A TEXTBOOK ON

Child Development

Rajammal P Devadas

N Jaya

M

© RAJAMMAL P DEVADAS & N JAYA, 1984

No part of this publication may be reproduced or
transmitted, in any form or by any means,
without permission

First published 1984 by
MACMILLAN INDIA LIMITED
Delhi Bombay Madras Patna
Bangalore Hyderabad Lucknow Trivandrum

Associated companies throughout the world

SBN 33390 459 1

This book has been subsidised by the Government of India,
through the National Book Trust, India,
for the benefit of students

Rs. 40.00

NBT Code No : (45-194/1977)

Published by S.G. Wasani for Macmillan India Limited
2/10, Ansari Road, Daryaganj, New Delhi 110002

Printed at Jagowal Printing Press
7/15, Kirti Nagar, New Delhi 110015

To

Sh. T.S. AVINASHILINGAM (REVERED AYYA AVERGAL)

Preface

Children are the most precious wealth of any country. Child Development is a discipline comprising an array of scientific facts, figures, statistics and theories. Knowledge of child development, and of the far-reaching influence of child training, would help parents and teachers to nurture and promote the all-round growth and development of children, and bring about desirable social changes and social equality through children. However, research in the field of Child Development in India is meagre and the much needed knowledge is being built up gradually to assist in regulating the forces which influence child and adult behaviour.

A course in Child Development and Family Relationship is one of the requirements prescribed for the B.Sc./B.A. degree in Home Science. Sociology, Social Work and Paediatrics also include Child Development. Child Development finds a place also in the ancillary subjects for the B.Sc., and B.A. Major. One of the formidable problems which students and teachers face is the acute dearth of textbooks in the subject with relevance to Indian conditions.

There is no textbook covering the entire gamut of Child Development in India at present. None of the standard books available in the market deals with all the topics in the syllabus for the Undergraduate students. Hence, taking advantage of the UGC Book Writing Scheme, writing of this book was undertaken. The chapters for the book have been listed after a study of selected curricula for B.Sc. Home Science and the publications of the Home Science Association of India, for the Undergraduates. The chapters have been so selected to introduce the students to basic concepts, issues and trends in Child Development and thus lay the foundation for a critical appreciation of the emerging studies in the field.

The book deals with the scope and components of Child Development. It includes meaning and importance of the different stages in human life, child psychology and development of individuals from conception to adolescence. Preschool education, exceptional children, sex education, population education, marriage and family and old age are also covered.

Students who study and understand the principles administrated in this book will be well on the road to use their applications to family life. This basic purpose of the syllabus has been kept in view throughout. It involved much research in the field and collation of the studies conducted in the different parts of India. The authors sincerely hope that students, teachers, paediatricians, child welfare workers and research scholars will find the book useful and furnish their feedback for further work in the future.

Rajammal P. Devadas
N. Jaya

Acknowledgements

The authors express their heartfelt gratitude to the University Grants Commission for the Senior Research Fellowship for Bookwriting that has brought forth this textbook. They express their wholehearted gratitude to the Founder President Thiru T.S. Avinashilingam for for his inspiring advice and support. They thank the members of the editorial committee Dr. T.E. Shanmugam, Emeritus Professor of Psychology, University of Madras, Mrs. Amita Verma, Dean, M.S. University of Baroda and Selvi Das, Director of Collegiate Education, Bangalore University for their appreciations and critical suggestions.

The authors extend their sincere thanks to the National Book Trust, India for offering subsidy for publishing this book. The authors thank Dr. and Mrs. Mohan Devadas for the photographs of their child Saradamani from infancy till pre-adolescence.

Several research projects have provided the background information for many parts of this book. The authors owe their thanks to the researches and their many colleagues and students who have contributed to the work of this textbook.

Rajammal P. Devadas
N. Jaya

Contents

Preface vii
List of Illustrations xi
Introduction xiii

Vol. I

1. Scope of Child Development 1
2. Methods of Child Study 7
3. Needs of Children 19
4. Human Drives and Motives 24
5. Maturation 28
6. Learning Process 35
7. Imagination 50
8. Play 55
9. Prevention and Management of Accidents 66
10. Discipline 79
11. Habits and Habit Formation 89
12. Behaviour Problems 95
13. Overcoming Conflicts—Defence Mechanisms 101
14. Personality Development 112
15. Juvenile Delinquency 121
16. Heredity and Environment 128

Vol. II

1. Meaning and Importance of Different Stages in Life 1
2. Growth and Development of Children 12
3. Pregnancy 16
4. Prenatal Development 24
5. Post-Natal Care 28

6.	Parenthood	31
7.	Infancy	35
8.	Care of the New Infant	44
9.	Babyhood	50
10.	Early Childhood	67
11.	Preschool Education	92
12.	Late Childhood	125
13.	Adolescence	147
14.	Sex Education	175
15.	Population Education	185
16.	Marriage	189
17.	The Family	200
18.	Crisis in the Family	216
19.	Old Age	223
	Subject Index	233
	Author Index	235

List of Illustrations

Volume I

Figure		*Following Page*
1.	Relationship of child development with other sciences	2
2.	Types of interviews	16
3.	A child engaged in a performance test	,,
4.	A child responding verbally	,,
5.	The interlocking relationship between development, maturation and nurture	,, 28
6.	Classical conditioning	40
7.	Learning by imitation	,,
8.	Trying on different roles	52
9a.	Pretending to be a policeman; 9b. Taking care of the imaginary friend	,,
10.	Play as a medium for emotional release and social relationships	56
11.	Types of play	,,
12.	Start in the right direction towards forming a habit	90
13.	The child's self-concept	116
14.	The developing personality	,,

Volume II

1.	How fertilization takes place	24
2.	Exercises after delivery	30
3.	An infant being weighed at birth	36
4.	Right type of lifting a baby	44
5.	Ways of folding diapers	,,
6.	Developing eating skill	54
7.	Becoming socially responsive	,,
8.	Holding head up at fifth month	,,
9.	Sitting is an important development in the trunk region	,,
10.	Eye-hand co-ordination at nine months and twelve months	,,
11.	Developments in the leg region	,,
12.	Eyes and hands are important tools of learning	,,

Figure	*Following Page*
13. Hand skills displayed in the second year	54
14. Expressions of anger in babyhood	60
15. Curious in knowing the how-abouts of the immediate environment	,,
16. Expressions of joy in babyhood	,,
17. Affection towards pets	,,
18. Play interests	,,
19. Interest in dolls	,,
20. Hide and seek—a favourite game	,,
21. Perceptions develop through sensory explorations	,,
22. Young children are 'into' everything	72
23. Expression of joy in early childhood	,,
24. Children enjoying a well planned meal in a nursery school	94
24a. Activities for practicing bodily control and mastering the basic motor skills in the preschool	,,
25. Fostering interests through opportunities to explore and experiment	,,
26. Opportunities for the development of positive emotions	,,
27. Play with peer group encourages desirable social relationships	102
28. Swings suitably designed for young children	,,
28a. A plan for a preschool building	,,
29. Low cost equipment for a preschool	,,
30. Providing firsthand concrete experiences through celebrations	114
31. Experiences with literature	,,
32. Investigating water	,,
33. Children interested in blowing soap bubbles	,,
34. Cleaning the school	,,
35. Playing with water in a basin or tub	,,
36. Observing characteristic movements of animals	,,
37. Parent education as a forum for home-school relationships	122
38. Appraising beauty in a matured way	132
39. Children in late childhood love sports	136
40. Interest in dramatics is on the increase in late childhood	,,
41. Being helpful	162
42. Being self-reliant	,,
43. Group endeavour by adolescents	,,
44. Guiding siblings	168

Introduction

This text book on Child Development is a significant one for students majoring in Home Science and Child Development and for parents and child welfare workers who wish to understand child growth and development. It provides background data on all aspects of development from conception till old age. A true understanding of human development is dependent on the knowledge of the present and past social and other environment and all the factors which condition human behaviour. A special feature of this book is the supply of information on Indian researches and their applications to the family, community and nation as a whole. Relevant to Indian conditions are the pictures illustrating various aspects of all round development of children.

It is that this book marks the first milestone in the literature as a Text Book in Child Development. May the students find the text book not only informative but also enjoyable, enlightening and stimulating towards further inquiry.

Rajammal P. Devadas
N. Jaya

VOLUME I

CHAPTER 1

Scope of Child Development

Child development, as a specialised field of study in higher education is relatively new. Parents have always been interested in their children. The community has been extending its care and concern for children. Poets have glorified childhood and literature has immortalised the innocence of children. However only recently, the need for a formal study of the child has been recognized in India. Hence only a limited body of reliable knowledge about the child, his psychology and development are available.

History of Study of Child Development

The early studies on child development were philosophical and mystical. The first efforts towards the study of the child based on direct observation were initiated by the child biographers of the nineteenth century—Darwin (1809-82) and Preyer (1841-97). They maintained careful notes on the development and behaviour of individual children over a period of years and thus started the method of longitudinal study, which has proved to be one of the most effective tools of research.

Stanley Hall (1844-1924) in the United States of America, and Alfred Binet (1857-1911) in France, carried out scientific investigations on children in the late nineteenth and early twentieth centuries, out of their concern to understand the causes of human behaviour. Their contributions constituted a turning point in improving the relationships of adults with children. Hall studied the concepts held by children when they entered the school and published in 1883, his findings in the book, *The Content of Children's Minds*. Binet's achievements were varied and many. One of his major contributions is his pioneering work, namely, the development of a method of testing the intelligence of children. His first intelligence scale was published in 1905, in collaboration with Stanford. After undergoing a series of revisions, that test finally resulted in the development of the Stanford-Binet Scales in the USA. Binet had thus widened the horizons of understandings about the intelligence of young children.

From these approaches emerged the new discipline of child development in the twentieth century. The earlier trend of thought that the child was a miniature adult, underwent considerable modification, with the discovery that a child has certain basic psychological needs and desires, the fulfilment of which leads to his development.

The earlier concepts of child development started with the birth of the child. Today it is recognized, that many events of great significance to the post-natal development, take place before birth. In order to understand patterns of child development fully, one must know what happens to the child before he is born. Consequently, the scope of child development encompasses the entire span of time beginning

with conception and extending to the period of adolescence.

Relationship of Child Development with Other Disciplines

One of the definitions of child development is that it is the science of development and behaviour of children. Behaviour patterns in childhood pave the way to behaviour patterns in adulthood. During the early period, scholars confined the study of child development to the developmental pattern only. Their followers made inroads into the fellowship of allied sciences such as nutrition, health, education, social work and home science. These entities which permit objective and quantitative measurements strengthen the subject. Today, one of the major tasks of child development is the integration of the findings of various fields into a harmonious unity of knowledge based on disciplines such as physiology, nutrition, psychology, sociology and anthropology. As Breckenridge and Murphy (1958) remark this drawing together of knowledge from different fields to provide an understanding of the child from many aspects is characteristic of the field of child development. This interdisciplinary approach is one of its distinguishing marks.

Child development has its roots in the disciplines of biology, psychology, sociology, and anthropology. Other fields such as education for children and adults, health, medicine, social work and home science need the findings and organized knowledge of child development for their activities with, and for children as shown in Figure 1.

Biology

The biologists have shown man's position in relation to other species in the animal kingdom. They have uncovered the facts of reproductive processes. The specialized field of genetics has shed light on the inheritance of certain characteristics of the succeeding generation from the preceding. Physiologists have made available factual and technical information on the growth and functioning of the body tissues and organs.

Psychology

Psychology deals primarily with man's behaviour and his adjustment to his environment. It impinges every area of human life. As a science, psychology has its roots in the laboratory of real life. Each child is an actor in the absorbing adventure of the human drama with varied scope and intensity (Paul, 1963). Developmental psychology is concerned with the chronological and progressive changes in man's capacity to deal with his environment. Other areas of psychology deal with those particular aspects in which one achieves a more or less satisfactory relationship with his world of objects and people. Some areas deal with personality and its development. Some are concerned largely with learning processes; and some deal with interpersonal relationships and the nature of adjustments made by individuals in achieving and maintaining healthy social behaviour. All these areas have significance to the study of child development, specially in understanding the laws and principles that govern the unique developmental and behavioural pattern of each individual child. Thus psychology helps to get an insight into the intricacies and glories of our common heritage, human nature. It also unfolds the amazing depth and the endless possibilities of the human mind (Boaz, 1968).

Sociology

Sociology is scientific knowledge about the behaviour of human beings in relation to other human beings. It is concerned directly with man's behaviour in relation to the various human groups in which he holds membership,

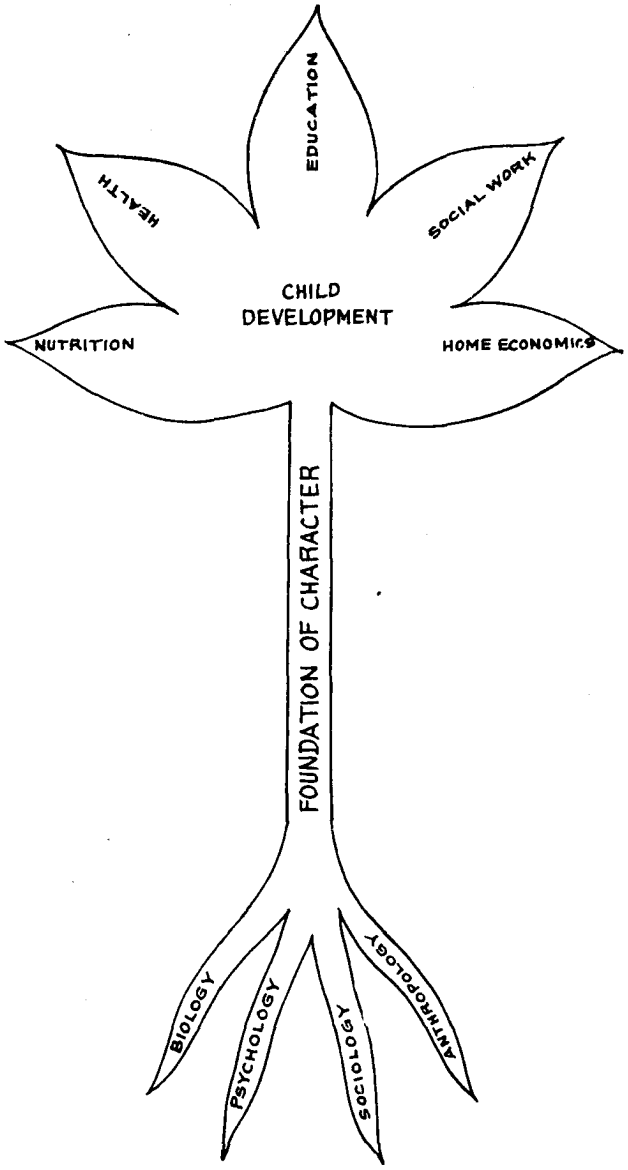


Fig. 1. Relationship of child development with other sciences.

especially those with which he is closely identified, and which more or less participate directly in structuring his personality and behaviour patterns. The family is the basic unit of all such groups. Since the growth and development of the child take place first in his family setting, sociology has great bearing on child development. Sociologists help to interpret the nature of the family and other social groups which play a vital role in the development of the child and how the nature of society and the various institutions in society influence the thoughts, feelings and actions of the child and adults. Perception of the physical world is coloured and determined in a large measure by the character of the social institutions. Sociology explains the powerful role played by the different socializing agencies such as the home, school and community, in the personality development of the child. The basic nature of child cannot be separated from the societal environment, the milieu in which human personality is moulded.

Anthropology

Anthropology which is the study of the human species and its origins, varieties and cultures, has two aspects, cultural and physical. Cultural anthropology seeks to throw light on man's nature and social behaviour in relation to his inventions. Anthropologists are interested in the socialization process of societies, that is, with the systems devised for inducting children into membership into the society and fostering the types of development which will allow them to participate in it fully.

Physical anthropology is concerned with man as a physical being. It deals with man's physical status and characteristics and his origin and evolution. Some physical anthropologists compare the physical characteristics of man with those of other primates (apes and monkeys); others compare the so called 'races' of man with each other and some specialize in physical growth and development. Through careful measurements of the human body and its parts at different periods and stages of development, they assess the nature of the growth process.

Contributions of Child Development to Other Disciplines

Child development as a specialized field integrates the findings of other disciplines to focus the understanding of the growing child. It organizes different findings into a coherent body of knowledge and makes it available to a variety of fields for application, such as, medicine, nutrition, health, education, social work and home science.

Medicine

Healthy growth is the culmination of a series of orderly and dynamic changes—involving higher levels of physiological and mental functioning—which eventually reach maturity. Health is more than freedom from disease. The physician charged with the treatment of children, whether he is a general practitioner or a paediatric specialist, is concerned with more than keeping records of heights and weights, diagnosing and treating the usual childhood diseases and prescribing medicine. These activities are important, but beyond these he is concerned with the total well-being of his patients. The physician has to rely heavily on a thorough knowledge of human growth and development. Anderson (1957), a professor of paediatrics in USA says:

> 'There is perhaps no professional 'field' in which the concept of growth and development can have fuller meaning than in the practice of medicine. Society demands that disease be prevented. Finally, if disease has produced permanent injury, the necessity of restoring functional capacity to a stage of social and psychological acceptability is another obligation. None of these responsibilities

can be met without a thorough and detailed knowledge of all phases and aspects of the process of growth and development'.

Psychiatry is a specialized branch of medicine concerned with the prevention of mental and emotional illness. The psychiatrist must be familiar with normal human development in all aspects: physical, mental, social and emotional. He must be able to discriminate between normal variations in individuals and signs of illness, or pathological behaviour, which indicate serious disturbances and call for special treatment.

In the study of child development, the psychiatrist's dealings with certain patients whose growth has been retarded in one or more areas of development, or in whom there has been a reasonably adequate development followed by a regressive return to an earlier, more primitive level of behaviour, is of special interest.

EDUCATION

The field of education has benefited greatly from the ever increasing knowledge of the characteristics of the growing child. Schools need to design and organize their programmes in keeping with the levels of readiness of children. Seeking an understanding of the individual child in the school mutually by parents and teachers is important for his development. As a result of the current recognition that the individual child brings all his special attributes, talents, attitudes, values, skills, competencies and deficiencies with him into the class room, a definite shift towards individuality is taking place in the curriculum. Educators, Home Scientists and Nutritionists have learned that the child and subject matter cannot be separated from each other in the class room. A good school programme is more than a series of courses; it is based on a sound knowledge of the nature of child growth in general and on a thorough understanding of each individual pupil in particular.

Importance of Child Study

The study of the child is very important to parents, homemakers, teachers and adults who are responsible for the welfare of children and adults. Tthrough child study, they can contribute more to the welfare of children and thus to the building of a better nation.

Therefore the study of the child is an important duty of the teacher and parents. Knowledge of children and their development contributes to human betterment. Achievement of sound mental health stems from proper physical development. An understanding of children has practical implications for a theory of human behaviour.

Child study means a scientific study of the individual from his pre-natal beginnings to the early stages of his adolescence. It deals with:

1. The stages of growth and maturation of the child,
2. The effects of environmental influences upon the child's pattern of development, and
3. The psychological and social interactions between a child and the other members of the society into which he is born and in which he is reared.

Study of children is of vital concern to the nation. If one is to understand human beings at any stage of their growth, it is important to study their beginnings. Such study can lead to greater understanding of the individual child and to a recognition of the factors and influences that make each child unique. Much of what children do is a direct result of the growth process, but some behaviour is caused by the interaction of the child with his environment.

Studying children offers an opportunity to discover what they are like and why they behave in a certain way. With the help of child study, one becomes aware of children as growing individuals with their own special needs—cultural, physical, emotional, social and intellectual. With the knowledge of factors

that affect the child's behaviour, it is easier to guide children constructively.

Child study also provides a background for a better understanding of adult behaviour. It increases one's ability to understand oneself and others and gain insight into his own behaviour, and find new meaning in the behaviour of adults.

The child also needs trained guidance for developing his mental, emotional and social potentialities. It has been found that insufficient care during childhood results in abnormal or subnormal development, accompanied by the development of undesirable attitudes. Inadequate care and understanding from parents results in personal and social maladjustments.

Rousseau (1712-78), Pestallozzi (1746-1827), Froebel (1783-1852) and Tagore (1861-1941) urged that teaching young children must be based on the nature of the child. The teacher needs to find out first what type of child he will have to deal with, and accommodate his methods accordingly. Thus study of the children and their ways becomes his primary task. All children need love and security. For developing their full personality, parents and teachers must satisfy adequately those needs at home and school in a favourable social and emotional environment.

Study of children also means study of their parents and their relationship with the children, knowledge of social and cultural values which children learn from their home environment and their relationships with their sisters and brothers. Parents must also understand that the child's learning is most affected by parent-child relationship as well as the values held in the home.

Recent investigations in psychology have revealed that the child must be brought up in an atmosphere of freedom. Too many restrictions should not be imposed upon him. Only in an atmosphere of freedom, the child can develop his innate powers and unfold them spontaneously. Impositions are of no use, and punishments have no value, when the child has no correct conception of what is wrong, or why the punishment is given.

Froebel (1850) studied the period of childhood very carefully. He discovered much similarity between a child and a plant. Just as the plant grows naturally, the child grows spontaneously. The plant throws out leaves and branches according to the seed from which it sprang. In the same way, the child grows because of the tendencies and impulses within him. Froebel discovered that growth and development are possible only through self-activity, which enables the child to realize his own nature and develop his own individuality. Froebel also maintained that the life of the child is bound with the life of the society. Therefore a child can be educated properly only in the company of other children.

Each child develops according to an orderly sequence, which is common to all the children in general, but unique in some respects only to him. The way he grows depends on the kind of child he is, and the experiences he has had. Parents and teachers can influence his growth by the way they feel and act towards him.

Children need guidance and understanding to grow. Ways and means of improving their behaviour must be explored. Suppose a child of three years says 'I won't' or 'No' to every request, what should the parents do? Suppose a child of five screams and kicks when he has to come in from play, why does he behave in this way? or perhaps a six-year-old child does anything he is told but nothing on his own initiative, how can the teacher help him to develop independence and self reliance? In another instance, a third-class child, equal in intelligence to other children in his class, is the only one who has not learned to read. What may be the reason? What should be done about it? If the third-class girl is timid and withdrawn what can the teacher do to further her development? Parents and teachers need to

learn how to help children to grow in their own best way. What are the most efficient ways of helping children at different stages of maturity, learn the ways of civilized life, to read, to work and play constructively with others and to develop the skills of living in groups? How can the adults teach them to formulate notions into action? How can they teach them the art of economical learning? How to learn and how to solve problems within the range of their experiences? Innumerable situations arise continually in the process of educating children and thus help in the study of the child (Kundu and Tutoo, 1971).

Summary

Study of the subject of Child Development helps towards getting an understanding and insight into the intricacies and glories of human nature which is a common heritage, and the amazing depth and endless possibilities of the human mind. The subject deals with the physical development and the conscious and unconscious mental processes and activities. It emphasises on the right type of thinking, feeling and imagination on the part of the adults motivating them towards the most efficient child-rearing practices and this helps them to help children.

Child development is both a descriptive and normative science. Through the study of children it enables one to 'know himself'. Everyone needs to know how his mind works and how various aspects in the environment influence him. A knowledge of the science of Child Development helps them to regulate his conduct to appreciate children and their behaviour, to guard himself from wrong practices, in short, to be a man.

For parents, study of Child Development at various ages and stages is a guide and aid to understanding. To learn that children generally behave in certain ways at certain ages may reassure them about the behaviour of their own child. It may reveal to them with sudden clarity what is going on in their own child that makes him do and say certain things and thus give them sympathy and patience to bear with him, and to help him by their understanding (Gruenberg, 1963).

Each child is unique. Hence a study of Child Development cannot give parents more than valuable sign posts towards understanding their own child. A general interpretation of children can not take the place of the intimate knowledge parents gain of their boys and girls as they care for them and watch them grow. Yet the growing fund of information on how children develop is illuminating every aspect of childhood and family life. It has stimulated and strengthened parents, enriched family living and brought significant new values to the art of child rearing.

References

Anderson, T.E., 'Child development, a historical perspective', *Child Development*. 27 (2), 1956.

Anderson, J.A., 'Significance of growth and development for the practicing physician", in Harris D.B. (ed.), *The Concept of Development*. Minneapolis : University of Minnesota Press, 1957.

Boaz, C.D., *Elements of Psychology*. Madras : Viswanathan & Co, 1968.

Breckenridge, M.E. Murphy, M.N., *Growth and Development of the Young Child*. London : W.B. Saunders Co, 1958.

Dennis, W., 'Historical beginnings of child psychology', Bulletin, 46, 1949.

Gardner, B.D., *Development in Early Childhood*. London : Harper and Row, 1964.

Gruenberg, S.M., *Encyclopaedia of Child Care and Guidance*. New York : Doubleday, Co., 1963.

Kundu, C.L., Tutoo, D.N., *Educational Psychology*, New Delhi : Sterling Publishers, 1971.

Paul, S., *Psychology—The Study of Behaviour*. London : D. Van Nostrand, 1963.

Siegel, I.E., 'The need for conceptualization in research on child', *Child Development*, 27, 1956.

CHAPTER 2

Methods of Child Study

Since the field of Child Development is comparatively new, a great deal of information, facts and data on the different facets of Child Development need to be collected and studied. For every aspect of the study, certain instruments or tools are required to facilitate exploring and fact finding. The major tools of research in child study are classified into the following categories.

A. Inquiry forms
B. Observation
C. Case study
D. Biography
E. Experimentation
F. Interview
G. Social measures
H. Psychological tests: (1) Achievement test; (2) Attitude test; (3) Intelligence test; (4) Interest inventory; and (5) Personality measurements

A. Inquiry Forms

Inquiry forms are data-gathering devices in which properly prepared proformas are used to inquire and secure information about the subject under study. Among the different types of inquiry forms, the most commonly used are: (1) Questionnaire; (2) Schedule; (3) Checklist; (4) Rating scale; (5) Score card and (6) Opinionnaire or attitude scale.

1. Questionnaire

According to Goode and Hatt (1952), 'questionnaire' refers to a device for securing answers to questions by using a form, which the respondent fills himself. Barr *et al.* (1953) define questionnaire as a 'systematic compilation of questions that are submitted to a sample of population from which the information is desired'. It is the most flexible of tools, which possesses some unique advantages over other kinds of tools in collecting both quantitative and qualitative information. Careful preparation of a good questionnaire calls for a great deal of time, ingenuity, care and hard work.

Characterisics of Good Questionnaire

The characteristics of a good questionnaire, as spelt out by Best (1963) are follows.

a. It deals with significant topics.
b. It seeks information which is not obtainable from other sources such as reports or census data.
c. It is brief and concise.
d. It is valid and reliable, that is, it contains questions that deal with a single idea in unambiguous terms.
e. It has the items arranged in categories to facilitate accurate responses.
f. It contains questions of an objective nature without suggesting the responses desired.

g. It presents questions in a logical order, proceeding from the general to the more specific responses; from the simple to the complex and from those which create a favourable attitude to those which may be delicate or intimate.
h. It avoids annoying or embarassing questions.
i. It has items, the responses to which are easy to tabulate and interpret.
j. It is attractive in appearance, neatly arranged and clearly duplicated or printed.
k. It offers necessary instructions.

When viewed against these criteria, the errors commonly observed in questionnaires are as follows.

a. They are often too lengthy.
b. They have subjects of trivial importance.
c. They hold vaguely worded or improperly arranged items.
d. They are poorly organized.

Guidelines for Constructing Questionnaires

The following guidelines will be useful in the construction of a questionnaire (Sukhia *et al.*, 1966).

a. Study some good questionnaires and note their characteristics.
b. Submit your questionnaire items for criticism to your colleagues.
c. Try your questionnaire on a few representatives of the population to be studied. Items that seem perfectly clear to you may turn out to be ambiguous. Improve them so that the questions are clear and unambiguous and fit to draw the desired information from the respondents.
d. Plan an outline for a questionnaire and then start constructing the questions.
e. Make the items of your questionnaire more precise by defining the terms that could be misunderstood or misinterpreted and by designing questions that will give a complete response.

Types of Questionnaires

Questionnaires are of two types: (a) Closed form and (b) Open end or unrestricted form.

The closed form requires short, 'check' type of responses. It may be just a 'yes' or 'no' response, or a check from a list of suggested responses. The main advantages of the closed form are the following.

a. They are easy to respond to;
b. They take little time;
c. They keep the respondent on the subject;
d. They are relatively objective; and
e. They are fairly easy to tabulate and analyse.

The 'open end or unrestricted type', otherwise known as free-response or unstructured form, call for free responses from the respondent in his own words. No clues are provided. Therefore they provide for greater depth in the responses, and go down into the area of hidden motives that lie behind attitudes, interests, preference and decisions. At the same time, the items are objective and enable the respondents to reveal their own frames of reference rather than the researcher's. However, the responses to such items are often difficult to tabulate, interpret and summarize.

Thus both the types have some merits as well as limitations. The one who frames the questionnaire must decide which type is more likely to supply the information required. In general, most questionnaires include both the open end and closed type of items in combination.

How to Administer a Questionnaire?

In the administration of a questionnaire the following practical suggestions will be helpful.

a. Choose the respondents carefully. Only those who possess the required information should be included.
b. Send the request to obtain the responses, through the administrative head of the organization, where such a need exists.

c. Include a courteous, carefully constructed covering letter explaining the purpose of the study. Enclose a stamped self-addressed envelope for returning the filled questionnaire.

These precautions will induce the respondent for maximum compliance and improve the returns.

Analysing and Interpreting the Responses

Quantification of data obtained by the questionnaire is achieved through tabulation. The results culled out from the tabular form must be refined in terms of totals, percentages and averages or others.

2. Schedule

A schedule is usually a set of questions which are asked and filled in by an interviewer in a face to face situation with another person. It is different from a questionnaire in that the schedule is administered personally to a respondent or a group of respondents, while the questionnaire is usually mailed. The advantages of the schedule over the questionnaire, are that it provides opportunity to establish rapport, to explain the purpose and to make the meaning of items clear. It also economises on expenditure of time and money and provides more complete and usable returns. The handicap that the schedule presents is the inability of the researcher to contact personally all the respondents required, either individually or in a group. The characteristics of a good schedule, the ways of constructing a good schedule and the guidelines for the analysis and interpretation of the data gathered through a schedule, are not different from those suggested for a good questionnaire. But in its administration in a face to face situation, it is similar to an interview.

3. Check List

Checklist is an important tool for gathering facts for educational surveys. It is a type of questionnaire, with a set of categories for the respondent to check. It is used to record the presence or absence of the phenomena under study. In this exercise, responses to the items in the checklist are a matter of fact, and not of judgement. Checklist as a fact finding tool has the advantage of systematising and facilitating the recording of observations. It helps to ensure consideration of all important aspects of the object, action or behaviour observed.

Guidelines for Constructing a Checklist

The following suggestions can serve as guidelines for constructing checklists and using them in research.

a. Read as many descriptions as possible on the construction and use of checklists in research.
b. Determine the items on which information is required for the study and the details needed.
c. Arrange the items in categories and the categories in a logical or psychological order, grouping related items together.
d. Arrange the individual items in such a way to secure adequately the information and details required. (Checklist items can be arranged in several ways)
e. Phrase the items in such a way that they are discriminative in quality.
f. Have completeness and comprehensiveness.

4. Rating Scale

The rating scale is a useful device in assessing quality, especially when quality is difficult to measure objectively. Rating is a term applied to the expression of opinion or judgement regarding some situation, object or character. Opinions are usually expressed on a scale of values. Rating techniques are devices by which such judgements may be quantified (Barr *et al.*, 1953). In this method, descriptions of different degrees of quality are arranged along a line

from high to low or otherwise and this line forms the scale.

Some guidelines for the construction and use of rating scales are given in the following.

a. Select the following factors included in the rating scale carefully: (i) the judges who will do the rating; (ii) the subjects or the phenomena to be rated and (iii) the continum along which they will be rated.
b. Choose only the most significant aspects for the purpose of the study.
c. Grade different degrees of quality which are usually adjectives or descriptions differentiated clearly from each other. In going up the scale one should feel that the next description represents a quality which is higher than the preceding.
d. Arrange the items in ascending or descending order from left to right. Rating scale may have as many divisions as can be readily distinguished by the raters. Usually they contain five divisions. By numbering each division in sequence, the descriptions can be converted into arithmetic values for averaging.
e. Select well informed and experienced persons for rating.
f. Depending on rating situation, employ several judges, to obtain desirable reliability.

5. Score Card

The score card is an elaborate form of the rating scale in which items are evaluated usually in numerical terms. Sometimes the score card and rating scale are used interchangeably. The score card provides for the appraisal of a relatively large number of aspects. Its ratings yield a total weighted score for an over all evaluation. The characteristics of a satisfactory score card, and the techniques for constructing one, vary with the project or research on hand, its objectives and the over all purpose of the vealuation.

6. Opinionnaire or Attitude Scale

Measurement and description of opinions and attitudes are indispensable, interesting aspects of research in child development. For collecting the opinions an inquiry form called opinionnaire or attitude scale is used. Opinionnaires help to collect in the form of expressed opinions of individuals or groups to obtain the measure of their attitudes or beliefs regarding some phenomenon. Opinions and attitudes are allied but not synonymous. An attitude denotes the inner feeling or belief of a person towards a particular phenomenon. On the other hand an opinion is what a person says about his attitude towards the phenomenon. The only means of inferring or estimating a person's attitude or belief is a sample of his expressed opinion secured in answer to a questionnaire or his reactions to certain statements. This process of inferring from expressed opinions is subject to many limitations.

B. Observation

Observation is a research tool that deals with the external behaviour of persons in appropriate situations, controlled or uncontrolled. Observation is one of the important modes of acquiring knowledge in social sciences (Gopal, 1964).

Adiseshiah (1969) defines observation as the careful and systematic watching of facts as they occur in the course of nature. In every observation, there are two components: the object or that which is being observed, and the subject or the observer. In many investigations, the observer is an entity apart from the thing observed. Observation of this type is known as objective observation or extrospection. Sometimes, one may have to observe one's own experience. This type of observation is designated as subjective observation or introspection.

Characteristics of a Good Observation

Direct observation has developed as a research tool, during the present century in the area of child growth. The characteristics of a good observation are that it is (a) physical and mental; (b) selective; (c) purposive; and (d) participant and nonparticipant.

a. *Observation is a Physical as well as a Mental Activity*

Since one needs to see or hear something and note it in observation, the use of the sense faculties is involved. Further attention needs to be focussed on the subject for observation. These are the two distinct elements in every act of scientific observation.

b. *Observation is Selective*

An 'observer' does not just observe everything. He first decides and delineates the range of aspects to be observed. The observer may observe several aspects of a child's social, physical, emotional and intellectual behaviour, but will take notice only of those which are the objects of her study.

c. *Observation is Purposive*

Observation must be guided by specific purposes. Therefore the investigator sets out with certain specified objectives to be attained through observation. In using observation as the method, she would therefore avoid noting anything and everything she comes across but would pick out those items which relate to her enquiry. Only that which is essential should be observed at the right time and in the right place. Every effort should be made to make certain that the observations are made under standard conditions. It is necessary that some control is exercised over observation in order to enhance its scientific value and to avoid the errors to which human observation is liable.

d. *Participant and Non-participant Observation*

'Participant observation' is any act of observation undertaken in circumstances which include the observer as a part of the situation or setting which he is observing. 'Non-participant observation', on the other hand, occurs when the observer keeps clear of any personal involvement in what is being observed.

The observer takes a position at a place where his presence is the least disturbing to the group but from where he can observe in detail the behaviour of the individual under observation or some specific characteristics of a small group. Such a position will permit him the use of recording instruments and the gathering of large quantities of data.

When an outsider enters a group in order to observe some aspects of the group, he may thereby alter the natural behaviour of the group, apart from the stresses and strains he is liable to experience in the course of his efforts to become acquainted with the ways of the group. Furthermore, by becoming a participant, he is liable to narrow down the range of his observations.

Anecdotal records are used for observing specific types of behaviour in terms of the observer's purpose and interest. An anecdote is a clear statement of the facts of the case (Crow and Crow, 1973). In such cases, the observer will need to wait until the particular type of behaviour desired is exhibited, e.g., a baby's first responses to a stranger, the child's reactions to an adult in the school and responses towards a group play. In other words, an anecdote portrays the picture of an incident. From the incidental observations (anecdotes) certain conceptions and generalizations about children's behaviour have been developed. Brief records thus made and filed cumulatively serve as indices of the consistency and inconsistency and relative continuity of certain behaviour patterns (Crow and Crow, 1964).

Requisites for a Good Observation

A good observation as research tool needs proper planning, expert execution and adequate recording and interpretation.

Planning for Observation

The factors to be considered while planning observation as a research technique, are : (i) definition of specific activities or units of behaviour to be observed; (ii) selecting the appropriate group of subjects; (iii) setting the scope of observation of the individuals or groups; (iv) determining the length of each observation period, number of periods and intervals between periods; (v) deciding the instruments and forms of recording and physical position of the observer; (vi) determining the special conditions required for the subjects; (vii) preparing tools for proper recording of the observations; and (viii) training the observer.

Execution of Observation

An observation plan, however good it may be, may not lead to success unless it is followed up with skillful execution and resourcefulness. An expert execution of observation demands : (i) proper arrangement of special conditions for the subjects; (ii) assuming proper physical position for observing; (iii) focussing attention on the specific activities, or units of behaviour under observation; (iv) observing discreetly, the length and number of periods and intervals decided upon; (v) handling the recording instruments efficiently; and (vi) utilizing the training received in terms of expertness.

Recording and Interpreting Observations

The two procedures commonly used for recording observations are : (i) the observer goes on recording his observations simultaneously with the occurrence of the phenomena observed as in time sampling; and (ii) soon after the observation, that is, when the observer undertakes to record his observations not simultaneously with his actual observation process, but immediately after he has observed for a unit of time, while the details are still fresh in his mind.

The choice between these two methods will depend on the nature of the individuals or groups to be observed, the type of activities or behaviour to be observed and the skills of the observer. Both the types have their merits and disadvantages. The simultaneous form of recording observations may distract the subjects, while the other may not be complete and exact.

For systematic collection of data through observation, the various devices used for recording are : checklists, rating scales and score cards.

C. Case Study

Case study or the clinical method, as it is sometimes called (Edward, 1969), involves intensive investigation of a particular case. It aims at studying everything about that case rather than something about everything. Case study takes into account all the pertinent factors of the case or situation.

The 'case' may consist of data relating to the life history of a case or other life processes. Case study often includes the analysis of an individual's life in the form of written records and diaries, health records, home environment, progress, social relations as well as the personal observations of the investigator. Anecdotal records of special episodes may be part of the basic data in a case study in child development. The end product of the case-study may have varying degrees of reliability, depending upon the sources used in its compilation.

A good case study should be a complete and accurate account of actual behaviour. It should do what a sound movie does (Best, 1963). A person reading such a case study record should be able to get the same picture as the person who actually observed the case.

D. Biography

Biography is a systematic method and has the advantage of providing continuous and more or less integrated observations of child development (Thompson, 1965). Biographies are

written usually by an interested parent or relative.

A child can be encouraged to write an autobiographical statement that includes information relating to his likes and dislikes, interests, ambitions, friends and relatives. Intelligent use of this procedure may prove to be an important means of discovering valuable information and gaining insights into his behaviour.

The biographer can be a parent too. She/he can observe and record the behaviour of infants and young children as their development progresses. For example, the mother may record the day on which the baby started eating with his hand, stood alone, walked and uttered a word for the first time. Such biographies are time consuming and may cover only those aspects of the child's life which interest the biographer.

E. Experimentation

Experimentation is the most objective method of research. It emphasizes accurate formulation of hypotheses, setting, executing, observation, collection and arrangement of pertinent data, and development of tentative theories by trial under controlled conditions and evaluation and follow up. Experiments may be conducted in the laboratory, in the class room or anywhere else in the community.

The important features of this method can be given in the following simple experiment: Two groups of children who are equal in all aspects, are treated alike, except for one manipulated difference. One of the groups is called the control group and does not receive that treatment. But in all other aspects, it is treated exactly like the other group which is called the experimental group. Any difference in the resulting behaviour of the experimental group can then be attributed to the condition of difference in treatment between the groups. The manipulation being studied is called the 'independent variable'. The measured behaviour changes which reflect the variable are called the 'dependent variables'. The function of the control group is to ensure that the change in the dependent behaviour is a result of the operation of the independent variable. The use of a control group allows the experimenter to assess the effects of other factors which may be present by chance, and the control provides a standard of comparison in the units of behaviour.

F. Interview

Interview is the oral version of the questionnaire or schedule in which the subject supplies the needed information through a face to face relationship. Interview is thus a process of communication or interaction between the interviewer and the interviewee or respondent. The success of an interview depends on proper motivation. Interview is relatively more flexible than a written inquiry form. It permits explanation, adjustment and variation according to the situation. As Gopalan (1964) interprets, interview is conversation with a purpose and therefore, is more than a mere oral exchange of information.

Special Characteristics of Interview

The interview when used by skillful interiewers, is superior to other data-gathering tools, because of the following characteristics: (i) people are usually more willing to talk than to write, especially with regard to intimate and confidential topics; (ii) the purpose and meaning of questions can be explained and valid responses obtained; (iii) the sincerity and insight of the interviewee can be judged through cross-questioning; (iv) depth in responses can be achieved; and (v) the interview does not permit the respondent to edit his earlier answers, in the light of subsequent questions.

The interview is specially appropriate, when dealing with young children, illiterates and those with limited intelligence or in an abnormal state of mind.

The interview is also used for some other practical purposes such as student counselling, occupational adjustments, selection of candidates for higher education or employment, psychiatric work and for commercial or social surveys.

Classification of the Types of Interviews

There are three main types of interviews as shown in Fig. 2, distinguished according to : (i) the functions; (ii) the number of persons participating; and (iii) the roles assumed by the interviewer and interviewee.

Function wise, the interviews are classified as: (a) diagnostic interview, (b) clinical interview, and (c) research interview.

Diagnostic interview : Used frequently in clinics and social work, the diagnostic interview helps to locate the possible causes of an individual's problems through probing into his past history, family relations and personal adjustment problems.

Clinical interview: Following the screening or diagnostic interview, the clinical interview takes place as a means of introducing the patient to therapy. Friends and relatives may also be guided in their dealings with patients.

Research interview: As a tool in research the interview is used for gathering data on problems of historical, experimental survey or clinical types.

Participant wise, interviews are of the following two types: (a) individual and group interviews, and (b) single interviewer and panel of interviewers.

Individual and group interviews: In individual interview, a single specialist or a skilled person interviews one at a time. A group interview requires a group of not more than 10 or 12 persons with some social, intellectual and educational homogeneity which can ensure the effective participation of all the members. A circular seating arrangement, with the interviewer as one among the group is conducive to full and spontaneous participation of all.

The group interview may have an advantage over the individual interview in the range of responses due to the process of group interaction. On the other hand, it may suffer from certain disadvantages if the group interaction turns into controversies or discussions which are unrelated to the topic or irrelevant, or when some members monopolize the discussion, without allowing others to participate. Sometimes the topic may not get fully explored in detail due to the hesitation of some members to express their responses.

Single interviewer and panel of interviewers: Both individual and group interviews may be conducted by a single interviewer or by a panel of interviewers according to the design and purpose of the interview. Usually, interviews for selection and therapeutic purposes are held by a panel of interviewers composed of experts in different but related fields, pertinent to the purpose of the interview. Interviews for research purposes are usually conducted by single investigators. The number of interviewers in a panel should not be more than three or four, as panels larger than 3-4 numbers may tend to scare and confuse the respondents.

Rolewise, interviews are classified as: (a) non-directive, (b) focused, and (c) indepth.

Non-directive interview. The 'non-directive' interview includes questions of the open-end form and permits freedom to the intreviewer to talk freely about the problems under study. Directive of approach, on the other hand, is structured and includes questions of the closed or suggestive type. It is definite in a planned order.

Focused interview: The 'focused' interview concentrates on some particular event or experience, rather than on general inquiry. It aims at determining the responses of individuals to specific situations.

Indepth interview: The 'indepth' interview is an intensive and searching type of interview with emphasis on such psychological and social factors as attitudes, emotions or convictions. It determines the respondent's degree of de-

tachment or attachment towards an experience or an activity.

Requirements of a Good Interview

As a tool of research, a good interview, like a good observation requires: (a) proper preparation; (b) skillful execution; and (c) Adequate recording and interpretation.

Preparing for interview: The following factors need to be determined in advance of the interview.

i. Clear conception of the purpose and the type of information to be elicited.
ii. Decision on the kind of interview (individual, group, non directive, focussed or depth) best suited for the purpose.
iii. Forming the best sequence of questions that will systematically bring out the desired information, and
iv. Decision on plan for recording responses

Execution of the interview: The following will help to ensure the successful execution of the interview.

i. Securing the confidence and co-operation of the subject, through building rapport.
ii. Securing desired information through asking the planned sequence of questions in not too rigid a manner, but with stimulating and encouraging comments and necessary explanations and recordings. and
iii. Securing a recording device which will not distract the interviewee. For recording and interpreting responses, it is best to employ, a device which would retain the actual wording of responses. For example tape recording permits a complete and objective analysis at a later time, by preserving the actual words, the tone of voice and emotional impact of the responses.

Limitations of Interview

The interview technique has the following limitations. (i) It is time-consuming, (ii) It has the constant danger of the interviewer's bias; and (iii) It requires objectivity and insight.

G. Social Measures

For describing and measuring social relationships, values or attitudes, there are several tools including the ones already described. However, the following tools are specially designed for this purpose: (i) social distance scales, (ii) guess-who-technique, (iii) sociometry, and (iv) psychological tests.

Social Distance Scales

Developed by Bogardus (1950) the social distance scale attempts to measure the degree to which an individual or group is accepted or rejected by others. The scale consists of a number of scaled situations ranging from acceptance to rejection. The subjects check their positions with regard to persons or groups studied, by choosing the points on the scale with which they feel themselves in agreement. The use of this method of scaling is generally restricted to pilot studies or to researches which for some reason or other, need to be completed quickly.

Guess-who Technique

The guess-who technique is an interesting tool devised by Hartshone and May (1950). It consists of descriptions of a series of roles played by individuals in a group. The subjects are to name the individuals who fit the descriptions. Peer judgements, poor or good about individual roles are revealed through this process of guessing. Some examples of the verbal descriptions provided in this technique are:

'This person is always happy'
'This person is always active'
'This person always finds fault with others'

Sociometry

Designed by Moreno and Jennings, (1952) sociometry is a measure of social distance.

According to Jennings, (1952) 'Sociometry is a means of presenting simply and graphically the entire structure of relations existing at a given time among members of a given group. In this technique, the major lines of communication, or the patterns of attraction and rejection in its full scope, are made comprehensive at a glance'. It is different from the approach of Bogardus (1950) in that it is specially concerned with the phenomena of attractions and repulsions between individuals within a small group and within the structure of the group.

Sociometry consists of designating a meaningful choice situation. For example, 'With whom would you like to work/play/visit?' and asking the children to name the person or persons, in the order of their preference—designating the child they would most like to play with. In some sociometric studies, negative items are also included to describe repulsions between individuals. The respondants are required to indicate whom they would reject in a situation. Being peer-rating rather than rating by supervisors, sociometry adds another dimension to the understanding of social relationships.

Psychological Tests

Among the frequently employed tools of educational research, psychological tests occupy a significant position. Psychological tests are instruments designed to describe and measure a sample in relation to certain aspects of human behaviour or inner qualities. They are used frequently as tools in school surveys, school appraisal programmes, experimental investigations, causal relationship studies and prognostic research. Psychological tests are of various types depending on the phenomena or traits they are devised to describe and measure. Chief among those are: (a) achievement tests, (b) intelligence tests, (c) aptitude tests, (d) interest inventories, and (e) personality measures.

The common characteristics of all these tests are that they are used to:

Describe status,

Measure changes in status produced by certain factors and predict future behaviour on the basis of present performance.

Among the many ways of classifying psychological tests are the ones which distinguish between

1. Performance tests and paper and pencil tests
2. Individual tests and group tests
3. Power tests and speed tests and
4. Standardized tests and non-standardized or teacher-made tests.

Achievement tests. Achievement tests are the most common among the various types of tests used in schools. They aim to measure what and how much pupils have learned as a result of formal or informal instruction. Achievement tests measure the present level of performance of individuals or groups. Achievement test scores are used in deciding which grade a student is suitable for or what his strengths and weaknesses are. Achievement tests are utilized frequently for evaluating courses of study or efficiency of teachers, teaching methods and other educational factors.

Intellignence tests. Conceived as an aspect of general ability which enters into performance of all activities, and which differs from person to person, intelligence is a factor which determines a good deal of educational outcomes. The tools which are used for measuring intelligence are 'intelligence tests'. Intelligence tests are classified as follows: performance tests and verbal tests; (Figs. 3 and 4); oral tests and paper-pencil tests; group tests and individual tests; omnibus tests and battery of tests and point-scales and age-scales.

Whatever the type, an intelligence test is marked out by the following characteristics:

a. It measures the quality termed 'intelligence' only indirectly through testing the persons present performance in situations where intelligence operates.

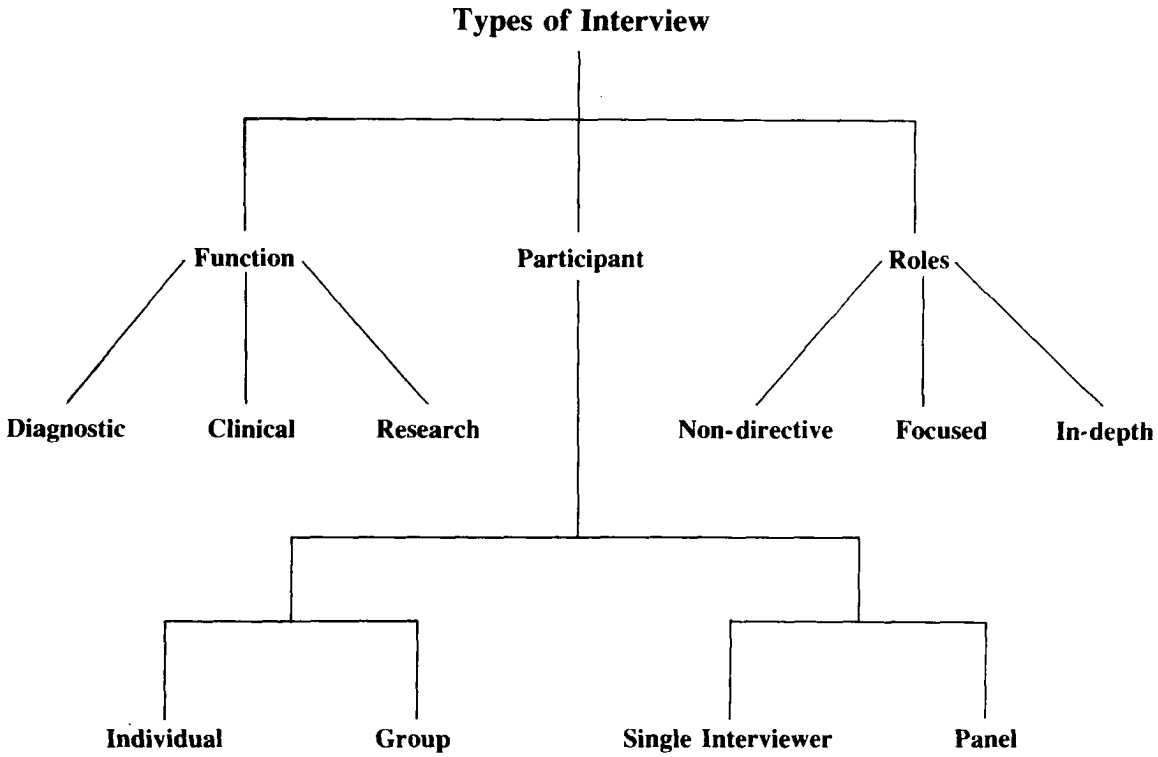


Fig. 2. Types of interviews.

Fig. 3. A child engaged in a performance test

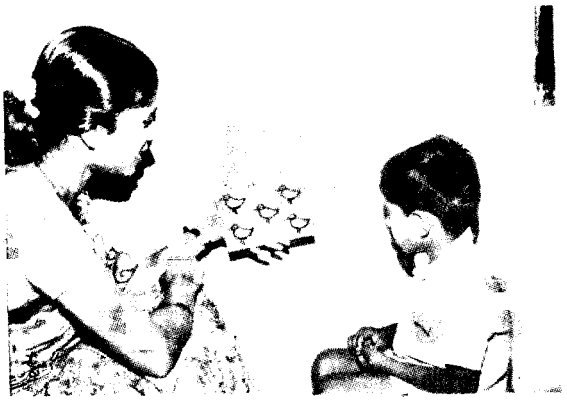


Fig. 4. A child responding verbally.

b. The items in any intelligence test are numerous and varied. They test many different abilities which are supposed to constitute intelligence.
c. The items are, to the extent possible, knowledge free.
d. The items are culture free and
e. The same test of intelligence supplies different norms for different age-levels and groups. Norms calculated for different ages and groups are essential factors in the use and interpretation of scores obtained in intelligence tests.

Constructing and standardizing tests of intelligence of various types is a long and painstaking activity requiring, besides expert planning, preparation and organization of work, steady application over a long period of time. It requires a great deal of statistical calculation and testing and retesting before being made available for wider use.

Aptitude tests. Aptitude tests aim at predicting the capacities or the degree of achievements that may be expected from individuals in a particular activity (Best, 1959). An aptitude test is reserved for the tools which measure and describe special abilities, capacities or talents which are supposed to determine the level of achievement that can be expected from individuals in specific fields of study and activities. Like intelligence, aptitude also cannot be measured directly. It can only be inferred on the basis of a present performance. Aptitude tests are, therefore, so designed as to predict improved performance with further training in the area under question which may be mechanical and manipulative skills, specific studies, musical and artistic pursuits.

Aptitude tests have proved useful in selecting individuals for particular courses of study or professional training and guiding them into areas where the probability of their success is the greatest. For research in educational and vocational guidance, aptitude tests are valuable.

Interest inventories. Interests constitute a significant element in the personality pattern of individuals. They play an important role in their educational and professional outlooks and careers. The tools used for describing and measuring the interests of individuals are 'interest inventories' or 'interest blanks'. They are self-report instruments in which the individuals note their own likes and dislikes. These are frequently used in the areas of educational and vocational guidance and in case studies. Distinctive patterns of interest which are associated with success have been discovered through research in a number of educational and vocational fields, (Sukhia *et al.*, 1966). Mechanical, computational, scientific, artistic, literary, musical, humanitarian, clerical and many other areas of interest have been analysed in terms of activities. Construction of interest inventories is yet in its developmental stage in India. Children's interests in reading, games, dramatics, and other extra-curricular activities, and in curricular work can be studied through this method.

Personality measures. Personality measures are of two kinds: direct or inventories and indirect or projective techniques.

Personality inventories are similar to interest inventories requiring the subjects to self-report on their personality patterns. The individuals check responses to certain questions or statements designed to measure certain personality traits or tendencies.

A projective test is one that provides the subject with a stimulus situation giving him an opportunity to impose upon it his own personal needs and his particular perceptions and interpretations (Freeman, 1968). In projective tests of personality, the individual unconsciously projects his personality through his responses to a given situation. Rorschach's ink blot test, Thematic Apperception Test (T.A.T), Children's Apperception Test (C.A.T) and Rosenzeweig's Picture—Frustration Study, are examples of projective techniques where, in

reaction to selected visual pictures or symbols, the individuals under study project their own personalities. Tautophone and Word Association tests present various sounds and words respectively, as stimuli for the purpose of recording reactions which are later interpreted, according to a pre ordained scheme of interpretation, to get a picture of the individual's personality. Sentence-completion and story completion are some other devices which depend largely on subjective judgements and skills of interpretation. Observation is also commonly used under pre-arranged conditions.

Data obtained through the methods of child study should be further analysed through the use of appropriate tools, for proper interpretation. While interpreting the facts acquired, one should always keep in mind the limitations of the planning or sampling procedure.

References

Adisesaiah, W.T.V., in Devadas, R.P., *A Hand Book on Methodology of Research.* Coimbatore: Sri Ramakrishna Mission Vidyalaya, College of Rural Higher Eductaion, 1969.

Barr, A.S., Robert, D.A., Johnson, P.O., *Educational Research and Appraisal.* Chicago: J.B. Lippincott Co., 1953.

Best, J.W., *Research in Education.* New Jersey: Englewood Cliffs, Prentice-Hall Inc., 1963.

Crow, L.D., Crow, A., *Child Psychology.* New York: McGraw-Hill Book Co., 1973.

Edwards, D.C., *General Psychology.* U.S.A.: MacMillan Co., 1969.

Freeman, Frank, S., *Theory and Practice of Psychological Testing.* New Delhi: Oxford & IBH Publishing Co., 1968.

Goode, W.J., Hatt, P.K., *Methods in Social Research,* New York: McGraw-Hill book Co., 1952.

Gopal, M.M., *An Introduction to Research Procedure in Social Sciences.* New Delhi: Asia Publishing House, 1964.

Jennings in Goode, W.J., Hatt, P.K., *Methods in Social Research.* New York: McGraw-Hill Book Co., 1952.

Sukhia, S.P., Mehrotra, P.V., and Mehrotra, R.N., *Elements of Educational Research.* Bombay: Allied Publishers, 1966.

Thompson, G.G., *Child Psychology.* Bombay: The Times of India Press, 1965.

Verma, M. *An Introduction to Educational and Psychological Research.* Madras: Asia Publishing House, 1965.

CHAPTER 3

Needs of Children

Children are the vanguards and supreme powers of the world of tomorrow. Therefore, a sound knowledge of the needs of children is essential for guiding them properly. Delving into the ways children feel, think and act is a very hard task. Application of the knowledge of child psychology and development helps to understand the needs of children.

The term 'need' is commonly used in circumstances in which there is an object or organism with certain requirements, and an environment or a society which can contribute to the fulfilment of these requirements (Fleming, 1969). Needs are permanent trends of human nature which underlie human behaviour from birth to death under all circumstances and in all kinds of societies. Need is also referred-to as a condition of lack or deficiency in the organism of an individual (Dandekar, 1976).

Types of Needs

Needs are of many types. They can be broadly classified into the following three categories.

A. Biological
B. Psycho-social
C. Egoistic

A. Biological Needs

Biological needs include:

1 *Visceral needs* such as food, water, oxygen, sleep, elimination, rest, clothing and shelter.
2 *Safety needs* such as suitable temperature, protection from danger and external threats.
3 *Sex urges* which are basic to the perpetuation of the species and important to individual fulfilment; and
4 *Sensory motor needs* which are sensory and motor activities essential for the body to develop and function properly.

B. Psycho-social Needs

The psycho-social needs include the following:

1 Need for love and affection
2 Need for approval
3 Need for nurturance
4 Need for affiliation, sense of belonging
5 Need for orientation
6 Need for the feeling of adequacy
7 Spiritual needs

1. *Need for Love and Affection*

All human beings need love and affection throughout the life span although the ways of satisfying these needs are different at successive stages. Whatever its source, love is universal and powerful in childhood behaviour.

Studies of children in orphanages have shown that babies do not develop friendly personalities, nor do they really flourish physically until they are assured of love and affection. The sense of touch is the most elemental

form of communication and the one that babies understand best. Hence all babies need a lot of caressing and cuddling for the development of happy and assured personalities. The fundamental need of every human being for caressing is nowhere as demonstrable as it is in young babies. Loving care and consistent, prompt response to their needs is tremendously important to their successful progress.

During the period directly after birth a baby needs frequent repetition of conditions similar to the prenatal state. He has a strong need to be held in close contact with his mother's body and carried about by her. 'Babies denied their right to such mothering in the earliest weeks and months may suffer throughout life from an impaired capacity for full emotional response' (Ribble, 1943). Happy experiences in breast feeding do more to establish the child's emotional security than whole dictionaries of words can do later.

Many paediatricians claim that in spite of good medical care and nutrition, children develop marasmus due to the lack of emotional warmth, fondling and other consistent forms of stimulation from their parents. The biological fact of motherhood automatically qualifies a mother as a good agent for satisfying the infant's needs for love and affection. Much of an individual's day-by-day behaviour may stem from the satisfaction or the dissatisfaction of the desire to be genuinely loved. Without gratification of this need, life becomes empty and valueless.

2. *Need for Approval*

The desire to gain and hold the esteem of one's fellows, friends and family—to be praised, looked-up-to or rewarded in some way—constitutes a powerful social need. A child, like all other individuals, needs the experience of the evidence that he is a valued person. He demands the confirming evidence that his 'Self' has worth and strives unceasingly to satisfy this basic need to be approved. Much of the success of parents whose children make important gains in development and in personal conduct is due to their sensitiveness to the differences in the ways children go about satisfying the need for approval.

3. *Need for Nurturance*

A group of actions have as their goal the sheltering, comforting, protecting and assisting of persons who are weak or in need of help. The supreme example for such behaviour is that expressed by parents. Therefore this behaviour has been usually attributed to a parental instinct. However, a great deal of the same behaviour is expressed by all who make an effort to help those who are less fortunate, less capable or comfortable than themselves. All such behaviour arises from a need for nurturance.

It would be a serious mistake, to suppose that this need is felt only by older people. It is frequently found in childhood and tends to increase towards adolescence and often becomes redirected so that the child may, in the end nurture his own parents. Not all behaviour arising from the need for nurturance is directed towards human beings. Many children find gratification for this need in caring for animals. This need is considered a very desirable trait in our culture. Children must be taught from an early age, that it is right and good to help those who are in need and to be considerate and sympathetic.

4. *Need for Affiliation—Sense of Belonging*

One comman goal for which individuals strive is association with other people. They possess the gregarious instinct. A child always tends to associate with other children and form groups. All children have this need in some degree and show it in everyday life. They have greatest enjoyment in life in being with their peer group and participating in the group activities.

There are children who seem to be able to gratify this need through association with almost any one. Their need is 'diffuse'. There are other children who associate a great deal

always with the same comparatively small group. Their need is 'focal'. Associating oneself with a group is one way in which one could obtain safety or security for himself. Having people near (perhaps) gives a feeling of well-being.

5. *Need for Orientation*

The need for orientation about the world of persons and objects is a basic human urge in the socialization process. Out of interaction with his fellows, the child is oriented to what is 'mine' and 'thine'. As he perceives the rights of others, he is meeting in part his need for orientation to the world of persons. The foundation for good relations in the family and elsewhere is sensitivity to the rights of others. This indeed is the most important principle in all great religions also.

Generally, a child who feels secure in the love of his parents and others and adequacy in his own developing powers is freed from the necessity of struggling for his own rights. He adjusts more readily to those of others. From the time a child starts asking questions about the environment, he should have help in working out meaningful answers to his questions. This is necessary in the area of concepts, to facilitate orientation to his world.

6. *Need for the Feeling of Adequacy*

The need for feeling adequate appears very rarly in life. Unfortunately many parents and adults frustrate this need by trying to do everything for their child or by under-estimating the child's ability when he is eager and ready to do things for himself. They may make mistakes because they lack understanding of the importance of readiness in the child's learning. For example, when the baby is 10 or 11 months, old, he may show that he is ready to learn to use a spoon by reaching for it and trying to feed himself. An understanding adult will render the child just enough help to ensure his feeling of adequacy so that the child will soon develop other self-help skills. When adults continue to do everything for the child when he is ready to do them by himself, they do him disservice. The objective of parents and adults should be to see that the child acquires a feeling of adequacy and self reliance when he is ready to have them.

7. *Spiritual Needs*

Spiritual needs are related to the child's perceptual part of personality. There is necessity for sound religious orientation for the achievement of mental peace and stability. Parents should take time to teach their children about their religion and let the child know that there is Good in all religions. The religious festivals must be celebrated so as to give children an understanding of the practical sides of religion, and how it affects one's activities, thoughts and indeed whole life. Gratification of spiritual needs is very essential for proper adjustment and sound mental health.

C. Egoistic Needs

A large part of human behaviour is directed towards needs and goals in which other human beings do not play an important role. Such needs are said to be egoistic in nature. They include: (1) need for dominance; (2) need for autonomy; (3) need for achievement; (4) need for acquisition; (5) need for cognizance; (6) need for attention and need for destructions.

1. *Need for Dominance*

One of the most conspicuous and common forms of egoistic behaviour is found in the attempts of a child to set himself in a position of authority from which he can control, influence or lead others. Some children seek to dominate in physical activities, others in the social, intellectual or spiritual spheres. There seems to be an urge in children which makes them strive to attain power of authority. We can assume that the motive for all such behaviour is a need for dominance.

2. *Need for Autonomy*

There seems to be a fundamental striving by the children against external controls. As children grow older, the restraints placed upon them are apt to be more psychological than physical. Then they develop a strong tendency to defy authority or free themselves of any form of restraint or coersion and to assert themselves as independent individuals. Behaviour of this kind is motivated by a need for autonomy.

3. *Need for Achievement*

To excel or achieve in a particular field of activity is a common goal of human endeavour. A child may strive to be the best runner, dancer, player or poet. His actions originate from a need for achievement. The goals that happen to be chosen depend, in a large part, on the operation of other needs, the environment and the native endowment of the individual. Every field of activity holds possibilities for the expression of the need for achievement.

4. *Need for Acquisition*

A common characteristic of human beings is the tendency to acquire objects. Some children strive for acquiring clothes, some for play materials and some for money. All behaviour that has the goal of acquiring more objects can be attributed to an underlying need for acquisition.

5. *Need for Cognizance*

This is a need to explain man's inquisitive, inquiring and exploratory behaviour. Whenever a child seeks to find out 'why' or 'how' or 'what', the child is expressing a need for cognizance. This need is manifested in the persistent search which children make for meaning in experience. This need in children should be satisfied in order to enable them to find fulfilment in life through the mastery of problems in day to day life.

6. *Need for Attention*

A large part of the behaviour of many children has the goal of attracting attention to themselves. These are the show-off, conspicuous, spectacular, or dramatic individuals who utilize a variety of means to gain the attention to themselves by their performance in various activities or by their withdrawal behaviour or by wearing extravagant jewels and so on. All such behaviour is motivated by a need for attention.

7. *Need for Destruction*

There are many behaviour patterns that have destruction as their goal. Children destroy objects and things in big and little ways at times and often. Psychologists have tried for years to explain the tendency. Destruction includes every action that tends in any way to belittle, degrade, attack, injure or destroy other objects or people. Such behaviour is easily observable in every day life and this destructive energy should be channelised positively.

There is a wide range of environmental obstacles both physical and social that might block the need fulfilment in children. They are: (a) poverty—economic deprivation; (b) housing shortage; (c) lack of adequate opportunities to grow and develop; (d) malnutrition and diseases; (e) ignorance; (f) strong sibling rivalry; (g) social customs, traditions and taboos; (h) broken homes, desertion of a parent; (i) authoritarian, over-protective, submissive or perfectionistic parents; (j) inconsistent and improper discipline at home; (k) alcoholic parent; (l) mentally retarded parent; (m) physical handicaps of the child; (n) injuries and accidents; (o) famines, droughts, earthquakes, war and economic depression.

Either one of or a chain of the above-mentioned events may lead to dissatisfaction of children.

Effects of Nonsatisfaction of Needs

When the needs of children are not met several

manifestations of dissatisfaction appear. They are:

a. Anxiety	—	Imaginary fears, tension, fears of reality and responsibility.
b. Social maladjustment	—	Juvenile delinquency, truancy, rebellion and crime.
c. Psychoneurotic disorders	—	Depressive reactions, obsessive, compulsive reactions and dissociative reactions.
d. Behaviour problems	—	Aggression, destruction, stubbornness, hostility, exaggerated egoism.

Ways in which Adults can Help Children Towards their Need Fulfillment

The following guidelines can help adults to enhance need fulfillment in children.

a. Learn the dynamics of behaviour of each child.
b. Assure each child that he is loved and wanted at all times.
c. Make one's aims and expectations clear to the child.
d. Let the child have some well defined boundaries and limits within which he can act upon.
e. Provide healthy, creative opportunities for the child to grow and develop at his own pace.
f. Accept the child for what he is and respect him as an individual having certain rights and responsibilities.
g. Regulate his emotional responses constructively and recognize his positive efforts.
h. Help and support him in meeting his developmental tasks.
i. Understand that each child is unique and avoid unreasonable comparisons between children.
j. Be emotionally stable and consistent in your directions to children.
k. Avoid authoritarianism, dominance, overprotection and submission in child rearing practices and guidance of young children
l. Never strive to realise your unfulfilled needs through the child.
m. Children learn what they live—so be a good model and example.

Helping children and youth can be a happy experience, if their needs are understood, satisfied and built up.

References

Coleman, J.C., *Abnormal Psychology and Modern Life.* Bombay : D.B. Taraporevala Sons, 1970.

Dandekar, W.N., *Psychological Foundations of Education.* Delhi : The MacMillan Co., 1976.

Fleming, C.M.,. Teaching, A., *Psychological Analysis.* London : Methuen & Co., 1969.

Pitcarin, L., *Child Care for Indian Students.* New York : Cambridge University Press, 1971.

Ribble, Margaret, *Rights of Infants.* New York : Columbia University Press, 1943.

UNICEF. *UNICEF and the Rights of the Child.* New York : McGraw-Hill Book Co., 1979.

CHAPTER 4

Human Drives and Motives

Human activities are influenced by needs, drives, urges and motives. Numerous words are used in every day life to signify in one way or other, motivation. Students of child development need to understand what the terms needs, drives and motives mean.

Drives

The term 'need' has been employed liberally in writings about motivation. Many psychologists refer to need, with considerable consistency, as a condition of lack or deficiency in an organism. For example, an organism may be lacking in food, water or other kinds of requirements for its satisfactory functioning such as air, optimum temperature and a sense of being 'in touch' with body—comforting objects. There appears to be some relationship between the conditions of need as described above, and the physiological states demanding 'satisfaction'. Hunger is one of such physiological states; so also is thirst. The states incite the organism to action towards their fulfilment. Such incitement is drive; that is, the consequences of a need or needs constitute 'drive'. For example, the need of a creature for moisture precipitates the 'thirst drive'. Drives are thus conditions which are preponderantly organic in nature. For example, fatigue, sleepiness, thirst, hunger and sex urges are all drives. There are also avoidance drives. For example, recoiling reactions to the prick of a pin, fire and the urge to relieve the accumulating waste products in the body are avoidance drives.

Motives

The biological drives are innate and unlearned. They are the inborn characteristics of nervous system of the organism. On the other hand 'a motive is a desire for a goal that has acquired value for the individual' (Kagan and Havemann, 1972). The term 'motive' appears to depend more on learning than on innate factors. It is extremely difficult to judge motives from behaviour. As a matter of fact, some motives may never result in observable behaviour. A man who has been eagerly following the developments in space exploration may have a strong motive to go to the moon. Yet such a goal is unattainable for him nor does he make any attempt to attain it. A more common example is that of many people talking wishfully about going abroad; yet they never try to save the money or work for the trip.

Motivation is a key issue in psychology. All behaviour actions can be accounted for in terms of cause and effect. Astronomy shows why the sun rises in the morning and sets in the evening. physics reveals why a piano sounds different from a veena. Chemistry throws light on why wood burns while iron does not. Similarly there are underlying causes for human behaviour. The forces that initiate,

direct and organize human behaviour are called 'motives'. A motive is a desire for a goal that has acquired value for the individual. The desire to achieve the goal leads the person often to learn ways of gratifying the motive.

Every individual learns through life experiences to value certain goals above others. Even in the same family, one brother may exhibit a strong desire to be dependent on other people while another brother may express dominance over others. Motives vary considerably from culture to culture. Achievement of material success is a motive frequently expressed by a majority of people in the different countries.

One method of identifying and classifying motives usefully is to group them according to their similarities, causes and conditions. A classification which has been proposed by several writers separates motives into three groups labelled as 'survival', 'social' and 'self'. An outline of this scheme is presented below:

Scheme of Motives

Category		*Examples*
Survival	Cyclical	Hunger, thirst, respiration sleep, elimination.
	Episodic	Pain, fatigue, temperature.
	Psychological	Informative stimulation.
Social		Reproductive (maternal sex), affiliative, dominance, aggression.
Self		Need to achieve, consonant information.

Survival Motives

Survival motives are those which are based upon a physiological necessity or other condition of an individual which may directly affect the survival of that individual. Included in this category are the motives which follow the 'deprivation satiation' cycle in time (hunger, thirst, and needs for air, elimination, and so on), motives which depend upon some episodic stimulation (pain and fatigue) and motives which orient the individual and stimulate in his immediate environment (curiosity and the need for manipulation and exploration).

For their development, the survival motives require a change in the condition of the individual as a result of either time or of some particular kinds of external stimulation. The change in condition is such that, if the change is not corrected but allowed to develop to an extreme level, the individual will not survive. The motive is present long before the extreme state is reached and may be thought of as serving the purpose of altering the conditions, so that they do not reach that fatal level.

The survival motives are further classified into three categories: *cyclical*, *episodic* and *psychological*. The *cyclical survival motives* include the needs for food, water, air, elimination and other items or processes which occur on a regular basis purely as a function of the normal operation of the organism over a period of time. The *episodic survival motives* are those which are produced by the application of certain stimulation conditions. Painful stimuli and situations which produce fatigue constitute the major motives which fall into this category. The *psychological survival motives* are those which are limited with the reception and interpretation of information necessary for immediate response and survival in the environment. Included in this category are the motives labelled as manipulation, exploration, curiosity, and the non-specific need for atleast a certain amount of informative stimulation.

Social Motives

If achieving fulfilment requires interaction

with other individuals, behaviour is said to be socially motivated. Hence, socially motivated behaviour involves other individuals in their goal attainments. The social motive may be controlled by specific known physical stimuli and physiological mechanisms, or it may have unknown and more complex origin in the individual's past experience and socialization.

Reproductive Motives

Certain social motives may perhaps be viewed as directed towards the goal of reproducing the species. The maternal behaviours of many animals are highly motivated towards the goal of caring for the young and sex behaviours are aimed at the goal of initiating the reproduction of the species. Maternal behaviours in animals include activities such as nest building, protecting the young, and providing for the feeding of the young. The typical maternal behaviours of each species involves specific patterns of each of these particular activities.

Sex as a motive is highly influential in producing and directing a variety of behaviour. Sex is a powerful motive in shaping behaviour only when there are few other compensating motives and behaviours, and only in a culture, where it is treated as exciting and different. Sex is not an important motive in cultures where sex is treated in a matter-of-fact and open way. The strength of the sex motive is weak when compared against other motives. Individuals who are subjected to the effects of a reasonably strong hunger motive or who are engaged in attaining other social or self motivated goals are not affected to any significant extent by sex arousing drives.

Affiliation

The tendency to be with other similar individuals is termed as an affiliative motive. The motive for some sort of social affiliation has proved to be an useful concept to account for many behaviours. One may speculate that committees, associations and clubs as well as other groups and organizations will satisfy the need for some amount of belonging or affiliation. The basis for this motive is most probably a learned dependence upon the support and comfort given by others during socialization training.

Dominance

The effects of dominance motives are quite apparent in the prestige-seeking societies. The dominance motive, perhaps, second only to sex has been exploited in many ways by politics, commercial promotions and advertising.

Aggression

Aggression is characterized by hostility and destructiveness directed towards other individuals, but the motive behind that behaviour may be quite difficult to identify. Aggression is prominent as an instinctive motive in Freud's theory of personality. Aggression is also connected with the state of frustration, holding that aggression is linked to certain cues in which the emotion of anger is normally elicited. The aggressive motive has a logical basis in theory but the isolation of examples of aggression as a 'pure' motive, uncontaminated by other motives has been difficult.

SELF MOTIVES

The self-motives are even more complex than most of the motives classified as survival and social, in that the personality structure upon which the motive is based is also acquired in the process of socialisation. Motives which defend the 'ego' or 'self' from incongruent action and information, provide examples for the study of this kind of motive.

The important self motive is the need to achieve one of the several motives included in an attempt to measure and study human motivation. Research on achievement motivation has used individuals classified by the fantasy assessment technique as having a high or low need to achieve. Low need achievers prefer a moderate risk, presumably in the hope of

scoring consistently. High need achievers prefer a difficulty level for which a success is valuable.

What is Motivation?

As discussed earlier, a motive is a desire for a goal. A motive can be verbalized reminder, a fleeting image or a fragmented version of either. We must distinguish between the latent representation of the goal, or the motive and the activation of that desire which is called motivation. A motivational state is best viewed as an abstract mental set. For example, when a person sits down to listen to a news broadcast she readies herself to receive certain sounds; she is mentally preparing for a particular set of events. This preparation is the state called, 'motivation'. A motive that is activated limits perception as well as action, for it acts like a governor on a motor or a programme in a computer. A simple illustration of the meaning of motivation as a mind-set can be seen in the behaviour of a man driving home after a day at work. The man leaves his office at 6 P.M., reminding himself briefly of where he is going. This self instruction takes less than a second. His mind then turns to other matters—the evening's work and the problems of the next day. He gets into his car, starts the ignition, makes automatically the correct set of turns to his house, without even thinking about his actions or about the goal towards which he is driving. Had he decided as he left the office, that he was going to a restaurant on the opposite side of the city, he would have made a different set of turns and arrived at his destination. There was a brief moment when a representation of a goal let the man select a set of action routines that ran off automatically. The motive was the brief representation of the goal.

Each individual possesses hundreds of thousands of representations of goals, most of which lie dormant in the shadow of unawareness. Some representations are capable of being activated into consciously experienced wishes. Others are less available to awareness, a fact that led Freud to invent the notion of unconscious motives. A motive is said to be unconscious when a person is unaware of a set of goals that he desires.

Motives and feelings are related to each other. Motivations, feelings and emotions constitute the main current of the dynamics of human behaviour. Therefore a study of the process of motivation is helpful to understand human behaviour.

References

Edwards, C., *Genera Psychology*, London: Macmilian Co., 1968.

Kagan, J.*Understanding Children Behaviour, Motives and Thought*. New York: Harcourt, Brace, Jovanovich, Inc., 1971.

Kagan, J., Havemann, E., *Psychology : an Introduction*. New York: Harcourt, Brace, Jovanovich, Inc., 1972.

Kennedy, W.A., *Child Psychology*. New Jersey: Englewood Cliffs, Prentice-Hall Inc., 1971.

CHAPTER 5

Maturation

Maturation is a concept which denotes growth, development and some intangible and qualitative changes in a person, structure or organ. It describes differentiation within structure and organs. Ordinarily it is used to designate qualitative changes, that is, changes in the complexity of structure, to begin functioning differently, or to function at higher levels. Psychologists have associated the inner process of maturation with a 'ripening' or 'readiness' of capacity based primarily upon a maturing of the organs of the body or its systems. For example, certain parts of the nervous system must mature for the given capacities to be ready for use. Olson (1959) uses the term, 'maturation', to cover the anatomic, physiological and chemical changes of the body that occur with time, and over which there is little or no control. Those changes push the child towards adulthood. The 'in-built' forces that effect such changes towards growth would fail if the environment is unfavourable or inappropriate. Olson uses the term 'development' to designate the complex product of maturation that is nature's design and nurture. Maturation requires nurture for development and development works with maturation to bring about the succeeding steps in development, which in turn, make greater demands upon the environment. This interlocking relationship is illustrated in Figure 5. Maturation has the following two facets: (1) Physiological and (2) Psychological.

Physiological Maturation

Physiological maturation refers to physical growth and functioning of some or all of the bodily systems. For example, at birth, the infant's skeletal structure is incomplete. His bones are, to a large extent, cartilage, and need to undergo considerable change towards 'hardening' with deposits of calcium and phosphorous, growing in length, breadth and density. Until a satisfactory level of maturation is reached, the child cannot begin to walk. His bone and other structures have not matured sufficiently. Similarly, the central nervous system also cannot function fully unless there is maturation. During the first month of life, there is a tremendous development of the nerve tissue of the brain and spinal cord. Until this system is sufficiently matured, the various phases of motor control which are dependent upon the C N S cannot appear. The interaction between physiological growth and psychological development is thus apparent. The latter cannot manifest itself until the organs of speech are sufficiently developed and are 'ready' to make the learning of speech possible. In this sense, maturation signifies the changes and refinements in the anatomy and physiological functioning of the muscle, bone and nerve and the regular, predictable biological growth pattern which characterises the individual (Stone and Church, 1957). Maturational

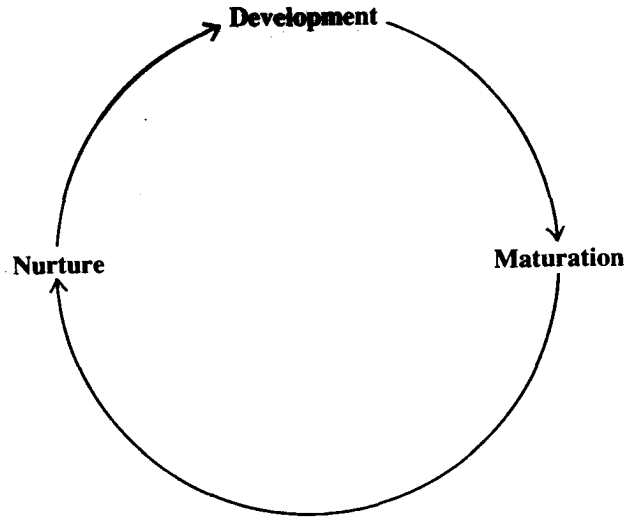


Fig. 5. The interlocking relationship between development, maturation and nurture.

changes result from inner stimulation that is from the built-in time table that governs the development of every child.

Psychological Maturity

A person is considered psychologically mature, when his responses to a situation are appropriate to his development and adequate to meet the demands of the situation. For example, a six-year-old child who starts his school life without much disturbance at the change of his milieu, with some cheerfulness and interest, displays responses appropriate to his degree of development. The ten-year-old whose behaviour is that which we expect of a boy of his age is behaving in a way appropriate to his stage of development, even though he may show some reluctance at his daily physical exercise. On the other hand the five-year-old's tempertantrum exhibited when refused a piece of sweet is not proportionate to the demands of the situation. He displays psychological immaturity.

Principles of Maturation

The principles of maturation are as follows:

1 Maturation follows an orderly sequence.
2 Maturation of the organism develops as a unit.
3 There is differentiation and integration in maturation.
4 Maturation is not uniform for all children.
5 Level of maturity is one of the determinants of readiness for learning.
6 Maturation influences the behaviour of the organism.
7 Maturation and learning are intertwined.
8 Time is a factor in the process of maturation.

1. Maturation Follows an Orderly Sequence

The development of physical structures through maturation proceeds in an orderly and progressive sequence in the infant. The growth of the organism follows a natural sequence which is comparable in all infants. Gesell and Ilg (1943), who had devoted a great deal of time to develop norms, wrote:

> The child's personality is a product of slow and gradual growth. His nervous system matures by stages and natural sequences. He sits before he stands; he babbles before he talks; he fabricates before he tells the truth; he draws a circle before he draws a square; he is selfish before he is altruistic; he is dependent on others before he achieves dependence on self. All his abilities, including his morals are subject to laws of growth. The task of child care is not to force him into a predetermined pattern but to guide his growth.

Throughout the maturation responses of the child, there is sequence, in which the accomplishment of each step sets the stage for the next phase of development. Thus maturation is accomplished not in a haphazard manner, but as in all nature, growth is realized according to an orderly pattern which can be studied and recorded for the guidance of those who work with children.

Since there is a definite growth pattern for the development of all structures, it is apparent that the infant will make certain responses only when a particular structure has matured and not before. For example, the child does not ordinarily walk before he can stand, does not reach for an object before he has first learned to fix his eyes. Therefore those who give exercise and training to the infant must recognize the need for his physical readiness in order he can learn a particular task. Since maturation appears to move forward without much help in the way of educational aids, use of specific exercises and education is even unnecessary, and may even prove ineffective. Studies on twins by Gesell and Thompson (1929) and McGraw (1935)

have indicated that phylogenetic functions are not materially affected by exercise or special training. In this context Gesell and Thompson (1929) write,

> "We have studied. . . . . a highly identical pair of twins at the Yale Clinic of Child Development, over a period of 14 year, by repeated physical and mental measurements, by systematic motion picture records of behaviour and experimental observations using the method of co-twin control. We have followed the life careers of the twin girls from infancy to adolescence. In the co-twin control studies, we trained one twin (T) and reserved the other twin (C) as a comparative control, to determine the effects of intensive training in such simple functions as stair-climbing, block-building, vocabulary and manual co-ordination. These effects proved to be relatively impermanent; the untrained twin attained the equivalent skill as soon as she reached the requisite maturity.

McGraw's (1935) results confirm the above conclusions. In his experiments the untrained child caught up very quickly with the experimental child, as soon as he had an opportunity to demonstrate what he could do. The Hopi child, though spending months on a cradle board, is able to walk as soon as the opportunity presents itself (Dennis, 1940). These studies have far reaching implications for understanding child development. Activities dependent upon maturation of structure for their appearance will not appear earlier or improve permanently, as a result of special training. As McGraw has pointed out, while the use of activity will not advance appreciably the day a child begins to walk alone and will not alter the general method of progression, exercise may influence the ease with which he places his steps, speed and progression.

2. The Maturation of the Organism Develops as a Unit

If the organism is to survive as an effective structure, it must, and it does, develop as an interacting totality. Any segment of the growing organism can be understood only as it is seen as a part of the entire structure.

3. Differentiation and Integration in Maturation

The process of maturation progresses from the general to the specific, from the random movements to the well ordered, from the axis outward, and from the head downward. These are well established and observable phenomena which each child reveals in his own maturing behaviour. This process of differentiation and specificity of response is largely dependent upon maturation of the muscles and the CNS. It is also dependent upon an economy of movement. Those responses which do not satisfy the needs of the organism are dropped out gradually.

4. Maturation is not Uniform for all Children

Each child has a unique pattern of maturation which in general conforms to the pattern of development common to all children, but which is sufficiently individualised to be effective in influencing the course of development of the personality of the particular child.

Why does one child mature more rapidly physically than others? Why does one child walk upright without ever having first crawled? Why is one child's growth arrested at a particular level? These are probably due to nature rather than nurture. Knowledge of the varying rates and influence of the types of growth patterns is essential and indispensable for child guidance and care.

5. Level of Maturity is One of the Determinants of Readiness for Learning

Aparna was a slow developing child during the second quarter in primary school. She got

along well with her age mates but was slow when reading instruction was introduced. She lagged behind and made almost no progress. Ability to translate symbols into words and then into ideas seemed to be completely beyond her, and individual instructions did not help her. Her eyes had not matured enough to perceive the printed words easily, and her cerebral cortex was still not functioning on a high enough level to enable her to translate the printed symbols into words and meanings. She was not promoted to the second grade because of her reading failure and general immaturity. During the next year she appeared to be on par with the other first grade pupils. When she encountered reading training again, she forged ahead steadily and made good progress. Thus maturation had made her ready. Reading requires a certain level of sensory and neural maturity. Until that stage of maturity is reached training will have little effect.

6. Maturation Influences the Behaviour of the Organism

An individual responds to his surroundings in ways permitted and delimited by his biological equipment. To illustrate: a person can perceive his world only from the data supplied by his sense organs (example—taste). Also influenced by maturation, as far as the higher organisms are concerned, is the glandular system (Reproduction). Maturation sets limits on the individual's behaviour. They are closely intertwined.

7. Maturation and Learning are Intertwined

It is difficult to find any behaviour pattern which could be traced as the result of pure maturation. For instance, in motor sequence in children, the progress from lying down to creeping, standing and walking is generally considered to be due to maturation. But if we change the normal human environment to an abnormal one, where the baby must always lie on his back, creeping may not appear. The more uniform an environmental situation is for all of the species, the more can the interactions with it be attributed to maturation.

8. Time is a Factor in the Process of Maturation

Time is a decisive factor in the process of maturing. When behaviour patterns depend largely upon maturation, their development cannot be hurried. Nor can they be retarded except by very drastic methods. In these ways, maturing of behaviour resembles maturing of the body. A series of events take place with great uniformity and under widely contrasting environments. This obvious similarity in growth patterns suggests a close connection between physical growth and mental growth.

9. Maturation and Learning

Fundamentally, behaviour is dependent upon the patterns of interaction of the neurons of the nervous system. The problem is to understand how these neuronal associations are formed to give rise to appropriate behaviour. The neuronal associations may be directly determined by the process of growth and self-differentiation or may be patterned by functional regulation through experience and training. Most of the activities of the child, of the adolescent and the adult are due to experience and training. To what extent the success of the training has registered success will depend upon the potentialities in the individual.

Maturation in man depends on the human genes and the human intra-cellular and external pre-natal conditions. Even after birth, there is growth unaffected by activity. Thus maturation occurs before as well as after birth. Just as the various organ systems develop before birth and after birth, just as the cells of the early embryo differentiate into a variety of types to form diverse tissues of the adult body, the cells of the CNS undergo differentiation

among themselves into a multitude of neuron types. This is not limited to the nervous system. The associated muscular and sensory tissues also become differentiated and specific.

Development that results from maturation must be contrasted with the development which depends on stimulation and response or on the activity of the receptor, the neural and the effector mechanisms. For example, our biceps develop by maturation, but the size of the muscle will depend largely on exercise than maturation. On the other hand, habits, skills and knowledge depend entirely on learning. They develop as a result of the stimulus-response activities involving the brain. In other words, these developments are individual rather than racial. A few studies show the importance of maturation in the race, as well as in the individual and the limitations of exercise and learning.

That maturation is a very important process can be seen by the fact that no amount of exercise or learning will enable the newborn child or the six-month-old child to walk or to talk. Similarly, we cannot teach a child of six months to pick up a pellet with his fore-finger and thumb. Exercise as well as learning become fruitful only when the organism is in a state of readiness to profit by them.

Training a child, for whatever activity, is non-productive, until the cortical development required for the task has been completed. The co-ordination necessary for walking, for example, is quite impossible before the motor cortex and cerebellum have developed sufficiently. When children have sufficient cortical facility they learn far easily with a minimum of training and practice for a task. An excellent example of the operation of this principle is furnished by a Hopi Indian child-rearing practice. The Hopi child spends much of his first two years on a cradle board, and has almost no practice in standing, creeping or crawling. Yet he walks at a normal age. When a child is ready to walk, he walks.

Much of the behaviour of the child during the first year of life results from the physiological maturational changes with his nervous and muscular systems. Only later, environmental influences such as stimulation and training, exert a major effect.

Kellog and Kellog (1946) reared an infant boy and an infant chimpanzee in the same human environment. They treated them both with the same affection and tenderness. Their aim was to see to what extent the chimpanzee could be humanized by the human environment. The boy was two months older than the chimpanzee. Still the chimpanzee was able to learn to skip, open doors, eat with a spoon and drink from a glass earlier than the boy. This was because the chimpanzee, though two months younger than the boy, was physically more mature. The chimpanzee reached the upper limit of its maturity much faster than the boy. Thus by 15 months of age, the boy surpassed the chimpanzee in almost everything except in physical strength. The experiment was terminated when the boy was 19 months old. The chimpanzee, though of an inferior species, was superior to the human child in certain respects. This superiority was due to his earlier maturation. On the other hand, the boy, even with his relative immaturity, was able to learn to speak, imitate and solve a number of problems, which the chimpanzee could not do even though he was more mature as a chimpanzee and even though the training given to the two was identical. From the standpoint of evolution, the human being is more mature than the chimpanzee; therefore the human child becomes superior in learning ability very soon.

It is not possible to conduct experiments with human infants, nor can we study the process of maturation, exercise and learning in their case as in animals. However, Gesell developed the method of co-twin control. In this method, two identical twins who are

identical in their heredity were taken up for study. One member of the pair received specific training while the other served as a control. Any residual difference between the twins could be attributed to the experimental factor in the environment. Gesell and Thompson (1929) tried to find out whether the training of one twin in stair climbing would give him an advantage over the untrained twin. At 46 weeks of age, neither of the twins could climb stairs. At this stage, twin T was given training to climb stairs. It was found that after four weeks of training, she was able to climb without assistance and by 52 weeks, she climbed five steps in 26 seconds. During all this period twin C, the control twin, had no chance of climbing stairs. When she was 53 weeks old she was placed in the staircase situation. She climbed the stairs unaided. She took 45 seconds to climb the five steps but with two weeks of practice, she was able to climb the five steps in ten seconds.

This experiment shows the strong influence of maturation and that maturation goes on even after the normal functioning begins. Thus it may be inferred that it is maturation that provides the basic structure of the organism and his potentialities for early growth. Activity can influence only the further growth of the structures already present. It can increase the size of the muscle fibres on the one hand and the nature of the nerve connections on the other. But activity cannot produce new nerve cells. Development of an individual as a competent adult, depends on both maturation and learning. In human development, learning after a certain stage plays an extremely important role. The habits and skills of a person depend upon the environmental situations which promote certain practices. An individual's knowledge as well as social attitudes depend greatly upon the environmental situations in which he is brought up. Thus most of the abilities of an adult as well as his personality characteristics are dependent on both maturation and learning. Particularly in the case of speech, while maturation gives the structures which can produce sounds, all languages, including the mother tongue, must be learnt.

Maturation does not mean that the organnism automatically grows up in a process which involves the unfolding of native potentials determined at the time of conception. The native endowment is there, but the realization of the potentials through maturation of structure is dependent upon the appropriate stimulation of environment, including diet, health, education and exercise all of which facilitate, modify, retard or destroy the ultimate development of innate structure potential. The kind of behaviour that the organism ultimately exhibits is dependent upon the nature of its physical structure. Different organisms react differently to similar stimuli, depending upon the nature of their structure and constitution and their experiences upto the time the stimuli are encountered. Education, training and exercises will be effective in relation to the capacity of each organism to respond to these stimuli.

References

Cole,L., Hall, N.I., *Psychology of Adolescence.* London: Holt, Rinehart and Winston, Inc., 1970.

Cowen, L.E., Melvinzah, *Abnormal Psychology: Changing Conceptions.* New York: Holt, Rinehart and Winston, Inc., 1976.

Dennis, W., 'Does culture appreciably affect patterns of infant behaviour?, *J. Soc. Psychol.* **12**, 1940.

Evans and Smith., *Psychology for a Changing World.* New York: John Wiley and Sons, Inc., 1970.

Gesell, A., Thompson, H., 'Learning and growth in identical twins: An experimental study of the methods of co-twin control', *Genet. Psychol. Monogr.* **6**, 1929.

Hohnhamberth., Mc Cullers, C.T. and Mellgren, L.R., *Foundation of Psychology.* New York: Harper and Row Publishers., 1970.

Illingsworth, R.S., *The Development of Infant and Young Child, Normal and Abnormal.* Edinburgh: Churchill Livingstone, 1975.

Jersild, T.A., *The Psychology of Adolescence*. London: The Macmillan Co., 1970.

Kagan, J., Havemann, E., *Psychology: An Introduction*. New York: Harcourt, Brace, Jovanovich, Inc., 1972.

Kennedy, A.W. *Child Psychology*. New Jersey: Prentice-Hall, Inc., 1971.

Kuppuswamy, B., *A Text Book of Child Behaviour and Development*. Delhi: Vikas Publishing House Pvt. Ltd., 1976.

McGraw, Mystle, B., *A Study of Johnny and Jimmy*. New York: Appleton-Century Crofts, 1935.

Munsinger, H., *Readings in Child Development*. London: Holt, Rinehart and Winston, Inc., 1971.

Olson, W. C., *Child Development*. Boston: D.C. Heath and Co., 1957.

Stone, L.L., Church, J., *Childhood and Adolescence—A Psychology of the Growing Person*. New York: Random House, 1957.

CHAPTER 6

Learning Process

Learning influences almost every phase of human activity. Learning is the great means for adjustment among human beings. It is the process by which the individual acquires knowledge, attitudes and habits that are necessary to meet the demands of life (Boaz, 1971). Knowledge of the learning process is useful not only to the student but to everyone interested in solving social and personal problems. Out of different studies on defining the process of learning, the following points emerge.

A. Learning means modifying and changing one's behaviour with reference to achieving a particular goal.
B. Learning means establishing new relationships between a stimulus and a response.
C. Learning means the development of a method for dealing with problems.

Learning is a process of effecting a change in behaviour which produces an improvement in the learner's relations with the environment as a result of training and experience.

Functions of Learning

Learning functions in three important ways—change in behaviour in the new situation, continuation of the changed behaviour and the use of changed behaviour in various other situations. When a learner faces a new situation he interacts with the situation and his behaviour undergoes some changes. For example, approaching a burning match stick, the child gets burnt and withdraws. This kind of change in behaviour takes place in every situation involving interaction. This is an important function of learning. The learner is able to develop adaptation through this function.

This kind of change is not of use unless retained by the learner. The child who gets burnt once would avoid approaching a burning match stick in the future. Continuity of changed (acquired) behaviour is necessary. Retention of the acquired behaviour is another important function of learning. This involves selectivity, retention of some and extinction of other modes of behaviour.

The changed mode of behaviour of the learned is not of use unless it is utilized in similar situations. The child learns to avoid not only the burning stick but also all burning things. This kind of transfer of learned experience makes learning more useful for the learner. This is the third important function of learning.

The Processes of Learning

Learning is a process which registers growth. Effectiveness of learning can be ensured by paying attention to those of its aspects, namely needs, readiness, situation and interaction.

NEEDS

Learning begins with the need of the learner. If the learner is conscious of the need, learning will be more effective. When the need of a learner is strong, he sets definite goals for achievement. Goal setting helps in making learning concrete. The student who wants to score high marks in the examination is conscious of the need for intensive learning. He sets the goal of scoring high marks and the goal makes him start learning with vigour and maturation.

The teacher can improve learning by studying the needs of children and helping them in setting high goals. When the individual learner himself sets, or is involved in setting goals for himself, learning is more effective.

READINESS

The next aspect of the process of learning is learning readiness. Every child is not ready to learn a particular matter. That is why we do not begin teaching reading or writing before a particular age. The child's equipment in terms of his ability in goal setting (or, at least, in goal perception), necessary physical and mental maturity, previously learned skills, etc., constitute his learning readiness.

People tend to pay much less attention to learning readiness. Parents are often so anxious that their child should learn things fast and start teaching reading and writing too early. But learning readiness is necessary for effective learning.

SITUATION

The learning situation is an important aspect in the process of learning. It provides opportunity for learning. The kind of situation available to the learner contributes to the quality and speed of his learning. The main task of the adults is to organize good learning situations for the child.

Learning situations are found in the home and school environments. Through improvement of the environment learning can be improved. Hence special learning situations should be provided by the teacher and parents to improve the environment.

INTERACTION

The child, with his needs and the goal set for himself, learns by interacting in the learning situation. Interaction is the process of responding to a situation and getting feedback from it—satisfaction or thwarting of the needs. Learning results from such interactions. The more numerous and the more satisfying the interactions are, the better will be the learning. Interaction can be in the form of observable physical movements, or emotional reactions, or verbal reactions.

Theories of Learning

Various explanations are offered regarding how learning takes place. Each theory emphasizes one aspect of the process and is therefore, helpful in explaining learning partly. The following are some of the important theories.

Connectionism
Trial and error learning
Conditioning
Reinforcement
Wholistic theory
Imitation

CONNECTIONISM

Learning can be explained in terms of conceptions occurring in different situations or stimuli. The theories giving importance to association as the basis of learning believe that a bond is established between two or more experiences, so that the second experience tende to connect the first one.

Trial and Error Learning

Based on his work with cats, Thorndike (1932) postulated his theory of trial and error in learning. A hungry cat would be put in a puzzle box. A fish would be placed outside the box, and the smell of the fish would be a strong motive for the cat to try to get out of the box, which he could do only by pushing a latch. In such a situation, the cat would make all kinds of movements—jumping, biting at the bars, scratching at the door, pushing at various parts and so on. All such movements may be of no use and the cat would not be able to get out of the box. At some point he may, by chance, paw at the latch and get out. When he is again put into the puzzle box, he would take less time to make the correct movement. In due course, he makes the correct movement as soon as he is put in the box. The cat has learned to open the latch.

Thorndike explains this type of learning as resulting from movements made at random, movements which are tried as possible ways of getting out of the box, but which are initially wrong movements. Such 'trial and error' movements include also one movement which is correct. Each movement involves some kind of connection. When there is no desired effect, the connection is weakened. Nevertheless, the connection of the movement which is able to bring forth the desired response is strengthened. It is strengthened because it brings about the desired effect. This is learning—strengthening of the connection of the response or set of responses made as trials. This theory can be applied to explain human learning also. For example, when a child starts speaking, he utters a variety of sounds, some of which are dropped subsequently because their connections do not produce effect.

Thorndike emphasized the following sequence in the use of the trial and error method. (1) The random activity. (2) The gradual reduction of useless movements. (3) The fact that the animal finally learned the trick. To explain the process of learning Thorndike suggested three laws. They are :

1 Law of effect
2 Law of frequency
3 Law of recency

1. *Law of Effect*

If any particular activity gives the satisfaction of success, then there is a tendency to establish that activity and get it fixed. On the other hand, when a particular movement does not yield the desired result, the feeling of disappointment and dissatisfaction helps towards discarding that particular movement. In Thorndike's words, when a modifiable connection between a situation and a response is made and is accompanied or followed by a satisfying state of affairs the strength of that connection is increased.

2. *Law of Frequency*

When any activity is repeated a certain number of times, there is a tendency for the same to be permanently established. Anything repeated gathers a certain amount of strength by which it would be easier to repeat it again. This is called the law of frequency.

3. *Law of Recency*

Another principle governing the trial and error learning is that an act which has just recently been performed has an advantage of being repeated once again, for the simple reason that it is recent and fresh in the experience of the organism.

Learning by Conditioning

Conditioning represents learning at a very simple level. The principle of conditioning was first explained by the Russian physiologist Ivan Petrovitch Pavlov (1849-1936). It has since become a fruitful source of experimental studies on learning.

Pavlov was conducting some experiments with dogs on their digestive process. During these experiments, the sight of food or the

placing of food in the mouth always caused the flow of saliva in the dog. Food is the natural stimulus of the salivary reflex. Pavlov noticed one day that even before the food arrived or was in view, the mere sound of the footsteps of the servant caused the dog to salivate. Here contact with food is the natural stimulus. Pavlov tried to experiment whether the dog can be made to salivate to any stimulus, however strange or unnatural it may be. He demonstrated that if a bell is rung repeatedly for a few times and each time the dog is fed, soon it will begin to salivate when the bell is rung without the food being brought. Thus the process of 'conditioning' simply means the establishment of a connection between a response and a stimulus which has no natural connection with it.

The natural stimulus food is technically called the 'unconditioned stimulus' (US); the response to the natural stimulus is called the 'unconditioned response' (UR), the strange experimental stimulus to which the response is conditioned is called the 'conditioned stimulus' (CS) and the response after it has been conditioned to the strange stimulus is called the 'conditioned response' (CR). (Figure 6).

In this classical experiment, after the salivary conditioned reflex had been established to the sound of a bell, the dog continued to salivate at the sound of the bell a number of times, even though on these subsequent occasions the CS was not followed by the US (food). After a few such trials, the amount of saliva secreted became less and less, till at last there was no saliva at all. In other words, the connection had been broken and what was called 'an experimental extinction' of the conditioning had been effected. To avoid the extinction taking place, the US must continue to follow the CS. Technically this is called 'reinforcement'.

With regard to the phenomenon of experimental extinction, Pavlov noticed an interesting fact. If the salivary conditioned reflex has been extinguished today because of repeatedly presenting the CS without the US, the salivary response may appear again tomorrow, if the bell is rung. But the amount of saliva may not be same as when the conditioning was first established. Still the conditioning tended to reappear. This was called by Pavlov the 'spontaneous recovery' of the conditioned reflex.

Pavlov demonstrated that conditioning a conditioned response is also possible. In the first stage, he conditioned a dog to salivate when a bell was rung and called it as 'first-order conditioning'. In the 'second-order conditioning', the bell itself was connected with another stimulus, a light. The experiment took the same form. A light was shown and the bell rung. There was salivation due to the bell. This process was repeated a few times and finally it was found that the dog salivated when the light was shown.

Another fact noticed was when the dog had learned to salivate to a particular bell, the CR appeared also with some other sound which was very similar to that of the bell. This was technically called 'stimulus generalization'.

Pavlov also demonstrated the limits to which 'stimulus differentiation' can be made. The dog was positively conditioned to a high tone of the bell. At the same time it was also negatively conditioned to a low tone. This means that whenever the low tone was produced food was not given. When the lower tone is never reinforced, the dog is made to note the differences in pitch. This is called 'stimulus differentiation'.

Although Pavlov was not primarily interested in the psychology of learning as such, it must be observed that he considered the process of conditioning sufficient to explain all forms of learning. As he put it 'Different kinds of habits based on training, education and discipline of any sort are nothing but a long chain of conditioned reflexes'.

Pavlov's theory utilizes the principle of

substitution in explaining the process of learning. Children learn to fear because of conditioning. In a child's experience, a toy dog becomes a substitute for loud noise, if both occur simultaneously. The toy becomes a source of fear for him afterwards. Similarly in learning to speak a language, the child learns to use those sounds which are associated with smiles, gestures of approval and appreciation.

The Human Subject and Conditioned Response

Watson (1920) started the conditioning experiment on human beings. He demonstrated this with a nine-month-old baby, Albert. Albert had no fear of rats. Like all children he had fear for loud noise. In the experimental situation, a rat was brought before him and as he approached to touch it, a loud sound was made by striking a metal bar behind him. Albert showed signs of fear and a startled reaction. This procedure was repeated a number of times. Soon conditioning had taken place and at the very presentation of the rat, Albert showed signs of fear and cried. This fear was also generalized to a number of similar objects such as rabbits, dogs and other furry objects.

Watson also showed how an acquired fear can be unconditioned or extinguished. He kept the rat at a distance and brought it to the notice of Albert when he was in a pleasurable situation such as enjoying a sweet or playing with his mother. After a few presentations like this he brought the rat a little closer, taking care to see that the child was not disturbed from his pleasant experiences. In course of time, he observed that the acquired fear was removed. Such experiments of Watson have great practical significance because children acquire many fears from the elders and in other situations as a result of the process of conditioning. Watson has also given us a method for removing such fears.

Reinforcement Theories

The theories outlined above stress on the association formed on the basis of temporal contiguity. While this may be an important condition of learning, simultaneous occurrence of two events does not always result in learning. Learning is selective. How is a particular response selected rather than the other ? The responses which are reinforced get selected, i.e., these responses are picked up by the organism which are rewarded. Emphasis is given on this aspect by Hull and Skinner, the authors of the reinforcement theories.

Hull's Theory

Hull formulated a number of laws which explain the intervening variables essential for learning. According to Hull, learning results from temporal contiguity and reinforcement. Reinforcement is the rewarding state which produces need-reduction or drive-reduction. Reinforcements are of two types—primary and secondary. Primary reinforcements reduce the basic physiological needs like hunger and thirst. Secondary reinforcements acquire reinforcement effects through their long association with primary ones. Hull's fourth postulate defines the upper limit of the habit strength in terms of relationship between three variables; the magnitude of the reduction, the time interval between response and reinforcement, and the time interval between the conditioned stimulus and the response.

Hull's theory was not tested much with human learning. The central position given to reinforcement, of course, has implications for class room teaching. In the earlier stages, primary reinforcements are more important which could gradually be replaced by secondary reinforcements.

Skinner's Theory

Skinner's main researches were done with rats. He holds that any response which leads to reinforcement will be strengthened. This concept differs from the usual S-R (Stimulus-Response) concept. It is not this bond which is strengthened. According to Skinner each

reinforcement builds up a reserve of responses.

Skinner's Instrumental Conditioning

Experiments on instrumental conditioning took away the emphasis on reflex actions and directed the attention of psychologists towards more complex behaviour. Skinner wanted to emphasise instrumental responses since most of human as well as animal behaviour come under this category. For this purpose, he devised a box which provided a learning situation of rats. It is referred to as 'Skinner box'. The box contains a simple lever-like device, which when pressed by the rat releases food (or water). There are devices for recording the number of such operations done by the rat. In his experiment, a hungry rat was put inside the box. After some period of inactivity, the rat began to explore the box and happened to press the lever. This happened two or three times before the rat noticed the food that was released. Later, the rat went on pressing the lever, every time running to eat the food.

According to Skinner, the experiment demonstrates the fundamental principle involved in most learning activities. First, the animal is motivated by a need (hunger). The general exploratory activity, which is the result of such a motivation, results in an accidental activity, instrumental in achieving the appropriate goal. The animal learns this particular response which has been instrumental. Skinner also uses the concept of reinforcement which has been found to be useful in all forms of conditioning experiments. When the hungry rat gets food there is reinforcement of the response, and only through this reinforcement does the animal learn the response. By modifications of the experiment, Skinner also studied the process of secondary reinforcement (same as second order conditioning, extinction of the learned response, etc).

Skinner emphasized by means of his experiments that most of our learning does not consist in simple S-R connections. The response is determined not by the stimulus but by the organism and its needs.

Wholistic Theories

In contrast to the theories emphasising the establishment of associations, some theories explain learning as a unique phenomenon occurring in a bigger context. These theories are naturally influenced by the Gestalt school.

Gestalt Theory

A group of German psychologists conducted experiments which gave rise to the Gestalt school of psychology. So far as learning is concerned, the Gestalt point of view emphasizes the close relationship of learning and perception. The learning phenomenon can be understood only in terms of perceptual organization. Wolfgang Kohler did interesting experiments with chimpanzees. The chimpanzee learning was called learning by insight. After a chimpanzee had seen a hanging banana and a box, the perceptual organization underwent a sudden change, resulting in the development of insight in the chimpanzee who drew the box under the fruit and was able to get it. This could be repeated later. The perceptual organization explains learning. While an organism has an experience, the traces are retained and get organized into wholes, or Gestalt's learning takes place when the relationships get reorganized into new patterns. According to the Gestalt school, learning cannot be explained by simple S-R bonds; it is the organizational pattern which is important.

This theory has much to offer to education. The teacher strives to develop significant relational patterns. This can be done through proper planning, providing significant experiences to the child and integrating theory and practice.

Insight in Learning

The sudden and new way of looking at the problem and solving it is called 'insight'. The

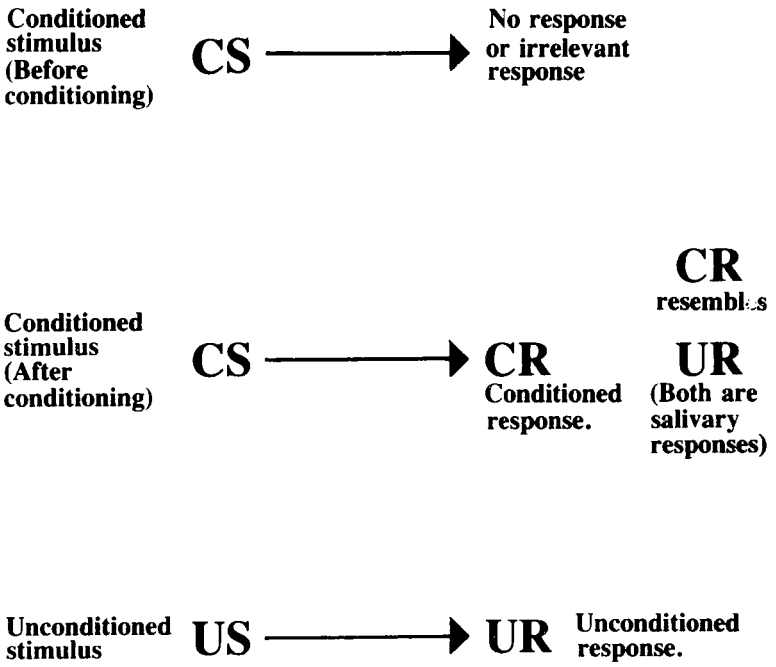


Fig. 6. Classical conditioning.

Fig. 7. Learning by imitation.

factor of insight in animal and human learning has been well demonstrated by many experiments. Kohler being a German citizen happened to be marooned in the Canary Islands during the First World War. That period gave him ample time to conduct a large number of experiments with chimpanzees, studying this problem of learning with particular reference to the factor of insight.

In one interesting experiment he put the chimpanzee, by name Sultan, inside a cage and a banana was kept outside. Inside the cage two sticks were placed, one longer than the other. One was hollow at one end so that the other stick could be thrust into it to form one long stick. The banana was so placed that neither of these two sticks will be long enough to reach it. But, if the two sticks were joined, then the banana could be reached. When the experiment started, just like Thorndike's cat, the chimpanzee got active. It tried various means of reaching the banana but every effort ended in vain. Kohler noticed that after some unsuccessful attempts, the monkey gave up the problem and just sat down in a corner and was playing with these two sticks. While playing like this, accidentally one stick fell into the hole of the other but not properly. This gave the animal a 'brain wave' or a 'bright idea'. The animal straightaway joined the two sticks firmly and got the banana. Kohler emphasises the suddenness with which the right solution appeared. It was not a gradual learning by the trial and error method. Similar experiments conducted by others with animals and with human subjects, particularly children, have shown that at some stage there is a new organization of the perceptual field resulting in getting the solution all of a sudden, which factor is named 'insight'.

Learning by Imitation

The human child learns a number of things by imitating his brothers, sisters and other elders in the house. Experiments done to find out the extent to which learning could be by observing and copying the performances of others show that children can be taught to imitate certain responses when the basic principles of learning and motivation are followed. The factor of maturation will also play a part. The child who is not mature enough cannot learn to jump just by observation. Similarly just by observation a boy cannot learn to ride a bicycle. So imitation as a help in learning can go into play only when the basic skills for the particular task have already been acquired.

Factors that Influence Learning

The factors which condition learning can be grouped into the following types.

A. The psychological factors—Motivational
B. Physiological and
C. Environmental

The motivational factors refer to these activities or movements which are brought about by motivating the learner. Motivation is the psychological factor which goads learning. The physiological factors facilitate the general physical status and tone of the learner. The environmental factor represents the arrangement of the total environment which is favourable and conducive to the learning process.

A. Motivation: The Psychological Factor

Motivation is the heart of the learning process. Adequate motivation sets in motion all the activities which result in learning, sustains and directs it. When the motivation generated is adequate, interest and effort are the positive outcomes which will emerge spontaneously.

Motivation of the learners in the school would depend upon a number of factors, the chief among which are the mores, beliefs and conditions of the society. While these operate outside the school, there are certain educational techniques and measures which may facilitate the creation of motivation. These are: maturation; repetition; rewards and

punishments; co-curricular activities; active participation and involvement; emulation; collective work; evaluation and feedback, checking progress and knowledge of results; and better teacher-pupil relationships.

Maturation

Some parents expect that seven-year-old children be in the fourth standard and achieve good results, while they are fit only for the second standard. It is highly unwise to so stimulate children for activities beyond maturation. Unless the child is physically, socially and mentally mature for the activities proposed, he will fumble and get frustrated. Thus the attempts and attitudes of the parents to push their children to classes higher than what their ages warrant are pernicious to the growth of children. The normal child is capable of taking care of himself in many respects. To provide challenges beyond his maturation may bring frustration and feelings of failure, which in turn may inhibit his mental growth and reduce his rate of learning. On the other hand, a properly planned curriculum and teaching appropriate to the age and level of mental development of the child would make learning meaningful, interesting and enjoyable. Pupils will then get interested in what they learn and therefore become involved in such learning. They begin to see some purpose and goal in their work and strive to achieve them. Properly understood goals increase motivation.

Repetition

From time immemorial repetition has been used as a method of teaching. Educationists now understand that mere mechanical or forced repetition does not lead to learning or modification of behaviour along the desired lines. Voluntary repetition of action is possible only when pupils get satisfaction from such an activity. The principle of pleasure leads to repetition and seeking satisfaction from repetition. The law of effect thus comes into operation. Certain connections in the brain get strengthened because of frequent repetition of the corresponding actions. This leads to effective learning. Here also motivation plays the central role. The child repeats his lessons and willingly works further, when there are prospects of satisfaction. The future satisfaction and pleasure, therefore, work as motivation.

A major task of the teacher is to make effective use of the motives and goals of children in ways that will harmonise them with the acquisition of socially useful skills and knowledge as well as socially desirable attitudes and beliefs. McDonald (1965) has emphasized the crucial tie between the child's goal and the teacher's instructional effectiveness by stating, 'The goal is what the child seeks, the incentive is what the teacher provides'.

Teachers need to gain insights from the study of motivation. Never are they closer to the 'why' of human behaviour than when they are carefully considering the evidences regarding the satisfaction of a child's basic drives and motives. There is no part of psychology that is more suggestive of helpful insight into the actions of children and youth than the accumulated scientific knowledge of human drives and motives.

Without a sound concept about human motivation, a teacher is likely to make erroneous inferences about why a child does certain things and deal with the child with wrong kinds of treatments resulting from faulty interpretations of the forces that are hidden within the child's behaviour. Motivation, like most other aspects of human behaviour, must be, as far as possible, studied in the context, that is, in the context of a particular 'whole' individual functioning in a particular environment, at a particular point of time. It is a short-sighted practice to try to understand a person's motives without at the same time trying to see his world as he perceives it or to try to understand his motives apart from his past experience, thoughts or feelings.

Rewards and Punishment

Rewards. A reward means something given to one person by another person or group in recognition of some merit. Reward generally brings pleasure or satisfaction to the recipient. When a child is rewarded immediately after some behaviour and knows that the reward is given for the behaviour, the particular behaviour is likely to recur at appropriate situations in the future. Also if a reward is promised for similar behaviour, the probability that the child will try to produce the desired behaviour again, is increased. For example, the mother rewarding a child for doing a right deed and then promising to reward him again, increases the probability of the child's starting to work immediately. Similarly saying 'good', in praise of the child, or smiling when he persists at tasks, will strengthen the persisting behaviour of children. In this way, rewards following certain responses can serve as positive reinforcers of the responses rewarded. From the standpoint of motivation, wanting to get the reward or expecting to get the reward directs and sustains the child's effort on the task.

An effective reward system does not require competition among children, nor should the higher-achieving, better behaving children get larger or more frequent rewards. On the contrary, the child who most needs frequent rewards for starting work promptly is the one who does not habitually start work promptly. He is promised rewards for starting promptly in the future and is rewarded when he does so. The amount and frequency of the reward are gradually decreased, as his behaviour improves.

A careful balance must be maintained between immediate rewards and promised rewards. Promised rewards must actually be given when the conditions are fulfilled within the stipulated time. Furthermore, the stimulation of rewards applies throughout life. For example, most adults-including the educated usually perform better and higher quality work when promised additional pay, better working conditions, or even just recognition for work well done.

Punishment. Punishments always brings pain or dissatisfaction to the recipient. Punishment is of many types including the withholding or withdrawal of anything that serves as a reward, expressing disapproval, either verbally or in non-verbal ways such as threatening, giving low grades or other indications of unsatisfactory work or conduct; removal from a desired situation and deprivation of basic needs.

Punishments may be administered by individuals or groups.

Receiving a punishment immediately after a response may bring about one of the following results.

(i) Weaken the response.
(ii) Lead to the recipient's temporarily supressing the response.
(iii) Lead to the recipient supressing the response only in the presence of the punisher.
(iv) Evasion of, or open aggression against the punisher.

In a few instances, announcing a punishment for not performing a task, may lead to the performance of the task. However, in a majority of cases it may lead to avoidance of the task, the punishment and the punisher. Being warned of a punishment if a specified anti-social behaviour is manifested may lead to non-manifestation of the behaviour, but it is more likely to lead to avoidance of the punishment and punisher, while still expressing the anti-social behaviour. Punishment may also result in undesirable anxiety in the child, negative feelings toward the punisher and negative feelings towards the system, whether family, school or community. There is yet another aspect to punishment. Punishment and threat of punishment are often misused or abused especially from the standpoint of the form of the punishment, its severity and timing.

Forms of punishment. One of the common forms of punishment given in the primary

schools is imposition or additional home work. Performance of school tasks such as doing additional work or extra assignments should never be used as punishment. Staying in the classroom doing school work, while other pupils are enjoying other activities or coming early or staying late to do school work are unpleasant experiences to the school going child. Using these as forms of punishment results in an effect opposite to that intended (Mager, 1968). Such forms of punishment create a dislike rather than a liking for school and school learning tasks. Actually, these activities should be used as rewards rather than as punishments. Also verbal insults, rebukes and attacks which are used widely to curb agressive behaviour, are often ineffective, because they tend to reduce aggression only in the presence of a strong authority, but increase it in his absence. Furthermore, in the process of punishing, the punisher ends up modelling aggressive behaviour which children may imitate and practise on other children.

The withdrawal of or withholding rewards, and privileges would serve better as punishments in school settings than inflicting physical or psychological pain. For example, going to the children's library or museum, listening to a record, or using the tape recorder may be a privilege or reward for getting a certain task accomplished well. Not being able to do these can serve as punishment; such a privilege can be readily withdrawn or withheld until the child manifests the desired behaviour. Withholding or withdrawing sweets or toys may also serve as punishment for young children. The sweet is withheld until the child exhibits the desired behaviour. It is given to him, immediately after he manifests the desired behaviour, thus reinforcing the desirable response. Saying words such as 'good', 'excellent' and 'fine', smiling at the child, and making other appreciative gestures that serve as rewards may also be withheld as punishments. In general, if the mother's or teacher's approving and affectional behaviour towards the child reinforce the desired responses, then, withholding or withdrawal of such approval will serve effectively as a punishment or threat of punishment to channelize behaviour along the desired path.

Severity of punishment. 'Severity' of punishment is a relative quality and is difficult to specify. Some acts intended as punishments do not result in either pain or dissatisfaction to the individual. On the other hand, a punishment may be so severe that it causes the child to feel continuing anxiety of permanent dislike of the punisher or both. When punishment is used, it should be sufficiently severe to cause temporary pain or dissatisfaction, and yet not produce undesirable long-term effects.

Timing of punishment. To be effective, punishment should be administered before the start of an undesired response, or its early inception, rather than immediately after or long after the undesired response has been completed. Once started the punishment or threat should continue until the child ceases the undesired response and preferably demonstrates the desired response. In turn, a reward is given when the child stops the undesired response or when he shows the desired response. The reward has two important effects. It strengthens the desired response and dispels possible ill feelings which the child may have generated towards the punisher.

Many adults, parents and teachers report that minor misbehaviours are best dealt with by ignoring them, particularly when the peers also ignore the misbehaviour. Ignoring or withholding attention or approval, may be interpreted by the child as a punishment. Further more, for some children, if attention is called to the misbehaviour of the child, this form of attention even though disapproving may serve as a reward, strengthening their misbehaviour, rather than eliminating it.

Punishment is obviously a negative motive and is based on fear of failure, lowering

prestige, insult or rejection and physical pain. Personality development based on fear of physical punishment is inimical to democratic living. Extreme punishment and insulting experiences kill initiative, resourcefulness, leadership and the spirit of free thinking and adventurous living, the very qualities to be cultivated in children. Punishment in school turns pupils into mechanical toys cramming certain facts without appreciable mental activity leading to development. Even the fear of failure in an examination is a negative motivation. Pupils work, not because they want to learn and excel, but because otherwise they may fail and be rejected. Such negative motives lead to a variety of negative and anti-social activities such as creamming, copying, stealing, quarrelling, corruption and bribery. In extreme cases, punishment and cruelty may lead to the recoiling of pupils from the society itself. In such circumstances pupils will become undesirable citizens.

Severe physical punishment is outrageous and should be banned in schools. Physical punishment even for criminals is becoming outmoded. But punishment, such as a reprimand, although negative in character, has certain advantages. It motivates children to work on desired lines so that they can avoid the experiences of pain associated with punishment.

Co-curricular Activities

Co-curricular activities such as sports and club work play an important role in motivating pupils to work. Therefore, as many activities as possible must be provided in the homes and schools so that children may choose activities of their interest and participate in them. Such activities help to develop initiative and interests and stimulate their latent abilities. These in turn, supplement learning and motivate children to learn and work on their own. In the school, pupils who are interested in history for example, may be brought together in a 'history club'. They may plan tours to nearby places of historical interest and study facts on the spot. Such activities would not only develop interest in history but also lead to better studies and lasting learning. Science clubs are becoming popular in our country. Efforts are being made to develop science clubs in all the schools. These would motivate pupils towards learning science, laboratory and experimental work and develop their talents and scientific attitudes.

Active Participation

Pupils learn better when they are active partners in the learning enterprise. School programmes which do not activise pupils are only one-way-affairs. Active association makes the activity more purposeful and therefore, motivating the pupils' 'ego-involvement' can ensure release of their talents. They should feel interested and become involved. Then they will attend to their activities more vigorously and put in more concentrated effort in physical and intellectual activities which will then culminate in learning.

Emulation

Young children want to imitate elders whom they like. This tendency can be utilized for healthy learning. Examples of good pupils may motivate others to become equally good. This should be tried in all fields of school work.

Collective Work

For a healthy democracy, coupled with emulative spirit, collective work is necessary. Our constitution calls for building a just society based on the spirit of co-operation through participation of all the citizens. Collective work is an effective scientific method of learning. Therefore, parents and teachers should inculcate in children the spirit of co-operation for the good of the group as a whole. Activities which promote the principles of 'give and take' 'live and let live' if properly planned and carried out, will help to release the noble qualities inherent in children. They will be

thus helped towards the development of socially healthy attitudes and motivate the individual to put his best, for the good of others and himself.

Team work is necessary for harmonious community living. Team work in schools helps to fight shyness, aloofness and nervous tensions. Through team work, pupils develop abilities to organize and manage on their own activities such as visits, hikes, school clubs, exhibitions, school assemblies, handicrafts and festivals. Through enjoyable meaningful team work, children can learn their lessons better.

Evaluation and Feedback

Proper evaluation of any activity, particularly school work, can become an effective motivation for better learning. Even the present system of examinations, in spite of its several defects motivates pupils to work better. A system of assessment based on the basic objectives of learning and teaching and built on sound principles can lead children to learn on desired lines and thereby promote their abilities.

Information given to pupils from time to time regarding their progress can motivate them to work better. Awareness of one's performance in terms of progress, success and failure, would inevitably urge pupils to work more purposefully. When tests are conducted more frequently, and the results of evaluation passed on, teachers and parents get greater chances to know the progress of their pupils/wards. Knowledge of and appreciation from teachers and parents act as unique motivators and pain and the law of effect come into operation through evaluation and feedback.

Teacher-pupil Relationship

Healthy intimate emotional relationship between the pupil and teacher motivates the pupil more effectively than any other factor. For good individual contacts with pupils, a favourable teacher-pupil ratio is necessary in the class. The relationship also depends upon the individual teacher's attitude towards her work and pupils, how and what type of atmosphere she creates and maintains in her class, the degree of acceptance she has for her pupils and vice-versa. Better acceptance leads to better understanding and therefore to better motivation.

B. THE PHYSIOLOGICAL FACTOR

The human organism has a built-in complex organization of sensory receptors which receive and record the impressions made by external and internal stimuli. All knowledge is based on sense perception. Perception is not merely the visual, auditory or other images of an objects present to the senses, it is also *congnition* or the consciousness of a number of facts associated with the object perceived. These facts are derived from experience with the object or with related objects. Perception is the foundation of all higher forms of knowledge. Therefore it is important to examine the organic factors which condition perception. The loss of or defects in any sense, means that knowledge and learning are impoverished proportionally. In the process of learning, particularly in the school, the distance receptors (vision and hearing) are at once the most obvious and the most important instrumental factors. Defects in these organic factors lead to defective learning.

C. ENVIRONMENTAL FACTOR

The environmental factor constitutes the environment which prevails in the school, home and community. The family enjoys an important place in the environment. If the family environment is bad, it adversely affects the learning progress. Similarly, the school is another important factor in the environment. The school nurtures the values and attitudes of society. It plays an important role in personality development and directs the social processes. Community also has an important

place in the environment. If the locality is bad, the learning will be ineffective.

Methods of Learning

The methods of learning involve the answers to the question "How to study?" The following are the methods favourable for studying as revealed by some investigations.

A. WHOLE V. PART METHOD

A poem of reasonable length, to be memorized, should be learnt as a whole rather than by parts. What a 'reasonable' length is, depends on the possibility of securing a central idea or unit of thought which may act as focal or reference point for related material. If the material is too long, the mediating method should be used. The part method has proved most fruitful in non-verbal material, such as skills. The whole method is not valid here because there is no logical unity or continuity in the material. Yet the whole method is operative to the extent that spatial position and order assume coherence or whole which enables the learner to retain the material.

B. THE MEDIATING METHOD

The whole method when strictly interpreted and applied at all situations proves cumbersome and even wasteful in materials of great length and varying difficulty. If all the material is given at the same time, the middle and more difficult portions of a long chapter or poem cannot be learned so well as the beginning and perhaps the end. Such disadvantages are remediable by the 'mediating' method. This method is applicable to long vocabulary material, as well as to more logical whole. It proceeds from whole to part as before, but allows the marking off of more difficult or unfamiliar parts for more intensive study. The whole method is still being applied and the learner should never lose sight of the whole, of the relation of the parts to the whole, nor concentrate on the former to the exclusion of the latter.

C. THE RECITATION METHOD

When there is time the recitation method is always of value for all kinds of material. It simply means checking up on one's self by being one's inquisitor periodically. The outstanding advantages of the recitation method are as follows.

i. Weak connections are discerned and given attention.
ii. A general feeling of accomplishment is achieved. This in turn stimulates further effort.
iii. Errors due to wrong first impressions are detected and eliminated before they become established.

Since the material is learned and used little transfer is necessary in the subsequent reproduction.

The recitation method of study is better for both immediate and delayed recall and for both sense and non-sense material.

LENGTH OF PRACTICE PERIODS

The maximum period of productive study has been found in relation to memorization, writing, arithmetical operations and archery. It is 20 to 30 minutes at one stretch. Periods of more than 30 minutes of concentrated study are relatively unproductive. It is probable that such a recommendation cannot be made for history and subjects that may demand an initial warming up process. Interest in a subject, likewise, may extend the limit beyond which the law of diminishing returns would begin to operate. Since the experimental evidence is against continuous study over a long period, the time at one's disposal must be distributed.

To Counteract Forgetting Overlearn

Studies on the retention of material or the rate of forgetting show that after learning material to the point of one or two correct reproduction, forgetting sets in immediately and is most rapid in the early stages. To counteract this factor, reviews should begin on the next day at the latest, especially for the very young and take place at comparatively frequent intervals. The periods between practice may be lengthened gradually and continued until overlearning is assured. Overlearning, in general, is necessary for delayed recall.

Cramming

Cramming is the attempt to acquire control, usually for the purpose of immediate reproduction of a relatively large amount of material in a comparatively short time. Cramming, therefore, cannot be undertaken except during the few days before a test or examination. Certain types of examinations and certain life situations may justify cramming, but where permanence is desired, cramming is of little value. Learning is a product of maturation, of enlargement of meaning and appropriate mass and of assimilation. For such outcomes, time is necessary and cramming negates it.

Speed of Learning in Relation to Retention

There is a popular saying, 'Quick learning means quick forgetting', meaning thereby that there is a negative correlation between quickness of acquiring knowledge and its retention. There is no experimental evidence to reject this generalization. With meaningless material, perhaps this popular view is correct; those who learn quickest forget quickest. With all other material, those who learn quickest forget the least. Again, those who learn quickest make more use of the whole method than the slower individuals and retain the best when the material is logical and useful.

References

Ambron S.R., *Child Development.* United States of America : Rinehart Press, 1975.

Baller, W.R., Charles, D.C., *The Psychology of Human Growth and Development.* New York: Holt, Rinehart and Winston, 1968.

Boaz, G.D., *General Psychology.* Madras : Viswanathan & Co. 1968.

Boaz, G.D., *General Psychology.* Madras : Sri Seva Mandir Press, 1971.

Breckenridge, M.E., and Murphy, M.N. *Growth Development of the Young Child.* Philadelphia : Saunders, 1963.

Cowen, L.E , Melvin Zax., *Abnormal Psychology—Changing Conception.* New York : Holt, Rinehart and Winston, 1976.

Denenberg, H.V., *Education of the Infant and Young Child.* London : Harcourt, Brace, Jovanovic, Inc., 1970.

Evans and Smith, *Psychology for a Changing World.* New York : John Wiley and Sons, Inc., 1970.

Garrett, H.E., *General Psychology.* New Delhi : Eurasia Publishing House (P) Ltd., 1978.

Goodacre, E.J., *Children and Learning to Read.* Great Britain : Northumberland Press Ltd., 1971.

Guilford, J.P., *General Psychology.* New Delhi : Affiliated East West Ltd., 1952.

Hurlock, E.B., *Child Growth and Development.* New Delhi : Tata McGraw-Hill Publishing Co., 1970.

Jerome Kagon, Ernest Havemann, *Psychology : An Introduction.* New York: Harcourt, Brace. Jovanovich Inc., 1972.

Kennedy, A.W., *Child Psychology.* New Jersey: Prentice Hall, Inc., Englewood Cliffs, 1971.

Klausmeier, H.T., *Learning and Human Ablilities—Educational Psychology.* New York : McGraw-Hill Book Co., 1970.

Klausmeier, H.J., Ripple, R.E., *Learning and Human Abilities—Educational Psychology.* New York : Harper & Row, 1971.

Kohler, W., *The Mentality of Apes.* New York : Harcourt, Brace, Jovanovich, Inc., 1925.

Kundu, C.L., and Tutoo, D.N., *Educational Psychology.* New Delhi : Sterling Publishers, 1973.

Kuppuswamy, B., *A Text Book of Child Behaviour and Development.* Kanpur: Vikas Publishing House Pvt Ltd., 1976.

Marx, M.H., *Learning Interactions.* London: Macmillan Company, 1970.

McDonald, F.J., *Educational Psychology*. California : Wadsworth Publishing Co., 1975.

Munsinger, H., *Readings in Child Development*. London: Holt, Rinehart and Winstons Inc., 1971.

Pavlov, I.P., *Conditioned Reflexes*. London : Oxford University Press, 1927.

Ruch, F.L., *Psychology and Life*. Chicago : Scott, Foreman and Co., 1948.

Skinner, C.E., *Essentials of Educational Psychology*. Bombay : Asia Publishing House.

Thorndike, E.L., *The Fundamentals of Learning*. New York : Columbia University, 1932.

Watson, J.B., *Behaviorism*. New York : Norton Press, 1920.

CHAPTER 7

Imagination

Meaning of Imagination

Imagination is one of the most important skills a child develops during the early childhood years. Imagination opens to the child a fascinating world of many challenges. Imagination is perception in which there is minimum of sensory experiences (Garrett, 1955). It is the faculty of mind behind any understanding of an experience one has not actually had (Breckenridge and Murphy, 1958). In its simplest form, imagination consists of representing some part of outer reality by an inner image. It is an indispensable medium for the total development of the child. But unfortunately imagination in children is often discouraged by adults in order to bring the child 'back to reality'. Such discouragement of early imagination may inhibit intellectual development and impoverish the personality of the child.

Imagination begins when a child is capable of forming images and is able to organize the images into a structured intellectual activity. Images grow out of concrete experiences that have become internalized in such a way that a child can see things in his mind's eye even though they are not visible. Imagination thus involves an intellectual flow, which means that images have become mobile, and bits from here and there are joined in a manner that is not bound to a pattern of experience with concrete things. Through the use of such imagination, a child is able to form total images out of fragments. For example, a set of blocks with which he plays becomes a car, a plane, a house and perhaps a shop. Such actions may appear illogical to adults and may even sound to be a retreat from reality. But it is important to recognize that the child had made a journey of his mind, in the only creative way possible for him.

Imagination plays an important role in all aspects of the development of the child. In the intellectual sphere, the child explores, investigates, experiments and works with ideas without restraints through his imagination. The first indications of imaginative play occur in babies during the final period of the sensorimotor stage, when they imitate their past actions in very simple, concrete ways and depict that they have mental images of these actions. For instance, a child may pretend to lick sand and say that he is eating halwa or dhalia. He may pretend to go to the temple, walking just upto the door. As he grows older, he might imagine in more complex ways certain aspects and thereby develop his intellectual potentialities. He will learn to substitute one rationale for another through imagination. For example, if certain lines and markings that have been put to represent a boat do not represent the boat, the child can supply a new name and rationale and convert the so-called boat into a new object of his identification.

In the emotional sphere, the child overcomes fears and aggressive impulses, enhances

desires and fulfills hopes through imagination. Aggressive impulses are often prominent in the imagination of young children. Children use imagination often to deal with irritations, to take action against conditions that annoy and thwart them in real life. In a study by Markey (1935) children were provided with small pieces of kitchen equipment and a 'family' in the forms of dolls and were encouraged to play a house-keeping game. One boy proceeded to lay hands on a doll. He called it, 'bad baby', put it on the toy stove, and said, 'You have got to be dead. You have got to stay on this for three weeks'. Then he proceeded to tear the house down and to beat the dolls, talking while he did so about burning the bad babies in the imaginary fire. The school records of this child revealed that he was very jealous of a baby brother. At home he had shown delight when the baby squirmed and cried, while his nose was being cleaned. Now, in the imaginary situation he seemed to relish the thought of watching the baby brother burn. Thus, through imagination, the child appeared to allay the conflict which arose between his desires.

Imagination is useful in the social development of the child, since much of his play with adults and youngsters occurs in make-believe settings. Having developed a firm sense of autonomy and a concept of himself as a person, the child longs to find out what he can do. To this end, he explores the world through his senses, through thinking, reasoning and imagination. Of course, in most situations these three elements of exploration are combined. Through imagination, the young child tries on the roles of the people important in his world, the people who do things which he might some day undertake (Figure. 8). Most vital of all are the roles of his parents. The child is continuously fascinated by the exploration of adult roles in the family and community. He plays out their roles in one way or other through dramatic play, literature, fantasy, dancing, singing, painting and other creative media.

In motor development also there is interaction through a child's imaginative activity. Many important motor skills are acquired or practised through play activities which have a high imaginative content such as doll play and sand play. Imagination also supplies the plot or purpose, when a child practises such motor activities as climbing, swinging or riding a bicycle.

Types of Imagination

Imagination in childhood is of two types. The ability to revive the past sensory perceptions in the absence of the objects which produced them is termed, 'reproductive imagination'. The capacity to modify and transform elements of revised images into new combinations is called 'constructive or creative imagination'. In the latter case, the resultant product, that is the image, may not be new but it is a new mode of expression to its creator. Images differ from memories in that images are confined to sensory experiences, whereas memories may be of sense experiences or of thoughts. Images differ from percepts in that they occur in the absence of the actual stimuli.

Children can recall past experiences through reproductive imagination before they form constructive images. To the very young child, the differeniation between percept and image is very small. Whatever he experienced yesterday may seem very real to him today. Some children possess highly vivid reproductive imagination. They can visualize with photographic details what they had seen. Some children display a high degree of constructive imagination in their early years. Here again the image they construct may be very real to them. For example, imaginary friends and companions they had created are very real parts of their life. All those concerned with children need to realize that productive imagination is a part of the intellectual development of the growing child.

Manifestations of Imagination

Imagination in childhood manifests itself in different ways as described in the following.

Imagination Increases Steadily as Age Advances

For most children, as they live with and adjust to their parents, the pattern of imaginative behaviour begins gradually around one year to eighteen months of age, thereafter mounts rapidly up to three or four years and remains at a high point for several years until they reach 10 to 12 years, when it gradually begins tapering off into a mature balance between imagination and adjustment to the real world.

The child's ability to imagine appears at least as early as his ability to talk and some children enter into complicated imaginative ventures even before they are able to speak. In a study wherein records were kept of children's language, it was found that 1.5 per cent of their remarks at 24 to 29 months of age were imaginative in character and 8.7 per cent at 42 to 47 months (Bunham, 1950). In a preschool, in which language as well as overt behaviour were recorded, there was a five-fold increase in frequency of imaginative episodes among the 3 to 5 year-olds.

There are Individual Variations in the Display of Imaginative Behaviour

Children differ greatly in the style and degree of imagination, as they do in perception and memory. There is great variety both in the type of images they tend to produce and in the vividness of their imagery. Some children can summon visual images readily, others tend predominantly towards sound images. The richness and fullness of an individual child's images are the outcome of many and varied perceptions.

Many Factors Influence Imagination

The ability of a child to express his imagination with fluency depends on the : (i) acquisition of controls over the body; (ii) accumulation of knowledge which will permit him to think, judge and handle objects and concepts intelligently (sense perceptions and judgements); (iii) language facility; and (iv) reasoning capacity.

The 'more intelligent' children show a somewhat higher amount of imaginative play. As in many areas of growth, there is no appreciable difference due to sex since both boys and girls display wide individual variations and neither sex seems to have a greater capacity in one direction than the other.

The Structure of Imagination also Changes

In addition to changes in the amount of imaginative activity, there are changes also in the themes which children select for expressing their imagination. Markey (1935) observed that much of the imaginative activity of children under the age of three fell into the following categories :

(i) Personification, such as talking to inanimate objects.
(ii) Make-believe use of materials such as calling a wooden plank a train and drinking out of an empty tin.
(iii) Participation in imaginative situations, such as giving bath to a doll baby or feeding him.
(iv) Pursuing imaginative activity in the privacy of thoughts. Some times, a child will let the adults get glimpses of his private day dreams through what he says or does. private day-dreaming sometimes may occur in the form of a 'continued story'. The child may return again and again, for weeks, months or even years, to add new episodes to what has gone before.

Fig. 8. Trying on different roles.

Fig. 9. (a) Pretending to be a policeman; (b) Taking care of the imaginary friend.

Types of Imaginative Play

There are many types of imaginative play such as fantasy, symbolism, dramatic play, imaginary playmates and creative language.

Fantasy

Every individual, at some time or other, indulges in undirected, free, somewhat symbolic and difficult or impossible to describe thinking. This is called 'day-dreaming' or 'fantasy'. Research shows that fantasy has an essential role to play in children's thinking. Through fantasy the child moves from a personal, subjective and egocentric point of view to a more socialized and objective attitude.

Symbolism

The child's fears and problems are often symbolized by the toys he chooses and by the content of his imaginative games. Discovering an analogy between two objects and situation, he invests one as a symbol for the other. In symbolic thinking, the child is only vaguely aware of what he is trying to do. The problem is solved piece-meal through a series of solutions. The process results in both acquisition of information and a change of attidute from personal and egocentric towards socialized and objective.

Dramatic Play

Dramatic play is synonymous with pretending. A child can pretend to be a police man, postman (Figure 9a) or a teacher or he may carry on dramatic play with other children. In a study with 108 children, Marshall (1961) found that for childrenbetween two and a half and six and a half years, dramatic play, language and hostility were important modes of social interaction and influence. In other words, the playful expression of anger in make-believe situations plus imaginative verbal expression, constitute useful social skills for preschool children.

Feelings of pleasure, excitement and satisfaction seem to accompany dramatic play. Observation in the nursery school reveals that when children imitate others and pretend, they are happy, excited, derive new experiences, solve problems and release their tensions. Interacting creatively with their world, children enjoy the satisfaction that goes along with exploring and enacting their findings.

Imaginary Playmates

In the world of children, imaginary playmates appear to be either human, toy (Figure 9b) or animal, fleeting or long enduring, single or multiple, ideals or scapegoats. Children who create these playmates, come in as great a variety as the imaginary creatures themselves, suggesting that the creations serve the needs of the children. Bright children are somewhat more likely to have imaginary companions than children with 'below-average' intelligence. Girls are more prone than boys to create their own playmates (Jersild, 1960). A study of college students who had imaginary companions in childhood showed that they had tendencies towards higher-than-average grades, co-operation, friendships and the experiencing of strong feelings and emotions (Duckworth, 1962).

Creative Language

Good stories and poems are imaginative to both the reciter and receiver. Imagination is present in their forms as well as their contents. Young children do not know what is bothering them or if they do, they cannot express the cause straightforwardly. At that juncture a story, poem or any other artistic medium can relieve their tension, clarify their troubles and help them to find the solutions.

References

Andrews, Pollard, B.M., Geoghegan, B., *The Growing Child in Contemporary Society*. U.S.A. The Bruce Publishing Co., 1969.

Ames, L.B., Leonard, J., 'Imaginary companious and related phenomena', *J. Genet. Psychol.*, 69 1946.

Boaz, G.D., *Psychology*. Madras : Boaz Institute of Psychological Service, 1971.

Breckenridge, E., Murphy, M.N., *Growth and Development of the Young Child*. London : W.B. Saunders Company, 1958.

Bunham, in Markey F.V., 'Imaginative behaviour of pre-school children'. *Child Development Monograph*. No. 18. New York : Teacher's College, Columbia University, 1935.

Davis, G.A. Scolt, J.A., *Training Thinking Creative*. New York : Holt, Rinehart and Winston Inc., 1971.

Duckworth, L.H., *The Relationship of Childhood Imaginary Playmates to some Factors of Creativity among College Freshmen*. Unpublished Master's thesis, University of Alabama, 1962.

Garrett, E., Henry, *General Psychology*. New York : American Book Co., 1955.

Griffiths, R., *Imagination in Early Childhood*. London : Routledge and Kegan Paul, 1935.

Guilford, J.P., *General Psychology*. New Delhi : Affiliated East-West Press Ltd., 1965.

Hutt, L.M., Gibby, R.G., *Child Development and Adjustment*. Boston : Allyn and Bacon Inc., 1962.

Jersild, A.T., *Child Psychology*. New Jersey : Prentice Hall Inc., 1960.

Jill and Pendarell Kent, *Nursery School for All*. London: Neil and Company Ltd., 1970.

Markey, F., 'Imaginative behaviour of pre-school children' in *Child Development Monograph*, No. 18. New York : Teacher's College, Columbia University, 1935.

Marshall, H.R., 'Relation between home experience and children's use of language in play interactions with peers', *Psychol Monograph*. 1961.

Paramesh, C.R., *Creativity and Personality*. Madras: Janatha Printing and Publishing Co. (P) Ltd., 1972.

Pollard, B.M., Geoghegan, B., *The Growing Child in Contemporary Society*, U.S.A., The Bruce Publishing Co., 1969.

Smart, Mellie, Smart S. Russell., *Children—Development and Relationships*. London : Macmillan Co., 1967.

Smart, R.C., Smart M.S., *Readings in Child Development and Relationships*. New Delhi: Macmillan Co., 1972.

Vinacke, W.E. in Pollard, B.M., Geoghegon, B., *The Growing Child in Contemporary Society*. U.S.A. : The Bruce Publishing Co., 1971.

CHAPTER 8

Play

Meaning of Play

Play! Play! Play! Every one uses this word often, and hears it frequently from children. Play is an integral part of the life of any child. In providing children play space and equipment, an adult offers them essential living and learning experiences. Play is an activity in which a person is engaged when he is free to do what he wants to do. Play satisfies the individual's urge for freedom of action. It is an expression of the creative activities of the child. It is marked by freedom and joy. Play cultivates human values in children. It is very necessary for the growth and maturation of the physical and mental powers of the child. Just as a poet cannot restrain himself from writing a poem, or a musician from singing, so too the child cannot restrain himself from play.

Yet for millions of children, there are either limited or no facilities to play at home due to lack of space in crowded housing units and apartment buildings. Yet every child needs the feel of the wind and the sun, the sight and smell of the plants and trees and the availability of material. Every child needs freedom to run, jump and to climb on something more acceptable and satisfying than furniture. A good preschool should offer all these.

Physical Values of Play

Playing is growing. Play contributes to healthy development of the body. When children play they are active, use their bodies, exercise, learn balance and develop control of strong muscles. Play also serves as an outlet for the surplus energy which, if pent up, would make the child tense, nervous and irritable. Vijay was a child of elderly parents. He had a comfortable home to play with blocks and books. When he first came to the nursery school, he retreated from the active world in which other children lived. He sat by the window and refused politely to go for outdoor play. He did not care for swinging, climbing, running or jumping. The other children did not recognize him. After sometime, the rhythm of swinging attracted him and slowly he began playing actively and gained some motor skills. With skills came confidences and contacts with other children.

Educational Values

Educationally, play is valuable in many ways. Playing with all types of toys, the child learns the shapes, sizes, colours, textures, numbers and qualities of objects as well as their significance. Exploring, collecting and experimenting with play things furnish the child with informations that cannot be obtained by any other means. Play is the means by which the child is also enabled to develop mentally by acquiring knowledge through watching the result of his actions. Furthermore, play helps the child to

comprehend and control the world in which he lives and to distinguish between reality and fantasy.

Play is the most creative form of learning for the child. It is not only one of the ways of learning, but also of revealing that the child is learning. For instance, when you observe a child at play, you see that he has learned a number of things about people, about what they do and why they do. He cannot enumerate what he has learned, but he can show in his games, in his buildings, in the way he plays mother or father or teacher or baby or doctor or policeman or postman. His gestures, and sounds are ways of imitating the way mother talks to him or to his father or to the milkman.

Playing is preparation for school too. One cannot educate a child just by putting him in the hands of a teacher. Play prepares him for his school education. During the years before a child goes to school he learns at least as much as he will learn later from his books. When children play, they learn by themselves about the real things they will later encounter in books. They learn to use their hands and fingers in ways they will later use to write. Therefore, the chance to play makes them ready for school. Learning to take care of their toys also helps them develop a sense of responsibility, which is very important for success in school and subsequent life.

In play, the child reveals not only how he feels about what he has learned, but also his creativity. He becomes an artist. He takes what he wants and gives it his own personal touch. He creates an artistic whole out of little pieces of information, observations and feelings. Left to live in his 'world of play' a child becomes completely oblivious of those around him. Play is thus a child's life and work. When he is left alone while at work, he can concentrate for some considerable time. When he is disturbed while he is in the middle of working out a scheme of his own, he becomes irritable and gives up trying. This will lead to loss of power to concentrate later upon any job for any length of time. Therefore, constant interference in early years of play, when habits are being formed, should be strictly avoided.

Play is also a means of 'finding out' for the child. For example, the 'house' Sita built when she was three years old, and the 'house' she built at five, differ a lot. The building built at five has windows and doors. She has also added a shed to park the car or house the cows. The five-year-old has not only discovered more about the way in which people live and work together, but through using blocks she has also found out that she can balance them to make the buildings steady.

Social Values

Play is the best way to help the child adjust to the society in which he lives, his group, family and himself. In play, the child can express his ideas without any restrictions and disapprovals. Furthermore, he can express much about his feelings which cannot be put into words, or for which, as a child, he has no words. By playing with other children, the child learns to establish social relationships and how to meet and solve the problems such relationships raise. Through games with peers and adults, he learns to give and take, cooperate, be tolerant and ultimately make better social adjustments. Thereby the child learns much about himself and others, and about his relationships. He learns about his abilities in relation to the abilities of others and thus gets a clear concept of himself.

Play thus helps a child to pass from the stage of desiring to have everything for himself, to being a member of a group who shares his toys with the other members, and finally becoming a member of a team. As a member of a team, he plays for the good of the team—not just as an individual.

Fig. 10. Play as a medium for emotional release and social relationships.

Fig. 11. Types of play : free, spontaneous play; constructive play; dramatic play.

Emotional Values

Play brings many emotional values to the child. It offers an outlet for the child to express his natural instincts and emotions. For example, Shoba had attended nursery school for nearly nine months, before she could bring herself to try going down the slide. Her delight in her success was evident in the use of the slide again and again, squealing with joy, calling the teacher's and other children's attention to her accomplishment. From that time on, her growth was rapid. She shed her tenseness and played joyfully.

Play has therapeutic values in that it acts as a catharsis for the release of pent-up feelings (Figure. 10). In every day life, the child needs release from the tensions and the restrictions imposed on him by his environment. Not only does play provide such a therapeutic release for emotional tensions, but it also provides a basis for meeting his needs and desires which otherwise cannot be met. For example, a child who wants to play the role of a teacher, may not be able to achieve this status in real life, but in dramatic play, he can be the teacher, father, mother or anybody he likes and release his pent up feelings through the character he acts. This therapeutic value of play has been employed in dealing with children's behaviour problems. This method is known as 'play therapy'. Play therapy is based upon the fact that play is the child's natural medium of self-expression. It is an opportunity given to the child to 'play out' his feelings and problems.

Moral Values

Play is an important medium for the moral education of the child. Through play the child is helped to know what is right and wrong. He learns to be fair, honest, truthful, self-controlled, a good sport and a good loser. Furthermore, he learns to play the sex role expected of him by the society by embodying the socially approved patterns of behaviour for his sex group (Landreth, 1958).

Types of Play

There are different types of plays such as, free, spontaneous play; dramatic or make-believe play; and constructive play.

The type of play a child prefers will depend upon his age and level of development. At different ages, different forms of play predominate. Some important favourite types of play of the childhood years are described in the following pages.

Free, Spontaneous Play

The child's earliest type of play is free, spontaneous play. This type of play is characterized by lack of rules and regulations and is for the most part solitary rather than social. The child plays as much as he wishes to play and stops playing when he is no longer interested in it. Play of this type is mostly exploratory. At first, most of the child's play is with his own limbs. By the time the baby is three months old, control of his hands is well developed. He explores his toys by sucking, banging and pulling at them and derives keen enjoyment from stimulating the sense organs.

Dramatic or Make-believe Play

In dramatic play, the child deals with materials or situations through language or overt behaviour, as if they had attributes other than those they actually have. A child pretends to become the person he loves and admires. By assigning a role to a doll, a toy animal, or some other article, he changes his own status. This gives him a feeling of self-importance and compensates for his dissatisfaction with his real self. An important advantage of dramatic play is that it encourages the young child to speak out, imbibe his culture and heritage (Figure 11). Even more important is that, it acts as a

socializing force, encouraging the child to make contacts with other children.

Dramatic play reflects not only the tenor and flavours of the child's life, but also the needs which his experience generates. It adds to the child's ability to transcend his actual limitations and go beyond the restrictions imposed by reality; it enables him to realize his desires and aspirations vicariously; and it provides opportunities for him to rid himself of irritations, to remove or overcome conditions which annoy or thwart him in real life. The following episode illustrates the soothing value of dramatic play.

Radha is washing a small rubber doll. She dries the doll and dresses her up. She takes a spoon and a tumbler and pretends to feed the child with the spoon. She says, 'If you do not drink the milk, I shall ask father not to get anything for you and I would not like to give you even a mouthful of rice'. After this statement she just threw the doll and shouted, 'Don't come in front of me; I will not be threatened by your crying or anything else'.

This shows that Radha disliked drinking milk. Her mother also reported in the nursery school that she tried her best to make the child drink milk. Finding that her efforts were futile she had started threatening and using corporal punishment. The episode shows vividly how a child assumes the role of someone with whom she experiences some difficulty or tension. The usual patterns of make-believe play are:

i. Domestic patterns including furnishing a house, cooking, eating, having tea parties, taking care of babies and being fathers and mothers
ii. Selling and buying
iii. Punishing, playing policeman
iv. Being a teacher

Constructive Play

Interest in construction is an important element in children's play. From the age of six years, materials are used specifically and appropriately for building and construction. As the child advances in age, he becomes more constructive.

The early forms of constructive play consist of making mud cakes, constructing mountains or tunnels from sand and playing with blocks, beads, scissors, clay, paint and paste. Constructive play is popular in late childhood and manifests itself in the building of tents, play houses, huts, roads and dams. When the child attains maturity he becomes interested in (a) drawing, (b) painting, (c) music, (d) collection (e) games, and sports, (f) reading and (g) listening to radio.

The amount and type of play equipment available exert a marked influence on the play life of the child. Given certain types of toys, the child will use them, and his play activities will be influenced by them. As the child's play is fully creative, dramatic, innovative, imaginative and inventive, he needs equipment and accessories for all types of indoor and outdoor play. As children become older, they need equipment for group games and sports of all types.

Theories of Play

Various theories have been advanced about the significance and functions of play. They are: the surplus energy theory, the recreation theory and the recapitulation theory.

The Surplus Energy Theory

The surplus energy theory is commonly associated with the names of Herbert Spencer and Schiller. According to this theory, play is the aimless expenditure of exuberant energy. It is a 'blowing off of steam'. Children have more vitality and energy than adults. But very often over-protective adults hold them back from play. When the child's energy accumulates, he

has an irresistible longing to get rid of the surplus energy by play.

The idea that play is an outburst of surplus energy is widely held. It has been handed down from generation to generation. That is why the less educated section in the population argue that if children have strength to waste in playing, why not contribute their energy in labour, which would bring wages to the family and get the work done. Those who think of work as the main factor in life would like their children to spend their extra energy in work, rather than in play. Children continue with their play, even when their superfluous energy, has been completely exhausted. That is why even sick children, who do not have the energy also play. The theory of surplus energy does not explain the developmental sequence of play; that is why the pattern of play changes with the child's maturity, nor does it take into account the question of individual differences, that is, why play takes different forms with different children. The theory is not tenable since it has no support in experimental researches.

The Recreation Theory

Lazarus and Sthainthel formulated the 'recreation theory of play'. This theory holds that play is necessary in order to provide refreshment after arduous labour and play uses the energy of the fresh tracts of the nervous system and thus gives the exhausted ones time and scope to recover their lost energy through anabolism.

This theory holds that the essential activities of life are extremely fatiguing and irksome and that an uninterrupted pursuit of such activities is injurious to health. Therefore play is an inevitable need. This concept offers satisfaction to those who take themselves and life too seriously. To them play becomes a means of getting out of the rigors of life. This appears to be an adult point of view inserted into the philosophy of children's life.

The Recapitulation Theory

Hall has ardently advocated the theory of recapitulation. According to this theory, each child is supposed to repeat the history of the race in his play activities, which are considered to be the motor habits of the past of the race, persisting into the present. The interest of the child was supposed to be an expression of some primitive activities of his forefathers. Thus, where the child showed a desire to climb trees, play hunting games, it indicated a relationship to the time when the forefathers lived in trees and lived as hunters.

In the words of Hall, 'The past holds the keys to all play activities. None survives unless based upon purely hereditary momentum'. The view that play is practice for future adult activities is very partial, superficial and perverse. It ignores the past where lie the keys to all play activities. True play never practises anything racially new. Play is a motor habit and spirit of the past persisting in the present, as rudimentary functions akin to rudimentary organs. Thus in play, the activities of our ancestors are rehearsed and repeated in summative ways.

The criticism posed on this theory is that it would be much more interesting and productive to study the interests, impulses, conflicts, habits and social behaviour of children directly than to hunt for similarities to individuals who died thousands of years ago. This theory is not scientifically sound or applicable to the problems of child psychology and development.

Characteristics of Children's Play

The universal characteristics of children's play are as follows.

A. Play follows a pattern of development,
B. Play is influenced by tradition,
C. Childhood play is informal,
D. Play activities decrease in number with age,

E. Time spent in play decreases with age,
F. Time spent in specific activities decreases with age, and
G. Play is less physically active as the child grows older.

A. Play Follows a Pattern of Development

Regardless of the individual's environment, caste, community, language, nationality or economic status, play activities are popular at one age and not at another, from early babyhood to maturity. Studies of childhood play carried out by Margolin and Leton (1961) reveal that various types of play occur in a more or less regular order and at predictable times in the child's pattern of development. During the first two or three months of life, when the baby is gaining control of the muscles in the head and arm regions, his play consists mainly of looking at people and objects and of making random movements in an attempt to grab the objects held before him. Thereafter, his arms and hands will have gained enough voluntary control to enable him grasp, hold and examine small objects and toys. His play then is exploratory in nature. When he has learned to walk, he plays by pushing or pulling wheel toys. In this predictable pattern, toy play begins in the first years of life and reaches a peak between seven and eight years of age. Block building for example, passes through four distinct stages. (1) The child merely handles and carries blocks and piles them in irregular masses. (2) Constructs rows and towers (3) Develops patterns and techniques for building more complicated designs and (4) Dramatizes and reproduces structures.

Likewise, definite patterns appear in painting, starting with scratching and scribbling, dotting with the brush at two and a half years and developing the painting with a theme at about four years.

B. Play is Influenced by Tradition

Younger children imitate the play of older children, who had imitated the play of the preceding generation. Thus, in every culture, one generation passes down to the next, certain forms of play which it finds most satisfactory. The influence of tradition is also apparent in the fact that there are seasonal patterns in children's play. For example, festivals like Sankranti and Christmas bring a shift of interest in children's play. They dramatize the celebrations of such functions in play, and also in their drawings, depicting different cultures.

Tradition determines what is sex-appropriate play, regardless of childern's preferences. If in one culture play with a bicycle is considered suitable only for boys, girls of that culture may not show preference for riding a bicycle having been accustomed to that tradition. Tradition plays a more dominant role among the lower-income groups than on the higher-income groups. With the affluent group, more money can be spent on new and different toys, and travel and social mobility bring their children in contact with more children of different cultural groups.

C. Childhood Play is Informal

Little children play when they wish and with whatever toys they have, regardless of time or place. Their play is spontaneous and informal. Much of the childhood spontaneity in play disappears during adolescence.

D. Play Activities Decrease in Number with Age

The number of activities undertaken gradually decreases as children grow older. Witty's (1951) comparisons of the number of different activities at different ages showed that, among eight-year-olds, an average of 40.11 different play activities were evident during one week,

while among persons who were 22 years or older, the average was 17.71. Play activities involving play with other children, likewise, decrease with age. At 7½ years an average of 27 activities are engaged in, as compared with 20 at 11½ years and 13 at 16½ years. The number of play activities decreased because older children have less time available for play, have a greater understanding of their interests and abilities, and a longer attention span.

E. Time Spent in Play Decreases with Age

New duties and commitments for the child might restrict the leisure time available for play. This becomes increasingly true as the child grows older. The amount of time a child has for play will also be influenced, to some extent, by the socio-economic status of the family. Upper-class children might have more time for play than those in the lower-class who might have to devote more time to chores in the home and after school jobs.

F. Time Spent in Specific Activities Increases with Age

Little children go from one toy to another or from one play activity to another due to lack of concentration. As they grow older and intellectually mature, they can attend to what they are doing for longer periods of time. When there is interest in an activity they spend more time on it. A two-year-old for example, can attend to a play activity for an average of 5 minutes, as compared with the 15 minutes a five-year-old can concentrate.

G. Play is Less Physically Active as the Child Grows Older

During the preschool and early school years, children engage themselves in energetic, vigorous and active play. Their interest in active play reaches its lowest point during early puberty. At that time, they spend most of their play time in day dreaming which requires only a minimum of physical effort and expenditure of energy.

Play Materials for Different Ages

From the vast background of information and experience available a list of play materials is given here which can be used as a guide in buying play equipment for different ages. The list is arranged in such a way that a toy is first mentioned at the age when its usefulness usually begins. Some toys continue to be useful for several years and a few never seem to outlive their appeal. To avoid repeating the same names under each age heading, a number is indicated at the right of most items, to depict the age in months upto three years and in years thereafter at which interest usually begins to fade. Items that are apt to remain persistently useful and interesting have no figures after them.

The First Year

3-5 months

a) Dangle toys for crib or carriage (8)
b) Crib (12)
c) Interlocking plastic rings (12)
d) Plastic discs on chain (12)
e) Bell shaped rattles (12)
f) Wind harps to hang by window (12)
g) Large, bright, simple pictures (60)

6 months

a) Roly-poly (12)
b) Rubber beads on string (12)
c) Soft rubber squeeze-toys (12)
d) Pull and push toys without handles (18)
e) Bright-coloured, medium-sized balls (24)
f) Cloth books (24)
g) Rubber blocks that rattle or tinkle (24)
h) Soft washable animals and dolls (12)
i) Floating bath toys (48)

1-2 Years

12 months

a) Colour cones (24)
b) Low rocking horse (24)
c) Nesting bowls or tumblers (24)
d) Pegboard with a few large pegs (24)
e) Bean bags (24)

18 months

a) Low slide (24)
b) Low swing with arms and back (24)
c) Nesting blocks (24)
d) Toys with openings of different shapes to receive blocks of different shapes (24)
e) Hammer boards (36)
f) Locomotor toys (36)
g) Rocking chair (48)
h) Large hollow wooden blocks (48)
i) Sand toys (Pail, shovels, sieve, moulds) (60)
j) Stuffed toys.

2-3 Years

a) Interlocking block toys (3)
b) Cloth books with pages for lacing (4)
c) Large beads to string (4)
d) Large crayons (4)
e) Washable dolls (4)
f) Wooden or rubber vehicles (auto, truck, ambulance, fire engine) (4)
g) Blunt scissors (5)
h) Blocks of assorted shapes (6)
i) Wooden puzzles of simple and complicated type graded according to age (6)
j) Doll bed and doll's furniture (8)
k) Housekeeping toys (carpet, broom, dust mop) (6)
l) Toy telephone (8)
m) Sand box (9-10)
n) Coloured construction papers.
o) Gardening tools.

3-4 Years

a) Hammer with pegboard (7)
b) Box ladder—out of doors (7)
c) Jungle gym (6)
d) Vehicles to ride in (fire engine, tricycle, car) (6)
e) Musical and rhythmic toys (drums, tambourines) (6)
f) Wheel barrow—size graded to age
g) Flannel surfaced board and pieces of flannel and felt in different shapes and colours (8)
h) Flexible plastic sheet and coloured cut-out pieces (8)
i) Strips, squares and triangles of coloured paper (8)
j) Adjustable easel (10)
k) Large brushes for poster paint (10)
l) Laundry equipment for doll clothes (10)
m) Newsprint paper for painting (10)
n) Wagon to haul things in (10)
o) Poster paint powder to be mixed as needed (12)
p) Finger paints
q) Colouring books (10)
r) Light weight bat and soft ball (10)

4-5 Years

a) Medium height slide (6)
b) Plastic blocks (6)
c) Wooden trains with wheels (6)
d) Wooden short pillar, large triangle, quarter circle, small half-circle, small bridge, quadruple block unit (8)
e) Small cars and trucks (6)
f) Parts of costumes (Policeman's badge, doctor and nurse kit, handcuffs, nurse's cap, cowboy's hat, etc. (7)
g) Blackboard, coloured and white chalk (8)
h) Doll bed and bedding, doll dishes, etc. (8)
i) Small wooden toys for use with blocks (8)
j) Wooden and plastic construction sets (8)
k) Workbench and vice
l) Swing (10)
m) Child-size play house (10)
n) See-saw (10)
o) Colourpaddles (12)
p) Xylophone and other musical instruments (12)
q) Equipment for playing store (10)

5-6 Years

a) Doll clothes with simple fastenings (8)
b) Doll feeding sets (8)
c) Animals and vehicles (10)
d) Cosmetic kit (10)
e) Doll furniture (10)
f) Jumping rope (10)
g) Storage cabinets (10)
h) Toy soldiers (10)
i) Walkie-talkie toys (10)
j) Jigsaw puzzles varying in difficulty (12)
k) Magnet
l) Magnifying glass, mechanical boats and ships (12)
m) Ring toss, scrap books, realistic mechanical cars and army vehicles (12)
n) Simple wind instruments for experimentation (harmonica, song flute, etc.)
o) Football, badminton, basket ball, hoop and ball equipment, tennis racket and balls
p) hand puppets (12)
q) Leather craft materials
r) Interlocking small wooden or plastic-brick building sets (12)
s) Ping-pong set
t) Puzzles
u) Advanced tools such as screw driver, pliers, auger bit, tri-square, coarse file, plane, etc.
v) Carrom board
w) Equipment for word building game.

Variations in Play

Children vary in their plays even when the same toys and equipment are provided. No two children play alike. The variations in play may be traced to one or more of the following factors, although the play interests of the children conform more or less closely to a pattern : health; motor development; intelligence; sex; environment; socio-economic status; available leisure time; play equipment.

A. HEALTH

Healthy children play more than sickly ones. Children who lack energy prefer mostly sedentary play. For example, Subha, who is healthy plays more, even after the school hours than Prabha who is sick, tired and listless most of the time.

B. MOTOR DEVELOPMENT

The level of the motor development of the child plays an important role in determining the type of play he prefers, for example when he is incapable of throwing and catching balls, he cannot take part in the ball games that his agemates who are more developed in motor activities enjoy. Similarly, a child with poor motor coordination cannot cut, crayon, paint, or do many of the things, from which other young children of similar age derive keen enjoyment. As children's play involves motor coordination at every age, a child who lags behind in this area of development is likely to find himself a social misfit. The inferior motor development might prevent him from playing as he would like to and force into play activities which involve a minimum of motor coordination.

C. INTELLIGENCE

Bright children are more active and playful than dull ones. They advance rapidly from sensory to imitative and imaginative play. During the preschool years, children with high IQ's show an interest in dramatic and creative play while the less bright are not so much interested in such activities. Very bright children may resort to day dreaming as often as it is pleasurable and they may produce day dreams with exciting themes. Differences in the play of those with high and low IQ's become even more marked among older children. Bright children enjoy intellectual games. They also have more hobbies than the less bright children.

D. Sex

In most homes, different environments and different toys are provided for members of the two sexes. Therefore children at an early age become aware of the fact that certain types of play are considered appropriate for boys and others for girls. In toy play, girls favour dolls, doll furniture, beads, blocks, while boys prefer trains, cars, horses, airplanes and tools. Boys play more strenuously than girls and prefer such games as baseball, football, playing hide-and-seek and house or school. Girls prefer games which are quieter and more aesthetic in nature. In dramatizations, boys pretend to be fathers, soldiers, doctors or truck drivers, while girls play feminine roles, such as mothers, nurses or teachers. Even when playing in the doll corner, boys and girls play differently. For example, boys operate the radio or clock, while girls play preparing food, serving and taking care of others.

E. Environment

Children from poor environments play less than children from better environments. This may be due, in part, to a difference in health, but, to a large extent, it may be traced to the fact that children from poor environments have fewer toys, less time and less space in which to play. Rural children play few organized games. They have less equipment for play and usually less free time because they help with the work in the farm or at home.

F. Socio-Economic Status

The play activities of children of different socio-economic backgrounds are different, both quantitatively and qualitatively. The differences increase as children grow older. The social class to which a child belongs influences the kind of books he reads and the play equipment he prefers. Children of economically privileged families engage in more cultural activities, such as dancing, music and dramatics.

G. Available Leisure Time

The extent of leisure time a child has for play depends primarily upon the economic status of the family. Among children living in villages and slums it is found that those of the higher economic level have few home duties and little or no work outside the home, while children from the poorer homes have less time for leisure activities and more duties.

H. Play Equipment

If a child is given certain types of toys, he will use them and his play activities will thus be influenced by them. Since young children spend relatively short periods of time in any one type of play, they need a wide variety of toys and materials. A good amount of well-selected equipment encourages the child to be resourceful and social. Due to differences in intelligence, interest and many other factors, a child needs the type of play and play equipment that will fit his needs. Whether or not a particular play activity gives him enjoyment and at the sametime is socially approved, will depend partly upon the child and partly upon what is available to him.

The important role of play and play opportunities is receiving increasing recognition from workers in many areas of human development. There is now an acceptance of the special function of play in the early years in the development of the individual's character structure, in the formulation of his expectations of the world and in the moulding of his approaches to other people. Play activities are also equally significant for the rapidly growing, healthy youngsters and for the millions of children who have suffered deprivations, malnutrition, frustrations, neglect, bad treatment or exposure to crisis and disturbance in the family such as desertion, divorce, alcoholism, prolonged absence of father or enforced absence of the mother for gainful employment. Children from disturbed homes may find in play and expressive activities the help

they need in meeting their problems and releasing their feelings, especially if their parents, adults, relatives and teachers are aware of these possibilities and provide the materials and the encouragement.

References

Annamma, Thomas, Nalina Devi, R., Devadas, R.P., 'The provision of literature and play materials for preschool children in the families with different incomes', *The Indian Journal of Home Science*. Vol. 4, No. 1, 1970.

Arya, S.C., *Infant and Child Care for Indian Mothers*. New Delhi : Vikas Publications, 1972.

Beatrix Tudor Hart, *Toys, Play and Disciplines in Childhood*. London : Routledge and Kegan Paul, 1970.

Charles, Wenar, *Personality Development*. New York : Houghton Mifflin Company, 1971.

Davis, G.A., Scott., J.A., *Training in Creative Thinking*. New York : Holt, Rinehart and Winston Inc., 1971.

Devadas, R.P., 'Preschool education', in *Child Development—A Symposium*. New Delhi : NCERT, 1964.

Erickson, M.T., *Child Psychology Assessment—Etiology and Treatment*. New Jersey : Prentice Hall Inc., 1978.

Evans, E.D., *Contemporary Influences in Early Childhood Education*. New York : Holt, Rinehart and Winston Inc., 1971.

Gupta, Kalyan, K.D., 'The child and his play', in *Child Development—A Symposium*, New Delhi : NCERT, 1964.

Hartley, R.E., Frank, L.K., Goldenson, R.M., *Understanding Children's Play*. New York : Columbia, 1952.

Hugh, Jolly, *Book of Child Care*. Great Britain : George Allen and Unwin Ltd., 1975.

Hurlock, E.B., *Child Growth and Development*. New Delhi : Tata McGraw-Hill Publishing Company Ltd., 1970.

Illingsworth, S.R., *The Normal Child*. New York : Churchill Livingstone, 1975.

Jill and Pendarell Kent, *Nursery Schools for All*. London : Neil and Company Limited, 1970.

Landreth, C., *The Psychology of Early Childhood*. New York : Knopf, 1958.

Margolin, E.B., Leton, D.A., 'Interest of kindergarten pupils in block play', *J. Edu. Res.* 55, 1951.

Smart, R.C., Smart, M.S., *Reading in Child Development and Relationships*. New Delhi : Macmillan India Ltd., 1972.

Wilty, P.A., 'Children's interest in comics, radio, motion picture and T.V.', in *Educ. Admin. Survey*. 38, 1952,

CHAPTER 9

Prevention and Management of Accidents

'Accidents are one of the three leading causes of death in many countries, with accidents in home accounting for a large proportion of accidental death', according to a report published by the World Health Organization. More accidents occur in the home than in any other single place. Unfortunately many people still believe that accidents are predestined and the individual cannot escape them. This is wrong; for evrey accident is the outcome of a chain of causes, most of which can be prevented. The two important factors involved in an accident are carelessness and lack of physical coordination.

Proper management of the child is an essential requisite for accident prevention. The child who is not properly disciplined, who is allowed by his parents to climb tables, window sills and dangerous levels and who is always allowed to do what he wants, is particularly apt to become involved in accidents. The overprotected child is also equally liable to become involved in accidents. The child who is constantly thwarted and prevented from any sort of ordinary activity because of some preconceived dangers, is apt to rebel and get into accidents.

Accident prevention needs forethought, time and discipline. Parents need to think of and become sensitive to possible dangers to children. They should spare time to watch them; and discipline the children so that they learn how far they can go. 'Mild, consistent, logical discipline is as necessary to a child's sense of security as it is to his life. It may be administered by a glance, a word, an act of deprivation, a tone of voice' Dietrich (1965).

During the first year of his life the child needs absolute protection against accidents, since the baby cannot understand what is dangerous to him and how he may be hurt. Any accident at this age, is entirely due to the fault of the custodians. In the first half of the second year, the child is still incapable of avoiding danger. At this stage, while maintaining protection against accidents, the child can be exposed to minor painful experiences for the educational and guidance values they offer. For example, he can be allowed to feel the heat of a coffee pot. He should be told that if he wants to touch a hot iron box, 'It is hot, if you touch, it will burn you'. If after such a warning he touches the iron box and it burns him, a valuable lesson is learned at high cost.

In the latter half of the second year, the child can be taught some degree of precaution. However, parents should not give constant warnings because they might be inevitably ignored. From the third year onwards, there are certain dangerous practices which children should always be prevented from doing such as: throwing objects about the room, hitting

other children on the head, pushing other children, removing a chair in fun just before a child sits, running about with sharp objects in the mouth, stepping into the fire place and banging the door. Wise discipline and guidance will help to stop all such dangerous practices. While discipline will not prevent the young children from becoming involved in accidents, it would do much to prevent them from getting into troubles. Parents of small children must train themselves to remember the child's growing abilities and power, his inquisitiveness and his ability to anticipate the consequences of what he is doing and remove the usual hazards in daily life, teach him how to handle a dangerous situation and avoid aspects of behaviour that will lead to accidents.

In the following pages, the common accidents, how they happen, how they can be prevented and what to do in case they happen are described.

The common accidents are : falls, cuts and scratches, electrocution, poisoning, scalds, suffocation, burns, play and toys.

1. Falls

Falls are the causes for many small children being killed or badly hurt. When toddlers start walking and climbing, the danger of falling becomes greater. Toddlers and young children are not very firm on their feet. Therefore even a little slip may mean a nasty fall. Children generally fall at the following places.

a) Down the stairs
b) Out of windows
c) Off balconies
d) Off tables, chairs and other furniture, and
e) Out of prams, cots and high chairs

Children also fall by slipping on wet, greasy or shiny floors, tripping over things on the floor and because their shoes do not fit properly or tied well, and clothes are too long or loose. The main rules for the prevention of dangerous falls are : careful watching and making things as safe as possible. The following precautions must be observed.

a. Stairs

i. A gate at top and bottom of the staircase is safest. They must have fasteners which small children can't open. The gate at the top of the stairs must not open towards the stairs.
ii. Objects must not be left on the stairs.
iii. Coverings and stair rods must be firmly fixed and in good condition.
iv. Small children should not be allowed to play on the stairs and
v. Any loose banisters should be repaired as quickly as possible.

b. Window

i. Vertical bars are safest in children's rooms.
ii. Windows should not be left open in such a way that a child could fall out.
iii. Catches should be high enough or of a type that toddlers cannot open. If a window needs to be left open a little way, it should be fastened firmly in that position.

c. Balconies

i. Balconies should be at a height of at least 200 cm.
ii. Stools, boxes or anything a child can stand on should not be left on the balcony.
iii. Small children should never be left alone on high balconies.

d. Tables, Chairs and Other Furniture

i. Do not ever leave a small baby alone on a table or chair even for one second.
ii. Have sturdy furniture : Children love climbing over furniture. Therefore, if the furniture easily tips over, the child needs extra watching.

e. PRAMS, COTS, CRADLES AND HIGH CHAIRS

i. Cots and cradles should have safe fastenings so that a child cannot lower the drop side.
ii. The sides and ends of the cot should be at least 60 centimetres high from the mattress.
iii. The bars must not be more than 7.5 cm apart.
iv. The cot must be strong and stand firm.
v. The cot must be painted with non-poisonous paints.
vi. Safety straps are a 'must' to prevent children from falling out of prams and high chairs. Check the 'anchor points' of these articles.
vii. Prams should not tip up. Brakes should be fixed to at least two wheels.
viii. Riding seats for toddlers must be properly fixed or the pram will tip over.
ix. Check clips, if the pram is collapsible.

f. WET, GREASY OR SHINY FLOORS

i. Wipe up spills at once. Never have a wet floor.
ii. Do not either have small mats or make sure the mats will not slip.

g. BATHS AND TOILETS

i. A non-slip mat at the bottom of the bath will help to keep a child steady on the floor of the bathroom, tub, or bath.
ii. A safety rail, for a child to hold, helps in bathrooms and lavatories.

h. TRIPPING OVER THINGS

i. Repair fringes on mats or worn places that will trip a child and make him fall.
ii. Keep the floor clear of things he may trip over.

i. SHOES AND CLOTHES

i. Tie the shoe laces properly. Shoes on the wrong feet cause falls.
ii. Badly fitting shoes also cause falls.
iii. Trousers or dress hanging down can trip the child. Trousers with shoulder straps are less likely to fall down.

2. Cuts and Scratches

Anything pointed or with a sharp edge is dangerous to small children who can be badly cut or scratched by such articles. Some things which should always be kept away from little children are : opend cans with rough sharp edges; broken glass, china, sewing things with sharp or pointed needles and scissors; tools which are sharp or pointed; jewellery with sharp points or stones, knives; razor blades, compasses, pens, etc.

All broken things which have a sharp edge such as glass, china, plastics and toys must be thrown away. Children's toys must be checked every now and then and dangerous ones removed tactfully. Children reach up and grab tools such as the blades of saws, choppers, hammer, pins, needles and screw driver within a few seconds. Either do not have the child around when jobs are being done or be very careful to keep the cutting and pointed tools including nails and screws away from the child.

If at any time you are likely to hold a small baby or play with a toddler, remember that your jewels can scratch or bruise the child's skin and hurt it badly. This applies to the jewels given to children also. Avoid wearing brooches, pins or any other jewels with sharp edges while fondling the child. See that the rings do not have sharp edged stones.

Children love cutting things and will get hold of knives and scissors whenever they can. This a valuable part of their education, but while they are beginners they should be given short-bladed scissors with rounded ends. It is therefore important to keep all knives and razor blades in a place where small children

cannot reach. The table drawers are not always the safe place for keeping these. When knives are being used for cooking, do not leave them on the edge of the kitchen table or on the floor.

Razor blades are terribly dangerous to little children. Great care must be taken to keep them in a safe place. All used blades should be put in a tin with a lid where children cannot reach them. Train the older children to keep the blades they use for hobbies in a tin and not to leave them where small children can get at them.

Very small children should never be given china or glass things to carry or use, although they love to do it. If they fall over whilst carrying such fragile things, they are likely not only to drop them and break them but also to fall on the broken pieces and get cut badly.

Older children must be told to keep their compasses, pens or any sharp instrument away from their small brothers and sisters.

It is wise to keep floors well swept especially if the child is crawling so that the child can be safe guarded from the dangers of nails, clips, common pins, odd staples and drawing pins. If a child has to wear glasses, it is best to have them fitted with safety lenses.

3. Electrocution

If an electric current passes into the earth through a person's body, the person is electrocuted. The electrical parts which can electrocute small children are: (a) open power points; (b) table lamps; (c) flexes; (d) electrical appliances; and (e) radios.

a. Power Points

If a child sticks his finger or a thin metal object into the little holes of the plug points, the child is likely to be electrocuted. Many times, children stick bits of toys, long nails, metal skewers, and steel knitting needles into the little holes they see. When the power points are approached thus, great danger lies ahead. To make power points safe, it is important to use safety power points or put some dummy plugs in the power point when the power point is not being used. The power points must be put high up on the wall, where small children cannot reach.

b. Table Lamps

If there is no bulb in the table lamp, children can push their fingers or metal objects in the hole where the bulb fits. Therefore never leave a lamp without bulb. If you have to remove the bulb for use somewhere else, make sure the lamp is not connected to the electricity supply. Keep all table lamps out of the reach of small children.

c. Flexes

Any flex which is the least bit frayed is likely to be dangerous. This is because children like picking loose bits off things and if they grab or crawl on the frayed part they might touch the bare wires. As they like chewing things and are even likely to cut a flex if they get the chance, it is safer to ensure there are no frayed flexes in use and small children are kept away from all flexes.

d. Electrical Appliances

Small children must never be allowed to plug electrical appliances in or out. They should never be left with the electrical appliances.

4. Poisoning

Little children love to put things into their mouths, drink out of any bottle and eat anything that looks like a sweet. The following things are likely to endanger their lives through poisoning.

(a) Medical supplies; (b) perfumes and

beauty aids; (c) household cleaners; (d) decorating things; (e) garden sprays, fuel oils, insecticides and pesticides; (f) poisonous plants; (g) gas ; (h) spoilt food.

a. MEDICAL SUPPLIES

Children can swallow anything in less than a second. Children love playing nurses and doctors and will dose themselves or little ones with real medicine if they get a chance. Therefore make it impossible for a small child to get at any of the following: bottles of medicines such as cough mixtures; tablets such as birth control pills; capsules such as a laxatives; pills and tonics; powders and skin creams; sleeping pills, eye ointments and drops; aspirins and first aid things; animal medicines.

Have a cupboard or shelf in a safe place to keep all the medical supplies and lock the cupboard. Do not store old medicines nor keep them without their labels. Never take medicines out of their containers. Do not use an empty medicine container for something else, before changing the label. Never dispense medicines in the dark nor let small children get medicines out. When giving tablets or capsules to children, never call them sweets. They will try to get more when you do not watch them.

Do not take medicines in front of small children. They always want to imitate adults. Never give the child more than what the medical label says.

c. HOUSEHOLD CLEANERS

Household cleaners include the following: bleaches; detergents; disinfactants; polishes caustic soda; other cleaning liquids and powders.

These must be kept away from children, although they are used always and need to be handy. Do not have children around while they are being used. Be careful with cleaning liquids which look like something a child often has.

d. DECORATING THINGS

Paints, strippers, etc. are all poison to small children. They should be stored where children cannot reach them. They should not be used when toddlers are around. Do not even put them in usable bottles. Paints with lead should never be used in the house for children's cots and toys since they often suck paint and get lead poisoning.

e. GARDEN SPRAYS, FUEL OIL, INSECTICIDES AND PESTICIDES

Rat poisons, insect killers and weed killers would kill a child outright. Fuel oils such as paraffin, petrol and car oil, methylated spirit may also kills a child if he drinks them. Children must never be allowed to touch such types of poisons.

f. POISONOUS PLANTS

Some plants which can poison children are: (i) deadly night shade; (ii) many fungi (that look like mushrooms) and (iii) oleander seeds.

Get rid of these plants from the house. Even after eradicating them, it will be necessary to keep an eye on small children. Every child should be taught not to eat things out of the garden unless they show it to an adult first and find it is safe to eat.

g. GAS POISONING

For the prevention of gas poisoning, observe the following rules.

i. Never leave a child in a room, if there is a gas tap which can be turned on.
ii. Report any leakage to the gas board at once.
iii. Never throw matches into gas fires since children might imitate you.
iv. If any gas taps are loose or can be knocked on or off by the furniture near them or by children, have safety taps fitted or put the appliance in a better place.

h. Spoilt Food

i. Babies and small children must always be given fresh, clean and covered food
ii. All utensils used to prepare and serve their food must be perfectly clean
iii. Those handling a baby's food or feeding babies must wash their hands and clean their nails first
iv. Never sneeze or cough into baby's food
v. Children must not be able to get at food which has been put in the rubbish bin or put down for dogs and cats
vi. The children themselves must be kept clean and
vii. Potties and lavatories must be kept clean and germ free.

Many things used in hobbies by the family members such as liquids used in photography, glues, adhesives and inks can also poison little ones. Therefore adults should be careful in using and replacing such materials.

5. **Scalds**

A scald is a burn caused by a very hot liquid or steam getting on the skin. The skin can still be scalded even if the water is not boiling, but only very hot, and if the skin is covered with clothes, if hot liquid is put over them. Therefore keep children away from hot liquids. Some hints to avoid scalds on children are;

a. Saucepans and Kettles

i. Never leave pan handles sticking out over the edge of the stoves. Children may pull the handle and be scalded by the hot liquid coming out of the pan
ii. Never leave the kettle spout facing the edge of the stove. When it boils, boiling water may fall on the child and
iii. Never put electric kettles on the floor if there are small children around. Hook the flex up so that they cannot pull it.

b. Food

Do not put food near children when it is very hot. Test the hot beverages for temperature before giving to children.

c. Table Cloths

Children often pull the table cloth and along with it they pull a pot of hot coffee and spill it on themselves. It is best not to use table cloths, where there are small children around. If they are used make sure that the edges do not hang down. Never put the following things near the edge of the table: tea pots, hot water jugs, flasks and cups of hot tea.

d. Washing and Bathing Small Children

Always pour the cold water in the bath tub first and then add hot water, test the heat of the water before you use it. Never leave the child alone with or in the water and never add hot water to the tub while the child is in the bath.

b. Household Washing and Cleaning

Keep small children away from boilers and washing machines. Do not leave buckets of hot water around. Keep an eye on boilers and bowls on stoves. If they boil over, a child can be scalded. Never pass hot liquids over a child's head.

f. Hot Water Bottles

For hot water bottle, do not use very hot water and never boiling water. Make sure the bottles are in good repair and put a thick cover over them and put them under the blanket.

6. **Suffocation**

Suffocation will cause death because the child cannot breathe. Little children get suffocated and die because of one of the following.

a. When soft pillows, cushions, mattresses,

bed clothes, older people sleeping in the same bed and accidentally, lying on, dogs and cats, fold-up cots folding up with the bapy inside and plastic bags, sand and very soft toys press on their noses and mouths.

b. By breathing fluff from fluffy materials, fumes from anything, smouldering fumes from gas fires, oil fires or boilers which are not working properly, smoke, gas and mucus.

c. When eyes from toys, beads, buttons, pins etc., fluff or other bits of material dummies and food get stuck in their thrat or wind pipe choking them.

d. If the inside of the throat swells up because they are ill or get stung and

e. By strangling by pram straps, etc.

How to Prevent Children Being Suffocated

a. Use firm pillows, cushions, mattresses and
b. Plastic materials.

Small children like to put plastic bags on their heads to play. The plastic might stick on the child's face and merge with the face and kill the child because it stops the child's breathing. The plastic is very hard to remove from the face. Therefore:

i. Never put childrens' toys in plastic bags
ii. If pillows or mattresses have plastic bags take the bags off
iii. Do not use plastic sheeting in cots or prams
iv. Do not let children play with pieces or sheets of plastic
v. Do not leave the baby alone with a plastic bib on and never let him sleep in one.

c. Bed Clothes

i. A baby must not be able to slip down the bed. Tuck him in firmly.
ii. Bed clothes must not come up high enough to cover the baby's mouth or nose.
iii. Do not cover the baby with anything made of fluffy material in case bits of fluff get into the baby's nose or mouth. Do not put soft fuzzy toys on small babies' pillows.

d. Sleeping

i. Babies should be put to sleep only in a cot or pram.
ii. A baby should not be made to sleep with grown ups or older children in case some one rolls over on the baby.
iii. Cots and prams should be covered with a safety net, to keep off dogs and cats.
iv. Have a look at a sleeping baby now and then to make sure he is all right.
v. Do not use fold up cots.

e. Fumes and Smoke

i. If the baby is in a room where clothes are airing, be careful not too put the clothes too near the fire. If the clothes smoulder, the fumes can kill a small baby.
ii. Do not burn material on a fire, if a baby is in the room.
iii. Make sure that gas fires, oil stoves and boilers are in perfect working order.
iv. Take extra care to see that unlit gas taps are not left on.
v. Never leave a baby in a room with a smoky fire.

f. Things Getting Stuck in the Throat

i. Never prop up a baby's bottle so that he can feed on his own. The milk can 'go down the wrong way' and stop the baby breathing.
ii. Never leave a baby to eat alone. Food can get sruck in his throat and choke him.
iii. Do not leave any small things near a baby. A small child could get sruck in its nose or throat through beads, eyes of toys, buttons, fasteners, any fluffy material
iv. Do not let small children have large or small hard sweets.

g. If a Child has a Cold or Bad Cough

i. Keep an eye on him day and night. ii. Try

to keep him lying on one side.

7 Burns

Every year many small children are burned to death due to avoidable accidents. Many more are seriously ill for months, because they had been badly burned. Children get burned because of the following reasons.

a) Fires with no guard or fires not guarded enough. Children can fall right on the fire and catch fire. Sparks and bits of live coal can fall out and set fire to a child's clothes. Children holding a long piece of paper or wood into the fire will also catch fire.

b) Playing with matches and candles.
c) Turning stoves on.
d) Lighted cigarettes and their fallouts.
e) Portable fires and fireworks.
f) Being left unprotected in the hot sun for too long.

How to Prevent Children from Getting Burned

a. *Fires*

i. Every fire must have a guard. The guard must be fixed so that a child cannot undo it. It should prevent sparks coming through when children poke sticks,
ii. Toddlers should never be allowed to switch fires on.
iii. Adults should never throw papers on to a fire and light paper at a fire since the children may repeat the act.
iv. If candles and night-lights are used anywhere they must be out of draught, firmly fixed, on something which will not burn it too and out of the child's reach.

b. *Matches and Lighters*

Matches and lighters must be always kept out of a toddler's reach.

c. *Stoves*

Safety taps are a must in stoves especially if burners light when the gas tap is turned. Never leave the lighting material on the sides of stoves where there are toddlers.

d. *Lighted Cigarettes*

Never smoke while holding a baby or when playing with him. Make extra sure that cigarettes and matches are quite out before putting them in ash trays.

e. *Fireworks*

Do not leave fireworks where small children can get them. Do not light fireworks too near children.

f. *Sun*

Do not leave babies unprotected in the hot sun. Keep an eye on toddlers on very sunny days; let them wear their loose cover-up garment for most of the time and probably a sun-hat too. Make sure they play in the shade or indoors for part of the day.

Use flame-proof materials for as many of the child's clothes as possible. Choose materials with a guarantee saying that the flame-resistant finish will last as long as the material.

8. Play and Toys

If a child is to play with safety he must have a safe place to play, and safe toys to play with. He must be watched all the time in the earlier months and taught how to play safely indoors and outdoors.

Indoors

For very small children a play-pen will be the safest for indoor play but it must be put at a safe distance from fires and away from anything which the child can grab at and get hurt such as stove in kitchen or living rooms. Small children should not be left alone to play in any room where they can hurt themselves. If the child is left alone to play in the garden, the garden must be safe. The child must not be

able to get through the fence or through the gate and into the road. No poisonous plants should be in the garden. The child must not have access to the sheds containing tools, garden sprays and other dangerous things in the garden. Paths and steps must be safe. Water must be firmly covered.

Little children should never be let out to play alone. While sending them outdoors for play, an adult or older child should be sent along and all make sure they are all trained well in safety.

Teaching Children to Play Safely

Safety in play depends a great deal on where the child plays, what toys he has and what he is like. But the following general rules will help in training children to play safely.

Teach the child the following.

a) To use any toy properly. He could be hurt by using it the wrong way.
b) Tidiness—not having all the toys out at once, especially big ones. If the bicycle is not being ridden, put it away instead of leaving it on the path.
c) To let you know if the bicycle brakes do not work.
d) To share toys since a nasty accident can happen if a small child pushes the other one off the cycle when he is riding it.
e) Obedience—small children must learn obedience as much as anything else if they are to play safely.
f) Rough play—if a child is using or playing with something that could cause an accident—a stick, even a pen or pencil poked in the accident, in the face or fallen on can do serious damage.
g) Not to play with dangerous things used by adults, eg., a hatchet, a sporting rifle. Guns must be unloaded and locked up after use.

Many little children get badly hurt by their own toys. Most accidents need not happen if only safe toys are bought and given to children and toys of older brothers and sisters are kept away from the little ones. However, many toys made for children are not safe. Many safe toys can become dangerous if they are broken, badly mended, not used properly and given to younger children when they are made for older ones.

When buying toys, parents should look for toys which are right for the child's age and take into consideration the child's ability and his taste. Parents should also look for labels, saying the toy is: non-inflammable, made of hygienic material, and painted with 'lead free' paint. Toys for small children must not be: too sharp, too painted, too rough, easily broken, inflammable, poisonous or dangerous in any way.

Some firms take much trouble to make their toys safe. They may be costly, but it is better to buy a few of them than many cheaper toys which may hurt the child. The following special points must be watched when buying stuffed toys such as dolls, animals and teddy bears.

a) Check that the inside and outside of these toys are: not inflammable, hygienic and washable.
b) Make sure the eyes on animals and people are firmly fixed or take them out and embroider eyes on and
c) Check that legs, arms, head and eyes are not fixed on with wire.

Wood

Wooden toys include all kinds played indoors and outdoors including swings and slides. Check these toys for: (a) splinters, (b) roughness, especially on the insides or underneath, (c) nails—nailed toys can always be dangerous. They should be safely glued or screwed with screws which don't project out, and (d) firm joints.

Plastic Toys

a) Toys made of brittle plastics usually have

sharp edges when they break.

b) There are often small pieces which are meant to come off these toys which might be swallowed by small children. So do not buy for small children the toys with parts that come off.

c) Plastic foam toys are not safe if the frame is stuffed with wire.

Tin

Tin is used for a number of toys and parts of toys or boxes to put toys in such as paint boxes. Feel the toy all over to make sure it has no sharp edges or corners before letting a child have it.

Electric Toys

Electric toys are usually meant for older children, but they are often played with on the floor where toddlers and babies are crawling. To keep the little ones safe try not to let the older ones play with electric toys in the presence of little ones and do not buy a toy rated at more than 20 volts.

Mechanical Toys

Mechanical toys are not safe for very small children to be left alone with, although they love to watch them 'go'. When buying these toys, make sure that any part that has to be held does not hurt a child's hand and that clockwork motors are enclosed.

Riding Toys

Riding toys must be strong because some children are heavier than others, and children like riding two at a time. They must be well balanced and have proper brakes.

Home-made Toys

Besides ensuring that all toys bought are safe, it is important to make safe toys at home also. This means that they must be made of safe materials (eg. the right kind of wood which would not splinter easily and fabric which will not flare up). They must be have a proper finish inside and outside if painted, with non-poisonous paint.

Teaching Children Safety

Children must be taught to keep themselves and others safe. The important points the teacher should remember are : small children cannot keep themselves safe and older people must keep them safe all the time. This means teaching must go on all the time. It is better to start as soon as children begin to crawl. For example, point out things which are hot and say the word 'hot' to the child. But never put their fingers on or in anything hot, to 'teach' them.

In the teaching process, elders should avoid telling children things if they are not true, just to stop them doing something. For example, 'you will fall down into a big hole if you go to that room' or 'do not touch the mirror, because it would burn you'. If you keep saying that certain things are dangerous when they are not, children will not take any notice when you tell them not to do something that is really dangerous. Fear is an emotion which is a child's natural protection but if you terrify him by shouting, he may get too scared to move and the accident you were trying to avoid will happen.

A few general things to teach children about safety are given below. Examplary day-to-day living will add to learning.

Behaviour

The child who does not behave properly will usually have or cause many more accidents than one who does. The following must be taught from the beginning.

Obedience —Safety training begins here

Self-control —Anybody who loses his self-control is likely to cause an accident to himself and to others. Children must be taught to control temper, impatience and excitement.

Selfishness —The child who always wants his own way and will not share anything with others will invite accidents to occur.

Manners —Gobbling, pushing, grabbing and bursting into rooms cause accidents. On the other hand, kindness, politeness and consideration prevent accidents.

Habits

Tidiness —Accidents happen everyday because things are either not put away or put away carelessly. Small children should be taught to work and play reasonably tidily and put things away when finished with.

Taking things —*If children are taught not to* take each other's things, younger children are not so likely to get hurt by older children's materials.

Touching things —Small children like to feel everything. Teach them not to, when it may be dangerous.

Picking things up in the street —Danger lies in picking up dangerous things, glass etc., and in eating dangerous things.

Self-reliance

Children must learn to stand on their own feet and do things for themselves. They should be given freedom, bit by bit, as they are ready for it, but still keep a watch over them.

How to Use Dangerous Things

If ever a child has to use a dangerous thing, he must be shown how to use it safely and not be allowed to use it until he can do so safely. A child imitates the way grown-ups do things. It is therefore important that adults always do things the safest way.

Model Sets

These model sets such as those for cooking, sweeping, ironing, laundry, tools and gardening are excellent for teaching safety. Adults must use the model set to teach children the safety rules. For example :

> Hold knives point downwards when carrying, strike matches away from yourself. Blow them out properly, always sweep up broken glass. Touch any switch board with dry hand.

Gradually children can be taught to use real tools, but they must be told :

i. What can go wrong,
ii. To tell you if something is wrong or in some cases what to do,
iii. The correct way of using the things
iv. To work carefully,
v. To practise until they have become really skillful,
vi. Not to use certain things without permission, and
vii. Never to play about with dangerous things.

How to Recognize Danger

Children must be taught how to know when danger is around, which things are dangerous, what accidents can happen and information about the things which will help and to tell you if there is anything wrong. Even small children can be taught to recognize certain signs and symbols and tell you when danger signs such as smoke, smell of gas, crackling or sparking electric fires, coal falling out of the fire and heaters falling over, etc., occur.

As soon as they can read they must be

taught which words mean danger and what kind of danger: For example; 'Danger', 'Fire', 'High Voltage', 'Inflammable', 'Poison', 'For external use only', 'Caution', etc. Children can also be helped to be aware of the general use of the red-colour for dangerous things.

Going Outdoors

The important points children must be taught while going outside is to always tell somebody in the family where they are going, what time they will be in and also to send a message if they will be late. In order to prevent meeting with accidents outdoors; teach them the following.

i. To say their name and address as soon as possible;
ii. Always to hold the hand of the person they are with and to keep close;
iii. To always walk on the inside of the pavements;
iv. To use proper crossings on the road;
v. That policemen and traffic wardens are his friends and to cross roads near them when possible;
vi. Little children must always be held when getting on and off trains and buses. They should also be held when getting in and out of traffic lights, going through swing or revolving doors. Keep children away from platform edges;
vii. About the danger spots such as water-pools, reservoirs, building sites, derelict houses, road works, etc., or forbid them not to go near such areas;
viii. To avoid the habit of picking up unusual things and eat anything off the ground; and
ix. General safety rules when going alone on buses or trains.

Accident prevention demands a constant balance between protection and education, beginning with absolute protection at birth and gradually letting them to be independent as their age advances. In other words, the completely protected, totally dependent infant must be transposed into a secure, self-confident and self-reliant child armed with safe behaviour.

Children will be safer if they :

a) Are obedient to firm, loving discipline,
b) Can 'give and take',
c) Are not treated as martyrs or heroes if they have an accident,
d) Are self-reliant and think for themselves as soon as they are ready for it,
e) Realize they can prevent accidents themselves,
f) Can recognize danger,
g) Are not frightened by safety teaching,
h) Get as much experience as possible exploring and experimenting things, going to places and meeting people,
i) Have safety skills such as swimming,
j) Have parents who set a good example and give positive instruction in accident prevention.

References

Arya, S.C., *Infant and Child Care for the Indian Mothers.* New Delhi: Vikas Publications, 1972.

Central Social Welfare Board, 'How to teach safety to each of your children', *Social Welfare*, Vol. XIII, No. 10, Jan. 1967.

Cole, L., Hall, I.N., *Psychology of Adolescence.* New York. Holt, Rinehart and Winston, Inc., 1970.

Dietrich, 'Accidents', in *Clinical Paediatrics*, 4, 1, 1965.

Directorate of Extension: *Home Science*, New Delhi; Ministry of Agriculture, Vols. 3, 5 & 6, July-August, 1965.

Harvey, D., *The Baby Book*. London: Marshall Cavendish, 1975.

Home Safety Journal, Vol. 1, No. 22, Jan. 1972.

Hugh, J., *Book of Child Care*. London: George Allen and Unwin Ltd., 1975.

Illingsworth, R.S., *The Normal Child. Some Problems of the Early Years and Their Treatment*. New York: Churchill Livingstone, 1975.

Jersild, A.T., *The Psychology of Adolescence*. London: Macmillan Ltd., 1970.

Kennedy, W.A., *Child Psychology*. New Jersey: Prentice Hall Inc., 1971.

Kuppuswamy, B., *Child Behaviour and Development*. Delhi: Vikas Publishing House Pvt. Ltd., 1976.

CHAPTER 10

Discipline

Meaning of Discipline

Discipline is an organized, regulated, orderly way or life. It means helping the child to become a happy, outgoing, expressive, co-operative individual and helping him recognize 'bad' feelings and learn acceptable ways of expressing his feelings. It is a process of training and learning that fosters growth and development. It helps to direct the child's energies into useful and socially acceptable channels. Discipline is also society's way of teaching the child moral concepts and behaviour approved by the group. Every child needs to be helped to understand the values of discipline through appropriate experiences. He must learn to conform to the expected patterns of behaviour and customs in an acceptable manner, use freedom wisely and distinguish between 'safe' and 'unsafe' actions. The ultimate goal of discipline is self-discipline.

Discipline fulfills certain needs of the child and thus adds to his happiness and facilitates his adjustment. The needs of a child to be met by discipline are as follows:

1 Development of a conscience which is the internalized voice that guides in making decisions and choices.
2 Praise. If a child does right acts, he should be praised and approved. He needs such praise to develop successfully.
3 Motivation to accomplish what is required of him.
4 Standards to enable the child avoid frequent feelings of guilt, which often lead to unhappiness and poor adjustments.
5 Feeling of security to help the child know how far he can go, and what he may or may not do.

Teaching Discipline

Techniques which are used to inculcate discipline are of three broad categories: authoritarian, democratic and permissive.

Authoritarian Techniques

The characteristics of the authoritarian disciplinary techniques are the following:

1 Strict rules and regulations;
2 No freedom of action, thought and movement;
3 Too much emphasis on perfection;
4 Making too many decisions for the child;
5 Constant criticism of the wrong doings and nagging;
6 Not respecting individual rights;
7 Expecting unattainable standards;
8 Control through external force in the form of punishment;

9 Not involving children in decision making or other activities;
10 Little or no recognition, praise, or other signs of approval, when the child meets the expected standards;
11 No relaxation in control or abandon of corporal punishment and
12 Depriving the child of opportunity to learn to control his own behaviour.

Effects of Authoritarian Techniques on Children

Authoritarian parents, guardians and teachers who use harsh and punitive methods to achieve the ends of discipline as concerned by them may succeed in making the child conform to their standards, but the apparent goodness is apt to be concealed by resentment which will break out sooner or later. Children who are subjected to authoritarian discipline would:

a) assert their independence by doing many wrong things which otherwise they would not have done;

b) believe and feel that the world is hostile and become hostile to the world. This is at the root of juvenile delinquency;

c) become rebellious and revolting;

d) become resentfully submissive and obedient to parents.

e) develop hypercritical attitudes toward all in authority;

f) live in fantasy in which they win out in their battle against those persons who restrict them;

g) turn their anger and aggressions inward;

h) become more sensitive to threat of loss of affection than others, and live in an interpersonal world of constant threat;

i) fear punishment more than others;

j) become sullen, obstinate and negativistic in attitudes towards any one in authority;

k) be outwardly quiet, well behaved and non resistant, but harbour deep resentments which make them unhappy and insecure and restrict their curiosity, originality and creativity which may lead to insecurity;

l) feel lack of confidence that might lead to feelings of guilt about thoughts and actions and thus impede social and emotional development and maturations;

m) think themselves 'worthless' and display poor personal adjustment;

n) develop an 'authoritarian personality' characterized by rigidity and inability to change attitudes and behaviour;

o) learn to be shy, secretive and dishonest to avoid punishment;

p) become withdrawn, shy, suspicious and introverted; and

q) become anxious and uncertain, because of their inability to conform to adult expectations.

The authoritarian disciplinary techniques exert a devastating influence on the personality of the child and his behaviour. The stricter the parents, the stronger and more outrageous may be the revolt from the children or there may be greater submissive conformity to parents.

Permissive Disciplinary Techniques

Permissive disciplinary techniques employ little or no discipline. They do not seek to guide the child into socially approved patterns of behaviour and do not employ punishment. The chief characteristics of these techniques are:

1 No limits or boundaries are set for the child on what he may or may not do.
2 The child can make his own decisions and act on them in any way he pleases.
3 There is too much leniency.

Effects of Permissive Disciplinary Techniques on Children

Under the influence of permissive disciplinary techniques, children might:

a) get confused and become insecure;
b) have no concept of right and wrong;
c) become fearful and anxious;
d) develop excessive aggressiveness;
e) become resentful because they feel that their parents care too little for them;

f) turn unmanageable in the school or neighbourhood;
g) expect a great degree of patience from others;
h) have no chance of learning to conform to the society; and
i) develop illusions concerning their own rights.

The problems which result from lack of disciplinary guidance can be as serious as those engendered by authoritarian discipline.

Democratic Disciplinary Techniques

Democratic disciplinary techniques are synonymous with education and counselling in that they emphasize growth, self-discipline and self-control. These in turn, lead to motivation from within. The characteristics of democratic disciplinary techniques, are that they employ:

1 Explanation, discussion and reasoning to help the child understand why he is expected to behave in a certain manner.
2 Punishment, only at appropriate times, when the child refuses to do an act.
3 No harsh punishment, at any time.
4 Rewards with praise or some other expression of approval, when the child comes up to expected standards.
5 Methods to develop inner controls by educating the child to understand fully and behave in the approved manner.
6 Careful planning of the child's activities so that his energies are directed into creative channels fostering self-discipline and
7 Appropriate means to motivate the child to live up to expectations.

Effects of Democratic Disciplinary Techniques on Children

Children brought up with democratic disciplinary techniques would:

a) achieve desirable personal and social adjustments;
b) develop independence in thinking;
c) develop initiative in action;
d) be active and outgoing;
e) be spontaneous in behaviour;
f) achieve healthy, positive, confident self-concept;
g) have better self-control;
h) deal with obstacles in a positive way;
i) co-operate with people with friendlier approach; and
j) achieve greater creativity.

Guidelines for Inculcating Discipline in Children

The following are simple, practical methods for disciplining children.

1. Make Sure That the Child has a Clear Idea of What He is Expected to Do

Misunderstandings arise when the child is confused over what is exactly expected of him. For instance, he may not understand that his hands must be washed before the meal unless his mother explains to him to do so. A toddler may not understand that he should stop scribbling on the walls because although his mother objects vigorously sometimes she does not object at other times when he scribbles on a spot. The child is also confused when both scolding and approval are administered at the sametime. Ravi's father punishes him when he hits other children. At the same time Ravi hears his father boasting in an approving tone that Ravi is a courageous boy. This makes Ravi wonder what is expected of him.

The best way to make sure that the child understands what is expected of him, is to talk it over with him. Ask him what he thinks he should be doing at a particular instance. His co-operation might be fuller if he is first asked what he thinks his parent should do and then tell what he feels he should do. Continue to talk things over until a clear idea of what is expected of each other emerges.

Only simple things must be expected from young children. They will learn what is expect-

ed of them when the point is made consistently. They will also learn from the tone of the voice, the sound and the smile on the face of the adult. In order to get maximum co-operation from the child make him understand that what his father and mother expect of him are the same.

2. MAKE SURE THAT THE CHILD HAS A CLEAR IDEA OF WHEN HE IS EXPECTED TO DO THE THINGS REQUIRED OF HIM

Young children do not have a clear sense of time, but they do learn early the sequence of events. For instance, a young child learns that if his mother gives him milk in the night and says 'good night' he is expected to go to sleep, and not ask for sweets. If mother sometimes comes back to give sweets and lets him fuss in vain because she is too tired or pre-occupied, then co-operation about sleeping or eating at regular times becomes difficult. With the older child, 'when' can be specific. His time table should be talked over. The time to get dressed, the time to go to school and to return should all be specific. Children's co-operation can be won simply by letting them set the time for these activities.

3. MAKE SURE THAT THE CHILD HAS A CLEAR IDEA OF HOW TO DO WHAT HE IS EXPECTED TO DO

Teaching little children 'how' is important. Suppose a child knows he is expected to be polite. Unless he is enlightened about what specifically being polite means, he cannot be polite. Talk about what it means to be polite; for example, not shouting from one end of the house to the other, not throwing play materials around, not to pull some body's dress and so on.

Suppose a three-year-old has spilt milk, the mother wants him to mop it up. Let him then work at it. It's amazing how much a little effort can teach children efficiently 'how'. But unless they are taught carefully, completely and in detail, full co-operation will be impossible, because they simply cannot do things which they do not understand fully.

4. MAKE SURE THAT THE CHILD HAS A CLEAR IDEA OF WHY HE IS EXPECTED TO DO CERTAIN THINGS

Giving a good, honest reason for everything the adult expects the child to do will pave the way for discipline. Such knowledge will reduce rules and regulations, which might make the child rebellious. For example, explaining why all the homework has to be done before the child goes out to play, may be altered due to the realization that perhaps it could be done after some play. Even if the child is too young to understand the reason, be catches the emotion and feeling that go with the explanations and takes the correctionless personally.

If mother says 'It would help me not to worry, if you inform me in advance', that approach is more likely to win co-operation than stating simply, 'remember not to delay and come right home from school'.

5. GET HABITS ESTABLISHED FOR AUTOMATIC CO-OPERATION

In order to establish desirable habits, it is necessary to do the same thing over and over again in the same way and with the same sequence. For example, a child who brushes his teeth and takes his bath regularly every morning, is not likely to fuss about morning bath.

Being pleasant is an asset to the formation of good habits. A child who frowns, makes faces and grumbles whenever polite requests are made and a child who never does anything until he is reminded several times or threatened have both learned undesirable habits. Well thought out and implemented daily routine helps to achieve the child's co-operation for forming the desirable habits. But there are

always unexpected events. That is why, in addition to regular routines, there is need for occasions when routines are broken harmlessly for example, during family outings and vacations.

6. Give the Child Enough Time for Mental Digestion

The child needs time to digest and absorb new ideas and suggestions. A child may be quite ready to co-operate after a time lag, while immediate conformation is difficult and may not even be possible. The more novel and creative the idea, the longer it may take to be absorbed. When the child does some wrong thing which he had never done before, the adult can say, 'It is all right this time, but please remember not to do it again'. This approach is more likely to win co-operation than a 'No'.

When the child is playing busily and the adult wants him to do something else, more co-operation will be forthcoming if he says, 'It is going to be wash-up time pretty soon. You better get ready to wash', and then wait for a few minutes before insisting on the washing up. When the time comes for doing things, a little time lag always helps. During the time lag, counting one to ten is a good technique for young children. Simply telling 'stop', may not be so effective, as allowing an extra minute or two. Instead of saying, 'Come into the bathroom to get washed up', say 'I'll count for you ten to come into the bathroom for wash-up. One, two, three . . ." and count slowly. Once the child is used to the counting way of management, he usually gets there before the number ten is reached. Be sure to praise every time the child comes by ten.

Rushing children makes them resistant. In the long run, more time will be wasted. Therefore, allow plenty of time for a relaxed, easy pace throughout the day. Give plenty of forewarning before something is expected of children to change from one absorbing activity to another. When a new rule of behaviour is introduced discuss it carefully beforehand instead of springing it on a child without forewarning. When there is need to resort to punishment about a certain persistent wrong habit of behaviour, it will help the child to co-operate if a warning is given thus. 'What you are doing is getting to be a harmful habit. I will have to punish you next time for it'. This will help the child know what to expect.

7. Praise Lavishly, Repeatedly and Sincerely Whenever it can be Done

Praise every improvement. The effects of praise are dramatic. Express your honest appreciation for everything every member of the family does when it is helpful, pleasant, outstanding or particularly kind. Instead of nagging at children who are perpetually messy, praise them every time they remember to put things neatly away.

Praise and approval can be expressed in many ways besides words. For example, smiles and pride as evidenced by conversation with others, show approval. Be sure to praise what means much to the child, and to you, such as an improvement in school grades and winning a game, the great achievement of skipping on a rope 100 times, without missing, or learning to ride home on the bus alone.

8. Appeal to the Child's Nobler Motives

Expect children to do the right. One father speaks of his children this way: 'I just cannot do anything with any children. They won't do a thing'. Another father speaks of his children, 'My children are the best helpers I have. I don't know what I would do without them'. Both fathers started with the same type of indifferent children to begin with, but one obtains more co-operation.

Sometimes warnings can give a child the notion that he is expected to do wrong. 'Do not start fighting now for Heaven's sake, since

it is time for us to catch the train', may give the girls the idea that their fighting is inevitable, and that they are expected to fight again. The approach, 'It was wonderful to have you play so happily together yesterday morning. You are really making progress in learning to get along together. I am so proud of you', is more likely to improve behaviour.

9. Do not Nag, Argue, Threaten or Verbally Attack the Child's Personality

Nagging, theatening, arguing arouse resentment and negate co-operation in the long run. Children can be exasperating at times being slow, inefficient, forgetful, irritating, and so forth. Under such circumstances, it is easy to fall into the habit of nagging, arguing and condemning. But this must be strictly avoided.

Praise and tactful management discipline children effectively. Only when praise and other tactful methods fail, punishment must be resorted to but never threaten, nag, argue, or make direct sweeping criticisms. These will accomplish just the opposite.

10. Ask Questions Instead of Giving Orders

There are times, when parents have to shout, 'Get back, there is a bus coming' or similar directions. But questions are even more effective and resented less. Questions are tactful ways of introducting ideas.

Asking questions in family life, and setting limits help to bring in discipline. 'What time shall we set the alarm in the morning so that we can be sure of getting off to school on time?" When children discuss such questions together, and work out the rule, there is much more chance of effective discipline.

11. Praise the Child Before and After Every Correction

When the child is to be corrected after a mistake, start and end with praise. Sandwich corrections between praises. For example, 'Raja, you are so good to Doggie Doggie. But, Raja doggie is a dog, and eats from dog's distics. We dont't like doggie to eat out of our best plate. You can help me feed him whenever you want, but doggie needs his own plate for feedings. It is lovely that you love doggie so much'.

12. Make Things Seem Natural and Easy

Making things natural can facilitate learning and achievement. For instance, the following treatment helped some children do or learn what was necessary: 'Come on now—it won't take you long to put away these toys. I know it seems like a mountain to put away, but they will disappear from the floor in no time, if we pick them. Narendra, how about you picking up the blocks; and Sudha, can you pick up the things from that end of the room?'.

13. Express Sympathy for Your Children's Actions

Expressing sympathy towards children's actions can work mircles. For example, 'I know just how you feel; that water certainly does look inviting, but it really is not safe to go for water play, since there is a heavy rain. You might catch cold and cramps'. Expressing sympathy with the child's point of view will make him more willing to oblige and comply with the adults point of view.

14. Substitute Rather than Deny

Children have to learn sometime that there are some irrevocable and fundamental 'no' signs in life. But the blow of the 'no' can be minimized by suggesting alternatives. At the same time the child will be learning a habit that will help him throughout life. A person who can think of different ways of satisfying the same desire, has an easier time in getting used to the disappointments of 'nos' in life.

Here is an example for a substitute response. 'I am sorry you cannot throw the books. Here is a ball and bean bag which can be

thrown and played with'. Sometimes instead of suggesting one substitute, it may help to suggest two or more substitutes. Choosing between two alternatives is a complex and absorbing problem for the young child and in that effort he often pushes away the original idea out of his mind.

15. Teach the Child that He can Control his Actions

Emotions are part of life. No one can prevent the child from expressing his emotions. Emotions are as instinctive and inevitable as blinking the eye when a foreign body approaches it. The direction, 'Don't be jealous,' 'Do not be moody', 'Do not be frightened', can accomplish nothing. At the most they can make a child ashamed of, or stubborn about his emotions. He stops admitting to himself that he feels mad or jealous or frightened. His emotions go underground and make discipline difficult.

The child will learn to control his behaviour in a healthy way, if only adults help him to recognize his emotions and that it is the action based on emotions, not the emotions themselves that are to be controlled. For instance, a parent who is helping his child recognize his emotions and control and channel the actions based on them says, 'That cat is really big. I can see why you are frightened of him. But really, most cats are friendly even if they look huge and frightening. Would you like to come with me so that we can pet the cat together?'.

16. Confess Your Mistakes

Saying, 'I am sorry, I lost my temper', or 'I see now, I was unreasonable', will help the child get over his bad feelings and smoothen the road for future discipline and co-operation. A parent will not lose his parental respect, if he admits his mistakes. Ability to admit the wrong done is a sign of strength, not of weakness. Not only will the child love and respect the parent for it but he will also learn to admit his mistakes more easily. Sometimes it even helps to explain why you were unreasonable. It also helps to admit the possibility of mistakes and the fact that you are a fallible human being. This is particularly important as children grow up.

17. Remember Co-operation is a Two-way Process

The techniques of discipline will work only if the child does not get the feeling that it is a one way road. Co-operation is based on the 'You help me and I'll help you' and 'we work together' spirit. These mean helping the child achieve his own aims and desires as well as the aims and desires of his parents and both work together for the realisation of their goals. Specifically, if the parents and the child work together to fulfill their needs and aspirations, without the psychological needs of either being frustrated, the techniques of co-operation will work efficiently.

What to do When the Child Misbehaves

A happy, healthy child who knows he is loved and appreciated seldom misbehaves. However, most behaviour, as the adult sees in children is natural. It is an expected and normal part of child behaviour. The following simple principles would help to deal with misbehaviour: (1) find out and correct the underlying causes whenever possible and (2) when necessary, use effective punishment to break the harmful habits. The first centers around discovering and removing the underlying causes of misbehaviour. It may not be possible to remove the causes completely, but there may be a number of things one can do to change the situation. Given below is a list of common causes for misbehaviour and irritability. 1. Inadequate sleep, 2. Hunger, 3. Exhaustion from too much exciting play or exercise, 4. Irritation from somebody, 5. Jealousy about attention

going to somebody else, 6. Boredom, 7. Hot or stormy weather, 8. Need for exercise, 9. Frightening or worrisome experience, 10. Parents being temporarily too busy to give usual attention and 11. Onset of cold or other illness.

A variety of causes as given below result in more prolonged signs of misbehaviour.

1 Practical method of winning co-operation has not been used
2 Misbehaviour is countered by attention-getting punishments
3 Misbehaviour rewarded by disguised parental price at cuteness or smartness of misdeeds
4 Inconsistent discipline
5 Chronic fatigue
6 Poor nutrition leading to great irritability.
7 Jealousy of brother or sister, who the child thinks is favoured
8 Fighting or tension between family members
9 Making the child feel insecure
10 Not receiving enough personal attention and interest
11 Not having challenging work and play
12 Too little exercise
13 Frustration at school
14 Poor relationship with other children and
15 Adult expecting too much from the child.

Development of good behaviour is not a smooth, easy, process. Every child has his ups and downs in the course of development. Just because he has been able to do something for a while, one should not expect that he will continue to be able to do it without some setback or even regressing.

During periods of setback of disorganization, or at any other time when the children are going through periods of misbehaviour, attention must be given to watch their physical development carefully. Extra care should be paid to their diet, sleep and exercise. They should be protected from over-fatigue and not strained by starting too many new things at once.

When the child misbehaves, the cause will be a combination of several physical and psychological factors. This is why it is important to consider all aspects of child care together when one tries to understand and correct the cause of a child's misbehaviuor. When necessary, effective punishment should be used to break up harmful habits.

For applying the principle of punishment one needs an understanding of exactly what it means. What are the harmful habits? What is effective punishment? and how to determine when punishment is necessary? In order to determine whether your child's misbehaviour is really a harmful habit, ask the following questions; 'Am I sure that this behaviour is not just immaturity or inability of a child to live up to adult standards?' 'Has this behaviour pattern been repeated often enough to be really a firmly ingrained habit?' If the answer to both questions is, 'Yes', then ask the following questions: 'Does the habit put my child in physical danger?', 'Does the habit make my child less efficient or unsuccessful at work, study, play or family living?' 'Does the habit really hurt the feelings or property of other people?' If the answer to any one or more of these questions is 'yes', probably a harmful habit is evident.

The next problem is under what circumstances should you consider punishment for this harmful habit. When is punishment necessary? In general punishment is necessary if the harmful habit continues after you have done what you can, to eliminate the basic cause of the habit and after you have tried hard to win the child's co-operation with the practical methods.

The final and crucial point is to understand 'what is effective punishment?' On the verbal level, the usual punishments are scolding, nagging, arguing and criticizing. As for the physical punishment, there are four types commonly used: (1) Spanking, (2) Isolation, (3) Withdrawal of privileges and (4) Work to restore

damages of misbehaviour.

Spanking

Spanking is occasionally an effective way of teaching a young child. A quick slap on the hand may speed up learning. A spank on the bottom for running across the street heedless of traffic may teach a young child to hesitate next time. As the child gets older spanking will not be necessary.

Spanking carries in it the inherent danger that the child gets extra attention by being naughty. It may give the child the satisfaction of dramatizing his woes and being the centre of attraction for the time being.

Isolation

Isolation is an effective form of punishment, provided it is administered wisely. For example simply carry or lead your child to a small uninteresting room and confine him there for a short period of time. The room should not be frightening or dull. A dull isolation hurts in two ways, the tedious boredom of having nothing to do for several minutes, and the separation from sociable family living. Isolation is an ideal punishment for children with temper tantrums or other habits that otherwise win a lot of rewarding attention.

It is important to be consistent and isolate every time the same harmful habit occurs. It is important for parents to remain calm and self-controlled during the child's isolation. Once the child's mood has changed to cooperation and he is allowed out of isolation, consider the incident as closed once for all and treat the child in the usual friendly way.

Withdrawal of Privileges

Withdrawal of privileges is a form of punishment for children of all ages. It is suitable for a wide variety of situations, but is particularly effective when the privileges withdrawn were the ones misused. When a toddler gets in the habit of hitting other children with a toy, the privilege of using the toy can be temporarily suspended with an explanation of why it is done.

A good way of dealing with little playmates who quarrel is to withdraw the privilege of playing together temporarily. Restrict them in different regions and see that they cannot play together for a whole hour.

Withdrawal of privileges can also be used as punishment for unrelated items. The child who has the habit of ignoring any request can lose the privilege of a field trip until he learns to heed the requests and do what is asked of him.

Work to Restore Damages of Misbehaviour

Working to restore damages of misbehaviour is a particularly good punishment, because there is a natural and logical connection between the punishment and misbehaviour. Being forced to do a careful clean up job after carelessly spilling milk on the floor may be all the punishment that is needed and at the same time it dramatizes the need for being careful. Sometimes children's work capacity is so limited that they cannot make up all the damage: however, they should be required to do as much as possible. For example, Ramesh gets spills on a carpet after being warned to paint elsewhere. He can be asked to clean, wash and get the dirt removed. Children feel better after they themselves have made the restoration.

One of the chief values of punishment is to bring about enough desirable behaviour so that praise and admiration can take over the main burden of discipline. However, all punishments have one inherent danger, that is, it is easy to drift into punishment as the main way of getting surface co-operation. If this happens, chronic resentment will supplant real co-operation and good will. Punishments should be used only after the other methods of disciplining have been tried. However, when the need

arises one should be firm. Children thrive better when held up to reasonable standards. A child cannot be hurt by firm and consistent justice administered in a friendly and sympathetic way.

References

Ambron, M., *Child Development*. San Francisco: Rinehart Holt, 1975.

Davis, G. A., Scott, J.A., *Training in Creative Thinking*. New York: Holt, Rinehart and Winston Inc., 1971.

Hart Beatrix Tudor, *Toys, Play and Discipline in Childhood*. London: Routledge and Kegan Paul, 1970.

Hugh, Jolly, *Book of Child Care*. Great Britain: George Allen and Unwin Ltd., 1975.

Illingsworth, R.S., *The Normal Child*. New York: Churchill Livingstone, 1975.

Jill and Pendarell Kent., *Nursery Schools for All*. London: Neil and Company Ltd., 1970.

Kennedy, W.A., *Child Psychology*. New Jersey: Prentice-Hall, Inc., 1971.

CHAPTER 11

Habits and Habit Formation

Man is often described as a creature of habits. Habits in relation to dressing, eating, work and other everyday activities are so readymade, that most people unfold 'without thinking'. It is only when an emergency or a new situation arises that a habit is interfered with or disrupted and may lose its utility temporarily.

Habit is the name given to behaviour which when repeated often becomes automatic. A habitual action is one which is performed with little or no thought and approximately always in the same way. Habit is thus the result of many repetitions of the act. The first time an act is performed, it is done slowly; and it may entail considerable thought. The second time the act is performed, less thought will be required and the act will be done more quickly. As repetition follows, less and less thought is required, until finally the act becomes almost indistinguishable from a reflex action. Without conscious thought, it is done smoothly and with maximum speed. Habit is a stable stimulus-response connection according to Watson (1963).

Each action involves the functioning of the afferent and efferent nerves as they carry messages to and from the brain. Hence with each repetition of the act, there is naturally an effect on the nerve tracks on the brain, when approximately the same message is taken to the brain and the same answer comes back, for the same action to result. A kind of track is laid, so that the answer to the message carried to the brain becomes more and more automatic. There is less and less need for consideration and thought and the answer comes almost immediatety on receipt of the message. Thus gradually, the action becomes more and more like a habitual action (reflex action) and a habit is established. Thereafter it becomes more and more difficult for any other answer to come in response to the in-going message than the one that has been given again and again in response to what is approximately the same message.

Advantages of a Habit

Habit saves the individual time and thought. The time and thought thus saved can be devoted to more important aspects. As a matter of fact, if we had no power of forming habits, life would remain a very elementary thing. We would then have no time or mental energy for the higher things of life and will make no progress.

Habits also cause dangers sometimes. Habit is a good servant but a bad master. Once formed, a habit is very difficult to break. If a habit is allowed to exert a great role in the lives of children, we will be reducing the part

that thought plays. Such a situation may be dangerous when we get away from the details of daily life. That is why Rousseau said that we should form the habit of forming no habits.

Habit may be divided into three groups: bodily habits, habits of character or dispositions and habits of thought. Bodily habits are those habits which are connected with the way in which we use our limbs, with actions such as walking, speaking, washing the teeth, gaining proficiency in the use of bodily powers in activities such as games. Habits of character or dispositions are habits such as obedience, telling the truth, hospitality, tolerance, tidiness and punctuality. Habits of thought are habits such as accuracy, of thinking for oneself, seeking for reasons and causes, correct observation and testing results.

Certain considerations favour the formation of habit, regardless of the type of habit. They are now described.

1. When a habit is in the process of formation the regularity is not steady. In the beginning, the formation is usually rapid, since there is interest in something new. The impression made on the nerve paths is a new one and as the impression deepens, the effect also becomes greater. However, when the number of repetitions increases, the impression does not increase in the same way. One comes to a point where no further progress is evident. Thus one reaches a plateau in the curve of progress of formation of habits. Progress will be resumed again, but never so quickly as in the first stages of formation of the habit. At such times, one must recognize that the arrest in progress is not due to the fault of the individuals but a natural characteristic of the process by which habits are formed. Adults must try to remove boredom if it has set in and ensure that the health and home conditions of the child are generally satisfactory, and make such changes as will bring back interest.

2. Short periods of practice spread over a number of days are more effective than long periods with longer intervals between the periods of practice. This is because short periods do not allow fatigue to set in easily. Therefore interest is not exhausted. Furthermore, when short periods appear frequently, there is not the same opportunity for forgetting. The nerve paths do not lose the first impression before the second one is made.

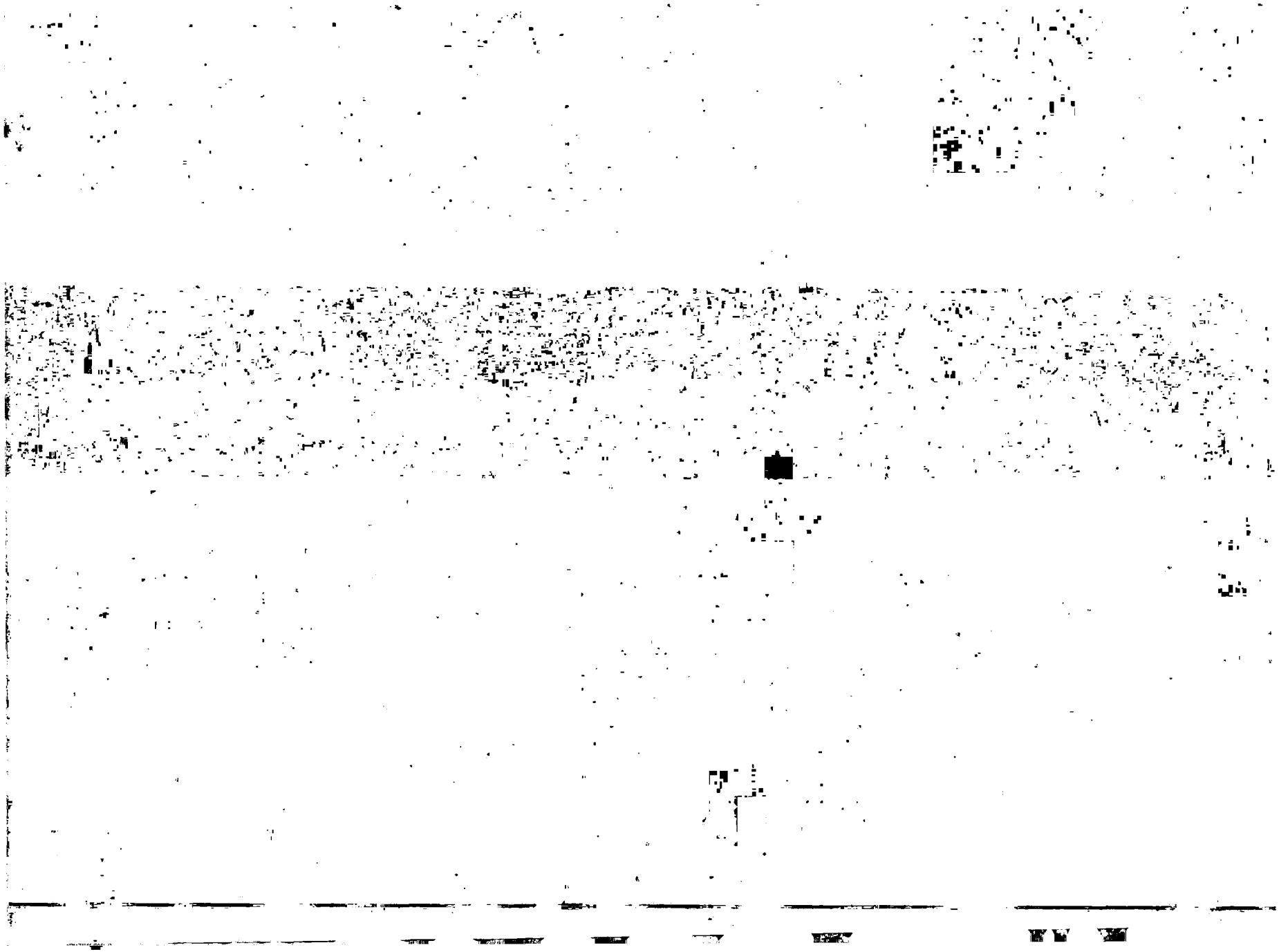
3. Get children started in the right direction from the very first time an attempt is made towards forming a habit. (Figure 12).

4. Having got started along the right track, there is need to see that the habit is not reversed or changed. Ensure that children get adequate opportunity to do the right thing and little or no opportunity for doing the wrong thing. Every exemption permitted, especially in the early stages, will lead towards a defeat in the purpose. If one wishes to form the habit of rising at 5 O'clock in the morning, he cannot accomplish it by getting up at 5O'clock for one or two days and then staying in bed till 7 O'clock on the third day. Only after a habit has been formed firmly, some exemptions may be allowed without upsetting the habit, but not while the habit is in the process of being formed.

5. Habits are formed by doing and children learn by doing. They should be encouraged to seize every opportunity for practising the desired habit. It is only by doing and not merely by thinking, that the required effects can be made in the nerve tracks.

6. Every resolution made must be carried out seizing the first possible opportunity to do it. Every emotional prompting and experienc must be directed towards forming the aspired habits. It is not during the moment of their forming, but in the moment of their producing motor effects that resolves and aspirations communicate the new 'set' to the brain. . . no matter how full a reservoir of maxims one may possess, and no matter how good one's sentiments may be, if one has not taken advantage of every concrete opportunity to act, one's characteristic may remain entirely unaffected

Fig. 12. Start in the right direction towards forming a habit.



(Ryburn, 1965).

7. The new habit must be launched with all the initiative one has.

8. No exception, no return to the unwanted habit should be permitted.

9. The new habit must be exercised voluntarily and as often as possible. Repetition provides regular reinforcement and makes the nervous system one's ally rather than enemy. Response pertaining to a habit, when not strengthened through reinforcement tends to drop out through the process of extinction. Many habits die through failure to keep them alive.

10. Try breaking an involuntary habit by a voluntary practice. Involuntary motor habits such as stammering, distorting the face when working, twisting one's nose and biting nails can be eliminated successfully by the method of voluntary practice. For example, when a person has a cold, twisting his nose or coughing would relieve the itching and unpleasant congestion. But, later even when the cold has been cured, twisting the nose persists as an involuntary act or 'habit residual' and leads to specific mannerisms. Involuntary acts of this type are often conditioned responses in which the effective stimulus is unknown to the victim himself. He cannot inhibit the activity because he does not know what had initiated it. Through voluntary practice alone he may gain control of the response and inhibit it 'at will'.

11. A new response can be substituted for the old by the conditioned response method. In breaking a habit, the response of withdrawal and dissatisfaction may be substituted for the response of approach and satisfaction. For example, if liquor makes a man ill, he may give up drinking. Whether or not this new response persists will depend upon how strong the original association was and to what degree the distasteful response is reinforced by illness, social approval, religious conviction and the like.

12. Definite specifications must be set for the new habit. New year resolutions to study well or be more creative are usually ineffective because they are too vague and too general. Somehow opportunities to exercise the new and desired never appear to arise, or when they do, one is not aware of their presence, or one is not sure whether the new resolve applies in this instance. A student who is dissatisfied with his performance, will have a much better chance of improving if instead of expressing a pious hope, he lays down a definite schedule of hours and subjects of study and sticks to it. An even better way is to analyse the bad habit, find the source of its appeal and replace it by other responses which are useful in social situations. An analysis of a bad habit often shows that it is possible to substitute it by socially—approved behaviour which serves the same purpose.

Formation of routine habits in a child, such as eating, sleeping and going to the toilet, is a problem of great importance to the one who has the responsibility for the child. Questions which are of concern in any specific habit are: How early should the training begin and how should training proceed? It is impossible to tell just when to begin training for a specific habit or for that matter to tell exactly how to do it, for there are no definite rules which would apply to all children in all situations. However, a few rules which have been found to work with many children are as follows.

1. Routine habits should be begun early and simply. For example, toilet training is more easily acquired at an early age and should be started early. It is more readily learned, if only one aspect of the training is undertaken at a time.

2. Maintain the training regular since no habit results when the effort is inconsistent and irregular. Only through repetition habits are fixed. If Raju is put to bed at seven one night, and if for no real reason he is allowed to play until 9.30 p.m. the next day, he will not acquire the habit of going to be regularly at a given time.

3. Habits must give some satisfaction to the child. Approval is probably the best form of giving satisfaction to the child while he is learning. Rewards in the form of special privileges may also be used occasionally.

Habit Breaking

Everybody has a few or more undesirable habits. Hence, habit breaking is of great interest to all. There are many methods to break habits. If reinforcement is withdrawn from a habit, it becomes weak and finally disappears. Punishment is another methad to help break a habit. By suppressing one habit, punishment permits another to take its place.

Habit breaking is closely related to the psychology of conflict. Both involve competition between habits and in the final analysis, resolution of a conflict. Breaking of a habit depends on one's habits, gaining dominance over another. Various techniques are available for breaking habits through the incompatible response method. As its name implies, the method breaks an undesirable habit by substituting an incompatible response. This may be done in several different ways as explained in the following.

Substitution Method

In the substitution method one tries to prevent an undesirable habit by simultaneously replacing it with another response.

Toleration Method

Toleration method consists of the gradual substitution of an undesirable habit with a desirable one. The stimulus evoking the desirable response is introduced so gradually that by the time it occurs in full force, the undesirable habit has been extinguished. The toleration method is especially effective in treating fears. A child who is afraid of dogs may be given a very small puppy that elicits no fear. As the puppy grows, the child's positive reactions towards the dog will be generalized to other dogs. Finally, by the time the dog is full grown, the child will have entirely lost his earlier fear of dogs. In this case, an avoidance response towards dogs has gradually been replaced by an approach response.

Change-of-Cue Method

One of the most widely practised and in many cases least effective methods of breaking an undesirable habit, is to remove the organism from the situation where the habit developed and to place him in an entirely new one. For example, the business executive who worries excessively about the rise in prices, is encouraged to go on a vacation.

If a habit evoked in a particular situation is to be broken, the stimuli that make up the situation must acquire the capacity to evoke the undesirable habit also. The change-of-cue method can be effective only when the responses in the new environment are generalized in terms of the old.

Maturation and Habit Breaking

The importance of maturation in eliminating many undesirable responses should never be overlooked. The teacher who gives her three-year-old child a crayon and a 12 by 12 inch piece of paper to keep him busy, can expect him to extend his creative masterpiece beyond the edges of the paper onto the table. The child has not really misbehaved. A three-year-old child naturally makes large, gross motions when he moves his hands. If he is to limit his drawing to the paper he will need a large piece of drawing paper. Training a three-year-old to keep within the confines of a 12 x 12 inch piece of paper is difficult because his neural and muscular organization have not matured sufficiently to enable him to confine his drawing to a small piece of paper. There are many other examples

of the importance of considering maturational variables in breaking undesirable habits in children. Toilet training, table manners and speech habits are but a few areas in which parents could be wise to delay corrective training, until the proper stage of development.

Principles Underlying Habit Formation

The principles underlying habit formation are discussed in the following.

Trial, Error and Success

An infant is in a state of almost ceaseless activity. Legs, arms, hands, fingers and head are in more or less constant motion. His eyes and ears are constantly receiving stimuli. Out of these ceaseless, random, spontaneous movements, a child eventually develops related harmonized movements that bring him in touch with his environment. When a child is in the process of acquiring any new skill like learning to handle a toy, we see that he makes many unnecessary and useless movements. He holds it in many ways, drops it and picks it up again; The correct holding of a toy is a complicated act for a child involving many different muscular movements. A child has to take many little separate actions and connect them into an unit. This tendency to make many seemingly useless movements is described by the term trial, error and success. Both children and adults as well as animals have to go through the process. A child learning to write, wriggles his feet, moves his head, sticks out his tongue and goes through many movements. After a long practice, he eliminates some of the awkward movements and writes smoothly using only the muscles of his arm, hand and fingers.

The Exhaustion Method

The exhaustion method involves continuous repetition of the habitual response with a view to get it vitally exhausted. This method is useful only in some particular situations. This may not always work if it means a simple repetition of the habitual response. Suppose one has a habit of biting his tongue and wants to get rid of that habit, he could go before a mirror and deliberately bite the tongue several times. This should be repeated two or three times a day. It is important however, that while doing so, he should silently repeat to himself that he is biting his tongue deliberately. If the habit is not complicated it will be broken. By deliberately repeating the activity, we make it a conscious one. So it is possible to exert control over it.

The Change of Environment Method

This is almost the same as the simple common sense method that will be advocated by a lay man. One should naturally avoid situations that would maintain the bad habits, although it will not always be possible to change one's environment completely.

Motivation

Another important principle in the building of a habit concerns motivating the child. Interest and zest can be cultivated. An interested child will learn more readily and put forth more and better efforts than a child who is uninterested. Hence parents and teachers should encourage children by being good examples and by using their interest as a basis on which to build habits and skills. Enthusiasm and interest on the part of the teachers and parents help to motivate the child. Motivation should be kept high, particularly in the early stages of learning, since once the child has good effort on a skill or habit, he tries to keep going on his own. To keep a child at tasks when he does not see the immediate benefits, require some skill on the part of parents and teachers. Judicious use of rewards and praise can help to maintain motivation.

Practice or Repetition

The principle of repetition is very emphatic in the budding of a habit. Practice means repetitions that give opportunities for reinforcement of an action. A child who has great difficulty in lacing his shoes at three years of age, may do it with great ease at five years. because during the intervening period, he has practised lacing many times and is more mature.

Effect or Satisfaction

The success or satisfaction which accompanies an act has much to do with the rapidity with which the habit is formed. Those acts which have pleasant results are more quickly learned, than an act in which no pleasure follows. For example, in the case of thumb-sucking, the feeling of security and comfort which the sucking movement brings is responsible for the child quickly acquiring the habit.

The result of an activity must be satisfactory to the child if learning is to be brought about. Only when some success is attained, the child gets the feeling of satisfaction. A few words of praise given now and then for his desirable deeds will help him acquire a desirable habit.

References

Constock, B., *All About the Baby*. India: Oriental Watchman Publishing House, 1964.

Garrett, H.E., *General Psychology*. New York: American Book Co., 1955.

Garrett, H.E , *General Psychology*. New Delhi: Eurasia Publishing House (Pvt) Ltd., 1975.

Gesell, A., *The First Five Years of Life*. London: Methuen and Co., 1966.

Hughes. A.G., Hughes, E.H., *Learning and Teaching*. London: Longmans, Green and Co., 1960.

Montessori, M., *Child Training*. New Delhi: Ministry of Information and Broadcasting, 1948.

Ryburn, W.M., *Introduction to Educational Psychology*. London: Oxford University Press, 1965.

Watson, R.I., *Psychology of the Child*. London: J.W. Sons, 1963.

CHAPTER 12

Behaviour Problems

Numerous behaviour problems arise in daily life. To live and to grow are the fundamental urges in life. No child grows up without exhibiting some problem behaviour or other at some time or another. When the urge to grow is inhibited, checked or thwarted the child reacts with assertion of his independence, resentment or rebellion against the interfering persons or circumstances. The actual mode of expression of the difficulty, annoyance or frustration, differs in different children. If, for example, a baby is annoyed by interference with his movements or play, he will cry and crawl to his mother for help and protection. If a young child is annoyed, he will react by hitting, biting, kicking or using abuses However, problem behaviours, although normal for a child to develop, should not be ignored.

The term 'behaviour problem' is used to designate a deviation in behaviour from the one expected or approved by the group. Problem behaviour is that behaviour which makes life difficult and unsatisfactory for the child and his parents (Hurlock, 1974). Breckenridge and Vincent (1965) consider behaviour problems as those forms of behaviour which indicate that something is wrong with the child himself or with the environment in which he lives. In Varma's (1964) view, behaviour problem is nothing but a deviation from the accepted pattern of behaviour on the part of an individual in society.

Hurlock has classified common types of problem behaviours into the following four groups according to the way in which they interfere with the child and endanger his well-being: Those which affect (1) the child's efficiency, (2) physical well-being, (3) social adjustment, and (4) the feelings inferior or inadequate.

In general, the behaviour problems appear as thumb-sucking, nail-biting, bed-wetting, masturbation, aggression, destructiveness, jealousy, tempertantrums, lying, stealing, selfishness, abnormal fears, use of bad language, truancy and eating too little or exhorbitantly.

Causes of Behaviour Problem

The causes for behaviour problems, particularly those in the emotional sphere, have been explained through a variety of theories stated in the following.

1. A child suffers from a genetic weakness or defect that makes him vulnerable to stress.

2. A child's problems stem mainly from a conflict between his basic drives and a forbidding environment which demands that he inhibits the expressions of his drives.

3. The problem behaviour comes about through learned or conditioned ways of behaving, that impair the child's adaptations to his environment, and

4. Some problems arise as a consequence of inability or failure to meet cultural demands,

such as failure to meet standards set at school (Jersild, 1969).

These theories are not mutually exclusive. Each attributes the cause of the problem behaviour to what the environment imposes on a child. The personal characteristics of a child emerge through the interaction between his environment and what he himself brings to his environment whether he is a problem or model of excellence.

The different types of behaviour problems, their characteristics and treatment are presented in Table I.

Table 1 : The behaviour problems commonly encountered in children

Behaviour problem	*Possible meaning*	*Do not*	*Do*
Hurts other children	Troubled feelings, anger	Punish or hurt him. Make him feel 'bad'. Act angry.	Separate quietly the other children. Divert his attention. Take away the hurting object, calmly and firmly. Teach the child that there are some things we just do not do. Help the children play happily together again. Prevent hurting episodes by helping the child feel loved, by giving him other outlets for feelings.
Destroys things	Feelings of helplessness, jealousy, boredom. Wanting attention, Excitement, Exuberance, Curiosity.	Scold, yell, shout, tell him he is bad. Preach at him. Punish, spank or hit him.	Remove destroyable things from the child's reach. Provide him a good place for play. Expect some wear and tear from things. Substitute something else for what is being destroyed. Expand the child's world by taking him to different places, let him see and explore new areas. Provide things to pound and mess and cut and tear. Teach him firmly what he may and may not do.
Uses bad language	Trying something new. A joke. Imitation Getting attention. Letting off steam.	Get excited. Feel embarrassed or shocked. Scold or punish. Lecture at him. Over emphasize the bad language.	Relax, understand what it means, Tell him calmly to stop. Try rhyming some other word with it for fun or often other simple substitutes. Give him healthy outlets for his feelings.

Behaviour problems	*Possible meaning*	*Do not*	*Do*
Does not share	Too young or too little. Need for experience in owning and sharing.	Snatch from him. Scold or hurt him. Tell him you do not like him. Do not play favourites in settling a dispute.	Help him to share and like it. Be sure he has things that are all his, let him know what it means to own things. Be a fair arbiter in his squabbles with other children. Love him, help him to feel secure. Provide experiences as he is ready for them.
Sucks his thumb (or fingers)	Need for sucking. Need for loving, cuddling, assurance and comforting. Fatigue. Hunger. Dissatisfaction. Boredom.	Force or restrain. Punish or scold. Coax, threaten or bribe. Tie fingers or smear them with bitter medicine.	Provide sucking satisfactions. Give more satisfaction, love, attention, pleasure. Find out what he wants and needs and provide them as best as you can. Relax an realize that thumb sucking rarely lasts and is not serious. See it as a sign that the child is unhappy or dissatisfied at the moment.
Wets	He is not ready for training yet. Too early to effort train. Resistance or rebellion. Insecurity, Fear.	Make an issue. Threaten, shame or punish. Bribe or reward. Insist that he tells you when he should go to the toilet. Tell him you do not love him.	Accept it and the child as gracefully as you can. Expect some accidents. Give him affection freely. Let him know you have confidence that he will do better some day. Help him become independent in other ways and encourage him to grow up.
Masturbates	Natural exploration. Curiosity. Boredom. Need for love, comfort and security.	Punish. Shame. Tie his hands. Threaten. Be too anxious.	See that he has plenty of interesting things to do. Answer his sex questions freely and frankly. Never fail to love him. Help him make friends. Provide opportunities for free play.
Demands attention	Feels let out, insecure, unloved. Boredom. Interest in you.	Scold or punish. Ignore or isolate him. Ridicule him. Shame him.	Give him a fair measure of attention. Show interest in him as a person. Provide interesting things to do. Share yourself with him.

Behaviour problem	*Possible meaning*	*Do not*	*Do*
Has fears	Previous painful experiences. Strangeness. Need for his parents close by. Feeling unloved or guilty.	Force or reason the child out of his fears. Shame, threaten or coerce. Make him do the feared thing.	Reassure and comfort him. Make the feared place or situation a happy one. Teach him caution for real dangers and hazards. Show him love and comfort. Encourage his efforts to be 'big'. Help him to help himself, avoid fearful experiences or prepare him for them.
Steals	Ignorance of property rights. Unsatisfied needs and hunger. Rebellion. Hostile feelings. Imitation.	Make him feel 'bad'. Scold or shame. Punish or reject. Cut off love. Take from him something to 'make up' for the theft. Humiliate him before others.	Let him own things and get a sense of mine and yours. Help him earn and get what he needs and wants. Be kind, understanding and not too rigid. Provide creative outlets for his interests. Help him make real friends.
Tells lies	Fear of punishment. Exaggeration. Imagination. Imitation. Attention seeking.	Preach or prophesy. Punish or shame or reject. Make him apologize. Get upset.	Relax and try to understand. Give him attention for what he does and provide him with opportunities for enriching his imagination. Help him discover the difference between fact and fancy. Tell him the truth.
Runs away from home	Boredom. Exploration. Independence. Rebellion. Anger.	Make a scene. Cry or make over to him. Punish or tie him up. Remove privileges. Be Unduly restrict.	Find him, see why he went away. Provide attractive alternatives within his own yard if possible. Let him know you like him. Help him grow up in many ways. Take him on trips with you. Let him take responsibility around home. Gradually remove restrictions as he is able to take care of himself.
Gets out of bed	Curiosity. Interest. Not sleepy. Attention seeking. Uncomfortable. Examine what you expect from him.	Scold or punish, treaten. Reward or bribe. Put to bed as punishment. Tie or restrain him.	Make going to bed a happy experience. Read or sing or play with him, a little before leaving him in bed. Avoid over-stimulating experience at bed time. See that his needs are met before he goes to bed. Talk to him in bed with evidences of real affection. Put him back kindly but firmly.

Behaviour problem	*Possible meaning*	*Do not*	*Do*
Refuses to eat	He is not hungry. Dislikes particular food. Feels unwell.	Force. Make a scene. Punish. Reward. Threaten. Put on an act.	Be casual and calm. It will not hurt him to miss a meal or two. Introduce new foods only a bit at a time and along with favourite foods.
	Independent. Wants attention. Imitation	Divert him	Let him rest for some time. Try later with something else. Make food interesting and attractive. Help him learn how to feed himself Enjoy food yourself. Let him help prepare food as he shows interest and readiness.

Behaviour problems originate in interactions of a host of factors. However, no one single cause ever operates in isolation. A behaviour problem is the child's way of gaining satisfaction or of avoiding annoyance. Therefore it is logical, rational and even necessary in his way of thinking. He resorts to problem behaviour to satisfy the desires for which he knows no other method. Therefore such normal problems of children should not be misinterpreted by parents as abnormal, under the spells of anxiety, prestige or status. In families and environments where children are assured of respect for their feelings, they will handle their problems adequately and grow into healthy, intelligent and useful members of the society. Therefore, parents and guardians need to do the following.

1. Give the children always their love, so that the child may grow with trust in himself and in others.
2. Recognize his worth as a person and help him to strengthen his sense of belonging.
3. Respect his rights and help him understand and respect the rights of others.
4. Help him to develop initiative and imagination so that he may have opportunities to be creative.
5. Encourage his curiosity and his pride in workmanship.
6. Provide conditions for wholesome play that will add to the child's learning, social experiences and happiness.
7. Illustrate by precept and example, the value of integrity and the importance of moral values and courage.
8. Encourage him always to speak the truth.
9. Provide him all the possible opportunities to develop faith in God.
10. Open the way for him to enjoy the arts and to use them for deepening his understanding of life.
11. Provide him with rewarding educational opportunities, so that he may develop his talents and contribute to a better world.
12. Protect him against exploitation and undue hazards and help him grow in health and strength, and
13. Intensify his search for new knowledge in order to guide him more effectively as he develops his potentialities.

With adequate and timely guidance from parents and others, the child can transform his life into a series of joyous activities with rich meaning, abiding faith and lasting contentment.

References

Ambron, S.R., *Child Development*. United States of America; Rinehart Press, 1975.

Arya, S.C., *Infant and Child Care for the Indian Mothers*. New Delhi: Vikas Publications, 1972.

Breckenridge, M.E., Vincent, E.L., *Child Development*. London: W.B. Saunders Co., 1965.

Erickson, M.J., *Child Psychology. Assessment, Etiology and Treatment*. New Jersey: Prentice-Hall Inc., 1978.

Harvey, David, *The Baby Book*. London: Marshall Convendish, 1974.

Hurlock, E.B., *Child Development*. New York: McGraw-Hill Book Co., 1956.

Hurlock, E.B., *Child Growth and Development*. New Delhi: Tata McGraw-Hill Publishing Company Ltd., 1970.

Jersild, A.T. *Child Psychology*. London: Staples Press, 1969.

Jolly H., *Book of Child Care*. Great Britain: George Allen and Unwin Ltd. 1975.

Klausmeier, H.J., Ripple R.E., *Learning and Human Abilities*. New York: Harper and Row Publishers, 1971.

Kuppuswamy, B., *Child Behaviour and Development*. Delhi: Vikas Publishing House Pvt. Ltd., 1974.

Leonord, C.W., 'why children misbehave', in *Child Psychiatry Quarterly*. II, I, 1969.

Smart, R.C., Smart, M.S., *Readings in Child Development and Relationships*. New Delhi: Macmillan Company, 1972.

Varma. R., 'Behaviour problems of children and problems of the exceptional child', in *Child Development—A Symposium*. New Delhi: National Council of Educational Research and Training, 1964.

CHAPTER 13

Overcoming Conflicts—Defence Mechanisms

Every one has ideas and feelings about himself, that are of great personal interest and significance. The 'self' is the integrating 'core' of the personality and any threat to its worth or adequacy is a threat to the individual's very existence. Consequently, various psychological defences are built up around the self, designed to protect it from insult and to enhance it. The methods of self defence are known as defence mechanisms (Coleman, 1950 and Murphy, 1964). They are many and various and not all of them succeed in removing the cause, in solving a problem, or in quelling the turmoil.

In day-to-day life individuals face frustration and conflicts of motives as an inevitable reality. These are particulary pressing with changing patterns of civilization. Children acquire motives, all of which they cannot possibly satisfy at all times and in full. They also acquire motives that are incompatible and thus bound with conflicts and frustration. The conflicts and the frustration may give rise to numerous highly unpleasant emotions, such as anxiety, which exert a profound and sometimes devastating effect on behaviour.

Frustration is the unpleasant feeling that results from the blocking of motive satisfaction, by an obstacle. Frustration results in many kinds of emotional effects. For example, in team play, losers will display hostility, slam the ball or a towel on the floor; some may weep with disappointment; some will display depression or apathy, and become disinterested in food, studies, and social events. 'Frustration' has two different meanings. One is based on external events and the other on internal feelings. According to the former, frustration is the blocking of motive satisfaction by an obstacle, based on the latter. Several kinds of obstacles cause frustration. The environment is surrounded by many physical obstacles, such as a drought that frustrates a farmer's attempts to produce a good crop, or traffic jam that prevents one from catching the train or plane in time.

One's relationships with others create social obstacles, such as refusal to give the attention desired. All individuals experience frustration. For example, a girl may want to be a good dancer but lack of the necessary skill frustrates her. One may aspire to be a champion, but may lack good physique.

Conflict

A conflict is the simultaneous arousal of two or more incompatible motives resulting in unpleasant emotions. A person in conflict experiences uncertainty, hesitation and the feeling of being 'torn' and distressed. Elements which are an integral part of conflict and which make conflicts an unpleasant part of life and a potential threat to normal behaviour are the physical environment, the social environment

and personal factors. Conflicts fall into two general classes: (1) those between motives and standards and (2) conflicts over incompatible goals.

Conflicts between Motives and Standards

The child acquires his standards through learning and identification with heroes. Standards comprise the pattern of how one feels one should behave. When a motive urges the individual towards behaviour that is incompatible with his standards, he has a conflict that often results in intense anxiety. Ram, for example, may be motivated by hostility and the desire for independence to disappoint in some manner, his parents' desires. But these motives conflict with his desire to live up to the standards that require him that he must be an obedient child and respect his parent's wishes. Due to the resulting conflict, he experiences shame and/or guilt. Adolescents and adults also experience conflicts and anxieties over what would happen to their images in society or to their self-respect, if they strike angrily a teacher or group leader. A motive which frequently troubles an individual is the desire to be dependent which conflicts with the drive calling for independent and even dominant behaviour. A motive that frequently troubles the modern educated women is the desire to be dominant for example, to assume leadership as a director of an institution, member of legislation and such which conflicts with the feminine standard calling for dependent and submissive behaviour.

Conflicts over Incompatible Goals

Conflicts occur when two motives for different and incompatible external goals are aroused at the same time. Often they conflict acutely and painfully. For example, on the day before an examination, the motive to get good grades creates a strong pull toward locking Radha in her room and studying, but friends suggest going to a movie. Thus the motives for acceptance, and affection now pull Radha strongly in the opposite directions, while only one of the two motives can be satisfied. Radha must make a decision though it will arouse anxieties and complicate the situation. If she decides to study, she would feel anxious about the loss of the goal of being with her friends, and also the possibility of lowering their regard for her; they may even reject her. If she decides to go with her friends, she would feel anxious over the possibility of doing poorly in the examination and suffer rejection from her teachers and parents. Life is full of such conflicts over pairs and multiplicity of goals which cannot be attained. For instance, a young girl may wonder whether she can marry or wait, whether to give all the money she earns to parents or save some of it for herself.

Some motives urge the individual to approach a desirable goal, while others make him seek the avoidance of something unpleasant. Most conflicts between motives fall into one of the following three categories according to Kendler and Kendler (1971) and Geldard (1963).

Approach-approach
Avoidance-avoidance or
Approach-avoidance.

In an 'approach-approach' conflict the aroused motives have as their objectives, two desirable goals, both of which one would want to approach. However, one cannot approach both goals simultaneously and attaining one of them means giving up the other. For example, Vimla cannot satisfy simultaneously the motive to spend her money on a saree and the motive to spend it on an ornament. The conflict in an 'approach-approach' situation arises from the fact that attaining one desirable goal means giving up another desirable goal. Vimla is torn between the alternatives, each of which would be pleasant.

In an 'avoidance-avoidance' conflict, there is simultaneous arousal of motives to avoid alternatives, both of which are unpleasant. For

example, Geeta is so anxious about the next-day's examinations that she is unable to sleep. She would like to avoid the unpleasantness of tossing and turning in bed. She would also like to avoid the grogginess she will suffer the next day if she does not sleep.

In an approach-avoidance conflict one has mixed feelings about a single goal that has both desirable and undesirable aspects. For instance Kumar may want to go for a long drive but knowing that the weather is too rainy for comfort, dislikes the idea of driving far. Sometimes one is torn between two goals, both of which have good and bad points. This is true in the case of Amirtha, who had not made up her mind between practising veena and going out with her aunt. She wanted to fulfil the goal of veena because it would satisfy her achievement motives. At the same time she wanted to avoid it, because it aroused anxiety over disappointing her aunt. She wanted to approach the goal of satisfying her aunt because it satisfied her affiliation motive, but she wanted to avoid it because it aroused anxiety over the veena practice and subsequent conflict. Thus this situation involved a double 'approach-avoidance' conflict.

Effects of Frustration and Conflict

Frustrations and conflicts are always unpleasant. Invariably they result in anxiety and other disagreeable emotions. One tries various ways to relieve the frustration or resolve the conflict in order to escape from the distress. Thus, many forms for behaviour, some of which, unfortunately, can result in even greater distress, are set into motion. The manner in which each individual reacts in situations of frustration and conflict, constitutes an important part of his personality.

Many effects of frustration and conflict observed in different societies appear to be universal. However, there are significant differences in the kinds of reactions approved by different societies and are therefore common. Even in the same society, there are individual differences. Among the most important is the nature of anxiety that the individual suffers. Some people are extremely anxious and even panicky and will be crushed in their distress. Others are less drastically affected. Other differences include the kinds of feelings and behaviour that accompany the anxiety among which the following are important.

Anger and Aggression

Aggression, displayed in different forms and strengths is one possible outcome of frustration. When frustrated by some obstacle, both men and animals fight back. They attack the obstacle—whether a physical barrier, a person, or society as a whole. The child frustrated by another child who takes his toy gets angry and throws mud on him. The adolescent frustrated by his failure in the examination destroys the property of his teacher or destroys himself. Aggression may be direct or displaced. Direct aggression is often a rather futile outlet for the emotions aroused by frustration. For instance pulling angrily a rope that has already been broken leads nowhere. In displaced aggression the child who is angry at his parents takes out his aggression on a smaller child or on a pet.

Depression and Apathy

Another important reaction to frustration and conflict is depression. Psychoanalysts believe that depression represents a turning inward of anger; the depressed person is one who in effect has made himself his own scapegoat and accuses himself of being stupid, ungrateful and unlovable. Such a frame of mind leads him eventually to feel totally unable to cope with the problems which surround him. Some psychologists believe that depression results from an inability to live up to an overly rigid set of standards of behaviour. It may also

result from grief over the loss of a loved one through death or rejection. Whatever the cause, extreme depression may lead to apathy, so severe that the victim loses all interest in what happens to him and has a difficult time finding the energy for carrying out the ordinary chores of life.

VACILLATION

Vacillation is the tendency to be drawn first towards one possible resolution of a conflict and then towards another. An adolescent torn between going with parents or grandparents for a holiday may change her mind several times. At one moment she may lean strongly towards the parents, at the next moment toward the grandparents. In an extreme case of vacillation she may take so long making up her mind, that she has very little time left for either of the possibilities.

STEREOTYPED BEHAVIOUR

Another reaction to frustration is the tendency to repeat some action over and over again, despite the fact that it appears to serve no useful purpose. This is called stereotyped behaviour. Many frustrated people have definite stereotyped patterns of conversation, with some phrases they keep repeating over and over again, whether appropriate or not.

Thus behavioural symptoms such as agression, depression, vacillation and stereotyped behaviour appear as effects of frustration and conflict. In addition, frustration and conflict in a result group of mental or symbolic processes known as defence mechanisms.

DEFENCE MECHANISMS

Defence mechanisms help to remove some of the uncomfortable aspects of frustration and conflict. They help to soften failures, alleviate guilt, preserve internal harmony and maintain feelings of personal worth and adequacy. They perform a vital function in protecting individuals, from the intolerable throes of anxiety. In their self-evaluating tendencies failure, guilt, inferiority threaten and arouse anxiety. The protection of the self from the overwhelming devaluation of such anxieties is the very essence of the defensive functions of these mechanisms (Coleman, 1950). Defence mechanisms also enhance the self esteem of the individual and permit a better adjustment to the precipitating situation. They represent an unconscious attempt to reduce anxiety. All defence mechanisms involve some degree of self deception and distortion of reality. They operate in everyone with varying intensities.

Long before an individual is willing to accept physical or psychological therapy or to modify his basic goals and expectant ways of living, he adopts one or several ways of neutralizing his emotions without realizing what he is doing. Therefore the frequent use of defence mechanisms does nothing to remedy the true causes of the emotion. They may even prevent the individual from working out a satisfactory solution to the emotion causing the situation. There are, however, some defence mechanisms which are helpful temporarily or even permanently to adjustment.

WITHDRAWAL

When beset by frustrations and conflicts, some individuals exhibit the kind of behaviour called 'withdrawal'. This tendency to avoid or deny unpleasant reality is evident in many everyday activities. They try to avoid close contacts with other people and any kind of goal-seeking behaviour that may pose the threat of causing further anxiety. Such persons have 'retreated into a shell' or at 'quiet trying'. Rather than making an attempt to cope with frustrations and conflicts, the withdrawn person prefers to escape from them by narrowing the horizons of his life, sometimes in the most dramatic and self-limiting ways.

Regression

Regression is form of behaviour which retreats toward types of activity appropriate to a lower level of maturity. For example, Leela, the first-born child in a family, showed signs of regression when a baby brother arrived. She went back to such forgotten habits as thumb sucking and feeding from a bottle. Frustrated adults may regress to weeping or temper tantrums.

Repression

Repression operates by preventing the cerebral cortex from perceiving the true nature of reality. Repression simply means refusing to let the unpleasant truth, or anything obviously related to it, enter the consciousness. For example, the child who gets zero in mathematics in one of the tests, does not want to remember it at all. The child simply puts the unpleasant aspects of reality out of mind and keeps them indefinitely out of his consciousness. Under such circumstances no reasoned solution to the problems is possible, since many facts will have to be kept out of conscious consideration because of their unpleasantness. One of the worst factors in repression is that the habit is so effective and so strong, that the individual not only forgets what he has repressed but does not even realize that he has excluded relevant considerations from his thinking.

Rationalization

It is a defence mechanism in which a person justifies his otherwise unjustified behaviour by giving socially acceptable reasons for it. For example, a child may blame the parents or his poor health and thus may try to conceal his weakness in studies.

As a defence mechanism, rationalization does not keep relevant matters out of consciousness but distorts the significance of the true facts in such a way as to change the meaning of the situation away from reality and towards something that the individual wishes were true. Through rationalization, a situation may be explained in such a manner as to show that it is really a good situation, although everybody has recognized that it is a highly undesirable one. There are endless ways in which children can distort the meaning of situations in their own favour and thus fool themselves since the distortions can in no way change objective reality, the true nature of situations, or the true meaning of behaviour. However, the distortions give relief from guilt for the time being and permit some respite from a strong unpleasant emotion.

Fantasy

Another type of defence mechanism that is often used to neutralize strong depressive emotions and sometimes active emotions as well, is resort to fantasy. A child who is handicapped, who has failed to achieve a greatly desired goal, or who is unable to win a place in the groups he admires, may spend many hours dreaming to himself the successful playing of dramatic roles or acts of great significance. With practice, this habit of fantasying can yield much pleasure and restore the body for the time being to its normal functioning. The dangers in fantasy lie in (a) avoidance of reality, in the failure to use the mind and the body in active, constructive learning situations; and (b) in the failure of the individual to adapt to reality by redefining his goals with what is realistically possible.

Compensation

Compensation is a mechanism to compensate oneself for strong, unpleasant, active or depressive emotions by filling the mind and the body with pleasant sensation or exciting experiences. For example, chronically unhappy people overeat. Others over-engage in sensational activities, such as burglary. Some stir up pleasant excitement by betting excessively on horse races or sports events. Others go constantly to the theatre to see motion pictures or

sport events, thus permitting themselves to forget and to play roles other than their own, vicariously. Driving oneself actively and mercilessly for amassing money or other's property, for gaining power to manipulate other people's lives or an insatiable effort to improve social status are other means by which people compensate for humiliations, guilt inadequacies and failures. In so far as such activities use up the energy generated by the underlying persistent unpleasant meanings, they help the body towards normal functioning. The forgetting of the unpleasant realities that they effect, permits the body to approach homeostasis. However, in the long run, such mechanisms are undesirable. The food, the amusements, the excitements sought may be pleasant for the moment, but will affect the well-being of the individual and leave him without peace of mind.

Catharsis

Catharsis is a constructive defence mechanism, dealing with the meanings that cause the unpleasant emotions, in ways that are indirect and expressional and yet effectively cathartic. For example, engaging in arts, sculpture, drawing, painting or aesthetic dancing are cathartic. So are writing poetry, fiction and dramas, composing music and research of various kinds. In the process of wrestling with the persistent emotion and its underlying meanings, the individual uses his energy creatively to describe his experiences to explore truth, to create beauty, to interest or challenge or give pleasure to other human beings. These creative, expressional processes may or may not lead to insights and adjustments. But they do use the generated energy constructively. They are active, expressional and yield satisfactions whether or not they help to solve the problem.

Sublimation

Sublimation as defence mechanism, involves sensitiveness to people. It helps them actively rather than hurting them. Although the individual is unhappy and dissatisfied, he does not permit himself to be eaten up by remorse or hatred, mope over failure or limitations, or to accept defeat. Rather, he directs the energy released by the emotion into a socially useful, constructive activity such as a craft, farming, business or profession. Or he may engage in philanthropic work or give his life up to the service of the oppressed or just serve the people the loves. He may identify himself with an orphanage or a cause and work tirelessly and selflessly towards furthering its success.

Sublimation seems to be the best of the defence (adjustment) mechanisms because it does involve genuine contact with social reality. Furthermore, it occurs through the active constructive use of the energy released by the emotion, in socially useful and consequently satisfying actions.

Identification

Identification, as a defence mechanism, is related to its role in the normal growing process of children. It is trying to be like some other person and living the motivated behaviour of that person. For children, identification is a normal part of their experiences in trying out different new personalities. In identification with a person, there is likely to be some mimicking of the behaviour of that person and its effects may be permanent. One may learn new ways of behaving by assuming parts of the observed role of others. Identifications are of great value in enhancing one's feelings of adequacy and worth and in the reduction of conflicts and frustrations. However, identification is dangerous in its extreme form of blind hero worship with a loss of personal identification.

Reaction Formation

Reaction formation refers to the development

of conscious attitudes and behaviour patterns which are the opposite of various suppressed or repressed desires and impulses. A man may pretend to himself as possessing motives that are the opposite of his real motives, causing him anxiety. For example, a man appears to be overpolite, he is constantly folding hands in namaskar forever saying, 'Yes, Sir'! and 'Yes Madam'. He is always smiling, agreeable and apogises for his mistakes. This exaggerated politeness and concern for others, may simply indicate a defence against the hostile motives he has.

Displacement

Displacement refers to the shift of emotion, symbolic meaning or fantasy from a person or object towards which it was originally directed to another person or object. A child who has been spanked or thwarted by his mother or father may kick his little sister or a young playmate, or he may break up his toys. Displacement is of considerable adjustive value because it enables the individual to discharge dangerous emotional tensions without risking loss of love and possible retaliation, and without the necessity of even recognizing the person at whom such feelings were originally directed. The boy who displaces his hostility on to his toys or playmates can maintain relatively pure feelings of love towards the teacher or any other adult who has just punished or frustrated him. Unfortunately, displacements can become too deviant, and they can result in the persistent avoidance of situations which could be more efficiently handled by a more direct approach. It is healthy to face and work through hostility-arousing situations whenever this is feasible, rather than to avoid them through displacement.

Projection

Projection is the process by which an individual blames other people or inanimate objects for his own failures. Projection is a mechanism by which an individual may ascribe to others his own weakness, faults, and impulses. The individual judges others by himself. The stingy person often accuses others as stingy. The person with a weakness for alcohol will call attention to this defect in others. The dishonest person will assert that everyone is dishonest. In this sense, projection is essentially another form of rationalization. A school boy involved in a fight, will usually blame the other boy for starting it. Although projection is extremely common and reduces tension in the frustrated individual, it does nothing to solve the basic problem or difficulty. On the other hand when carried to an extreme form, it may eventuate hallucinations. Adults and teachers should aid children to make adjustments which will protect and enhance their egos in ways other than those which involve projections.

Nomadism

When someone continually wanders from place to place, and is always, 'on the move' even when moves bring no tangible gains, he is a 'nomad'. A nomadic reaction as an attempt to get away from a frustrating situation is seldom satisfactory because the frustration usually follows along.

Negativism

Negativism is another form of defence mechanism. The 'negative' individual may be opposed to almost everything. In school, when a group decides upon a course of action, the negativistic child may stubbornly refuse to go along with their decision. He will often sulk, rebel against authority and refuse to be bound by rules. Negativistic behaviour in the home is also a frequent reaction of children who feel thwarted or insecure. Such children may refuse to eat, talk or follow any idea propounded by a sibling or their parents.

Negativism on the part of the children is

difficult to deal with but may be lessened by teachers and parents if the following rules are observed : (1) avoid situations which are know to produce conflict; and (2) do not make issues of minor sources of disagreement.

Teachers and parents often assume that the blame rests with the child. Actually, alterations in adult behaviour will tend to produce marked changes in the child if a little thinking is extended. For example, when a child refuses to do an assignment, reexamine it, in terms of its relevance to the child's needs, interests and capabilities.

Egocentricism

The individual who feels insecure will strive often to establish himself as the centre of attention. He may show off, ask numerous questions, talk loudly, try to be witty, and play all types of mischievous pranks. Everyone, of course, needs regular and satisfying reinforcement of his ego. School activities and curricula should be so designed that every child has some opportunity to receive attention and acclaim, for creditable achievement. If this is done, many misbehaviour problems will disappear automatically from classroom situations.

Hysteria

Hysteria is a condition or set of conditions which manifest themselves by the disorders of the will, perversion of the inhibitory powers of consciousness and partial cessation or exaltation of the individual functions of the brain. Hysteria is marked by symptoms of the most varied character, from simple nervous instability and attacks of emotional excitement to convulsions and muscular contractures. In a neurotic person, symptoms of paralysis, blindness, deafness, invalidism, etc., may appear as a result of hysteria, since being ill provides a way out for the individual. However, nothing may be organically wrong, but the illness may persist until the personal problems of the individual are solved. Minor forms of hysteria are sometimes referred to as hysteriod reactions. Teachers have ample opportunities to observe such reactions among their pupils. For example, often, on the day of an examination, children become so ill, that it is necessary for them to return to their homes. They might become perfectly well the day after the examination. Students scheduled to make a talk before a class or before the other students in the auditorium, have been known mysteriously to lose their voices and become unable to appear. As soon as the crisis period is over, the physical ailment also disappears. These are real problems. Therefore teachers should be sympathetic to pupils who develop headaches, eye trouble, diarrhoea, high temperature, sinus trouble, colds, sore throats, and fainting spells in their attempts to avoid unpleasant situations. At the same time every effort should be made to make pupils feel competent and adequate, that such defence mechanisms are not necessary.

Expiation or Atonement

Expiation or atonement is a mechanism used by many individuals to establish personal adjustment and to relieve guilt feelings. When other means fail to alleviate painful conflict over an act the individual tries to find a way of atoning for it. Doing penance such as fasting for a week to compensate for the wrongs committed is one such method. Atonement, as a reducer of tensions is used by all individuals at times. The man who brings flowers to his wife when he is late from the office, or the student who studies unusually hard after having failed in an examination are examples of individuals who try to expiate for their short comings. Atonement produces some sort of a balance for the individual, since good deeds are substituted for bad deeds.

Alcoholism

Alcoholism is a defence mechanism that ham-

pers the higher mental processes from operating, and thus prevents the perception of the true nature of the situation. This can be accomplished by taking a drug like alcohol that deadens the cerebral cortex and prevents its function of correctly interpreting the total situation. Under the influence of alcohol, a person who has deep and continuing cause of unhappiness 'forgets' and spends hours in singing and joking with friends. This does nothing whatever to improve the true situation, which is the real cause of the strong unpleasant emotion. It does, however, temporarily, relax the tensions. A number of narcotic drugs play the role of inhibiting full perception of reality and consequently give relief from contiuning strong emotions. The great danger in their use, is they are all habit forming and enslave the individual.

The defence mechanisms are many. Their specific functions are summarized in Table 2.

Table 2 : Defence mechanisms and their functions

Mechanism	*Function*
Withdrawal	Detaching from unpleasant reality to protect self from hurt.
Regression	Retreating to earlier developmental level involving less mature responses and usually a lower level of aspiration.
Repression	Preventing painful or dangerous thought from entering consciousness.
Rationalization	Attempting to prove that one's behaviour is 'rational' and justifiable and thus worthy of self and social approval.
Fantasy	Gratifying frustrated desires in imaginary achievements.
Compensation	Covering up weaknesses by emphasizing desirable traits or making up for frustration in one area by over-gratification in another.
Catharsis	Engaging in creative, expressive processes like arts, sculpture work, drawing, painting and so on.
Sublimation	Accepting a socially approved substitute goal for a drive whose normal channel of expression or normal goal is blocked.
Identification	Increasing feelings of worth by identifying with a person or institution of illustrious standing.
Reaction formation	Preventing dangerous desires from being expressed by exaggerating opposed attitudes and types of behaviour.
Projection	Placing blame for difficulties on others or attributing one's own unethical desires to others.
Displacement	Transferring emotion, meaning or fantasy to person or object other than the ones towards which it was originally directed.
Nomadism	Wandering from place to place to escape from a frustrating situation.
Negativism	Opposing almost everything that is done and said.
Egocentricism	Developing ways to establish oneself as the centre of attention.
Hysteria	Developing symptoms of physical disability and ailments.
Expiation or atonement	Making compensation for a wrong done.
Alcoholism	Consuming alcohol or drugs to forget strong unpleasant emotions.

Dangers of Defence Mechanisms

The major weaknesses of defence mechanisms as adjustment devices for an individual are as follows:

1. Their excessive use leads to greater social and personality difficulties.

2. They do not generally solve the problem which required their use in the first place. Although motivational problems of frustration and conflict may be removed momentarily by the defence mechanisms, little is usually accomplished by the mechanisms to change the basic problems of personality structure which had aroused those motivations.

Some of these mechanisms are harmful and lead to further maladjustments in the person. Some at best, give brief relief from strong emotions but do nothing to remedy the trouble. Still others add creative or constructive experiences to life and may produce satisfactions in their own right. But no mechanism will bring an individual complete relief. Rationalization of the full potentialities for self-development, requires more positive and dynamic mechanisms than emotion avoidance. Courage, fortitude and integrity do not grow out of defence mechanisms.

Management of Tensions

Psychological 'security' during infancy gives children 'a good start' towards effective self-realization and social usefulness. But life will inevitably impose difficulties in the way of goal accomplishments, threats to physical safety and social roles, conflicting motivations and inconsistent codes for judging conduct. Consequently, disappointment, guilt, frustration, fear, anger and anxiety oppress human beings. As life progresses, everyone encounters tension to resolve or to manage. Failure to resolve or manage tensions is the source of psychic and somatic illness. Naturally, 'psychological security, is regarded as an important goal towards which one's efforts must be directed. The development of skill and of means for managing tensions are important in child growth. People have to learn to live with their emotions graciously or they will destroy their own health and the happiness of numberless persons around them.

The following six positive factors will promote mental health

1 Limited and judicious use of emotional catharsis for temporary relief of tension;
2 Loving and being loved to afford a basic security;
3 Participant belonging in groups which are carrying on socially useful activities;
4 Learning and facing the full range of true facts about the situations that are producing the unpleasant emotions;
5 Building a few very strong convictions about what is valuable in human life; and
6 Orienting one's life to religion and/or philosophy.

These six ways of dealing with tensions are complementary to each other for maintaining mental health. Each helps the individual and all together make it possible for an individual to endure an unbelievable amount of tension and still not break down.

References

Coleman, J.C., *Abnormal Psychology and Modern Life*. New York: Scott, Foresman and Co., 1950.

Cown, E.L., Lax, M., *Abnormal Psychology*. New York: Holt, Rinehart and Winston, 1976.

Erikson, M.T., *Child Psychopathology*. New Jersey: Prentice-Hall, Inc , 1978.

Geldard, F.A., *Fundamental of Psychology*. London: John Willey and Sons, 1963.

Havemann, E., Kagan, J., *Psychology: An Introduction*. New York: Harcourt, Brace, Jovanavich, Inc., 1972.

Jersild, A.T., *The Psychology of Adolescence*. London: Collier Macmillan Ltd., 1970.

Kendler, H.H., Kendler, T.S., *Basic Psychology*. New York: Appleton—Century Crofts, 1971.

Kennedy, W.A., *Child Psychology*. New Jersey: Prentice Hall, Inc, 1971.

Kuppuswamy, B., *Child Behaviour and Development*. Delhi: Vikas Publishing House Pvt. Ltd., 1976.

Murphy, G., *An Introduction to Psychology*. New Delhi: Oxford Book Co., 1964.

Sorenson, H., Malm, M., Forchand, G.A., *Psychology for Living*. New Delhi: Tata McGraw-Hill Co., 1971.

Taylor, N.B., *Stedman's Practical Medical Dictionary*. Baltimore: The Williams and Wilkins Co., 1946.

Walker, D.K., *Socio Emotional Measures for Preschool and Kindergarten Children*, London: Jossey-Bass Publishers, 1973.

Wener, Ch., *Personality Development*. Boston: Houghton Mifflin Company, 1971.

CHAPTER 14

Personality Development

What is personality? The term personality is employed in both qualitative and quantitative senses. For example, Brinda has a good or a nice or a pleasing personality, while Ganga's is better (or worse) than Saroja's: Kala has a great deal of personality while Gomathi has considerably less. Personality as expressed in these statements pertains to qualities such as popularity, manners, disposition, sense of humour, appeal, gregariousness and the like. In a more technical sense, personality refers to the sum total or the integration or the interrelation of all those traits, qualities and characteristics that constitute a particular human being. Personality is the unique and dynamic organization of all the factors that sum up an individual's behaviour. Personality is unique in that no two people look or think or love or feel exactly alike. Personality is dynamic in that the individual is incessantly developing in all these respects. The concept of personality in this sense, includes the individual's physical structure and functions, his values, attitudes, interests, goals, ideals, manner of solving problems, likes and dislikes, habits and emotional disposition, mental abilities, knowledge and skills he has acquired and his manner of relating to others and interactions with them. All these make up personality and distinguish one person from another.

Engle (1964) defines personality as the unique or distinctive pattern or life style of an individual. It is the fundamental organization of an individual's characteristic adjustment to his environment. Total adjustment includes the individual's attitudes towards others, his habits of thought and ways of expression, his interests and ambitions, his plan of life, and his attitude towards life in general. Everyone has a pattern of life and therefore every one has a personality.

There are many different theories of personalities as given below: (1) Self theory; (2) Freud's theory; (3) Sheldon's theory; (4) Jung's theory; and (5) Adler's theory.

The Self Theory

Of the theories that relate to personality, the self is the most easily understood, for everyone possesses an image or idea of what he is like. The self is the person as he is known to that person; it is that part of his own personality which the individual is aware of through his knowledge, beliefs, impressions and sensations; it is his image of himself as a physical and social being, or what he believes he should be like. This image is so highly valued that in some instances survival itself is valued less than the maintenance of a self-concept that has honour, family pride or national pride as an important part.

Self includes not only the person's beliefs about his own characteristics but also what he wishes to represent to himself and to others

and what he believes he should be. These interrelated sub selves are: the personal self, the social self, and the ideal self. The personal self is the image the person possesses of himself as a physical and social entity. As a result of the individual's developmental experiences, self becomes a highly organized system of attitudes, beliefs, impressions, habits and values. The social self is not identical with either the social stimulus value, which a person possesses or the sum total of his social skills; rather, it represents his perception, attitudes and feelings about himself in relation to other persons, the society. The ideal self is the image the person has of what he wishes to become.

The personal self is the existing self. The social self is that part of the self which works for acceptance by others, and the ideal self is the self which maintains the goals, aspirations and the best thoughts about one's self as an individual. In order that a person can achieve stability, it is necessary that these three selves are pulled together, superimposed upon each other and merged as one. If such an integration can be maintained, the individual will become adjusted and satisfied with his total self.

Freud's Theory

Freud's work led to his theory and techniques of psychoanalysis. Although psychoanalysis is thought of primarily as a method of therapy for emotionally disturbed people, it is a scientific method of observing certain mental and emotional phenomena. On the basis of observations made by the methods used in psychoanalysis, a body of knowledge has been collected to explain personality development. Five points emerge as Freud's major contributions relative to the development of personality. They are as follows.

(a) Early childhood experiences influence psychological development. The experiences of the child during infancy and early childhood have a significant effect upon his psychological development. Freud has provided a technique whereby experiences of the early years, which seemingly have been forgotten, can be recalled.

(b) Human behaviour is influenced by irrational or unreasonable motives as well as rational or reasonable ones.

(c) Behaviour is multidimensional. Hence any specific behaviour may be explained by a number of different combinations of motives and cause.

(d) Psychological equilibrium is maintained through the use of the 'mechanisms of defence'. In its efforts to maintain a state of minimal conflict among its components and to minimize the anxiety it experiences, personality employs certain protective and defensive techniques as explained in the previous chapter. These mechanisms of defence are also called mental dynamisms.

Frued's five points are generally accepted by psychiatrists and psychologists. His concepts of the id, ego and superego are recognized as having value in describing complex psychological processes. Ego-ideal is a person's 'right' behaviour, which was developed through praise and punishment when he was a child. The idealized image is the desire of the superego not to submit to the id or ego but to make the world over in its own image—a complete striving for perfection. The superego thus takes on two functions: one is warning the ego not to submit to the basic drives and the other is determining the social aspirations, ideals and the highest goals of human beings.

The id represents the basic drives of man—the striving within himself for protection, pleasure, comfort, the fulfillment of wants without considering how they may be obtained or restrained from the outside. The ego stands between the id and the superego and tries to resolve the conflict of getting something to satisfy the body, while not getting into trouble with the outside environment.

The superego is the result of the restraints put on man's desire to gain the approval of and be accepted by others through his actions and to attain recognition and status in society.

It is also the result of the moral teachings and the fundamental religious and philosophical doctrines instilled into the moral fibre of an individual. Only by abiding by the rules and regulations imposed by society, culture and conscience, the individual can gain these desired results in life.

The ego evaluates whether or not it is advantageous to gain the comfort and pleasure in addition to the survival of the organism, or to obtain the recognition and status from the environmental cultural group. If a man becomes obsessed with satisfying his id he becomes self-centred and selfish. On the other hand, if he acts to satisfy exclusively the superego, he may live in a constant state of anxiety or tension because he will not be able to satisfy the cultural standards or the varied and inconsistent ideals of others. As he lives in fear of not being accepted, his behaviour may become distorted and others around him may feel he is not acting appropriately.

In the development of the ego concept of self, Freud held that the individual acts in two ways (a) in relation to the environment and (b) in relation to himself in satisfying his basic needs. In this context Freud, has departmentalised the individual's thinking into three component parts: (a) the id, (b) the superego, and (c) the ego.

The id is the generating source and also a reservoir for satisfying infantile, instinctual, basic wants. It creates the desire within the individual to have food, sex and bodily needs satisfied immediately. This creates a tremendous power within the organism and when the basic needs cannot be fulfilled, tension is created.

The superego is the internal watch dog or the conscience of the individual. This force is continually exerting pressure to uphold the values that have been learned early in childhood from parents and teachers—the social values and the sense of right and wrong developed from the relationship of the individual to his environment. The superego tries to make the individual conform to the cultural pattern with its mores and regulations so that there will not be punishment resulting from his actions. The superego controls behaviour by making the individual prejudge his behaviour.

Ego, according to Freud, is an integrating mechanism within the individual that accepts the instinctive demands of the id on the one hand and the culturally and conscientiously accepted regulations of the superego on the other. The ego is in constant contact with the environmental situation (the real world); thus it takes on an even greater function because it is regulating the forces between the id and the superego and also the relationship of these forces to the external conditions. Actually, the ego acts as a judge which determines how the person and his personality can best survive.

The meaning of the term superego has been further expanded to include two other concepts: the ego-ideal and the idealized image. This is circular response. The ideal personality maintains a balance between the id and the superego, so that there is concern for the survival and comfort of the organism, combined with an adequate amount of consideration for the others in the environment, and fitting into a social environment.

Sheldon's Theory

Sheldon, a medical psychologist, developed a theory of personality types based on body types. He classified men into three distinct types: endomorphic, mesomorphic and ectomorphic. He studied the measurements of thousands of photographs of male bodies and concluded that the physique could be identified through three components, one of which is more greatly developed in each type: the fatty, fisceral component—endomorphy: the muscular and body component—mesomorphy: the 'skin and nerves' component—ectomorphy. Although Sheldon's studies showed a high correlation between body build and temperament, other

scientists have not been able to establish such a high correlation. They have presented evidence to show that nutritional differences, ill health and dietary factors can make changes in physical types.

Jung's Theory

Jung, the Swiss psychologist divides people into two types, the extrovert and the introvert. Extrovert means to turn 'out-ward'; introvert means to turn 'inward'. Jung believed that every human being has both tendencies but that in each one tendency predominates. The extrovert is the person who turns out to the world about him. He loves to be with people and lets others know of his feelings and thoughts. Since he values activities with people, he tends to be actively engaged with the people around him.

The 'introvert' is the person who likes to be alone or only with those people whom he knows well. Keeping his feelings and thoughts much to himself, he values ideas, imagination, dreams and feelings. Much of his activity takes place in thinking, dreaming and imagining.

Jung did not advocate one type or the other as being the more desirable. They are different, that is all. There may be both well adjusted and poorly adjusted people in each group.

Adler's Theory

Alfred Adler, an Austrian psychiatrist claims that the source of determinism for a person was his will to power. This he believes is the primary motive of a man. To Adler, the will to excel in social, economic and sexual competition is of paramount consideration in men's lives. Failure to excel in these basic areas, leads to an inferiority complex, which in turn, is responsible for people's manifold efforts to compensate for their defeats. According to Adler, personality development progresses along a road paved with evidence of either personal superiority or inferiority.

Classification of Personality Traits

The personality traits that characterize each individual can be classified broadly in the following statements.

(a) *Physical appearance* : The individual's posture, body build and size, complexion, hair and eyes, facial expression, and appropriateness and condition of clothes.

(b) *Intellectual accomplishments* : The individual's range of ideas, the way he talks and the things he talks about, his quickness of mind, and ability to judge values.

(c) *Emotional adjustment* ; What an individual likes and dislikes, whether he is aggressive or docile, how he responds when things get a bit difficult, whether he is usually calm and self-reliant, how quickly he gets angry, whether he can take a joke, whether he has a sense of humour and so on.

(d) *Social qualities* : How well the individual conducts himself with other people, how well he knows the rules of etiquette that govern society and whether or not he adheres to the prevailing customs and conventions.

Self concept is an important component of the personality pattern core because it is the care of the personality pattern that influences the form the different traits will take. The home environment is important in maintaining the self-concept (ego strength). Any break in the family may have serious effects on the child's concept of self. Figure 13 shows the various influences that affect the child's concept of self. By the time the child reaches adolescence, the self image is firmly established, though it may be revised later as the individual undergoes new social experiences.

The child's relationships with people outside the home are more important than the

experiences he shares with those at home.

Determinants of Personality

The factors which determine personality are now discussed.

Physique

Physique influences personality both directly and indirectly. It determines directly what the child can or cannot do. Indirectly it influences personality by determining how the child feels about his body. This, in turn, is influenced by how significant people in his life feel about his physique.

A child who is obese and huge becomes self-conscious, timid, retiring, slow, awkward and incapable of holding a secure status among his peers. He is often at the mercy of more active children who tease and bully him. As he is unable to engage in active play with other children, he becomes increasingly unsocial. He becomes more dependent on the mother and develops a tendency to be immature for his age.

Not only does good health enable the child to engage in all the normal activities of his age group, but it also exerts a favourable influence on personality. The attitude of the family and the social group in general is more favourable towards a healthy child than towards a sickly one.

Glandular Factor

Glandular secretions determine personality to a great extent. The glands are of two types: duct and ductless. The substances secreted by the 'duct' glands find their way through a duct or canal such as the salivary, sweat, tear, urine and a part of sex. The saliva secreted by the salivary glands helps in the digestion of food. The excess or shortage of salivary secretion interferes with the digestion of food. Sweat, tear and urine glands eliminate waste products from the body. Too much or too less perspiration, secretion of tears, urination or sex secretion produce remarkable changes in personality. A person suffering from disorders of glandular secretions may flare up in anger, strike or insult a friend or lose his job by his rude behaviour with the authorities.

Compared to the duct glands, the ductless glands such as the thyroids, adrenals and the pituitary exert a greater influence upon personality. The secretions of these glands find no outlet in the body and so get merged with the blood and spread in the different parts of the body. Excessive or deficient secretion of thyroxin produces various distortions of personality. For example, hypothyroidism results in cretinism, while hyperthyroidism produces myxcedema. The adrenal or the suprarenal gland secretes adrenin or opinophrin. It is also powerful like thyroxin. The pituitary glands secrete pituitrin which exerts a great influence on personality. In fact, it is called the 'master gland'. The excessive or inadequate secretions of the pancreas the thymus and the pineal glands also influence personality.

Intelligence

Intelligence provides the child the capacity for meeting and solving the problems in and adjusting to life. Average intelligence makes it possible for the child to adjust with reasonable success if other conditions are favourable. But very low or very high Intelligent Quotients prove to be a disadvantage to social adjustment. The child who is very bright or very dull is generally psychologically damaged because he develops a concept of self that militates against good adjustment.

Emotions

Even a mild emotion causes significant physical imbalance to affect the child's behaviour. When emotions are strong and persistent, damaging effects multiply. Unfortunately the environment usually encourages the development of unfavourable emotional patterns. Too

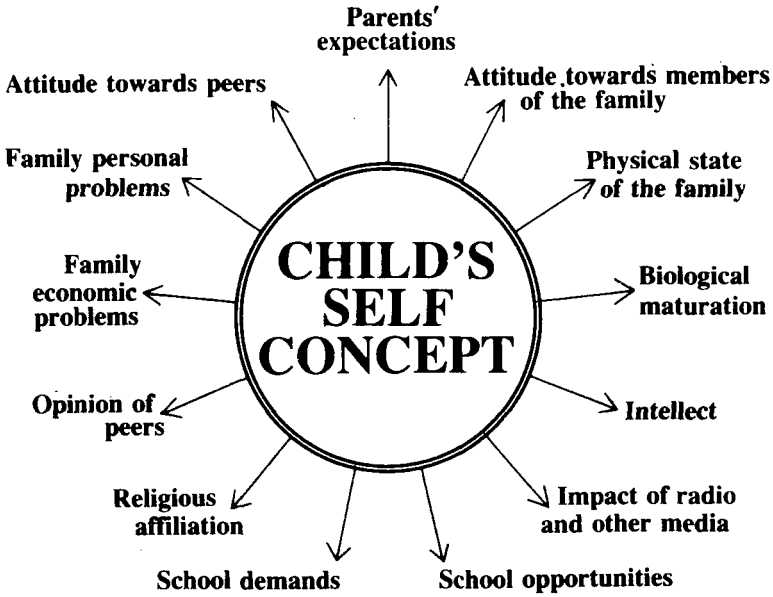


Fig. 13. The child's self-concept.

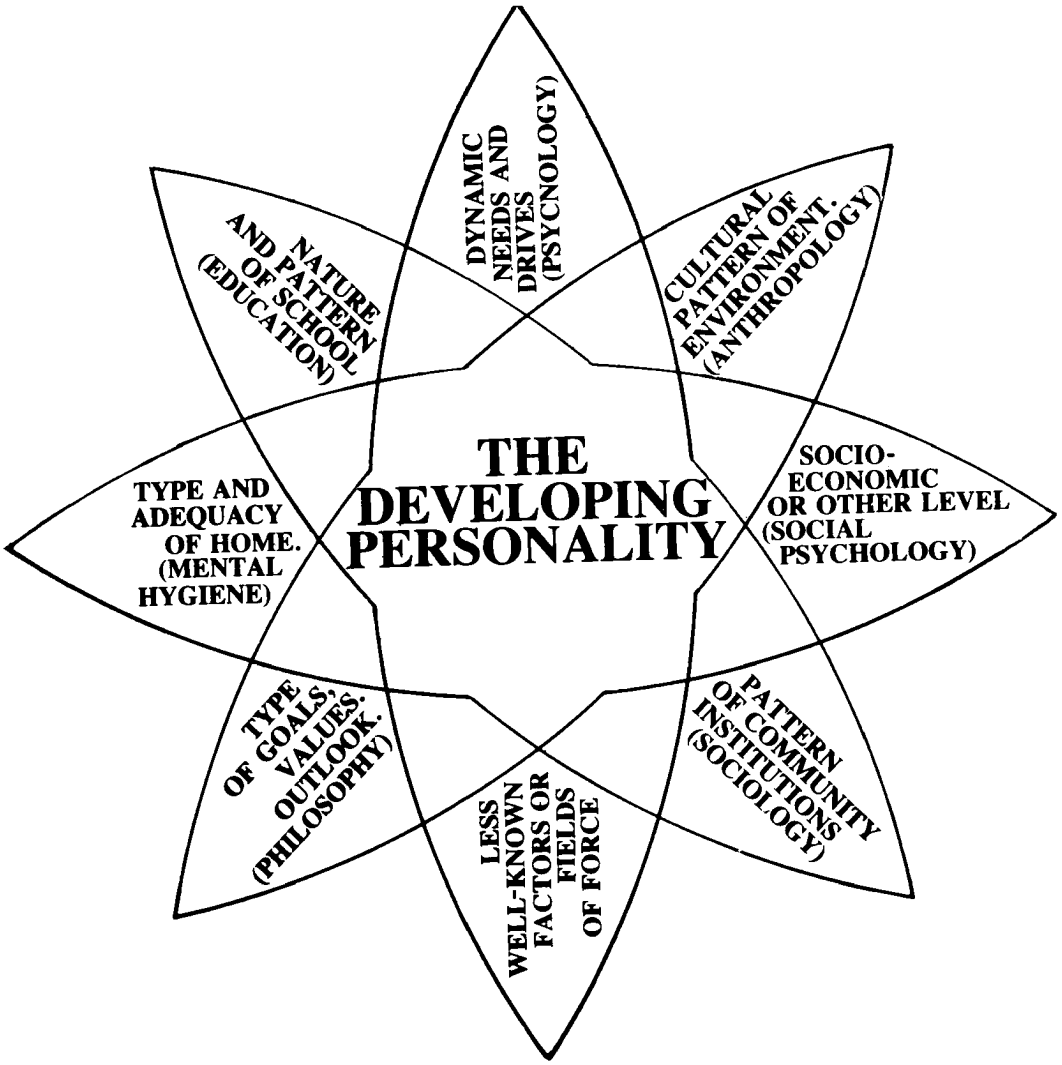


Fig. 14. The developing personality.

many and too frequent worries tend to weaken self-confidence. These lead to feelings of personal inadequacy and inferiority. People tend to judge a child favourably when he keeps his emotions under control. When his emotions are strong or persistent and disorganize his behaviour, the effects on his patterns of adjustment to life are serious. Suppression of emotional expressions results in moodiness which makes the child rude, snappy, uncooperative and preoccupied with the self heightened emotionality.

Early Childhood Experiences

Early childhood experiences and the memory of these experiences as the years go by leave an indelible impression on the individual's personality. The emotional damage inflicted during the period of infancy has far greater effects upon future character development. It was Freud who first stressed the importance of early experiences to future personality development. He found that many of his emotionally and mentally ill adult patients had unhappy childhood experiences. Lack of 'mothering' during the early years and emotional deprivation impede and thwart the personality development of the child.

Family Influences

The type of home life a child has is determined by his parents. Homes characterized by friction, discord, lack of affectional relations, absence of parental interest in the child, and breaks due to separation, death or divorce, lead to emotional instability and poor adjustments. A home in which family members are companionable, where co-operative and democratic relations exist, and where attempts are made to meet the needs of the family produces a well-adjusted personality in the child (Parameswaran, 1964). This type of home provides the affectional relationships every child needs with his parents and siblings. This influence appears to be greater in the Indian culture where the parent-offspring relation is stronger than in the Western culture.

The personality of the child is also influenced indirectly by his parents through his tendency to imitate them and to identify himself with them. The type of relationship that exists among siblings has much the same influence on the child's personality development as his relationship with his parents. The size of family also plays an important role. The socio-economic status of the family affects the child's developing personality both directly and indirectly. Directly it determines what social class standards the parents will accept and what child training methods they will use, and indirectly because it determines where and how the family live.

Cultural Influences

In every culture, children are pressurized to develop a personality pattern that will conform to the standards set by the culture. The cultural group to which the child's parents belong sets the pattern for basic personality. The way the child is brought up culturally is responsible for the type of personality he develops.

Playmates and Friends

The popularity of the child plays a considerable part in the development of his personality. Children who are accepted in the social group or who find themselves from time to time in positions of leadership develop self confidence and poise which are lacking in children who are social isolates. The popular child has a freer, lighter attitude, is more relaxed and is less influenced by the opinions of others than the unpopular child.

School Influences

The influence of the school in the personality development of the child is very great because the school becomes a substitute for the home and the teacher a substitute for the mother

during the school hours. Like the home, the school acts as a transmitter of cultural values. The teacher influences directly the way the child feels about himself by the way she corrects his behaviour, ignores him or his social behaviour, or interprets his school work. Indirectly, the teacher influences the child and his personality by helping him to adjust to the group and by helping the group to adjust to him.

Level of Aspiration

By the time the child is three or four years old, he begins to establish standards for himself. The standards become levels of aspiration. The child whose level of aspiration is too high for his abilities becomes an 'impractical idealist' who sees himself constantly as a 'failure'; the child who sets his aspirations below his abilities lacks 'ambition' and 'gets nowhere' in life. Aspiring to do too much or too little is set early in life and has a marked influence on the individual's concept of self.

Status Symbols

The desire for a position or status becomes stronger as the child grows older. One way to increase his position in the group, he soon discovers, is to have status symbols. Status symbols can influence a child's personality as he becomes aware of the meaning of the symbols to the social group and realizes that he is judged in terms of the status symbols he or his family possesses.

Level of Adjustment

Adjustment is the extent to which an individual's personality functions efficiently in a world of other people. A well-adjusted child, regardless of occasional set backs and disappointments, will continue to hold to the goals he has set for himself and will strive to reach them. The well-adjusted child enjoys a kind of 'inner harmony', he is at peace with himself, just as he is at peace with others. A child who becomes self-rejectant makes poor personal as well as social adjustments; he becomes a maladjusted person.

Heredity

What the individual inherits at birth from his ancestors is a great factor in personality development. Heredity is the force by which some characters of the previous generation are transmitted to their descendants. The hereditary factors of personality are those that reside in the child from the moment of conception. The factors that work upon the child from the moment he is born are those in the environment. As in the case of all higher animals, man's life also starts as a protoplasmic cell or as a zygote formed out of the union of the two parental cells. His future is contained potentially in the zygote. The heredity of an individual is unchangeable. But the environment leans closely upon heredity in the development of the individual. Environment determines which hereditary factor will develop to what extent. In the development of the individual, heredity plays a definite role while environment plays an indefinite role. Environment cannot originate an ability which has not already been transmitted by heredity. Improvement of the environment only facilitates the development of the best among the heredity factors. Thus heredity lies at the root of all the possibilities of personality development, environment being a means to the actualization of these possibilities.

A Well-developed Personality

A well-developed person has the following qualities.

1. Enjoys life
2. Realizes that any unhappiness he experience has understandable causes
3. Is self-confident

4. Is able to maintain close and satisfying relationships with people

5. Is able to meet problems without becoming more disturbed by them than their degree of seriousness would warrant

6. Is sensibly concerned about his health and is neither overly interested in his body functions nor repelled by them

7. Is able to express justifiable anger in a socially acceptable way

8. Is not afraid of people, things or situations except where there is reasonable cause to be afraid

9. Has a conscience that helps him to keep his behaviour acceptable for himself and others

A study of an individual's personality must include an investigation of his home, his interests, his attitudes and his personal involvement. Problems of personality pervade all aspects of society. Every aspect of personality (Figure 14) has significant implications for all other aspects. Any one taken alone is virtually meaningless (Thorpe and Schmuller, 1966).

An individual can be helped to maintain a well-developed personality if he

1 develops a pattern of living that reinforces his basic psychological needs: love, a sense of security, respect for others, a philosophy of life and satisfying relationships with others;
2 lives to meet his own goals, values and standards without trying to compete or compare himself with others;
3 usually thinks kindly of others;
4 tries to make others happy when he is around;
5 achieves within his own range of abilities, carefully evaluating himself and knowing where he may find, successful experiences;
6 believes that his problems and peculiarities are similar to those of other people;
7 recognizes reality as the state of affairs with which one must deal;
8 develops the ability to face the world alone and with confidence. A desire to make the best of whatever happens is basic. Self-reliance is built up being independent of any particular person or type of person and by handling specific situations over a period of time;
9 maintains a sound body. Proper diet, rest, exercise, play and regular physical examinations make it easier to develop constructive emotional responses;
10 participates in activities with the whole self (the physical, emotional, social and intellectual self) without conflicts; and
11 creates new experiences each day.

References

Allport, Gordon., *The Individual and His Religion—A Psychological Interpretation*. New York: The Macmillan Co., 1950.

Anastasi, A., *Psychological Testing*. New York: Macmillan Publishing Co., 1976.

Boaz, G.D., *General Psychology*. Bombay: The Times of India Press, 1957.

Boaz, G.D., *Elements of Psychology*. Madras: Viswanathan Co., 1968.

Cole, L., Hall I.N., *Psychology of Adolescence*. New York: Holt, Rinehart and Winston, Inc., 1970.

Cown, E.L., Lax, M., *Abnormal Psychology*. New York: Holt, Rinehart and Winston, Inc., 1976.

Duck, S.W., *Personal Relationships and Personal Constructs*. London: John Wiley and Sons, 1973.

Engle, T.L., *Psychology*. New York: Harcourt, Brace and World Inc., 1964.

Gamat, M.B., 'Child upbringing and social development', *Child Psychiatry*, Vol. V, No. 3, 1972.

Gosling, R., Meyerson, S., *Adolescence and Breakdown*. London: George Allen and Unwin Ltd., 1975.

Helen Gum Westlake., *Relationships: A Study in Human Behaviour*. Ilington: Ginn and Co., 1969.

Howard Kendler H., *Basic Psychology*. USA: Meredith Corporation, 1966.

Hurlock, Elizabeth, B., *Child Development*. New York: McGraw-Hill Book Co., 1964.

Jersild, A.T., *The Psychology of Adolescence*. London: Collier Macmillan Ltd., 1976.

Jung, Carl G., *Psychological Types, or the Psychology of Individuation*. New York: Harcourt ,Brace and World Inc., 1923

Kagan, J., Havemann, E., *Psychology: An Introduction*. New York: Harcourt, Brace, Jovanovich, Inc., 1972.

Kennedy, W.A., *Child Psychology*. New Jersey: Prentice Hall, Inc., 1971.

Kundu, C.L., Tutoo, D.N., *Educational Psychology*. New Delhi: Sterling Publishers, 1971.

Kuppuswamy, B., *Child Behaviour and Development*. Delhi: Vikas Publishing House Ltd., 1976.

Lamberth, J., Mc Cullers, C., Mellgren, R.L., *Foundations of Psychology*. New York: Harper and Row, 1976.

Paramesh, C.R., *Creativity and Personality*. Madras: Janatha Book House, 1972.

Parameswaran, E.G., 'Environmental influences on child development' in *Child Development*. A symposium. New Delhi: National Council of Educational Research and Training, 1964.

Walker, D.K., *Socio Emotional Measures for Preschool and Kindergarten Children*. London: Jossey-Bass Publishers, 1973.

CHAPTER 15

Juvenile Delinquency

An individual, usually under the age of 18 years who manifests either antisocial or criminal behaviour, is referred to as a juvenile delinquent (Travers, 1977) Juvenile delinquency, is therefore, a pattern of behaviour of children, who come in conflict with the law. There are various forms of delinquency such as truancy, vagrancy, stealing, smoking, gambling, drinking and committing crimes including sexual misbehaviour.

Delinquency is social sickness among children arising out of many factors. The chief causes are; biological factors, sex and family.

Biological Factors

Although the theory of innate predisposition to delinquency is considered untenable, an individual's body build and features do inuence his acceptability. His vulnerability may be accentuated because of certain biological factors, including constitutional peculiarities and organic defects. For example, a club-footed boy may slip into delinquency to prove that he is good at something. Physical defects make adjustment more difficult in a culture where visible features determine social acceptability.

Two Harvard criminologists, Glueck and Glueck (1950) investigated a possible link between body build and delinquency. Among a number of samples studied they found that twice as high a proportion of delinquents as nondelinquents were of the solid, well proportioned big boned athletic type called, 'mesomorphs'. This type of body build, if not extreme, has sometimes been considered the most desirable type. The Gluecks interpreted that because mesomorphs are vigorous, assertive and apt to take out their tension in actions, they have a high delinquency potential. If their energies are not channeled toward socially acceptable goals, they may get antisocial outlets. In order to forestall them from slipping into delinquency, an approved outlet for tension such as football is recommended.

Sex

Sex is a factor in delinquency. The question is, whether the difference originates in social or biological characteristics. The theory that the male's greater aggressiveness and higher reactivity constitute a more 'adequate' biological base for delinquency may be tenable but hard to prove. The argument against this factor is that the sexes show little difference in type of offences during childhood, a period when boys and girls are treated in similar fashion. Gibbons and Griswold found that during childhood mischievous acts and thefts are common for both boys and girls. They also pointed out that after the age of 13 years, running away and ungovernable behaviour became most frequent among females, perhaps due to the more rigid

rules applied to girls in their teens. The boys remain much the same in line with the more consistent treatment accorded to them over the years. Thus it appears that much of the differences in behaviour between boys and girls is due to social expectations. Society insists that the male be masterful and strong, but guidelines for expressing and proving these qualities in acceptable ways are lacking. Custom requires that the males be supplied with money. Therefore if jobs for them are scarce, they may be driven to theft.

The different delinquency rates are the opposing set ups for rearing the sexes and the contrasting interpretations placed on their behaviour. Boys are conditioned to be active and seek excitement, whereas girls must be less vigorous and even silent socially. Girls are more often accused of being, 'ungovernable' when their usual passivity makes conspicuous any departure from submissiveness. Besides, girls are more closely confined with authority-figures and experience more conflict. The girl who feels she is discriminated against by her parents or at the extreme, treated brutally cannot drown her trouble in the excitement of peer group or seek escape through roaming in the streets. She cannot simply 'takeoff' to avoid parents' nagging. She is required to 'stay put' and 'endure it'. In such circumstances, delinquency is simply a way of over-reacting to the very thing counted on to prevent it, that is, strict supervision.

Family

Conditions in the family are probably the most important factors in producing delinquency. This applies to both sexes. One of the commonest factors among delinquents is friction with parents and the school. Conditions at home, especially the mother's influence, seem to have more causal relation to girls' delinquency than boys'.

Broken homes cause delinquency although the severity and seriousness of their effects vary with the causes of the break up. The children are affected undesirably when the father and mother go to work, leaving the child in the streets. After a divorce, the mother's unhappiness adversely affects the child.

However, there is danger in conjectures born out of these observations. Correlations between two variables are easier to demonstrate than is an outright causal relationship. For example, broken homes do have their effect, but they are found more often among lower class families in the socially disorganized urban areas where poverty and disrespect for law also prevail. In such cases, it is hard to determine whether delinquency is a result of a broken home or a broken family is the result of unfortunate environmental conditions, which might have contributed to parental disagreements in the first place.

Then, there are parents who even while living together neglect their parental functions. An insecure child, whose parents show that they neither expect nor hope for anything good to come out of him may seek satisfaction in the close comradeship of the delinquent group.

A kind of quasibroken home is one where the father's influence is felt missing, simply because he goes to work early and comes home late. A boy's delinquency, in such a case may be an instance of so-called masculine protest, an effort to set himself apart from the predominantly female influence at home. He wishes to dissociate himself from any suspicion of feminine traits when he perceives them as devaluated members of the society.

Parents contribute to delinquency by the examples they set. Parents of delinquent youth are often guilty of low morals. The patterns commonly manifested are: excessive drinking, sexual irregularities, irresponsibility, openly breaking the law and hostility towards authority. These bad habits and unstable values find expression in indiscipline. The parents of

many delinquents are overly harsh and project their aggression into their children, thus making scapegoats of their children for their own shortcomings and wretchedness. Their children, in turn, may not dare to strike back but instead take out their own hostility on teachers or other adults.

The pattern of parental discipline matters more than the degree of harshness. The over-dominated child may regulate his conduct on the basis of his feeling of personal loyalty rather than on any abstract principles of equity; the underdominated child may acquire no standards at all. The underdominated child who is also spoiled, often develops a passive, dependent, irresponsible attitude rather than delinquent patterns of behaviour. The child whose discipline is inconsistent is subjected to the worst pattern of all and one that is particularly unfavourable for social development. It should be added that children often charge their parents on being inconsistent simply because the parents do not explain why they do what they do, that is, fail to reason out matters with their children.

Parents

a) Mother Dominance

In the situation of maternal dominance, the father plays a reduced role in family life because of work or other reasons and the mother takes over the function of providing both affection and discipline. During adolescence, the boy who has identified himself with his mother, and relied heavily upon her as role model presumably has difficulty in shaping a masculine self-concept. Consequently he tends to be rebellious and to engage in 'proving' offences in which the primary motive is reassurance as to his own courage, independence and virility.

b) Sociopathic Fathers

Several investigators have pointed out the high incidence of sociopathic traits in the fathers of delinquent boys (O'Neal *et al.*, 1962; Glueck and Glueck, 1962; Bennett, 1961). These include alcoholism, brutality, antisocial attitudes, failure to provide for basic needs, frequent absences from home and other characteristics which made the father an inadequate and unacceptable model for the boy. In the case of girls, sociopathic parents may contribute in various way, to delinquent behaviour including overt encouragement of sexual promiscuity.

c) Parental Absenteeism

In studies of juvenile vandalism, Martin (1961) has emphasized the feeling of unrelatedness and detachment from family and society. Lack of communication between the parents and children leads to failure of children to learn appropriate social values and a tendency to act out inner tensions in hostile, destructive behaviour.

These feelings of rootlessness or unrelatedness appear in all young people who may differ widely in age, intelligence, personality makeup and socioeconomic status. The key source for this feeling appears to be 'parental absenteeism' which occurs not only in broken homes but also in the case of parents who are too absorbed in their jobs and other activities to provide their children the needed support and encouragement during the many critical periods involved in growing up.

Many complex influences from the family produce delinquency. Glueck and Glueck (1962) studied the causes for delinquency and concluded that the home of delinquents are characterized by one or more of the following factors :

1. Substandard economic conditions in the home, which tend to encourage young people to satisfy their normal cravings for attractive surroundings in socially undesirable ways.

2. Substandard educational background of the parents which may lead to lack of respect from children.

3. Undesirable parental attitudes, producing resentment or hatred of home or of the ways parents treat them.

4. Broken home or where there is a lack of supervision.

5. Mental illness, mental defect or other peculiarities in a blood relative, possibly complicated by inheritance of something similar in the child.

6. Indifferent moral standards or actual criminality among adult members of the family, who are thus undesirable models for immature and impressionable young people.

7. Parents are from different cultures, with the result there is a clash of customs and standards between parents and children.

School

The school is less influential than the home in its bearing on delinquency, but it does play a part in evoking incipient anti-social tendencies. A delinquent's deficiencies in social achievement seem to be related not so much to their inability to do school work as to their nonconforming to the standards set by the school. Since lower class standards are typically represented as undesirable by middle-class teachers, the lower class child feels that he is being devalued or held up as a bad example. His feelings of inferiority are further accentuated by patronizing attitudes, slurs and taunts from his peers.

Neighbourhood

An inferior neighbourhood contributes more to delinquency than the school. Research has shown a high correlation between anti-social behaviour and neighbourhoods at low economic levels. The adolescent slum dweller suffers the usual traits of developmental changes, while enduring in addition environmental conditions under which hostile attitudes are likely to be engendered. He lives in an area characterized by overcrowding, poverty, substandard housing, very large families, unemployment and lack of suitable recreational facilities with their attendant inadequacies in nutrition and high disease rate.

It is not easy to pinpoint which of these factors precisely cause these troubles. Poverty unquestionably plays a part in producing the conditions which give rise to anti-social behaviour. Besides, poverty is related to many other factors which are associated with crime such as overcrowding, poor morale, lack of educational opportunities and undesirable neighbourhoods. However poverty by itself is not a cause except that it is related to inadequate housing, education or undesirable neighbourhood. After all, being poor does not necessarily make a particular person a criminal.

A second factor in causing antisocial trends is a community where there is lack of opportunity for wholesome recreation. Modern urban life does not provide enough scope for the spirit of adventure to engage and channelise the abounding energy of the young group of children. The open spaces and facilities are grossly few and limited. Organized playground matches, picnics, camps and excursions are rare.

Low Intelligence

In a few cases around five per cent, low intelligence appears to be of etiological significance in delinquency. The delinquent is unable to appreciate the significance of his actions or to foresee the consequences. This is particularly true of mentally retarded, sexually delinquent girls (Writ *et al.*, 1962). Occasionally boys and girls of low intelligence fall prey to the suggestions of brighter sociopaths who dominate and exploit them. In some instances, mental retardation is associated with serious brain damage and leads to a combination of the features of both the organic and the mentally retarded delinquent.

In a limited number of cases, (probably about three per cent) delinquent behaviour is associated with a psychotic reaction. This involves a pattern of prolonged emotional and social withdrawal which culminates after long frustration in explosive outbursts of violent behaviour. Here the delinquent act is the by-product of the personality disturbances rather than a reflection of a consistent antisocial orientation.

Brain Pathology

In some rare instances, probably about one per cent, brain pathology may result in lowered inhibitory controls and a tendency towards episodes of aggressive and violent behaviour. Such children are hyperactive, impulsive, emotionally unstable and unable to inhibit action when strongly stimulated. They also experience strong guilt feelings following their explosive outbursts. The occurrence of violent episodes depends upon the acceptance or rejection of these children by parents and peer group members.

Neurosis

In more cases, about 10 to 15 per cent, delinquent behaviour appears to be directly associated with psychoneurotic disorders. Here the delinquent act often takes the form of a compulsion such as peeping, stealing things which the individual does not need, or setting fire. Such compulsions are related to deviant sexual gratification in overly inhibited adolescents who have been indoctrined in the belief that masturbation and other overt forms of sexual discharge are terribly evil and sinful. Such individuals fight their inner impulses through the delinquent act and then feel extremely guilty afterwards.

The Delinquent Gang

The incidence of juvenile delinquency is higher in the slum areas of large urban centres. In these areas, poverty and inadequate living conditions bring about frustration and discontent and foster in children hostile attitudes towards society. The child is exposed to many antisocial models, and the parents are not in a position to impart desirable values or to maintain control over the behaviour of their children. In such environments teenage gangs flourish. Fortunately, many of these gangs provide useful and constructive outlets for the socialization of the adolescent. Often such gangs function as a haven for teenagers who have no clear sense of self-identity, feel rejected at home and are confused and overwhelmed by the complex and seemingly indifferent society in which they live. In delinquent gangs they find social approval and status while temporarily escaping from and defying the larger society. They also find a sense of self-identity and a readymade value system in the gang. This value system, though often contradictory to that of the larger society, may reflect more or less accurately the values of some small segment of population, such as a minority ethnic group in a given urban area. To survive in the hostile world in which the gangs live and to some extent, create loyalty to the group is the essential key of the 'gang code'. Many delinquent acts are ways of gaining or maintaining approved status in the gang.

Regardless of the constructive or destructive effect exercised on the lives of its members, the juvenile gang is an extremely important influence. Once the individual joins a juvenile gang, it replaces largely the family as the principal agent of his further socialization, at least until he reaches adulthood.

The Larger Society

People in every sub-culture are influenced by the motives and values of the larger culture. The juvenile delinquent, who generally occupies a lower sociometric status than other children,

shares with others the desire to get ahead by competing successfully and to improve his position in the world. Furthermore, he is like anyone else in being able to rationalize his acts of retaliation towards those who reject him.

'The perceiving adolescent easily detects adults circumventing accepted codes and evading the law, that is, the hypocrites. We fail to present our youth with a consistently moral set of values. This is one basic reason why preaching to the young is greeted with amused criticism and sarcasm. They know us for what we are'. (Glueck and Glueck, 1962).

It is a great saving feature that even when all the causes discussed are present, delinquency does not result in several cases. All the children from broken homes, slums or other consted localities may not become delinquents. Delinquency cannot be explained in terms of a single factor or groups of factors. Against this background, the approach to delinquency is now discussed.

Approach to Delinquency

Delinquency is the product of an environment which the individual finds beyond his control. One needs to understand the circumstances leading to the delinquent pattern, modify the environment and help the child and the family to adjust to the changed environment.

The following facts form the basis for a sound approach to deal with the delinquents.

1. Every normal child has potentialities for adjustments. He is growing and if he does anything wrong it is the result of his environment. As such no stigma need to be attached to a delinquent child.

2. A young person's character and habits are not yet fixed. They are capable of being remoulded into socially useful and healthy channels.

3. The aim of treatment of the young delinquent should not be punitive but curative and preventive.

4. The State must give protection to the juvenile delinquents as a superparent. The State must take the place of a guardian and provide opportunities to the child so that he may be disciplined.

5. The main purpose of the proceedings of the juvenile court is to find out the why of the child crime, and not just to prove the crime.

6. The juvenile offender is no longer seen only as a legal category. Instead, attention is focussed on the psychological, educational and social problems which lie behind the youthful act of delinquency. The court therefore should not award legal punishment only.

Children with delinquent patterns need to be treated in a manner which is different from that in which adult criminals are treated. If a juvenile is punished and imprisoned in the same manner as an adult, he would come out of the prison as a confirmed criminal, whereas, if the child is helped to live in a different helpful environment it will be possible to change him and save him from becoming a criminal. Therefore separate courts with separate magistrates, preferably women, are necessary to deal with the cases of delinquency. In fact, the work of juvenile court must be governed by a separate Children's Act.

No child is born a deilnquent with specific innate physical, mental or emotional characteristics. Therefore, the delinquent child need a very careful handling.

References

Central Bureau of Correctional Services. *Juvenile Delinquency—A Challenge*. Allahabad: Directorate of Advertising and Visual Publicity, 1970.

Chowdhry, P.D., *Handbook of Social Welfare*. New Delhi: Atma Ram and Sons, 1966.

Coleman, J.C., *Abnormal Psychology and Modern Life*. Bombay: D.B. Taraporevala Sons & Co., 1969.

Dutt, N.K., *Psychological Foundations of Education.* New Delhi: Doaba House, 1974.

Evans, E.D., McCandless, B.R., *Children and Youth Psycho-Social Development.* Illinois: The Dryden Press, 1973.

Gibbons and Griswold, in Glueck, S., Glueck, E.T., *Family Environment—Delinquency.* Boston: Houghton Mifflin, 1962.

Glueck, S., Glueck, E.T., *Family Environment Delinquency.* Boston: Houghton Mifflin Co., 1962.

Marfatia, J.C., 'Juvenile delinquency', *Child Psychiatry Quarterly,* VII, 1974.

Martin, J.M., Juvenile Vandalism: *A Study of Its Nature and Prevention.* Springfield: Charles Thomas, 1961.

O' Neal, P., Robins, L.N., King, L.J., Shaffer, J., Parental deriance and the genesis of sociopathic 'personality', *Amer, J. Psychiat.* **118,** 1962.

Rai, B.C., *Educational Psychology.* Lucknow: Prakashan Kendra, 1976.

Sebald, H., *Adolescence—A Social Psychological Analysis.* London: Prentice Hall Inc., 1977.

Travers, J.F., *The Growing Child.* Canada: John Wiley & Sons, Inc., 1977,

Writ, R.D., Briggs, P.F., Golden, J., 'Delinquency prone personalities III—the sociopathic personality treatment', *Minnesota Medicine,* **45,** 1962.

CHAPTER 16

Heredity and Environment

Heredity means the sumtotal of all the traits present in an individual at the time of his birth, inclusive of the likeness or dissimilarity between parents and the offsprings. Heredity is the basis for the development of human personality. It is like the raw material in the hands of the artist out of which the potter or tailor prepare the specific objects. Any amount of moulding and treatment with special processes will still retain the basic properties of the raw material.

Environment includes all the factors, human and others, to which the individual is exposed from his birth—parents, family, friends, surroundings, school, office, food, clothing, education, socio-economic conditions and recreation. Environment covers also the social, moral, economic, political, physical and intellectual factors which influence the development of the individual from time to time. The individual emerges from his interactions with all the influences of his environment.

Each individual enters the world with certain hereditary characteristics transmitted to him through his parents. He grows up in a certain environment with its human, social and material surroundings. Everything he does as a child or adult results from the complex interactions between heredity and environment. Which is more important, heredity or environment? To answer this question and to understand and control human behaviour, one needs to know something about the nature and function of each. The role played by heredity in the development of personality has its origin in the chromosomes and genes and the prenatal period.

Prenatal Origins of Behaviour

The greatest of all the critical events in human life occurs at the moment when a female ovum is penetrated by a male sperm marking the beginning of life. Once every lunar month (28 days), usually midway between the menstrual periods, the mature female produces an ovum or egg. The egg is released from the ovary and propelled by muscular contractions down the ovarian tube, where it is ready to meet the male comfeyle, the sperm. Unless fertilization occurs, the egg completes its journey through the tube, enters the uterus, and is discharged during the menstrual flow which takes place within approximately two weeks.

Viewed under the microscope the sperm cell resembles a tadpole and propels itself by lashing its whip-like tail. If a sperm cell succeeds in reaching the ovarian tube and in penetrating the wall of the ovum, fertilization takes place. It is at this moment, that the beginning of a future human being is determined and his existence commences. The egg is now called a zygote. It changes immediately, grows and develops. Not only has life begun,

but the sex of the developing organism is also determined along with all its hereditary characteristics. Genes which are carried by chromosomes from both the father's and the mother's side, unite to determine the hereditary traits. The characteristics that are inherited are structures whose characters are determined at the moment of conception.

Inherited Characteristics

Each individual inherits his tendencies towards his stature in terms of :

1. Body type and body height. Body type is determined by stature structure, the proportion of fat and muscle tissue and the length of limbs.
2. Sex
3. Appearance, which is one of the most obvious and to the individual one of the most important areas of inheritance. The child acquires genetically the texture and colour of hair, shape and colour of eye, shape of nose, structure of ears and shape of head. All the external and observable characteristics which make the individual unique in appearance are thus inherited.

Internal Structure

In addition to inherited structures are inherited tendencies to function in certain ways. Such inherited functioning tendencies include

1. Neural responses;
2. Sensory efficiency;
3. Operation of the 'vegetative system';
4. The functioning of the endocrine system;
5. Rate of physical growth; and
6. Predisposition to certain diseases.

The internal structure is governed by the size, proportions and adequacy of various organs and systems of the body. For example, the shape of the lens in the eye determines, in part, accuracy and clarity of vision. The size of the heart and lungs relative to the rest of the body help determine the capacity for prolonged output of physical effort demanded in many events such as atheletics and carrying weights. The size and position of the girl's uterus help to determine her future capacity to conceive and bear children normally. In short, much of what is thought of as capacity or ability, begins with structures whose characteristics and frame are determined at the moment of conception.

NEURAL RESPONSES

The full functioning of the nervous system, as indicated by the neural responses, is of great importance to behaviour. Intelligence has several sources, but the basic element is the functioning of the cerebral cortex and the entire nervous system. An individual may not reach his intellectual potential, because of physical or environmental factors, but under no circumstances can he be any brighter than the nervous system allows him to be. The functioning of the nervous system predisposes the individual to react slowly or quickly to stimuli of all sorts.

SENSORY EFFICIENCY

Keenness of vision, range of hearing, sensitivity of touch, ability to perceive odours and similar attributes are basically inherited traits.

OPERATION OF THE VEGETATIVE SYSTEM

By vegetative system is meant the organs which carry out the basic life activities ; the heart and circulatory system, the digestive system, the reproductive system and so on. The efficiency of these systems is primarily genetically determined, as is their ability to function well under varying environmental conditions and their differing responses to body emergencies.

THE FUNCTIONING OF THE ENDOCRINE SYSTEM

The endocrines are the glands of internal

secretions. They are part of the vegetative system, but deserve special mention because of their unique functions: the thyroids, which control the metabolic rate, the pituitary, which is a 'growth-stimulator', the gonads or sex glands, which are concerned not only with the sex drive but also with secondary sex characteristics, and the adrenals, which 'stir-up' the organs in strong emotions. The functioning of these glands determine to some extent the nature, way of life and temperament of an individual.

Rate of Physical Growth

The rates at which different children progress through the growth cycle vary greatly from one child to another, even when all conditions which promote growth are identical. There are many factors involved in determining this rate.

Predisposition to Certain Diseases

Predisposition towards certain diseases may also be inherited. For example, one may not inherit tuberculosis but some individuals seem to succumb more easily to exposure to this disease than others. Thus human beings inherit physical structures which are predisposed to function in certain ways (Baller and Charles, (1968).

Equally important is what is not inherited. Behaviour that is not a direct outgrowth of the biological inheritance of the individual may be more amenable to learning and to environmental pressures, and may therefore be more subject to change. In short, the child does not inherit specific traits or trends of behaviour, but rather differing capacities to learn them. How they develop and in what forms, are dependent on his environment and exposure to different experiences.

How does One Inherit Characteristics

Knowledge of inheritance began with the work of an Austrian monk Gregor Mendel, who experimented with plant breeding in the early 19th century. When he mated white flowered peas with red flowered peas, he found that certain intangible factors, which he called *elements* for want of a better term, determined whether or not the offspring would be red or white. The *elements* produced consistent ratios between red and white offsprings, not only for one generation but in successive generations also. Subsequently the rules for hereditary transmission came to be known as Mendel's laws. Biologists all over the world followed up Mendel's study. In the USA, Thomas Hunt Morgan and Reymond Pearl developed a theory of heredity according to genes and chromosomes, which terms have since replaced Mendel's 'elements'.

The carrier of genetic determination is the *chromosome*. Chromosomes appear to be rod-like, sausage shaped, or V shaped bodies. The requisite number of these in the normal human cell is 46. When the human sex cell reaches maturity at pubescence or later, the number of chromosomes is reduced by a process called meiosis to 23 in each cell. When mating occurs and a sperm cell penetrates the ovum, the two sets of chromosomes line up in appropriate pairs and the total number is reached. All the pairs are matured, except for the 23rd pair. If by chance, a pair of like (called x) chromosomes match up in the 23rd set, the sex of the developing human being will be female; if they are unlike (x and y) the child will be male. Thus in the zygote, or fertilized egg, two sets of 23 chromosomes each have paired, half from the mother and half from the father. Whether or not a specific chromosome came from one of the parents, the father or mother cannot readily be determined.

Occasionally, through some unfortunate bodily error, aberrations in chromosomes appear. If an extra chromosome appears, making 47 rather than the normal 46, Mongolism (or Down's syndrome or Trisomy 21 anomaly) will result. The child with Mongolism suffers

from a deccleration of growth during the prenatal period which results in a highly complex, multidimensional disorder in which every organ is involved. A host of other abnormalities have been identified as the product of chromosomal or genetic disorder.

When chromosomes are studied under a miscroscope, bands of markings appear, representing an entity called *genes*, which appear to be the actual determiners of traits. Each chromosomes is made up of many genes. Man has, probably not less than 2000 and not more than 50,000. One authority estimates the actual number at 10,000 pairs for each individual (Stern, 1960). It was once supposed that each gene was the determiner of a specific characteristic, such as a straight nose or a deep-lobed ear. At present, it appears that there is no simple one-to-one relationship between genes and traits, that is, one gene may influence many characteristics or traits or conversely many genes may combine to determine one characteristic. Genes have been compared to catalysts, which precipitate changes in chemical reactions without undergoing changes themselves.

Factors other than the combination of chromosomes, and thus of genes, enter into the determination of traits. One of these is the dominant or recessive nature of some traits. In the colour of the eye, for example, brown is dominant over blue, and if one parent carries only brown and the other only blue determiners, their offspring will have brown eyes. Many people, however, carry both; and if two recessive blues happen to match up in the assorting process of meiosis and fertilization, the child would have blue eyes even though parents and all the immediate relatives have brown eyes.

Some characteristics are sex-linked, that is, one sex shows the characteristics while the other sex, not apparently effected, is the carrier. One such trait is colour blindness. For example, the sons of a colour blind man and a normal woman do not inherit the defect, but the daughters may be carriers of the disorder to another generation of males, their sons. Another example is haemophillia, the 'bleeder's disease', which rarely occurs in women but is transmitted by them to their sons (Stern, 1960).

Occassionally, in the reproductive cells of any living thing, a change occurs which causes the introduction of completely new traits in the next generation. Such changes are called *mutations*. Mutant plants and animals might have characteristics that breeders can use to improve existing varieties. In human beings, unfortunately, mutations are almost always undesirable. Their causes are not clear, but it is known that they can be induced by atomic radiation.

Interaction of Heredity and Environment

For over 70 years, and especially since 1920, psychologists have been working on the problem of separating the strands of heredity and environment. The earliest research efforts consisted of tracing geneologies. The book *Hereditary Genius* was published in 1869 by Francis Galton, a brilliant freelance British scientist who helped launch psychology on its scientific footing. Galton believed that genius was inherited and undertook to prove it. He selected names of nearly a 1000 of the most eminent statesmen, army, navy, and other professional leaders, who had lived in the British Iles during the preceding several generations. To see whether or not they had more distinguished relatives than would be expected by chance, he studied their geneologies carefully.

For comparison, he calculated that among all the relations of any 1000 unselected garden variety Britishers, one would expect to find only four eminent persons. In the family trees of his selected 1000, however, he found over 500 distinguished relatives. Galton believed that these results proved that genius was inherited.

Encouraged by these findings, Galton began research into heredity and art. He showed that, of the children in 30 families of artistic parents, 64 per cent were artistic, whereas only 21 per cent of the children in 150 families of non-artistic parents revealed artistic ability. Galton concluded that heredity's influence far outweighed that of the environment.

Galton's findings have been criticized by many because he judged eminence by his own personal standards and attached little importance to the various non-hereditray factors which might have influenced the lives of these eminent men. Identifying eminence with genius is also fallacious since some attain eminence at-least partially through political favour, good name or just plain luck. This oversight was noted by Decondolle, a Swiss, who published in 1873 a reply to Galton's *Hereditary Genius*. Studying genious in the field of science, Decondolle compiled a list of environmental influences which fostered scientific creativity. He found that wealth, leisure, scientific creativeness, scientific traditions, good education, availability of libraries and laboratories, freedom to express opinon and to follow a chosen profession and geographical location were the influencing factors. He did not take into consideration the hereditary influences making one man brilliant, another average, another dull, all in the same environment.

The fabulous history of the Kallikaks, traced by Henry H. Goddard and published in 1912 is cited to illustrate the far-reaching effects of defective heredity. Goddard noticed that several derelicts in the community bore the same surname as that of a well-known and respected family. Tracing their geneology, he found that both groups stemmed from a common ancestor, a soldier in the revolutionary war. Goddard called this man, Martin Kallikak, in order not to reveal the family name. Kallikak means 'good-bad' in Greek. The records showed that Martin had had an affair with a feeble-minded girl, which resulted in a mentally defective illegitimate son. From this son, 480 descendants were traced—143 were feeble minded and only 46 appeared to have had normal mental abilities. The rest were of doubtful intelligence. The clan included 24 confirmed alcoholics, three epileptics, three criminals, 35 sexually weak persons and eight brothel keepers.

After the war, Martin settled down in marriage with a woman of normal intelligence. In striking contrast to the orher strain, all but three of the 496 descendants traced from this legitimate union were morally and mentally sound. This branch of the family included respectable and prominent citizens, doctors, lawyers, judges and business men. No traces of feeble mindedness were found. No illegitimacy, no epilepsy, no criminal tendency and only one case of bad morals and two of alcoholism were found among all the descendants. Goddard concluded that Kallikak degeneracy resulted from defective mentality caused by infusion of bad blood. Goddard minimized the effects of environment. Although criminals are made rather than born, he did not consider the ill-effects of poverty, filth and deplorable home conditions on children born into the bad side of the family.

Jungle or Feral Children

Stories of infants abandoned in the wilds and reared by animals show striking environmental influence, which the geneological studies have neglected. Although rare and incomplete they deserve mention. In 1799, some hunters found a wild boy roaming in the forests of Aveyron in Southern France. He appeared about eleven years old and grubbed his living from roots and acorns, in animal fashion. Captured and brought to Pairs, he was in the care of a Dr. Jean Itard who undertook to civilize him. He was feeble minded, shaken with spasms and convulsions. His senses were dull and he uttered occasional grunts and showed no social behaviour or powers of atten-

tion or observation. In Itard's words, 'his whole life was a complete animal existence'. For five years he tried. The child progressed a bit, but never became normal. He learned to respond to his name Victor, and to speak, read and recall a few words, learnt the meaning of lait (milk) and to arrange that word's letters in proper order. His sense of discrimination improved and towards Itard and others who cared for him he developed strong affection, but did not learn to play or behave like a normal young child. Perhaps the child would have been a mentally defective imbecile and therefore abandoned or the early non-human environment experiences had affected him so profoundly. One may also argue that since he had ably coped with a wild environment he was not mentally defective. However, one cannot interpret accurately from the sketchy data recorded. Each view may be partially correct.

The amazing story of India's wolf children was first told by Squires and has been documented recently in a book by the anthropologist Zingg. In 1920, two little girls, later named Kamala and Amala, were found living with wolves in the erstwhile Bengal province of India. The older child, Kamala, seemed about nine years of age and her sister about two Placed in a nearby orphanage, they were trained by the Director, Rev. J.A.L. Singh and his wife.

At first the children behaved like animals. They moved about on all fours, standing upright only occasionally. Their senses of hearing and smell were acute, and Kamala apparently saw better by night than by day. A picture of her taken soon after she entered the orphange shows her lapping up food from a pan on the ground, like a dog or a cat. She ate ravenously, particularly meat, which she stole without compunction, and growled when approached while eating. Almost two years after her capture she found a dead chicken in the yard, seized it in her jaws, ran on hands and feet to the bushes and emerged some minutes later with bloody feathers clinging to her lips. She was also found devouring the entrails of a fowl.

Amala died after a short time, but Kamala lived for nine years. She learned to wear clothes, eat from a plate using both hands, and walked upright, although she descended to all fours when running. Gradually her animal ways were abandoned. Instead of baring her teeth at other youngsters, she took part in their activities and moped if not included. At night she slept on a bed beside her playmates instead of roaming the fields as before. She ran errands, cared for children, used about 100 words, and showed responsibility, initiative and self-reliance. In short, she developed an essentially human mode of life. Unfortunately psychologists had not examined or trained the wolf children. A journal kept by Rev and Mrs. Singh records the only data we have of their progress. Though not scientific, it is extensive and includes 22 photographs, which have been reproduced in full in Zingg's book, *Wolf Children and Feral Men*.

The most recently reported feral child is Tamasha, the wild boy of Salvador, who was captured by police after a struggle and put in the care of a psychologist named Jorge Ramirez Chulo. Tamasha, named for the one word, meaning 'village', that he could speak when he found, apparently was lost or abandoned when very young and lived with animals in the jungle. He could throw stones with astonishing precision and swing skillfully from limb to limb in the jungle trees. At first he refused cooked foods, lapped up liquids from a dish and preferred curling up on the floor to sleeping in a bed. Under Chulo's supervision he progressed rapidly. With good grace, he accepted clothes, baths and barber shops. He acquired a considerable vocabulary and described eating with animals in the jungle, but he could not recall human parents.

In all these studies information on many important points is scant; such as an exact account of behaviour when first discovered, precise data about training or degree of success

in learning. From the evidences on record one can say merely this: It is possible, although uncommon, for human children to survive in a non-human environment. Such children develop some means of locomotion, speech sounds, emotional reactions and various habit patterns adapted to their environment. On the other hand, many kinds of usual human behaviour chiefly reasoning, language, and social conduct are absent. Feral children can be retrained, but the longer they have been isolated from human influences the harder it is to teach them and the less likely they will become normal. For a child to develop a human personality, he must have the usual social contacts. Environment is shown to play a vital part in the process.

Studies on Twins

The ideal situation for studying heredity would be to have subjects with identical inheritance but with different environmental experiences. There are two types of twins, first the dizygotic, or fraternal, which result when two ova, or eggs, are fertilized during the same period, and second, the monozygotic, or identical twins which result when a single zygote (fertilized ovum) divides into two identical parts and each develops into a separate person. Dizygotic or fraternal twins may be like or opposite in sex and in general may have as much or as little resemblance to each other as any pair of siblings, since there are actually two separate and independent conceptions taking place. As they share the womb and are born at about the same time, they have a more common environmental experience than other siblings. Monozygotic, or identical twins have, of course, identical inheritance since the zygote divides after the pairing up of chromosomes and genes has taken place. They, too, have a similar prenatal environment. Similar prenatal environment, for either kind of twins does not mean identical environment. Fraternal twins ordinarily have separate sacs or chorions, but identicals may have single or separate amnions and single or fused placentas. Despite these and other technical differences, studies of twins provides some of the most impressive evidence on the relative effects of heredity and environment.

Galton was the first to realize that twins are valuable for research studies. He assembled information, mostly in the form of anecdotes, about 80 pairs of twins, both identical and fraternal. His data indicated amazing similarities between identical twins even when they were reared apart. On the contrary, twins dissimilar at birth, though brought up together and treated alike, differed widely in their behaviour. Galton's conclusions stressed again the overwhelming importance of heredity.

Thorndike of Columbia University, USA, conducted a study in 1905. Interested in heredity's effects on human abilities, he gave 50 pairs of twins six mental tests which involved problems in addition, naming opposites of given words, canceling all 'a's on a printed page and the like. With the same material he tested pairs of siblings, that is, ordinary non-twin brothers and sisters. A striking similarity showed up between the test scores of the twin pairs as compared to scores of the sibling pairs. Twin scores were two or three times more similar than were sibling scores. Heredity dominated in determining the abilities tested, since the environments of twins and siblings were the same.

Newman, *et al.* reported a number of comparisons on 50 pairs of identical twins reared together, 50 pairs of fraternal twins reared together, and 19 pairs of identical twins reared apart. Correlations of height, weight and Binet IQ for fraternal twins ranged from 0.63 to 0.64 and for identical twins reared together from 0.88 to 0.93; for identical twins reared apart the correlations were 0.77 for IQ, 0.89 for weight, and 0.97 for height. The identicals were more alike whether reared together or apart than were the fraternals. The trait

correlations between monozygotic twins reared together and apart and dizygotic twins are given in Table 3.

Table 3 : Trait correlations between monozygotic twins reared together and apart, and dizygotic twins

Trait	*Mz twins reared together*	*Mz twins reared apart*	*Dz twins*
Height	0.94	0.82	0.44
Weight	0.81	0.37	0.56
Intelligence	0.76	0.77	0.51
Extraversion	0.42	0.61	0.17
Neuroticism	0.38	0.53	0.11

In addition to the data shown in the table, Newman, *et al.* report other characteristics in which there was much greater consistency and similarity for the identicals than for the fraternals. Some of these characteristics were :

1. Physiology, blood pressure and heart rate;
2. Onset of menarche (first menstruation);
3. Longevity;
4. Capacity for and response to psychomotor activity, for example, sit-ups and jumping;
5. Pathological conditions: club foot, measles, diabetes, tuberculosis.

A later evaluation of these and other evidence from similar studies showed that the differences between identical twins reared apart were related to the quality of environment.

Studies of Foster Children

A study of foster parents captured the interest of Barbara S. Burks, a psychologist at Standford University, USA. Does the intelligence of adopted children tend to resemble that of the foster parents or does it carry on as a heritage from the true parents ? Burks took 21 cases of children placed in good foster homes at an average age of three months, and compared them with 105 children living with their own parents. Results of intelligence tests given when the youngsters were 5 to 11 years old, showed that adopted children resembled only slightly their foster parents. On the other hand, children reared in their own homes showed noticeable similarity to their parents. From these findings Burks ventured to conclude that heredity is four or five times as important as environment in determining how individuals differ on intelligence tests.

Freeman and two associates at the University of Chicago studied, "How much can a foster home change the intelligence of an adopted child?". They found that children given tests both before and after adoption, showed an average increase of 7-5 IQ points after four.

Environment and Personality

Environment affects a child's personality in major ways. A child absorbs a lot from his parents, home surroundings, school friends and the neighbourhood. What aspects of personality are influenced precisely by these ? Social service records show that many traits which are important to personal adjustment, may be changed radically by a change in environment. Carl Rogers of Ohio State University in USA, summarizes the effects of foster homes. More than 80 per cent of children who had personality and behaviour problems like bed wetting, masturbation, lying and insecurity made good adjustments in foster homes. Influenced by the new environment, their personalities improved. Where a child had some heredity defect like mental deficiency, or an organic injury like a brain lesion, chances of success in a foster home declined further. The younger children placed in better homes gained about 10 points. Freemen tested also the intelligence of siblings separated and living in foster homes (different ones) for more than five years. The separated brothers and sisters resembled each other, far less than true brothers and sisters who grow up together. Again he found that where environment differed widely, a greater gap between the IQ's appeared. To complete the picture, un-

related children living in the same home were shown to resemble each other in IQ somewhat more than related children in different homes.

Burks showed that, heredity more than environment caused differences between children's I.Q. Freeman demonstrated that a good foster home could raise a child's I.Q. appreciably. These findings though differing in their emphasis, are not in real disagreement. Burks does not deny that environment can modify intelligence, nor does Freeman dispense with heredity.

"The potency of environment is not merely so great as commonly supposed. . . . A child's abilities are determined by his ancestors, and all that environment can do is to give the opportunity for the development of his potentialities. It cannot create new powers or additional abilities" (Pintner, 1920).

"Give me a dozen healthy infants, well-formed and my own specific world to bring them up in, and I will guarantee to take anyone at random and train him to become any type of specialist I might select—doctor, lawyer, artist, merchant—chief and yes, even beggar, and thief—regardless of his talents, penchants, tendencies, abilities, vocations and race of his ancestors" (Watson, 1925). Thus there is diversity of opinions with regard to the relationship between heredity and environment.

Research findings of the last two decades do not confirm either the extremely hereditarian or the extremely environmentalist positions. Heredity and environment appear to be the co-acting influences; both are essential to achievement. The colour of a child's hair and eyes, his physique, strength are primarily inherited, while his 'mother tongue' depends upon the locality in which he was born and reared up, and hence is environmentally determined. Even here, the distinction is not clear-cut. Eye and hair colour, height, weight and strength are influenced by climate, diet and disease. Spoken language of any kind is impossible, unless one possesses the inborn structures of the throat and vocal cords. In neither case, therefore, heredity and environment can be exclusively responsible. Every human being is born with certain muscular and skeletal structures as well as with a repositary of movements which are inherited. This native equipment could be of little value, unless it is shaped and moulded by learning and experience. In any given act, whether it consists of spelling a word, throwing a bail, building a bridge or writing, both the native constitution and environmental influences play a significant part.

Heredity provides the raw material from which a person is made. How the material is moulded, and what he becomes depend chiefly on environment. Good materials placed in good hands result in a fine finished product. Poor material, no matter how carefully fashioned can never become a first-rate product. To ask, therefore, whether heredity or environment is more important becomes meaningless. However, it is logical to inquire whether observed differences in behaviour between A and B, depend more upon differences in hereditary background than upon differences in environment. The answer to this question is not precise. However, enough scientific knowledge has been accumulated, to make possible an 'educational guess' as to the relative contribution of nature and nurture, in a number of physical traits, mental abilities and personality characteristics.

References

Baller, W.R., Charles, D.C., *The Psychology of Human Growth and Development*. London : Holt, Rinehart & Winston, Inc., 1968,

Devadas, R.P., *Text Book of Home Science*, New Delhi: Directorate of Extension, 1968,

Garrett, G., *General Psychology*. New York : American Book Company, 1955,

Garrett, H.E., *General Psychology*, New Delhi: Eurasia Publishing House (Pvt) Ltd, 1975,

Illingsworth, R.S., *The Development of the Infant and the Young Child: Normal and Abnormal*. New York: Churchill Livingstone, 1975,

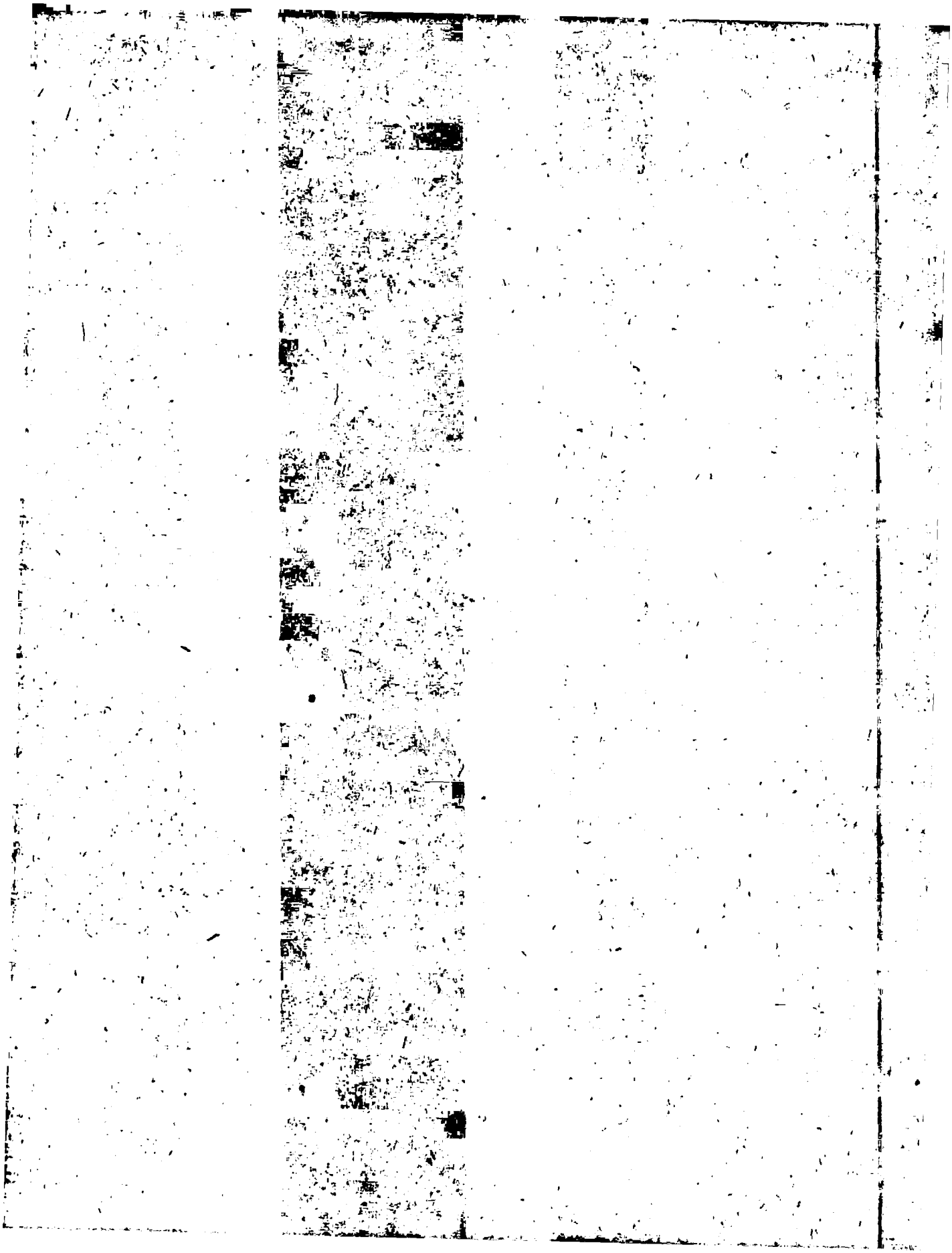
Kendler, H.H., Kendler, S.T., *Basic Psychology*. New York: Appleton-Century Crofts, 1971.

Wennedy, W.A., *Child Psychology*. New Jersey: Englewood Cliffs, 1971,

Kundu, C.L., Tutto, D.N., *Educational Psychology*. New Delhi : Sterling Publishers, 1971,

Munsinger, H., *Fundamentals of Child Development*, America: Holt, Rinehart, Winston Inc., 1971,

Sargent, S., *Basic Teachings of the Great Psychologists*, New York: Barnes and Noble, Inc., 1958,



VOLUME II

CHAPTER 1

Meaning and Importance of the Different Stages in Life

Each child's growth pattern is unique and special : no two children ever develop at the same rate. Nevertheless, there is an orderly sequence in the course of human life. A stage is a period during which certain changes occur (Smart and Smart, 1971). Every stage is built upon the foundation of the development of the previous stages. Each stage is designated according to the child's activities during that period. Irrespective of racial or cultural differences of the human growth process follows a general deveplomental pattern of different stages in which certain distinct period can be marked off. The stages which serve as a framework to study the growing child have been described in different ways by different psychologists, each influenced by his own theory. The successive eight stages as outlined by Smart and Smart (1971) are presented in Table 1—Prenatal, infancy, early childhood, childhood proper, pre-adolescence (early and later), adulthood and senescence. A study of the first four stages is within the purview of the area of Child Development.

Stages of Growth and Development

Table 1 : Stages of growth and development as interpreted by Smart and Smart

Stage	*Approximate age*	*Salient features*
A. PRENATAL	In the uterus :	Organogenesis—Development of living organs
Zygote	0 days - 14 days	
Embryo	14 days - 2 months	
Foetus	2 months - birth	
B. INFANCY	Birth - four weeks	Adjustment to extra uterine physical growth
Neonate	(0-30 days)	
Infancy	1 month - 2 years, 11 months	The develpoment of 'sense of trust'
C. EARLY CHILDHOOD	3 - 5 years, 11 months	Rapid physical and psychological development. The development of self-concept
D. CHILDHOOD	6 - 9 years, 11 months	Primary school years— Formal learning
E. PRE-ADOLESCENCE	10-12 years, 11 months	Middle or higher elementary school years Industry and initiative

Stage	*Approximate age*	*Salient features*
F. ADOLESCENCE	13-20 years, 11 months	Increased physical growth Self-identity
G. ADULTHOOD	21-55 years, 11 months	Self-responsibility; establishment, maintenance
H. SENESCENCE (Old age)	56 onwards	Decline, retirement

A. The Prenatal Period—The Beginning of Life

A human being begins his life from the moment of fertilization which occurs in the middle of a menstrual cycle of the mother, when the father's sperm cell penetrates the maternal egg cell, the ovum. The newly formed cell, the zygote, remains single for a very brief period, perhaps for about 24 hours. Thereafter, cell production begins and progresses rapidly. Within two weeks, the *cell mass* is attached to the uterine wall. At this stage, the cell mass is designated as *embryo*. Between this period and 40 weeks primitive forms of the bodily organs appear and continue to develop. At the end of two months, this new 'individual-in-the-making' is known as 'foetus' until the time of birth. In order to prepare the new life to meet the rigours of existence outside the protective walls of the uterus, more development is needed. That is why, the foetus has to be about nine months old, before the new human being is ready to be born.

B. Infancy

Infancy involves two stages: (1) The neonatal stage and (2) Infancy.

1. *The Neonatal Stage*

From the time of delivery to a short period of 10-30 days the new born is termed *neonate*. This is a transitional stage from the foetal to the post-natal functioning. During this brief interval great changes and adaptations take place in the new human being. He makes tremendous adjustments to a new way of life which requires the performance of bodily functions like breathing, digestion of food, excretion of waste and the like.

2. *Infancy*

By the time the baby's physiological processes become operative and fairly well-adjusted, he is referred to as an *infant*. During infancy, which is roughly from the age of one month to the beginning of the third year, the child undergoes physical growth at a rate greater than he will ever experience subsequently. However, that growth is less striking and dramatic than that of the prenatal period. In the latter part of this stage of infancy, that is, during his second year, he is able to move about on his own. At this stage when he 'runs about' he is known as a *toddler*.

C. The Period of Early Childhood

The early childhood years, approximately two to five years of age, represent a remarkable period of physical and psychological development. While it is true that personality development begins during infancy, it is during these years of early childhood that one sees the uniqueness of the individual emerging in complex ways. He acquires the ability to communicate with others—and to be communicated with—through the use of words, which are symbols to represent ideas. As he can move about freely, he is better able to explore the world around him. As his ability to communicate grows and he becomes intelligent enough to use his memory power he relates in more significant ways to others—to members of his

family and to those outside the immediate family circle with whom he comes in contact.

D. The Period of Childhood Proper—The Primary School Years

The stage of childhood starts from the sixth year and goes on till the tenth year. During this stage, physical growth continues, but at a slower pace. The child's intellectual and emotional development is rapid and very complex as he moves from the sheltered, intimate world of his home to the larger environment of the school and community. He begins to acquire the basic skills of formal learning and develops certain social abilities as his relations with non-family 'others', including peers, teachers, older children and adults expand.

E. The Period of Pre-adolescence—The Middle School Years

Pre-adolescence is the period from the tenth to the twelfth or fourteenth year. During the greater part of this period, the child's physical growth continues, but at a still slower pace until it shows a sudden spurt as the child approaches adolescence. These years are only tentative points on the growth spiral, since at the end of this stage, there are great time differences among children in the onset of puberty. During this period school tasks contribute to the intellectual development. Social and emotional growth are marked, as the child finds satisfactions of his social needs in his peer groups and learns to participate in group activities.

F. The Period of Adolescence

Adolescence can be divided into two stages: early and late adolescence stage.

1. *Early Adolescence*

The onset of early adolescence is the most dramatic of all stages. The changes of puberty marked by maturation of the sexual organs appear in a striking manner. However, there are differences among individuals in the changes which mark the beginning of adolescence. The average age is 13 years for girls and 14 for boys. During the first years of this stage, physical growth is rapid in both boys and girls, Intellectual development is marked by the increase in ability to do abstract thinking. There is enhanced mental activity in general. Emotional stress is great as the individual accepts his new role in the society. Cultural practices, constraints and expectations exert great influence at this stage.

2. *Later Adolescence*

Later adolescence is generally the years from 16-17 years to the beginning of adulthood. It is characterized by a tapering off of physical growth. But the individual's psychological development continues in many and complex ways, as he faces the need to make decisions and choices, and the imminent necessity of adjusting to the demands of society as an adult.

G. The Period of Adulthood

An individual assumes adulthood at the age of 21. By this time, the physical changes accompanying adolescence are fairly complete for a majority of persons. However, psychological adjustments continue throughout the entire stage, but are perhaps more crucial in the 20's as the individual chooses career, life's partner, establishes his family and becomes a productive and useful member of his economic and social world. His personality and achievements are determined to a considerable extent by the kinds of experiences he has had during his earlier formative years.

H. Senescence

Of all the stages of development, senescence is the one for which it is difficult to set a beginning age. Some men and women manifest the signs which are associated with old age in their 50's or earlier and some in their 60's. Others are

psychologically alert even beyond the 70's. Similar to early childhood, these ageing years demand a higher degree of emotional adjustment. Deprived of the emotional support of daily occupation, and of the confidence engendered by the feeling of being needed by one's family, old age can prove a most difficult time for some persons. The increasing efforts to help people adapt to declining physical power, changing emotional satisfaction and necessary social adjustments have given rise to new fields of study in the areas of social psychology and medicine.

Besides the general pattern of the life cycle explained here, based on the study of Smart and Smart (1971) other writers have presented some different patterns. Among these, those interpreted by Havighurst, Erikson, Freud, Buhler and Manu are of interest and application.

Erkison's Stages of Psycho-Social Development

Erikson classifies the stages according to activities involving the whole personality. Each of these represents a crisis to be overcome and 'fought through' successfully, if the next developmental stage is to be reached. The stages put forward by Erikson are—infancy, early ehildhood, play age, school age, adolescence, young adulthood, adulthood and senescence.

According to Erikson, 'In each crisis, under favourable conditions, the positive is likely to outbalance the negative, and each re-integration builds strength for the next crisis'.

These Eriksonian psychosocial stages offer to those interested in children and youth, valuable material in understanding the importance of various stages in life thus assisting them in their study of the development from infancy to maturity.

A. INFANCY—TRUST V. MISTRUST

Infancy is the stage which deals from conception to about two years of age. During infancy, the first stage of personality growth gets almost completed; development of the sense of trust is crucial and resolutions of the problems form the basis for building the personality of the infant. The intellectual growth of the infant comprises sensory motor period of intelligence, during which he learns to control his movements in space and establishes the idea that objects are permanent. He comes to realise that he is an object in space and an object among objects. These achievements contribute to his sense of trust, and he learns to expect certain regularities in the world, and that he can count on himself to accomplish certain actions.

The period from 18 months to two years, when the child is in the *toddler* stage, is a transitional period in intellect and personality. Intellectually, the toddler enjoys the new ability to represent actions and objects to himself through the use of mental images. He demonstrates that he can do so when he pretends and imitates. The growth of the sense of autonomy is facilitated by these new mental abilities, through which he begins to know himself as a person—among—persons. Growing physical powers and motor co-ordinations also contribute to his feeling of being an individual who can make decisions and who can succeed. His testing grounds and working material include both objects and people. Through interactions with them, he develops in one direction or another.

A basic sense of trust in others and in self is the cornerstone of healthy personality. Acquisition of this sense is facilitated by the *tender loving care* (T.L.C.) of the mother. The interchanges between the infant and the mother or mother-substitute should satisfy the infant's needs. If the child is deprived of contacts with the mother as he progresses through infancy, he will fail to develop the basic sense of trust and will lack the feeling of security and acceptance which are necessary for his ongoing psychological growth throughout life.

B. Early Childhood—Autonomy v. Shame and Doubt

The early childhood years are significant for both personality and intellectual growth. As the child's musculature and psychomotor skills increase, he finds himself able to hold on and to let go of his own volition. He thus experiences an intoxicating ability to express his own will. Helped to grow in his capacity to choose without being too severely punished for mistakes, he will emerge from this stage with some confidence. If this crucial stage is mishandled by the adults who are significant in his life, he will emerge with a sense of doubt in his own 'goodness' and a distrust of his ability to make good choices. With the problems of developing a sense of autonomy fairly underway by the age of $3\frac{1}{2}$ years, the pre-school child comes to grips with the development of a sense of initiative and imagination.

C. Play Age—Initiative v. Guilt

The child of three to five years of age, still in the pre-school years, with his growing mobility, increased ability to communicate with others, curiosity which leads him to explore and take initiative finds whole new vistas open to him as he strikes out on his own. If the satisfactions he derives in this exploratory period are shadowed by feelings of anxiety, as a result of displeasure and disapproval of the adults significant in his life, his initiative may be stifled, and he may carry with him feelings of anxiety and guilt which interfere with optimum functioning as he approaches the next stage, the school age.

At the preschool stage, personality develops through starting new activities, getting new ideas and through exploration of places, people, language, objects and materials. Repeated experience are necessary, too, since only through repeated encounters with classes of objectives can he draw abstractions.

D. School Age—Industry v. Inferiority

As the child reaches the school age, he is quite different from the pre-school child in body, mind and personality. He has slow physical growth, well developed motor coordinations and relatively few illnesses. He is now a person who wants to learn to do and make. During this stage of rapid progress in intellectual and social development, it is necessary that he experiences atleast a modicum of success and some recognition of his achievement to develop an adequate and healthy self concept. If during this crucial period he is denied the opportunity to taste the satisfaction that comes with learning and doing, the resulting negative effects on the self will be deep-seated and long-lasting. Attainment of success, on the other hand, will encourage him to venture and try further. In that process he will acquire habits of industry and positive attitudes towards work for the future.

At this stage the child is ready to give up much of the play which constituted his pre-school business in order to learn the rules of his society and the fundamentals of being a pupil and productive member. Personality growth requires the development of a sense of industry. He accepts a great deal of repetitive practice even enjoying doing the same thing over and over again. He strives to learn reading, writing and arithmetic. He spends much of his free time in practising motor skills and learning the rules of social and intellectual games.

The school age is a phase of intellectual development and concrete operations. It is marked by faster, more flexible and more accurate thinking. Instead of being limited by his own points of view, the school child can inquire and imagine himself into the places of other people which he does in much of his social interaction. His broader store of experience and his previous achievements with concepts, supplement his emerging ability to consider several aspects of the situation before coming to a conclusion. Satisfactory personality development results from interactions in which

his physical and mental powers develop, in which he does learn the skills and rules which other children of his age are learning and in which he gets the idea that he has performed satisfactorily. Since his field of interactions broaden beyond the family, people outside the family become increasingly important in contributing to his success or failure and to a sense of industry or a sense of inferiority.

E. ADOLESCENCE—IDENTITY V. IDENTITY DIFFUSION

The chronological age-limits of adolescence are very vague. When an individual leaves childhood and begins the adolescent years which culminate in adulthood, he suffers a temporary sort of indentity diffusion which gets resolved as he gradually finds himself. Thus the dominant personality problem at this stage is to develop a sense of identity. The adolescent is faced with the problem of becoming a new, grown-up person who knows who he is, what he wants to become, what he could be and where he is going. The individual undergoes radical physiological changes and must get used to them. He also undergoes an expanding intellectual development and meets new and different social demands. He finds the emergence of new emotions which are hard to deal with. Intellectual advances help make logical thought possible. Consequently, he has to work out a new identity in each area of his life, in study and work, with relatives in family and friends outside, and in religion or what represents his relationship to reality. If he fails to achieve the new identity, he may continue into adulthood as a perpetual adolescent without goals or commitment. This achieving of identity is thus the central concern both for the adolescent and those who deal with him during these critical years.

F. YOUNG ADULTHOOD—INTIMACY V. ISOLATION

Towards the end of adolescence, when the sense of identity is quite well established, young adulthood marks another stage of personality development with a sense of intimacy. As he continues to build a sense of identity, the individual is able to establish friendship and love with others without feeling insecure or threatened. This stronger and deeper kind of relationship is perhaps the greatest of the many satisfactions that characterize early adulthood. If the individual fails to relate to others in this type of 'self-other' relationship, he will develop a sense of isolation and separation which will prevent his achieving adequate self-realization, for he cannot grow into maturity in a self-confined, self-bound vacuum.

G. ADULTHOOD—GENERATIVITY V. SELF-ABSORPTION

By generativity, Erikson means, interest in guiding and assisting the young of the coming generations. Some reach this stage through parenthood; others through work with youth or through practice of their own occupations, or through recreational activities. Failure to achieve generativity spells a self-centredness and emotional impoverishment which, as in earlier psycho-social failures, interferes with the individual.

H. SENESCENCE—INTEGRITY V. DISGUST

If an individual has successfully achieved the earlier stages of development and accomplished the tasks of intimacy and generativity, as he goes through life, he is able to approach later years with a sense of acceptance. He achieves integrity in life and has desirable acceptance of the gradual cessation of activities in his declining years.

Havighurst's Developmental Tasks

Havighurst (1953) conceives the evolving personality as confronted by *developmental tasks* in its progresss toward maturity. By 'develop-

mental tasks', Havighurst means certain problems which arise during a particular period in life. Successful handling of these problems leads to satisfaction and success with later tasks; failure leads to dissatisfaction in the individual, societal disapproval, and difficulties with subsequent tasks. The 'developmental task' concept, like Erikson's 'stages', helps the student of Child Development to know what to look for and how to understand the child's behaviour. Havighurst has prescribed developmental tasks for the following stages of development infancy and early childhood, middle childhood, adolescence, early adulthood, middle adulthood and later maturity.

A. Infancy and Early Childhood

The developmental tasks of these periods are enumerated in terms of the following broad units:

1 Learning to walk
2 Learning to take solid foods
3 Learning to talk
4 Learning to control elimination of body wastes
5 Learning sex differences and sexual modesty
6 Achieving physiological homeostas is
7 Forming simple concepts of social and physical reality
8 Learning to relate self emotionally to parents, siblings and others and
9 Learning to distinguish right from wrong, and developing a conscience.

B. Middle Childhood

During the years of middle childhood, as the child meets the world, he is moved by what Havighurst terms, three outward pushes:

1 The social thrust from the home to the peer-group environment,
2 The physical thrust into a world of games and of work demanding neuro-muscular skills, for example, handwriting, and
3 The intellectual thrust into the world of adult ideas, symbolism and communication.

Out of these pushes emerge the developmental tasks of middle childhood which are:

1 Learning physical skills necessary for ordinary games;
2 Building wholesome attitudes toward oneself as a growing organism;
3 Learning to get along with age-mates;
4 Learning an appropriate masculine or feminine role;
5 Developing the basic skills of reading, writing and arithmetic;
6 Developing concepts necessary for daily living as tools of thought;
7 Developing conscience, a sense of morality, and of values;
8 Achieving personal independence, developing the ability to choose; and
9 Developing attitudes toward social groups and institutions.

C. Adolescence

Havighurst classifies the tasks of adolescence in terms of peer influence, movement toward independence and autonomy and the attainment of an ethical code and system of positive values. The first two tasks are associated with peer relationships, the next six with the thrust towards independence and self-responsibility and the last two toward achieving the traits that characterise the good man and the good citizen. These important developmental tasks in adolescence are:

1 Achieving new and more mature relations with age-mates of both sexes;
2 Accepting and achieving a masculine or feminine social role;
3 Accepting one's physique and using the body effectively;
4 Achieving emotional independence;
5 Achieving assurance of economic independence through actual work experience or through educational planning for such independence;

6 Selecting and preparing for an occupation;
7 Preparing for marriage and family life;
8 Developing skills necessary for civic competence;
9 Acquiring a set of values and on ethical system as basis of behaviour; and
10 Desiring and achieving socially responsible behaviour.

D. Early Adulthood

The developmental tasks of early adulthood include:

1 Selecting a mate
2 Learning to live with a marriage partner
3 Starting a family
4 Rearing children
5 Managing a home
6 Getting started in an occupation
7 Assuming civic responsibilities, and
8 Finding a congenial social group

E. Middle Adulthood

As life progresses, middle aged people find themselves fulfilling different roles and functions. In family life, the developmental tasks become reciprocal, the members interacting with one another in achieving them. The tasks include:

1 Achieving civic and social responsibility as natural leaders and members in the civic life of the community.
2 Establishing and maintaining an economic standard of living.
3 Assisting teenage children as the latter move toward independence to become responsible and happy adults by serving as models.
4 Developing adult leisure-time activities.
5 Relating to one's spouse as a person, as the children grow and require less time and attention.
6 Accepting and adjusting to the physiological changes of middle age, and
7 Adjusting to ageing parents, making old age satisfactory for them, and at the same time promoting self-satisfaction.

F. Later Maturity

According to Havighurst, man learns his way through life, and hence he continues to learn tasks in old age also. As opposed to the pushing and looking-forward-to types of the earlier age the developmental tasks of later maturity are of a defensive or holding nature. These learnings which confront the individual in later maturity are:

1 Adjusting to decreasing physical health and strength
2 Adjusting to retirement and reduced income
3 Adjusting to the loss of a spouse by death
4 Establishing affiliation with one's own age group
5 Meeting social and civic obligations and
6 Establishing satisfactory living arrangements

These six developmental tasks categorised by Havighurst have many educational implications in that they make an individual aware of the many problems which confront children and youth in their advance toward maturity.

Buhler's Analysis of Life Stages

Buhler (1933) approaches human development in terms of the problems and activities characteristic of each of the five periods she has delineated as growth, exploration, establishment, maintenance, and decline.

A. Growth

Beginning with conception and continuing until the age of 14 years, this stage is characterized by rapid physical, emotional and mental development. These years are marked by the emerging self-concept as foundation for further development.

B. EXPLORATION

The next stage, 'exploration' extends to about 24 years of age. It corresponds roughly with adolescence and early adulthood, with all the characteristics of those years; it is marked by tentative trials by the individual—trial of his own potential and that of the world around him.

C. ESTABLISHMENT

The third period, 'establishment' extends for about 20 years from 24 years of age. During this period, the individual undertakes adult responsibilities, establishing a career, a way of life, a home and a family.

D. MAINTENANCE

The period, 'maintenance' varies considerably in length from person to person and may extend to the 70th to 75th year, although for some individuals it terminates in the 50's. As a rule this is the period of consolidation and enjoyment of past achievements, rather than one marked by new ventures.

E. DECLINE

In this final stage, 'decline' a gradual lessening of physical and mental abilities becomes evident. It is a period of tremendous adjustments for the individual.

The Classical Psychoanalytical Stages as Enunciated by Freud

Freud emphasizes three early stages of development associated with the processes of feeding, excretion and reproduction. Basic to his psychoanalytical theory is the dominant influence of these three experiences in the development of personality.

The first stage which is the 'oral' comprises the first year of life. It is followed, in turn, by the 'anal', and the 'phallic' stages from one to two or three years. During his early years, the child derives sensuous pleasure from the sucking experiences and is therefore pre-occupied with the stimulation of the membranes of the mouth (oral), the anus and urethra (anal) and of the genital area (phallic). Disturbance to, or prevention of the satisfaction of these tendencies, will lead to emotional frustrations, which will be expressed in later years as various defects in personality. The three early stages are followed by the latency period from five years of age to pre-puberty, the pre-pubertal stage, the adolescent stage (13 to 20 years of age) and the adult stage.

Manu's Stages

The Manu Dharma Sastra of ancient India provides for four stages, as living in four different social settings—bachelorhood, family life, detachment and ultimate renunciation.

Manu gives a detailed account of each of these four stages of life in terms of the individual's participation in the corresponding social institutions. He shows, how in each stage by means of certain social controls operating in the setting, well-ordered progress is ensured for both the individual and the group. At each of these four stages of life, an individual must be given opportunities and scope for exercising his inborn faculties, Each stage is a preparation for the succeeding stage.

BRAHMACHARYA

The first stage is in the educational setting. It is here the process of assimilation begins for the child. The first quarter of the individual's life is devoted to education. He is psychologically flexible. Advantage should be taken of the elasticity of his early nature. Training and equipping of the intellect is the dominant aspect of this stage. One generation can transmit its heritage to the succeeding generation through teaching.

GRAHASTHA

After completing edudation, the young student attains manhood, and enters the second stage of his life, that of the house-holder. However, education of a human being does not end with the formal instruction obtained in a school. It continues throughout life. He puts into practice in the everyday activity of his life, what he has learnt as a student. Desire, enjoyment within socially-accepted limits, is the basis of this setting. The individual has now become a full-fledged member of the society. He satisfies the drives for sex, progeny and property during this stage, but always with the vision of the higher goals and tasks.

VANAPRASTHA

This is the third stage of life, when the individual should retire from the dust and storm of activity motivated by sensual pleasure. There should be greater activity but without self-aggrandisement. This is essentially a stage of human consciousness. The individual may continue to life with the family, but his attachments must cease, the bonds of relationships to persons and property must be sublimated. The mind must change in the direction from a life of pleasure and enjoyment to that of dignified, quiet seclusion, repose and meditation, which is also a form of intense activity.

SANYASA

During this last stage of life, the individual devotes himself entirely to spiritual pursuits and prepares for his return or homeward journey to the eternal bliss. He has lived his life with a sense of duty and discipline and has contributed his mite to the welfare of his group. He must continue that effort, but now in a different direction. His attainment of self-knowledge, his conscious entry into the world of the spirit is of infinitely greater value to the group than any other contribution such as wealth, time and services. Man must make a provision for such withdrawal in his scheme of social life or else the surfeit of things can smother his very being and create mental and moral chaos.

Summary

The framework within which the growth of the child takes place, from the prenatal period to senescence has been discussed in this chapter. The successive stages include; the prenatal stage, infancy, early childhood, childhood, pre-adolescence, adolescence, adulthood and senescence. The period of infancy covers the first two years of life, including babyhood and the stage of the toddler. Early childhood includes the pre-school years and childhood covers roughly the primary school years. Pre-adolescence is the period of transition of the child, from childhood to the onset of puberty. Adolescence is the longest of these stages, commencing with the occurrence of puberty and continuing until physiological maturity is attained.

Erikson describes the different stages in terms of psychosocial development. In his description, each stage represents a critical period with its concomitant learnings and attitudes. Havighurst speaks of the stages in terms of developmental tasks which are learnings that must be successively acquired and achieved if the individual is to attain self-satisfaction, and make a successful contribution to the society. Buhler gives yet another analysis in terms of five developmental periods. Freud develops the psychoanalytical approach for the various stages—oral, anal, phallic and latency. Manu describes four stages in terms of the different settings of the individuals life.

The characteristics of each stage in life, as expounded by the different psychologists reveal the meaning and importance of the particular stage. Each stage of personality development can be conceived as a balloon whieh swells at the particular age-level wherein its characteristics and potentials are most dominant.

References

Buhler, C. *The First Year of Life.* New York: Day, 1933

Erikson, E. 'Youth and the Life Cycle'. In *The Self in Growth, Teaching and Learning* by Hemachak D., New York: Prentice Hall, 1965

Havighurst, R.J. *Human Development and Education.* New York: Longmans, 1953

Pollard, M.B, Geoghegan, Barbara. *The Growing Child in Contemporary Society.* USA: The Bruce Publishing Co., 1969.

Smart, M.S., Smart, R.C. *Children—Development and Relationships.* London: The Macmillian Co. 1971.

Stegilitz, E.J., *Geriatric Medicine.* Philadelphia: J.B. Lippincott Co. 1954.

Wood, E. *Manu Dharma Sastra.* Madras: Ganesh Co., 1958.

CHAPTER 2

Growth and Development of Children

The terms, '*growth*' and '*development*' have different meanings, but are often used synonymously, to mean increased amount or complexity or both (Smart and Smart, 1967). Growth generally refers to the physical aspect. It is quantitative, indicating changes in the size, shape and proportions of the parts of the body such as the structure of the internal organs. Development, on the other hand, includes processes like maturation and learning which are qualitative by nature. The totality of these changes is known as 'development' which is the emergence and expansion of the capacities of the individual. It is a 'progressive series of orderly, coherent changes leading towards the goal of maturity' (Hurlock, 1964). 'Progressive' signifies that the changes are directional and that they lead forward rather than backward. The terms 'orderly' and 'coherent' suggest that there is a definite relationship between a given stage and the stages which have preceded or followed it.

The general pattern of growth and development varies from person to person. The rate and extent of development among the various phases of the personality also differ. The tide of development deepens with age. In a relative sense, it slows down also. As age increases, it takes a longer lapse of time to attain a proportionate degree of maturity. Fitzgerald and Mc Kinney (1970) advise that the concept of 'development' should be used to name those changes in behaviour that normally occur with an increase in the chronological age of the child.

The fundamental purpose of studying the development of many children is to discover the normal pattern of a normal child and to determine, when deviations occur, and the factors responsible for such deviations. A knowledge of developmental pattern enables the parents and teachers to know what to expect of a child, when to expect it and at what ages different patterns of behaviour mature. If too much is expected of a child, he is likely to develop feelings of inadequacy. Equally serious is that situation when he builds up resentments towards those who under-estimate his capacity.

Knowledge of the developmental operations helps to set up standards of 'norms' in the form of height-weight scales, age-weight scales, and social or emotional development scales. These standards should represent what can be expected from the average healthy child. Based on the norms, children could be guided along channels most approprirte for the age. For example, when a baby is ready to walk he must be given opportunities to practise walking in a safe place so that his falls will not harm him. In addition, he must be given encouragement to try as often as necessary. When the developmental pattern is known, the child could be prepared for what will be expected of him in a new experience, for example, when he goes to the primary school.

Principles of Development

The principles of development common in all children are:

1 Development occurs at different rates for different parts of the body;
2 Behaviour patterns of children change with maturity;
3 Development progresses from the head downwards. For instance, skin sensitivity comes in the uppermost part of the body before it appears in the lower;
4 Development proceeds from general to specific responses. For example, at first an infant shows his happiness by total bodily expression. When be grows older, he expresses the same response with a smile;
5 As the child grows, his expressional behaviour becomes more refined. At 17 months, the child may throw a temper tantrum when another child takes his toys. When he is four years old, he will probably call the other child and give him his toys;
6 Each development stage has certain characteristic traits;
7 Every child normally passes through each of the several major stages of development;
8 Most traits are correlated in development; The child whose intellectual development is above average is generally above average in health, size, sociability and special attitudes;
9 The child develops as a unified whole. His intellect is related to his physical well-being; his physical health is affected by his emotions. His emotions are influenced by successes or failures in school;
10 Both the rate and pattern of the growth of the child can be modified by forces within and without the body;
11 Child growth is a continuous process. It is both quantitative and qualitative. A child's digestive tract is an illustration of this principle. Growth in size permits a larger intake at a single feeding. Changes in structure permit the digestion of more complex foods and increase the efficiency of converting foods into simpler forms which the body can use;
12 Child growth follows an orderly sequence. The learning pattern of a large majority of children develops, for example, in a fixed order. A child learns to stand before he walks and he passes through the babble stage of syllables in language before he speaks clearly;
13 There are periods of accelerated growth and periods of decelerated growth. During infancy and the early pre-school years, growth is rapid. A child's physical health is affected by his emotions. Emotions are, in turn, influenced by success or failure in school and the maturity indications of each of the various aspects of growth appear in swift succession. During the school years the growth-rate decreases although significant changes are taking place; and
14 Growth patterns are not uniform in children.

Factors that Influence Development

Physical growth depends upon heredity and environmental factors such as sunlight, fresh air, food, climate conditions and freedom from infections. Development is not due to one factor, but many factors such as intelligence, sex, glandular secretion, nutrition, injuries and diseases and position in the family. Each of these is related to the other.

Intelligence

Of all factors which influence the development of the child, intelligence seems to be the most important. High-grade intelligence is associated with a speeding up of development, while low-grade intelligence is associated with ratardation. The age when a child first walks and talks has been carefully studied in relation to the child's intelligence. It has been found by Terman (1926) that in the case of walking, very light

children walk first at 13 months, average childern at 14 months, morons at 22 months and idiots at 30 months. In talking, the very bright children talk earlier than the average children.

Sex

Sex plays an important role in the child's physical and mental development. At birth, boys are slightly larger than girls (Harish chandra, 1971 and Chatterjee, 1974). But girls grow more rapidly and mature sooner than boys. Girls on the average mature sexually a year before boys, and at that time they are larger than boys. This is apparent at the puberty age from nine to twelve years. Girls also attain their maximum size earlier than boys (Bhoota, 1966).

Glands of Internal Secretion

Endocrinology has shown that certain glands play an important role in the physical and mental development of the child, both in the prenatal and postnatal stages of growth. The level of calcium in the blood is regulated by the parathyroid glands, located in the throa t near the thyroids. Deficiency of sercretions in these glands results in defective bone growth and hyper-excitability of the muscles. Thyroxin produced by the thyroid glands is essential for physical and mental growth. Deficiency of thyroid activity during the growth years, stunts physical and mental development. In extreme cases cretinism results.

A too active thymus gland or pineal gland (located at the base of the brain) will retard normal development and keep the child physically and mentally childish for too long. Deficiency in the activity of the sex glands delays the onset of puberty, while hyperactivity brings about precocious sexual development. Extreme cases of gonad hyperactivity are known as puberty praecox or early sexual maturity, in which the child may be sexually mature even between the third and fourth year of age.

Nutrition

Proper nutrition is essential for the healthy development of children in terms of physical and mental qualities. The nutritional status of childern reflects the nutritional status of the community. Surveys conducted in the different parts of India by the Indian Council of Medical Research indicate that protein-calorie malnutrition is widely prevalent among the poor segments of the child population throughout the country. Since there is great need for both protein and energy to meet the demands for rapid growth, dietary restriction of either protein or calories or both, as is most often the case, results in the development of protein-calorie malnutrition. Infections and infestations play a precipitating role in malnutrition. Studies conducted by the ICMR also indicate that children who had once suffered from severe protein-calorie malnutrition in their early childhood, may suffer from permanent stunting in physical and mental abilities.

Rao *et al.* (1969) assessed the nutritional status of 3115 pre-school children in the rural areas near Hyderabad city. Their results indicate that more than 40 per cent of the children examined had evidence of one or more of the signs of nutritional deficiency. The growth retardation observed in most of those children was significant. The major deficiency conditions observed in most of those childern were protein-calorie malnutrition, hypo-vitaminosis A, anaemia and deficiency of B-complex vitamins. Adequacy of food supply and proper use of available resources are important steps in combating malnutrition and its consequences.

Toxic poisons from diseases and drugs, bacterial poisons from diseased tonsils, adenoids or typhoid fever retard the child's development. Except when these conditions are very pronounced, the effect is limited almost exclusively to physical development.

Position in the Family

The position of the child within the family may influence his development more through environmental than through natural factors. The second, third or fourth child within a family generally develops more quickly than the first-born, not because of any pronounced intellectual difference, but because of the fact that the younger children learn from imitating their older brothers and sisters. On the other hand, the youngest child of the family, especially if distinctly younger that the other children, is apt to be slower in his development because he is 'babied' and given little incentive to develop his latent abilities.

Physical Defects

Physical defects, even when slight, place limitations on the child. Among the most common physical defects of children are visual and auditory impairments, orthopaedic disabilities, speech defects, harelips, cleft palates, central nervous system disorders and heart disturbances. Some of these defects are congenital. Some are the result of an illness or an accident. The developmental status of a child suffering from a physical defect is usually below that of the normal child. For example, blind children are slower in walking, feeding or dressing themselves than are children with normal vision. This may be partly because they need to substitute ear-hand for eye-hand coordinations and partly because they are hindered by parents who do these things for them.

The aim of the study of human development is to understand the qualitative and quantitative changes through out the life span and the factors influencing them. By examining human development from a life-span perspective, one can begin to understand the unique features of each period of development as well as how each period relates to the entire life process.

Refrences

Bhoota, Kamala *Your Child from 6-12.* Bombay: Vora and Co. 1966.

Chatterjee, Swapna. *'Birth Weights of Infants'*—an unpublished Master's Thesis, Madras University, 1974

Fitzgerald, H.E., Mc Kinney, J.P. *Developmental Psychology.* Illinois: The Dorsey Press, 1970

Harish Chandra. 'Birth weights of infants of different economic groups in Hyderabad'. In *Proceedings of the Nutrition Society of India.* Hyderabad: National Institute of Nutrition, No. 10, 1971.

Hurlock, E.B. *Child Development.* Fifth Edition, New Delhi: McGraw-Hill Book Company, 1972,

Kuppuswamy, B. *Child Behaviour and Development.* Delhi: Vikas Publishing House Pvt. Ltd., 1976.

Indian Council of Medical Research quoted by Gopalan, C., Vijayaraghavan. *Nutrition Atlas of India.* Hyderabad: NIN, 1971.

Rao, Prasad N., Singh Darshan, Swaminathan, M.C., 'Nutritional status of preschool children of rural communities near Hyderabad city, *Indian J. of Med. Res.*, **147**, No. 11, 1969

Smart, M.S., Smart, R.C. *Children—Development and Relationships.* London: The MacMillan Co. 1967.

Terman, L.M., *Genetics Studies of Genius. Vol. I; Mentel and Physical Traits of Gifted Children.* Stanford: Standford University Press, 1926

CHAPTER 3

Pregnancy

Pregnancy is a condition which every bride looks forward to with joy, anticipation and a certain amount of fear and anxiety. It is a compeletely new experience for both husband and wife.

Every exceptant woman should be examined by a physician and be ready to cope with the strain of child-bearing as well as any hereditary conditions that might affect the pregnancy. Even though the birds wishes to have children, there are often undisclosed fears and anxieties about pregnancy that should be discussed and cleared up as far as possible.

The attitude of husband, wife, relatives and friends towards pregnancy influence the offspring. The husband, for example, may view the child as a financial burden, a strain imposed on his mother, or a disturbance to her career. The wife, on the other hand may, have certain feelings of embarrassment about the condition of pregnancy, its effect upon her social life and marital relations with her husband. She may also feel insecure because she is partially ignorant about the condition and demands of pregnancy.

Pregnancy is the most exciting period of expectation and fulfilment in a woman's life It is a period of great anabolic activities when the most rapid rate of growth in human development takes place in the foetus at the expense of the mother. The environment in which the unborn child grows has tremendous influence on the subsequent patterns of physical and psychological growth. Hence the expectant mother should be given utmost care and remain in good health throughout pregnancy in order to provide for the optimum development of the foetus. When her health is so guarded she will not encounter any unusual difficulty during the periods of labour, puerperium and lactation.

An average pregnancy lasts 266 days, that is 280 days from the beginning of the last menstrual period. To figure out the date, take the date in the subsequent year of the last day of the last menstrual period, substract three months from it and add one week. For example, if the last period had ended on 1st July, the baby can be expected around 8th April. Less than half of the babies are born within a week of the expected time. A week or two earlier or later is common, and one should therefore be prepared for the arrival of the baby at least two weeks in advance.

The care of the expectant mother should cover the following : Medical aspects, diet, clothing, exercise, marital relations, care of the breasts and care of the teeth.

Medical Aspects

Throughout pregnancy, regular medical care is important. It gives the doctor a chance to prevent latter complications by diagnosing and treating them in time before they became serious. The doctor will do an internal

examination, taking measurements to see if the bony birth canal is large enough to permit the passage of the baby. He will test the urine, the blood for Rh factor and for certain antibodies which occasionally cause trouble in the new-born baby and for anaemia and syphilis.

DIET

Pregnancy requires special considerations in diet since the expectant mother should 'eat for two'. However, just eating more food will mean that the mother will gain more weight, since the nutritional demands of the growing foetus in the beginning are minimal. This raises the question; how much weight should a pregnant mother gain and therefore how much more should she eat ? The baby himself will account for about 3 to 3½ kilograms at the time of birth, and the weight of the placenta, 'bag of waters', and the enlarged uterus, will account for another 3 to 3½ kilogram. It is normal to gain a little more weight than this. Thus roughly 9 to 11 kilograms should be the weight-gain during the nine months of pregnancy at the rate of no more than 250 to 500 grams per week. If the pregnant mother is under-weight at the start, she must try to gain a little more; if over-weight, less.

There is a popular misconception that under-feeding the mother will keep the foetus small and make labour easy. The baby takes the nourishment he needs, even at the expense of his mother, as evidenced by the fact that pregnant women who have almost starved during war-time or famine, gave birth to normal babies.

The food that an expectant woman consumes is digested and absorbed into her blood-stream from where it is used to build the body tissues of the foetus. When proper building materials are present in the mother's blood-stream, the baby will get all that he needs for optimum growth. If the mother's food does not contain all the necessary nutrients, her blood will try to supply them to the foetus withdrawing them from her own body tissues, depleting them. This can be done only when the mother's body contains these needed substances. Recent studies show that mothers with adequate diets during pregnancy tend to have less difficulties in labour and are less likely to have premature or sickly babies.

The foetus acquires two-thirds of its total birth weight in the last three months of pregnancy, two-thirds of its calcium, four-fifths of its iron, three-fourths of its protein and over 90 per cent of its fat. It is during this period, that the serious effects of malnutrition are likely to appear in the mother if she does not eat adequately. On the other hand, the well-being of the mother, and the chance of survival and health of the child are greatly increased by good nutrition during pregnancy.

During the later half of pregnancy, the protein intake of the mother should be increased by 20 per cent over her normal requirements. She needs the extra quantity for the protein synthesis of the foetus. She needs to accumulate about 4.5 kilograms of protein to take care of losses in child birth and in preparation for lactation. While egg, milk, cheese, curds, meat, fish, and poultry are excellent sources of good quality protein, the poor cannot afford to have them, But they can derive the additional protein from wheat, rice, maize, jowar, bajra, bengal gram dhal, black gram dhal, green gram dhal, red gram dhal, groundnut and soya beans.

Pregnancy considerably increases the requirement for calcium from the sixth to ninth month, to meet the demands of the growing foetus. If the dietary supply of calcium is inadequate, the skeleton of the foetus will develop at the expense of the mineral content of the mother's bones and teeth. Such depletion and the consequent deficiency may lead to mild or latent tetany in the mother. Therefore good sources of calcium such as green leafy vegetables, milk and milk products, ragi and

dhals must be taken in abundant quantities by the expectant mother. Plenty of Vitamin D from exposure to sunlight is also necessary to ensure the maximum utilization of the calcium in the diet.

Phosphorus is as essential a dietary element as calcium. The average Indian diets ensure a good supply of phosphorus. Hence the danger of its being deficient in the Indian diet appears remote. Milk and milk products, egg, fish, mutton, liver, bajra, barley, maize, ragi, parboiled rice, whole wheat, pulses, soyabeans and groundnuts are rich in phosphorus. The need for iodine is also higher in pregnancy. It can be met by the use of iodized salts. This is particularly important in areas such as the goitre belts of the Punjab, Himachal Pradesh, Andhra Pradesh and Tamil Nadu where the soil lacks iodine.

Iron should be available in sufficient quantities in the pregnant woman's diet. Whole wheat, ragi, jaggery, green leafy vegetables, egg yolk, liver and red meat contain a lot of iron. To overcome iron deficiencies, the government of India has taken up distribution of iron to pregnant women. Salt and fluid intake should be adequate during pregnancy. Extreme salt restriction is ordinarily unnecessary, but sodium intake should be moderate, since excess might lead to fluid retention, swelling of legs indicating oedema.

The requirements for all the known vitamins, particularly those of the B-complex are increased during pregnancy.

Vitamin A is essential for normal delivery and milk production and for resistance to infection. A survey shows the incidence of maternal deaths to be more than four times in the vitamin-A deficient women than in those who have it adequately. Lack of vitamin A during gestation may cause imperfect formation of the bones and teeth of the foetus.

Vitamins of the B group are also important during pregnancy. There is indication that vitamin-B complex deficiency during the first half of pregnancy might lead to miscarriage. A deficiency of one or more of the B complex vitamins during gestation may prevent the proper use of ingested foods to supply energy, to provide body-building materials and to regulate the essential processes of the body.

Thiamine is essential for metabolism and growth. Symptoms noted in pregnancy due to the lack of this vitamin are fatigue, poor appetite, indigestion, nausea, disturbed bowel function, palpitation, shortness of breath, and headache or backache. Parboiled rice, ragi, grams, nuts, soyabeans, green leafy vegetables, milk and milk products, meat, liver, eggs and whole wheat are good sources of thiamine.

Folic acid of the B complex vitamins is best known for its curative effects in pernicious anaemias. It acts as maturing agent on the cells of the bone marrow and plays an essential role in body activities. Green leafy vegetables such as cabbage and cauliflower, yeast, grams, liver and kidney are good sources of folic acid, while whole grain cereals are fair sources.

An adequate intake of vitamin C (ascorbic acid) during pregnancy is necessary for the proper absorption of calcium and phosphorus, and for their proper utilization by the bones and other tissues. When the mother's diet is short of this vitamin, the mother's body tissues will give up what she has to the foetus, to the detriment of her own health. Amla, oranges, lemon and other citrus fruits, sprouted pulses, tomatoes, guava, papaya, cabbage, drumsticks and other green leafy vegetables supply vitamin C.

Vitamin K assumes great importance as pregnancy draws to its close, since it is the antihaemorrhagic vitamin. Haemorrhagic disease of the newborn is associated with the lack of this vitamin. Nowadays vitamin K is given to guard against this hazard during the last weeks of pregnancy or during delivery. Green leafy vegetables such as amaranth and spinach are excellent sources of vitamin K. Cereals and fruits contain small amounts of

vitamin K.

The well-being of the infant depends largely on the diet and health of its mother during pregnancy. The nourishment of the foetus makes extra demands for proteins, vitamins and minerals on the mother and consequently her intake of these must be increased.

According to the ICMR (1971) an expectant mother needs every day, the foods specified in Table 2 to meet her energy and nutrient requirements.

TABLE 2 : **Foods necessary to meet the calorie and nutrient requirements of expecting woman**

Food	*Vegetarian* (*g*)	*Non-vegetarian* (*g*)
Cereals	400	400
Pulses	70	55
Green leafy vegetables	150	150
Other vegetables	75	75
Roots and tubers	75	75
Fruits	30	30
Milk	325	225
Fats and oils	35	40
Sugar and jaggery	40	40
Meat and fish	—	30
Eggs	—	30

Using the foods listed in Table 2, a day's menu for the expecting woman can be as follows:

Early morning — Milk/Coffee
Breakfast — Idli/chappathi
Mint and coconut chutney
plantain/seasonal fruit, milk/butter milk
Midmorning — Juice of seasonal fruit
Lunch — Rice/chappathi
Beans sambar/beans-dhal
Amaranthus poriyal
Curds, seasonal fruit
Roasted Bengal gram toffee
Tea/snack — Potato bajji, milk/coffee/tea
Dinner — Ragi dosai/parotha,
Brinjal and green gram kootu/
Mixed vegetable/milk.

Clothing

A feeling of being properly clothed and well groomed imparts comfort and confidence to the expecting woman. Clothes should not only be attractive, but also be comfortable. They should not be too tight or loose to impede normal activities. Tight skirts and bodices interfere with the blood circulation and may cause varicose veins. Shoes with high heels are undesirable because they exaggerate the forward curve of the back. An uplift brassiere is good to preserve the shape of the breasts. If necessary, a maternity corset can be used from the fifth month of pregnancy to help support the abdomen and prevent backaches. Looking well and feeling comfortable throughout pregnancy would add to one's sense of well being.

Exercise

An expectant woman is not an invalid. Therefore she should carry on with her usual household work, gardening and walking without alteration. Exercise is healthy, as long as she does not overdo it and feel exhausted.

Marital Relations

Sexual intercourse is not advisable during the last six weeks of pregnancy.

Care of the Breasts

During pregnancy, the nipples should be kept clean. The secretions which appear must be wiped away. The doctor will advise if the breasts need any other special treatment. Sometimes the nipples are inverted; that is, they do not protrude beyond the breast. Such a condition makes nursing for the child almost impossible. This can be overcome by gently drawing out the nipples between thumb and forefinger, for a few minutes each day.

Care of the Teeth

The teeth are subject to decay during pregnancy. By drinking the required amount of milk which is the chief source of calcium, consuming optimum quantities of green leafy vegetables and visiting the dentist regularly during pregnancy can help to avoid some of the damage.

Minor Discomforts During Pregnancy

Many women go through pregnancy without any difficulty. Others suffer to some extent from a few minor discomforts. Nausea may occur in the early months. An empty stomach itself often leads to nausea. Therefore it is advisable to try to eat something frequently. Five or six small meals a day may be more successful than three large ones. Butter, fatty foods and foods with much residue such as cabbage, Brussels sprouts, cauliflower, spinach and onions should be avoided. Dry foods such as toasts are permitted. It is important to drink sufficient fluids. If water does not appeal, tea, gingerade or soups will be all right.

Urination may be frequent during the early and again later stages of pregnancy. In order to avoid getting up in the middle of the night beause of frequent urination, it may help to cut down on fluids after 6 p.m. Constipation may be incident at the beginning or the end of pregnancy, caused by the pressure of the uterus on the intestines. It can be controlled by eating more fruits and green leafy vegetables. Laxatives should be taken only on the advice of the doctor.

Haemorrhoids or piles are dilated blood vessels in the rectum. They result from constipation which so often accompanies pregnancy. Immediate treatment consists in applying cold compresses or inserting haemorrhoidal suppositories in the rectum.

'Heart burn' is a common occurrence during the last three months of pregnancy, when the foetus presses against the stomach and interferes with digestion. It is a pain caused by indigestion and may be accompanied by belching or regurgitation of bitter fluid from the stomach. It has nothing to do with the heart. Taking half a glass of milk half an hour before every meal may help. Sodium preparations such as soda are not advisable.

During pregnancy, a good deal of mucus is discharged from the vagina. Some women may have more discharge than the others. Sometimes they may have to wear a pad also. If the discharge varies from its normal pale, yellow colour and watery consistency, and contains fresh or old blood, the doctor must be consulted at once. A douche should not be used unless the doctor advises it.

Some pregnant women feel extremely sleepy during the first three or four months of pregnancy. That is a normal reaction and an afternoon nap will help them adjust to the dual job to be performed by their bodies and to let the drowsiness disappear.

Due to the enlarged size of the uterus during pregnancy, the circulation of blood in the legs tends to slow. Therefore varicose veins, which are enlarged veins, appear just below the surface of the legs. They are more common in subsequent pregnancies. When varicose veins appear or the feet get swollen, the feet must be rested as much as possible, by putting them up. If the trouble continues, an elastic circular bandage may be put on while still in bed in the mornings, before the veins have a chance to fill.

Leg cramps are also caused by the slower circulation of blood in the legs during the end of pregnancy. Rest, gentle massage, or a frequent, simple, change in position usually solves the problem.

Pelvic pains come from the stretching of the abdominal muscles during pregnancy. They are generally infrequent and do not last long. Comfortable clothing and foot-wear will help. Rest is the best medicine for pelvic pains.

During the last month of pregnancy, when the enlarged uterus presses against the lungs, some women suffer from shortness of breath. If this is troublesome, the expecting woman must lie down with her shoulders and head on a raised pillow.

Danger Signals

An expectant woman needs to be alert to the following danger signals and consult her doctor immediately, if she experiences any of the following symptoms:

1 Spotting or bleeding from the vagina
2 Severe pelvic pain or cramps
3 Exposure to German measles
4 Spots in front of the eyes, or any visual disturbances
5 Severe and persistent headache
6 Dizziness
7 Swelling of the face, ankles, feet, fingers or hands
8 Chills with fever
9 Painful or burning urination
10 Severe constipation
11 Flush of fluid from the vagina
12 Excessive nausea and vomiting
13 Failure to feel the movement of the foetus for three or four days

All serious complications of pregnancy are preceded by at least one and generally two or more of the above warning signals. The doctor should be seen immediately and the exact nature of the symptoms explained.

Miscarriage

Miscarriage is the birth of a foetus before it is old enough to survive. It occurs in one pregnancy out of ten. Nothing worries an expecting mother so much as the possibility of a miscarriage. The cause of miscarriage is not clear. However, one thing is certain: no woman should reproach herself if she has an accidental miscarriage. There is no reason why she cannot become pregnant again and have a normal pregnancy.

Miscarriage usually occurs before the sixth month of pregnancy—generally during the second or third month. Four out of five miscarriages are blessings in disguise. They cause the loss of imperfect embryos and are nature's method of protecting the mother from abnormal births.

A backward tilting of the uterus, which the doctor can detect and usually correct is responsible in some instances. Castor oil and other drugs that are taken deliberately to terminate a pregnancy, practically never affect it. However, over-exertion, falls, or lifting heavy weights may cause miscarriage in some women. It is wise to guard against overstrain or falls.

Bleeding usually is the first warning for a miscarriage. In most cases spotting occurs for a day or so before the profuse flow of blood and abdominal cramps appear. Sometimes the cramps come first. With either bleeding or cramps one should go to bed at once and call the doctor. It is important to save all the tissues and blood clots in a pan for the doctor to examine. When a miscarriage occurs it is usually complete, but sometimes when only a part of the embryo is expelled, a minor operation called *curettage* may be necessary to remove the rest.

Toxemia

Toxemia is a complicated disorder that occasionally develops during the second half of pregnancy. The expectant mother may feel fine, but a close examination will show a great increase in blood pressure, albumin in the urine and an abnormal gain in weight. There may be swelling of the face especially around the eyes or in hands, fingers, feet and ankles. Sometimes there may be spots before the eyes and a per-

sistent headache. There may be pain in the upper part of the abdomen. With any of these signs one should seek the doctor without delay. The usual treatment for toxemia consists of a decrease in the amount of salt eaten and complete rest. Other treatments may be indicated in individual cases. The doctor will prescribe the proper treatment depending on the nature and severity of the ailment.

Pyelities

Pyelities is an infection of the upper urinary passage. The symptoms are chills, fever, pains at the back of the waist, and pain or burning when urinating. Pyelities is seldom serious. It disappears quickly with appropriate medical treatment.

Premature Birth

The birth of a baby before his full term is preceded by a sudden gush of fluid from the vagina, which means that the bag of waters surrounding the uterus has broken. If this happens, the expectant woman should not wait for the onset of pain, but call the doctor at once. Premature labour may be short, and a premature baby may be weak. Hence medical attention is urgent. Premature births can be caused by toxemia or by some other complicating disease. In many instances, they occur without any known cause.

Exposure to German Measles

German measles is a short, mild disease, often milder than a bad cold. It is nevertheless a threat to pregnant women. If a woman contracts German measles during the first three months of her pregnancy, there is one chance in five that her baby will have defects in bones, heart, ears, eyes or brain. After the third month of pregnancy, the risk is less.

Unfortunately, German measles is extremely difficult to detect. There is no laboratory test to diagnose it, and many other disorders can also cause a rash and fever like that of German measles. In fact, if the attack of German measles is slight, the rash and fever may not even occur but the effects on the unborn baby can be just as severe.

If an expectant mother is exposed to German measles, there is nothing that can be done except to wait and see if she develops the disease. If she does not, no harm has been done. If she does, the question of terminaing the pregnancy arises. This is now infrequently recommended, for the risk of having a malformed baby is actually less than was once believed.

Chronic and Acute Diseases

Any chronic disease suffered in the past or any acute disease developed during pregnancy must be notified to the doctor. Such diseases as diabetes, rheumatic heart disease, kidney disease, tuberculosis, or syphilis require special attention during pregnancy.

The Rh Factor

There has been a tremendous amount of discussion about the Rh factor. Rh incompatibility is not a fearful disorder to be dreaded. Instead it is a very rare complication. The Rh factor is a substance found in the red blood cells of the majority of human beings—about 85 to 90 per cent of all people, depending on their race. If the factor is present, a person is designated Rh positive, if the factor is not present, he is Rh negative.

The union of an Rh-positive father with an Rh-negative mother may produce a baby who takes after the father and is Rh-positive.

Sometimes when this combination occurs, Rh-positive red blood cells pass from the baby into the mother, who, in turn, develops antibodies against them. The antibodies find their way back to the baby and destroy his own red blood cells. producing a disease called *Erythroblastosis fetalis*, or *haemolytic disease* of the new born. This disease does not necessarily develop every time the mother is Rh negative and the father Rh positive. The chances are only about 1 in 16 that the baby will be affected, and even if he is, the disease can often be treated successfully. The first pregnancy almost always escapes erythroblastosis, and although the chances of the disease increase with later pregnancies, they remain small. Once an erythroblastic baby does appear, however, there is a strong possibility that most, and in some cases, all subsequent pregnancies will be so affected. Many doctors now have a routine test for the Rh factor so as to be on guard and ready to treat erythroblastosis promptly after birth if the baby has been affected.

References

Douglas, G., David, H. *Recent Advances in Paediatrics*. London: J.A. Churchill Co. 1971

Indian Council of Medical Research. Special Report Series 41. 'Nutrition for mother and child'. Hyderabad: National Institute of Nutrition, 1971

Muktha Sen. 'Care of the expectant mother—A key to child's good health'. In *Children's Annual*, Nov. 1968.

Nirmal Kher. *Prenatal Care*. Bombay: Vora & Co. Publishers, 1968

Robinson, C.H. *Normal and Therapeutic Nutrition*. Calcutta: Oxford and IBH Publishing Co., 1970.

Swaminathan, M. *Essentials of Food and Nutrition*. Madras: Ganesh and Co. 1974

CHAPTER 4

Prenatal Development

At birth, the ovaries of the female contain some 200,000 ova. About 400 will mature between puberty and menopause. Regularly one or the other of the ovaries develops a rather complex cyst, a *Graafian follicle* that eventually ruptures and frees on ovum, which contains the 23 chromosomes that carry half of the thousands of genes which control the inherited potentialities of the individual. The ovum is liberated into the abdominal cavity near the open siphons of the Fallopian tubes. The sperm cells travel through these tubes. Carrying the 23 choromosomes from the male, the sperm after being deposited in the vagina, penetrates the neck of the uterus and migrates up to the Fallopian tubes.

Once a sperm cell penetrates the ovum, complex chemical events result immediately with the realignment of the two sets of 23 chromosomes into a meaningful code for reproduction and sealing of the cell-wall against penetration by any other sperm.

Neither the male nor the female cell is complete in itself. But when they unite, they form a cell that is complete, with a capacity for growth. This newly formed cell, the fertilized egg, contains all the material from which the baby gets his inherited characteristics, his looks and other abilities. The first two weeks after fertilization constitute the 'period of the ovum'.

The new cell soon divides into two cells and the two into four and so on. This process of cell division continues throughout life. However, during the early days, the cell division is very rapid. The increasing cluster of cells is called *embryo*.

During the first few days after conception, the embryo gets its food from the material in the middle layer of the original female cell. This food is exhausted gradually as the embryo moves down the Fallopian tube into the uterus. It takes probably three to five days for the journey.

By the end of six days, the embryo has become a mass of many tiny cells. It sinks into the thick soft lining of the uterus as shown in Figure 1. The lining of the uterus contains several glands and tiny blood vessels. When the embryo settles into this lining during the second week after conception, it finds a bed and a source of food for itself.

About the ninth or tenth day, the protective layer of the embryo disappears and a shaggy growth with many little finger-like structures takes its place. These little finger-like structures are the beginnings of the placenta. They fasten the embryo to the inner lining of the uterus.

During the second week after conception, the original cluster of cells begins to form into three different groups of cells. Some of these cells develop into the baby; some form the placenta—the attachment to the uterus which will be joined to the baby by the umbilical cord. Some will develop into the membranes

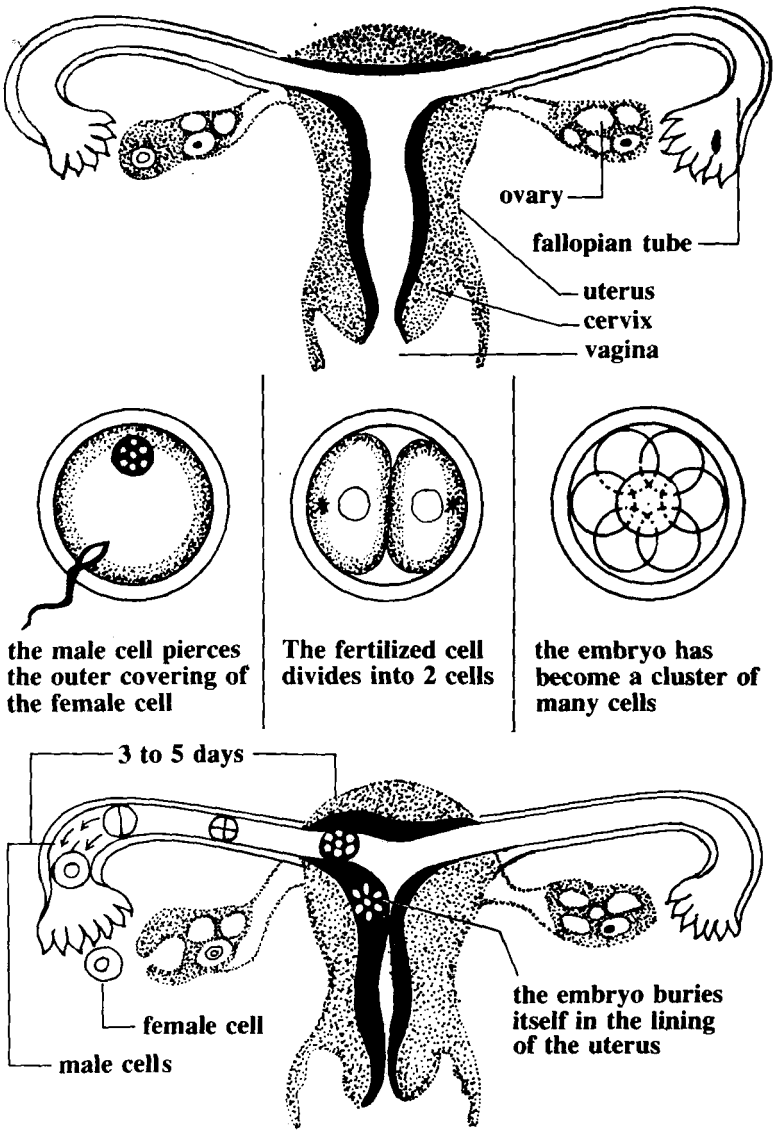


Fig. 1. How fertilization takes place.

that will surround and protect the baby.

The period between the third week and third month is known as the *embryonic period.* During the third week after conception the group of cells which develops into the baby looks like a flat grooved, or ridged oblong. It is barely large enough to be seen by the naked eye. Yet many important organs will begin to take shape. At this stage, the area which will develop into the head and brain is growing very very fast. There are shallow depressions where the eyes will form.

The embryo's growth is very rapid during the fourth week of life. At the end of four weeks it measures about 0.4 centimetres in length. During this important week all the internal organs (such as the heart, liver, digestive tract, brain and lungs) are really beginning to take form. The heart begins to beat, although it cannot be heard for many more weeks to come. At this time the mother begins to think that she might be pregnant.

During the baby's fifth week of life, the embryo is bent in an arch and looks like a flat semicircle. The backbone begins to form. The head is developing faster than the rest of the body and will continue to do so till the time of birth. The tiny limb buds, the beginnings of the arms and legs have appeared.

At six weeks the embryo is almost 2.5 cm long with the four limb buds grown into arms and legs with tiny webbed fingers and toes. The embryo has a well-developed tail and a pot belly, because the internal organs are growing fast.

At seven weeks, the embryo takes on a more definite shape. The ears and eyelids are forming. The internal organs begin to take their permanent place in relation to each other.

At the end of the eighth week, the placenta and membranes would have been completely formed. The membranes make a sac that contains the fluid in which the baby floats. From now on until birth the developing baby is known as the foetus. The last 30 weeks of intrauterine life make up the foetal period.

Third Month of Pregnancy

During the third month, the fingers and toes lose their webs. The tail disappears as the body grows longer. The skin is thin and transparent. At the end of this month, the baby is 6.5 cm long and weighs about 14.2 grams. The abdomen begins to enlarge.

Fourth Month of Pregnancy

The fingers and toes are well formed and tiny nails begin to appear. The back is still bent in an arch, but the baby's head becomes more erect. A little hair begins to grow on the scalp. The teeth also form deep in the gums. The external sex organs form. At 16 weeks, when the muscles begin to be active, the foetus is 10 to 12.5 cm long and weighs about 113.60 g. Towards the end of the fourth month, a few women can feel the stirrings of the foetus.

Fifth Month of Pregnancy

Sometimes, between the 18th to 20th week of the foetus' life, the doctor begins to hear its heart beat when he listens through his stethoscope. About the same time the expectant woman also begins to feel the fluttering movements as the foetus stretches his arms and legs. At 20 weeks, the foetus is about 20 cm long and weighs about 298 g. The abdomen of the pregnant woman is getting large enough to become noticeable.

Sixth to Ninth Months of Pregnancy

From the sixth month, the foetus grows very fast in length. Until the eighth month, the skin

of the foetus is wrinkled and red. He looks somewhat like a little old man. During the last two months his body fat is formed and he becomes more rounded and filled out. From the sixth month until shortly after birth, his skin is covered with soft fuzz. A soft white creamy secretion called *vernix* begins to collect on his body.

His movements become real thumps by the sixth month. The foetus may change his position many times. Sometimes he lies on one side, sometimes on the other, sometimes with his head down and sometimes with head up. Usually by the 7th month, the foetus will take one position either with his head up or down, and will probably stick to this position until he is born. There may be times when the expectant woman does not feel any movement. Some doctors think that the foetus has periods of waking and sleeping, just as he will have them after birth.

A few foetus are born before their 28 weeks of development is complete. Some do survive, but this is very rare. Before this time, the baby's internal organs have not developed enough for him to be able to live in the outside world. After the 28th week or roughly about 6½ calender months of pregnancy, his chances of living, even if prematurely born, increase with each month. A seven month's foetus has a fair chance of surviving the premature birth; an eight month's baby has even better chances, if given the special care that all premature babies need.

When the Baby is Ready for Birth (Full-term)

At the ninth month, the tiny fuzz covering the skin of the foetus disappears. Now the baby's skin has its own natural colour and is thickly covered with the soft creamy vernix secretion. His head is covered with fine hair. His eyes are of a dark colour. The demands of the foetus become more and more extensive, putting a greater and greater strain on the ability of the mother's system to maintain the balance.

Process of Birth

The birth process involves highly complex chemical and physical reactions. The process begins with chemical signals which, in turn, start the muscular contractions which signal to the mother that her voluntary help is required. Labour is usually described in terms of three periods or stages. In the first stage, the contractions of the uterus cause the opening at the lower end of the uterus. The cervix gets stretched so that the baby can pass out of the uterus into the birth canal. In the second stage, the baby passes down through the vaginal opening, which stretches to allow him to be born. In the third (the after birth) stage, the placenta and the membranes are loosened from the uterus and are ejected out. At the end of labour, the uterus is entirely empty, except for the remains of its thick lining.

The first stage of labour is by far the longest During a pregnancy, the cervix softens and relaxes, so that when labour begins, it is thin and has opened to about 1.25 cm. There is usually a small amount of mucus present, as a sort of a plug. During the first stage of labour, the cervix must open to a diameter of about 10 cm in order to let the baby's head pass through. The cervix, as well as lining of the vagina, have all been softened during pregnancy so that they can stretch as much as necessary. As the baby is pushed against the cervix by the strong contractions of the uterus, the opening gradually gets bigger and bigger, until finally the baby can pass through. As the cervix opens, the mucus plug is loosened and passes out, often with a small amount of blood. This is called the 'show'.

The second stage of labour is shorter than the first. It lasts from 1½ to 2 hours. The strong abdominal muscles begin to help the muscles

of the uterus in pushing the baby out, and the pregnant woman will have what are called 'bearing down feelings'. She will have a strong urge to push down with each contraction and the doctor may also tell her to hold her breath and push hard. Pushing at this time helps, but if she tries to bear down before the body tells her it is ready, she will just tire herself needlessly. As soon as the baby is born, he will cry vigorously and move his arms and legs energetically.

After the baby is born, the doctor clamps the umbilical cord and cuts it. The placenta begins to separate from its attachment to the lining of the uterus. Within a short time, usually in 10 to 15 minutes, the muscles of the uterus contract once more and push out the placenta and the membranes. A moderate amount of bleeding, from the area where the placenta was attached, accompanies the afterbirth. But this bleeding is negligible. Shortly after the placenta passes out, some women have a brief shivering chill which lasts for a minute or two. This chill is thought to be a normal release of muscular or nervous tension.

Most babies are born head first. This is the easiest way, for the baby's head, which is the largest part of its body, can help to stretch the cervix quickly. Sometimes the baby is born feet or buttocks first. A baby in this position is called a *breech* baby. If the baby comes as a breech, labour may take a longer time.

Since the muscles of the uterus are working hard during child birth, the contractions will be painful. Much depends, however, on one's reaction to pain and discomfort. Fear and anxiety do not help to make muscles relax and can add more discomfort to labour. Women who are able to relax, experience less discomfort.

Forceps or 'instruments' are used only for complicated births when the baby cannot be born naturally. Nowadays there is a trend to use forceps even in normal deliveries to lift the baby's head out. Forceps are used only after the mother has been aneasthetized or the pelvic region is made numb by local anaesthetics.

Cesarean Delivery

This is a major abdominal operation and is done when there is some reason to indicate that normal birth is not possible, or if normal birth through the vagina would be dangerous to the mother.

References

Ambron, S.R. *Child Development.* San Francisco : Rinehart Press, Holt, Rinehart and Winston, 1975.

Hurlock, E.B. *Child Development.* New Delhi : Mc Graw-Hill Kogakusha Ltd., 1972.

Hurlock, E.B. *Developmental Psychology.* New Delhi : Tata McGraw-Hill Publishing Company, 1975.

John, J.C., Lamberth, J., Mellgren, R.L., *Foundations of Psychology.* New York : Harper and Row Publishers, 1976.

Kennedy, W.A., *Child Psychology.* New Jersey : Englewood Cliffs, 1971.

Smart, M.S., Smart, R.C. *Child Development and Relationships.* London : Macmillan Co., 1971.

Spock, B., Gesell, A. *Guide to Child Care.* New York : Prentice Hall International Inc., 1961.

Spock, B., Gesell, A., Bundesen, H.N., Drimmer, F. *Every Woman's Standard Guide to Home and Child Care.* New York : Greystone Press, 1969.

CHAPTER 5

Post-Natal Care

Post-natal care includes several aspects such as feeding the baby, care of the mother's breasts, diet of the lactating mother, her digestion and physical fitness.

Feeding the Baby

Breast-feeding is the cheapest, simplest and the best way for the baby. The mother's milk is by far the best in nature, free from harmful organisms, and always ready. It gives great emotional satisfaction to the mother and child. The mother continues to have a sense of giving life to the baby she has brought into this world.

The mother's mental attitude will affect both the quality and the supply of her milk. If the mother is happy, and has an inclination to nurse her baby, it is likely that she will have an excellent milk supply. Her emotional upsets will also affect the baby's digestion.

During the first two weeks, the usual schedule for feeding the baby is for every four hours, beginning at 6.00 a.m. However, the first feeding can begin at any time so long as the feedings are at four-hour intervals. After the third week, the 2.00 a.m. feeding may be omitted. The baby nurses 20 minutes generally, at each breast.

Just like all the time tables, the feeding schedule is also adjustable. It may be changed according to the baby's demand. In demand feeding, the baby is fed only when he is hungry. A few guidelines for the process of breast-feeding are given here in sequence of order.

1 Cleanse the nipple and the area around it with hot water. This is to protect the baby and the nipple from infection. Start with the nipple and work outward.
2 Put the baby on the mother's arm which rests on the pillow. Rest his head in the bend of her arm, with his head slightly raised. He is less likely to swallow air in this position.
3 Raise the breast and direct the nipple into the baby's mouth. Be sure he has the nipple and is in a comfortable position. Do not be in a hurry for he knows instinctively you are upset.
4 When he has nursed for ten minutes change him to the other breast and repeat the above procedure.
5 To release his hold on the nipple and to prevent him from injuring it, press the baby's lower jaw gently away from the nipple.
6 Remove the baby from the breast.
7 Cleanse the nipple with moistened applicators or cloth, using a separate applicator for each breast.
8 Place a clean towel over shoulder and hold the baby over your shoulder and bubble him. Pat his back gently or rub with a circular motion. Bubbling releases air

bubbles and prevents him from spitting up milk, and makes him comfortable.

If the mother does not have enough milk, she has to supplement his needs through bottle-feeding. It might even be necessary to put the baby on a formula immediately. Apart from an inadequate milk supply, illness might make it inadvisable for the mother to nurse. Drugs are now available to dry up the breasts without much discomfort.

Some mothers think that nursing their baby will make them fat or lose their figure. There will be no weight-gain during the breast feeding period if the mother is careful with her diet. Others fear that the breast will be permanently deshaped. This need not be, if they are properly supported by well-fitted brassiers before the baby is born, and during the months he is being nursed.

Care of the Breasts

Until about the third day after delivery the breasts contain a thin, watery fiuid called colostrum. The baby is put to breast for the first time 4 to18 hours after he is born. Nursing helps to stimulate the flow of milk. The colostrum is the baby's first food. It has a laxative effect. Then comes milk, which besides feeding the baby, helps to protect him from infections. The breasts become full and hard with milk every three hours. They are relieved when the baby is fed.

A good nursing brassiere helps to support the breasts. Sometimes they become so full that there is more milk than the baby needs. At such times the breasts may become painful. Perhaps the doctor might suggest pumping with a special bulb and glass cup. But this will stimulate the secretion of milk. If the baby empties the breasts well each time, the supply of milk usually regulates itself. The mother's diet affects both the quality and the quantity of her milk.

The nipples should be protected from cracks which may invite infection. They must be washed before and after each nursing and protected from rough clothing. The mother must release the baby's jaws before drawing the nipple away from his mouth. She must put the whole nipple in his mouth, so that his jaws close beyond the base of the nipple.

The mother usually loses from 5 to 10 kilograms after her baby is born, due to a number of factors. For a short time, all her organs are more active than usual, causing fluid loss through the skin, kidneys, bowels, uterus and breasts. The nursing mother loses even more weight than the mother who does not nurse her baby. She will most likely be back to her normal weight within six weeks if care is given to her diet.

Diet

During lactation, the nutritional requirements of the mother increase progressively over her pregnancy need, with two exceptions; her calcium requirement is unaltered and her need for iron returns to that of her pre-pregnant status. Additional calories and nutrients are required by the mother for milk production which should increase steadily to meet the needs of the fast growing baby. The amount of milk produced should be a response to the baby's demand which varies considerably from infant to infant. By the time a baby is six months old, he may require about one litre of breast milk per day. Unless a nursing mother has an adequate diet, she will not produce milk adequate in quantity and quality for her baby, and may lose in weight and health (Devadas, 1972).

The nursing women should include the foods (Gopalan *et al.*, 1971) given in Table 3.

TABLE 3. **Foods to be included in the everyday diet of nursing women**

	Vegetarian	*Non-Vegetarian*
	(*g*)	(*g*)
Cereals	450	450
Pulses	80	65
Green, leafy vegetables	150	150
Other vegetables	75	75
Roots and tubers	75	75
Fruits	30	30
Milk	325	225
Fats and oils	50	55
Sugar and Jaggery	50	50
Meat and fish	—	30
Eggs	—	30

Exercises

There are certain standard exercises which will help nursing women to maintain their figure. They help to bring the uterus forward into its normal position. The exercise positions are given Figure 2. A woman is instructed to do these exercises ten days after delivery or even before. They can be done for approximately ten minutes in the mornings and in the evenings.

Digestion

The mother may be constipated for several days after the baby is born. She may have difficulties also in urinating due to fatigue or a decrease in bladder tone. Perineal stitches also make voiding painful. Pressure on the abdominal and bladder muscles during labour and delivery may cause temporary paralysis. An anesthetic often disturbs the voiding processes temporarily. Usually, diet helps to regulate these normal functions within a few days. Sometimes haemorrhoids appear after delivery. Natural birth may avoid the worst of the above problems, since muscle control is the main factor involved.

For the first few days after delivery, the mother may have abdominal cramps caused by the uterine muscles contracting in an effort to return to their normal shape and expel the lochia. These decrease as the tone of the uterus muscles returns. The mother must have a check-up with the doctor after six weeks. The doctor will examine her pelvis, check her weight, blood pressure, and her general condition and suggest appropriate means for her welfare.

References

Devadas, R.P. *Nutrition in Tamilnadu.* Madras: Sangam Publishers, 1972.

Gopalan, C., Ramasastri, B.V., Balasubramaniam, S.C. *Nutritive Value of Indian Foods.* Hyderabad; NIN, 1971.

Hurlock, E.B., *Developmental Psychology.* New Delhi: Tata McGraw Hill Publishing Company 1975.

John, J.C., Lamberth, J., Mellgren, R.J. *Foundations of Psychology,* New York: Harper and Row Publishers, 1976.

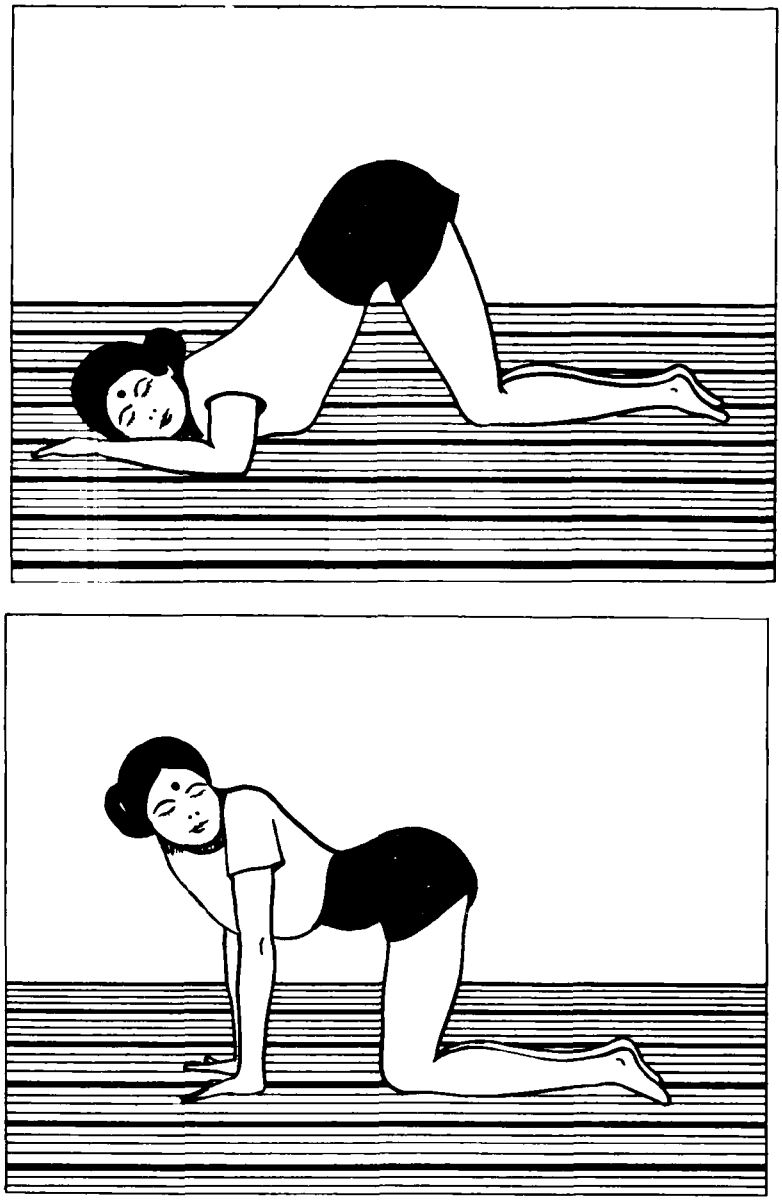


Fig. 2. Exercises after delivery . (a) 'Knee-chest' position : kneel, bend forward, until chest and side of face are resting on the floor. Keep knees 12 to 18 inches apart to allow air to enter the vagina. Remain in this position for five minutes, twice a day. (b) On hands and knees, swing your hip like a dog wagging its tail. Turn the head every time in the direction of the swing so that the waistline is well tucked-in on the side in which you are looking. Repeat five times and then rest,

CHAPTER 6

Parenthood

A right approach to parenthood is important for a successful marriage. Parenthood brings fulfilment and completion to a marriage. When a baby is born parents must be prepared for many new and interesting experiences. Each baby is an individual with his own special outlook. Parents should relax and watch the phases of the unfolding of this young life. If the parents can enjoy and appreciate each new development, they will appreciate even more their active part in it and achieve greater satisfaction.

From the moment the baby first turns his eyes to the light, or shows that he has heard a sound; from the time he first reaches out for his rattle or for the finger held invitingly near or towards the face smiling above him; from the moment he kicks and coos with delight as someone who loves him comes near; from the moment he responds with evident joy to some light, some colour or some sound; in short, from earliest babyhood on, a child is reaching out to see the world. He reaches out to feel, to taste, to touch and to hold. He reaches out for colour, light and sound. He searches for meaning in every thing he sees. Even before he can talk, he expresses his questions through his looks, tones, gestures and actions.

When he begins to speak, he has a never-ending string of questions to any one who will answer him. He reveals new understandings as they unfold themselves to his searching thought. He shows his delight in beauty as it is revealed to him in word, rhythm, sound, colour and in the love of the people around him. He glories in his ability to do things, in his accomplishments and in his achievements. He has his ups and downs, his babyhood problems, the trials of childhood but they are all a part of his understanding the world. New meanings unfold in his thought daily, new understandings are imparted and new abilities revealed. To parents is given the priceless privilege of giving guidance that will ensure that all these meanings are rich and fine, that all these understandings are true, that all these abilities find their expression, in useful and loving actions. With such guidance everyday, the life of the child can become a joyous activity, rich with meaning, and deep and abiding contentment. It is very important for a child to have his parents enjoy him, enjoy the things he does and enjoy doing things with him and for him. It is the beginning of a companionship that can make living richer for both parents and child. It can begin in early babyhood and last throughout their lives.

Duties of Parenthood

The duties of parenthood are manifold. During the child's infancy the parents must :

1. Be consistent, reliable and loving care-takers who respond to the infant's need for comfort, and who provide a relief of

tension and a social company.

2 Supply the basic elements of physical nourishment, adequate food, clothing and shelter to support growth, protect health and prevent physical illness.

3 Supply adequate social and physical stimulation through the handling involved in holding, cuddling, bathing, lifting, dressing and undressing that are part of the infant's daily life. Such handling provides the needed stimulation of gross motor skills, and aids the development of the infant's sense of his own body and the capacity to act in an intentional way. It also provides opportunity for emotionally meaningful communications between the parent and the infant.

4 Promote the knowledge of language and development of logical thought through talking to the infant about himself and his world and by responding with pleasure to his verbal productions.

5 Provide an environment that is consistent and predictable.

6 Provide and sponsor the use of toys and other materials that stimulate, challenge, give pleasure and can be used for expressing feelings.

7 Provide opportunities for games and practice of emerging skills in a safe, supportive environment.

8 Order the environment so that the infant can have quiet and peaceful moments when he is not reacting to people. This will help him become aware of the inner world of his own thoughts and feelings.

9 Provide opportunities for learning to live with others through imposing limits, prohibitions and frustrations carefully attuned to the child's individuality and particular stage of development.

10 Help the infant gradually to learn to wait for brief periods while the needs of the other family members are attended to. This is an important part of his adaptation to reality.

These tasks are natural for healthy parents. They are the spontaneous response to the pleasure and delightful stimulation the baby himself provides and often do not need any conscious thought or action.

The Baby's First Year

The art of child-rearing is an education to be learned through sound training. Some guidelines for child-rearing are listed below.

1 Register the child's birth and get a copy of the birth certificate.

2 Take the child to a doctor to be examined at frequent intervals and be advised on his diet and health care.

3 Nurse the baby with mother's milk and give him plenty of cuddling and affection.

4 See that his surroundings are healthful and free from possible sources of infection.

5 Keep him clean and let him have plenty of fresh air, sunshine and exercise.

6 Have a schedule for the baby based upon his own rhythm which can be learned after a little careful observation.

7 Remember that babies are human beings and not playthings. Each one is different from the other in many ways.

8 Rearing children requires the effort and concern of both the father and the mother for best results. Both should know what their children are like, what they need and how to guide and foster their development. This knowledge will eliminate conflicts between parents over child-rearing methods.

The entry of a child into the family will specifically mean the following. The child may :

1 Become the centre and source of great joy. He will add to the happiness and enhance

the love of a couple who are in love. He will not be a cause for any conflict between the couple.

2. Upset the household routine of the family, making the parents rearrange their accustomed ways of life to allow time for the third person.

3. Become the sole object of tqe parents' attention to the extent that they neglect their own relationship or he may become the sole object of the mother's attention and energy to such a degree that she forgets she has a husband and fails in her role as a wife. This has been the basic cause for the beginning of many estrangements between the husband and wife.

4. Interfere with the social life of the couple. If they cannot afford a maid, or have a nearby relative to stay with the youngster while they go out, they will become frustrated.

5. Cause much irritation and conflict between the husband and wife because each has a different idea as to how he should be reared. Fathers are not usually as well-informed on sound methods of child-care and training as mothers.

6. Be the source of annoyance to parents who are over-meticulous about their home and the things in it.

7. Cause the mother more work and thus add to her physical and emotional fatigue. The mother should learn to plan and organize her household work so that she can have some time for rest and relaxation. She needs some of her emotional energy for her husband, friends and outside interests also.

Additional expenditure may necessitate some sacrifices on the part of the parents. When the second or third child arrives, all the above-mentioned developments will continue to be important. In addition, a rebalancing of the household will have to be planned. New problems of giving attention, affection, a sense of security and acceptance to each child and sharing proportionately the material things will arise. Parents will have to be careful as to how they show their feelings toward and about each child, in a manner not to make any child feel rejected, unwanted or inferior.

On the other hand, the coming of a child into the family may bring a hope for the realization, through the child, of the desires and aspirations which the parents themselves had not been able to enjoy or achieve. This can be a great source of satisfaction if the fulfilment comes as a result of what the child can accomplish in terms of his own abilities, interests and opportunities, but it may be crippling to the child if he is forced into activities and training unsuited to his abilities and interests. The coming of children also gives a sense of fulfilment and achievement to the parents, which are added incentives to living. Children cement the solidarity of the family and pose a challenge to parents to project into the society, an individual who will be a credit to himself and his parents by his contributions to the world. It is a great deal of fun watching and guiding children grow from infancy, through early childhood into adolescence and into maturity and marriage.

3(45—194/1977)

References

Breckenridge, M.E. Murphy, L.B. *Growth and Development of the Young Child.* Philadelphia: Saunders, 1963.

Brim, O.R. *Education for Child Rearing.* New York: Russell Sage Foundation, 1959.

Emmett, H.L. *The Housekeeping Book of Baby and Child Care.* New York: Appleton Century Crofts, 1957.

Foster, R.G. *Marriage and Family Relationships.* New York: The MacMillan Co. 1955.

Gruenberg, *The Encyclopaedia of Child Care and Guidance*. New York: Double Day Co., 1963.

Hurlock, E.B. *Child Development*. New Delhi: Mc Graw-Hill Book Company, 1972.

Illingworth, R.S. *The Development of the Infant and Young Child*. New York: Churchill Livingstone, 1975.

Parsons, C.E., *Home Craft and Mother Craft in India*. Madras: Christian Literature Society for India.

Wenar, C. *Personality Development*. Boston: Houghton Mifflin Company, 1971.

CHAPTER 7

Infancy

Infancy or the period of the newborn is the shortest of all the developmental stages. It begins at birth and ends when the infant is approximately two weeks old. This is the time when the newborn adjusts to life outside the uterine walls of the mother, where he has lived for approximately nine months.

The period of infancy is generally subdivided into two parts: (1) the period of the partunate and (2) the period of neonate. The period of the partunate lasts for the first 15 to 30 minutes of postnatal life from the time the infant emerges from the mother into the world until the umbilical cord is cut. The cutting of the umbilical cord marks the beginning of the second period of infancy, that is, the period of the neonate. At this time, the infant is no longer dependent on the uterine protection but has become a separate, distinct individual. This period is characterised by several adjustments to a new environment in the world outside.

Although the human life-span begins at the moment of birth legally, birth is merely an interruption of the developmental pattern that had commenced at the moment of conception. Birth is thus the graduation from an internal to an external environment. Like all graduations, it requires adjustments on the individual's part. Depending on the circumstances, it may be easy for the infant to make these adjustments or difficult. As Miller (1950) comments, 'In all the rest of his life, there will never be such a sudden and complete change of locale'.

Characteristics of the Infant

Infants differ greatly in size, physiological features, physical proportion, physiological functions and appearance at birth and in their early adjustments after birth.

Size

Harish Chandra (1971) has presented a mean birth weight of 2.7 kilograms based on the birth weights of 3124 single, full-term, live, babies born in the Niloufer Hospital, Hyderabad. A mean weight of 2.87 kilograms and a mean length of 48.8 centimetres have been reported by Shanti Ghosh *et al.* (1971) based on 5022 observations at the Well Baby Clinic and Low Birth Weight Clinic of Safdarjung Hospital (Delhi), from 1966-68.

Boys, generally, are slightly longer and heavier than girls. However, there are marked individual differences between infants of both sexes. These differences are more obvious in weight than in length. Mature infants are not only bigger and heavier than those born premature, but are also less scrawny and better filled-out because they have more fat tissue. Prematures are deficient in fat tissue. As a result, they appear to be withered and scrawny.

Variation in size is dependent not so much upon sex as upon factors in the prenatal environment. Of these, maternal diet is one of the most important factors. Infants whose mothers

had good prenatal diets were rated 'superior'. They were found to weigh one to two kilograms more at birth than infants whose mothers had poor diets and rated as 'very poor'. The former were likewise approximately 5 cm longer at birth than those whose prenatal environment was not so favourable (Montagu, 1962.)

Physiological Features

The special physiological features of infants are :

1 The muscles of the newborn infant are soft, small and uncontrolled.
2 At birth, less development has taken place in the muscles of the neck and legs than in hands and arms.
3 The bones, like the muscles are soft and flexible being composed chiefly of cartilage or gristle. They can be easily misshaped because of their flexibility.
4 The skin is soft, deep pink in colour and often blotchy.
5 The flesh is firm and elastic.
6 Soft hair is found on the head and back.
7 The tear glands are inactive at first. However, in full term babies, tears appear within the first day of life.
8 Natal teeth occur approximately once in every 2000 births. They are the 'baby' type and are usually central incisors.

Physical Proportions

As for the physical proportions of the infant, the following are the salient features :

1 The infant's head is approximately one-fourth of his body length. The adult head, by comparison is approximately one seventh of the total body length.
2 The cranial region, the area over the eyes is proportionately much larger than the rest of the head, while the chin is proportionally too small.
3 The eyes are almost mature in size, but because of the weakness of the eye muscles, they move in an uncontrolled way in the sockets.
4 The nose is very small, while the tiny mouth looks like a slit, because of the narrow lips.
5 The neck is short and almost invisible. The skin covering the neck lies in thick folds or creases.
6 The shoulders are narrow, while the abdomen is large and bulging, and
7 Proportionally, the arms and legs of the infant are much too short for his head and trunk.

Physiological Functions

The helpless condition of the infant at birth to maintain homeostasis changes rapidly as the autonomic nervous system matures. As a result, homeostasis improves.

With the birth cry, the lungs are inflated and respiration begins (Smith, 1963). The respiration rate, at first, ranges from 40 to 45 breathing movements per minute. By the end of the first week of life, respiration normally drops to approximately 35 breathing movements per minute and is more stable than it was at first. Neonatal heart-beat is more rapid than that of the adult because the infant's heart is small when compared to his arteries. This more rapid heart-beat is necessary to maintain normal blood pressure (Grossman and Greenberg, 1957).

Reflex sucking movements occur when the infant is hungry or when his lips are touched. Breast-fed infants develop stronger sucking reflexes than the infants fed by the bottle (Spock, 1964). Regardless of the method of taking nourishment, there is an increase in the rate of sucking and in the amount of nutrients consumed, with each passing day, partly because of maturation and partly because of learning. During the first week of life the

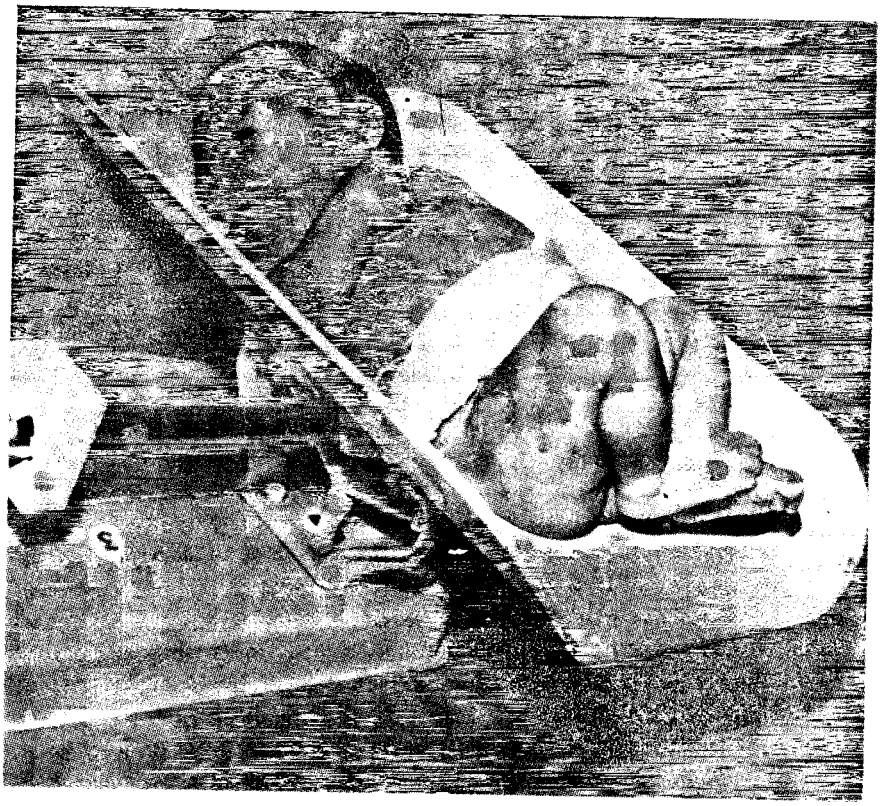


Fig. 3. An infant being weighed at birth.

hunger demands of the newborn are irregular, not only in regard to intervals between feedings, but also in regard to the quantity. By the age of two or three weeks, a hunger rhythm develops, after which the infant can adjust to a feeding schedule.

Elimination of waste products begins a few hours after birth. Many voidings occur during periods of wakefulness and when the infant is quiet, usually within an hour after feeding. Defecations also occur like wise. Both voiding and defecation vary in regard to time and amount.

The infant sleeps for approximately 80 per cent of the time. Neonatal sleep is broken by short waking periods which occur every two or three hours, with fewer and shorter waking periods during the night than during the day. By the age of one year, the infant's sleep comes down to 50 per cent of the time. The infant falls asleep readily and can be wakened easily. The infant is wakened also by internal stimuli, such as pain, discomfort or hunger. The environmental stimuli which disturb him are very loud noises and marked changes in temperature.

Other Activities of the Infant

Movements of the body begin early in the foetus and become stronger and more frequent as the foetus grows larger and stronger. They become evident as soon as the foetus emerges from the mother's body. The infant's movements cannot be meaningful or coordinated because of his neuro-physiological immaturity. However, in spite of their random and meaningless nature, the movements of the infant can be classified into two general categories: (1) mass activity and (2) specific activity.

MASS ACTIVITY

Mass activity includes ganeral movements of the whole body. When a sensory stimulus is applied to any part of the body, activity occurs throughout the body. For example, when the left leg is stimulated, the infant moves not only that leg, but the other leg as well. In addition, he is likely to kick his legs, twist his trunk, turn his head from side to side or cry. As mass activity is diffused, the amount of energy expended is great and the infant becomes tired quickly.

There are marked variations in mass activity among different infants and sometimes within the same infant at different times. The prenatal and birth experiences of the infant influence his activity after birth. Infants who have been most active as foetuses tend to be most active during the neonatal period (McCrade *et al.*, 1965). His physicai condition has a marked influence on mass activity. Hunger, pain and general discomfort give rise to greater activity, while limited activity follows nursing (Henry and Kessen, 1964). Breast-fed infants show slightly greater mass activity than those fed by the bottle (Spock, 1964). The movement occurs to a larger extent when the infant is awake and crying. Environmental conditions also influence the nature of neonatal activity. Light and sounds produce an increase in the infant's activity.

SPECIFIC ACTIVITY

Specific activity involves certain limited areas of the body. It includes; (a) reflexes, which are definite responses to specific sensory stimuli and which remain unchanged with repetition of the same stimuli and, (b) generalized responses, which use larger groups of muscles than those involved in reflexes, and which may be aroused by either external or internal stimuli.

(a) *Reflexes*

Most of the important reflexes of the body, such as the pupillary, lip, tongue, sucking, flexion, knee jerk, sneezing and others are present at birth. The first reflexes which appear

have distinct survival value. With practice, the reflexes become stronger.

(b) *Generalized Responses*

Generalized rosponses involve larger portions of the body than the reflexes. Like the reflexes, they are present at birth and are direct responses to external or internal stimuli. Some of the most common generalized responses are visual fixation on light, spontaneous eye movements, shedding of tears, feeding responses such as sucking and swallowing, tongue, cheek and lip movements, sucking of the fingers, yawning, hicupping, frowning and wrinkling of the brow, turning and lifting of the head, turning of the trunk, body jerk, hand and arm movements, prancing and kicking leg and foot movements. All these are uncoordinated, undefined and aimless. Yet, they are important because they are the basis from which skilled movements of a highly coordinated type will develop as a result of learning. In hand-mouth contacting, for example, the infant tries to put his hand into his mouth but, in doing so, he makes many random, uncoordinated movements. His hands are in constant motion, sometimes loosely fisted, sometimes tightly fisted, and sometimes partly open. They are especially active when he cries (Cobb *et al.*, 1966).

Vocalization of the Newborn

Most of the infant's vocalizations are his cries, although occasionally he utters other sounds. During infancy and the early months of babyhood, crying is the dominant form of vocalization. All his vocalisations are random and uncontrolled because of his neuro-physiological immaturity. Crying begins at birth or shortly afterwards. The cry of the newborn is uttered with force and loudness and is characterised by regularity of breathing. The purpose of the birth cry is to inflate the lungs, which makes breathing possible and supplies the blood with sufficient oxygen.

The cry is a sort of a reflex because it is a response to a definite stimulus (Brim *et al.*, 1961). Shortly after birth, the cry of the infant shows variations in pitch, intensity and continuity. Cries come from the physiological conditions such as hunger, pain, discomfort or fatigue. Bodily activity of some sort almost always accompanies the crying, as a signal that the infant needs attention. Crying is thus a form of language.

There are marked variations in the time and tonal quality of the infants' cries. These variations are apparent in the birth cry. They are influenced to a certain extent by the physical conditions of the infant and by the type of birth.

In addition to crying, the newborn occasionally makes explosive sounds similar to heavy breathing. They are commonly called 'coos' 'gurgles' or 'grunts'. These are gradually strengthened and develop into babbling, which later develops into speech.

Sensory Activities

Sensory activities of the infant include sight, hearing, smell, taste and feeling. There are marked variations in the sensory abilities of infants just as in the other areas of their development.

Sight

The retina of the eye, which contains the sense cells for vision, has not reached its mature development at birth. The ability to follow a moving object and then move the eye backward appears several hours after birth. On the first day of life, incipient fixation on a near, approaching object can be observed. In the first week, there is sustained fixation on near objects. This led Gesell to conclude that the infant 'takes hold of the physical world

ocularly long before he grasps it manually'.

Hearing

Of all the sensory activities, hearing is at the lowest stage of development at birth. The average newborn gives no evidence of hearing ordinary sounds during the first two days of his life. It has been reported that an infant can discriminate the location of sound within the first 118 hours of life (Leventhal and Lipsitt, 1964).

Smell

The sense of smell is well developed at birth or within a few days after birth (Lipsit *et al.*, 1963). Infants can not only smell but they can also distinguish between different odours. At first, the infant's response is diffused and disorganised. Later it changes to a smooth efficient attempt to escape from unpleasant odours, first by turning the whole body and, later by turning the head (Engen *et al.* 1963).

Taste

The sense of taste is also well developed at birth. Reactions to sweet are primarily positive; to salt, sour and bitter, negative. Wide individual differences in tastes are found, however, as in other sensitivites (Bell and Darling, 1965).

Skin Sensitivities

The skin's sensitiveness to touch, pressure, temperature and pain are present at birth. Some parts of the body are, however, more sensitive to touch than others, especially the lips. The skin on the trunk, thigh and forearms, on the other hand, is less sensitive (Weller and Bell, 1965). Sensitivity to temperature is shown by differences in sucking reactions to changes of temperature in milk. Pain responses appear earlier in the anterior end of the body and develop more rapidly than those in the posterior end.

Organic Sensitivities

Hunger contractions are fully developed at birth and appear shortly after birth. They differ from those of an adult only in that they occur at more frequent intervals.

State of Consciousness

As the most important sense organs are relatively undeveloped the infant's awareness would more likely be 'one great, blooming, buzzing confusion' (James, 1890). The longer and more difficult the birth, the longer is the state of confusion of the infant. Gradually, as the shock of birth wears off, and as the sense organs begin to function better, the infant becomes more conscious of his surroundings.

Emotions of the Newborn

The newborn's emotional reactions can be divided into two groups : the pleasant or positive responses and the unpleasant or negative responses. Pleasurable responses can be elicited by patting, rocking, warmth and sucking. These are not as clear-cut and definite as the unpleasant responses and resemble more a state of quiescence than an emotional state. Unpleasant responses can be elicited by changing the infant's position abruptly, by sudden loud noises, by hampering the infant's movements or by a wet diaper. The outstanding characteristics of the infant's emotional make-up is the complete absence of gradations of responses, showing different degrees of intensity. Whatever the stimulus, the resultant emotion is intense and sudden.

Birth is a chain of many critical changes which exercise an important series of influences upon the foetus about to be born, and which

prepare him for the new life he will live outside the womb (Montagu, 1962). To every newborn infant, adjustment to the post-natal life is a difficult process. The infant must make four major adjustments before he can resume his developmental process. They are; adjustments to (a) temrpeature changes, (b) breathing, (c) sucking and swallowing and (d) elimination of waste products. While these adjustments are being made, the infant will remain on a plateau or may even regress in his development.

Adjustment to Temperature Changes

In the sac in the mother's uterus, a constant temperature of approximately 99°F is maintained. But the temperature will vary from 85° to 90°F in the hospital or home where the child is born.

Adjustment to Breathing

During the prenatal life, the necessary supply of oxygen came to the foetus from the placenta through the umbilical cord. With the cutting of the umbilical cord, oxygen must be obtained from inhaling and exhaling air through the lungs. Before this process is possible, the lungs of the newborn must be inflated. This normally occurs with the birth cry. At first the breathing is irregular and imperfect.

Adjustment to Sucking and Swallowing

During prenatal life, nourishment came in a constant supply through the placenta and umbilical cord to the foetus, from the nutrients in the maternal blood stream. As a result, the foetus grew and developed at a rapid rate. After birth, nourishment must come from the infant's own efforts by sucking and swallowing. These reflex activities are usually imperfectly developed at birth. The result is that the infant often does not get the required nourishment and, consequently, loses weight. Only after the reflexes of sucking and swallowing become regular, will he get enough nourishment to regain his lost weight and resume the pattern of growth which was interrupted at birth.

Adjustment to Elimination

Waste products during the prenatal life are eliminated from the foetal body through the umbilical cord and the placenta into the maternal blood stream. Within a few minutes or hours after birth, the infant's organs of excretion begin to function. This takes care of the elimination of waste products from his body.

That the infant finds the four major adjustments difficulty is apparent from the effects they have on the pattern of his development. The major indications of the difficulty the infant faces in adjusting to the postnatal life are loss of weight and disorganization of behaviour.

Loss of Weight

The newborn infant generally loses weight during the first week of post-natal life. This is mainly due to imperfectly developed sucking and swallowing reflexes at birth. Consequently the infant is unable to get a constant supply of nourishment adequate to meet his needs. However, under normal circumstances, he is able to adjust to this new method of taking nourishment since the sucking and swallowing reflexes develop through maturation and use. As a result, he begins to regain the weight lost after birth. By the time he is two weeks old, he weighs approximately what he weighed at birth.

Disorganization of Behaviour

All newborn infants experience a state of relative disorganization of behaviour during the first day or two of post-natal life. It may last longer in some infants. Gradually by the end of the first week of post-natal life, the infant normally achieves a more organized pattern of

behaviour (Brazelton, 1961). The disorganization of behaviour is evident in irregularities in the rate of respiration and pulse, frequent urinations and defecations, wheezing, colic and regurgitation of food taken. There are two major causes for such disorganized behaviour. Firstly, the newborn infant is stunned by the ordeal of birth, which brings with it a pressure on his brain, which is only partially protected by a still undeveloped skull. The second cause of disorganized behaviour is his still-deficient mechanisms for maintaining body homeostasis, and his undeveloped autonomic nervous system. Before birth, his homeostasis was maintained by the mother's homeostasis in the uterus. With the severing of the umbilical cord, his own body has to achieve this.

Infant Mortality

Although the number of deaths during the period of postnatal adjustment has been declining in India in recent years, the death toll is still high. According to statistics (UNICEF, 1973) 114 infants die under one year of age in rural areas of India against 78 in urban areas in a year per thousand live births of the same year. Three out of four deaths among babies under one month of age are from causes arising either before or during birth. Of these, the most common are prematurity, congenital debility, injury at birth, malformation, diarrhoea, influenza, pneumonia and oxygen deficiency resulting either from having the umbilical cord tighten around the foetal neck during the birth process or from excessive use of drugs on the mother to relieve labour pains.

Generally girls adjust better to their post-natal environment than boys (Montagu, 1962). The higher the socio-economic status of the family, the better the adjustment of the infant. The neonatal mortality rate increases primarily due to the poorer prenatal care women get in areas where poverty and ignorance prevail.

Infants whose birth weight is average or slightly above-average adjust better to their post-natal environment than those whose birth weight is below average, or those born before full term. The factors responsible for great variations in neonatal adjustment appear to be the physical and emotional condition of the mother during the period of pregnancy and the type of birth the infant has experienced.

Many factors influence the success with which an infant makes the necessary adjustments to post-natal life. These include : the type of prenatal environment, the type and severity of birth experienced, prematurity, parenatal attitudes and post-natal care. The health of the mother and her emotional condition during pregnancy play an important role in determining the ease or severity of birth and the ease or difficulty the infant would experience in his adjustments to the post-natal life.

There are many types of intra-uterine disturbances which may cause an infant to be born 'with severe injuries and then be subject to a miserable life'. Inadequate prenatal care of the mother, because of poverty or neglect, is often responsible for the development of unfavourable conditions in the intra-uterine environment which, in turn, affect the developing child and lead to complications in child birth. Both these influence the type of adjustment the infant makes.

Malnutrition of the mother during pregnancy has been found to be responsible for premature births, still-births and infant mortality. Improvement in maternal nutrition, on the other hand, helps to prevent these hazards and makes post-natal adjustment easier for the infant. With advancing maternal age, more problems are likely to arise during pregnancy and thus more complications in the child's adjustment to post-natal life. Infants whose mothers suffer from diabetes may have more difficulties in adjustment and are responsible for a higher incidence of mortality, than

infants whose mothers are non-diabetic.

One of the most important factors, which contribute to difficulties in post-natal adjustment, is the prenatal environment characterised by prolonged and intense maternal stress (Lindzey *et al.*, 1960). This leads to complications during pregnancy and child-birth. As maternal stress causes the foetus to be hyperactive during the last months of pregnancy, this condition tends to persist even after birth and manifests itself as difficulties in feeding, failure to gain weight, problems in sleep, general irritability, distractability and a host of other conditions that make adjustment to post-natal life difficult (Clifford, 1962). Commenting on the effects of maternal stress during pregnancy on the adjustment of the infant, Sontag (1944) states :

> 'To all intents and purposes, a newborn infant, with such a background, is a neurotic infant when he is born—the result of an unsatisfactory foetal environment. In this instance, he does not have to wait until childhood for a bad home situation or other cause to make him neurotic. It was done for him before he even saw the light of day.'

On the other hand, when the physical and emotional states of the mother are healthy, the infant will make quick and satisfactory adjustments to his new environment. He will regain the weight lost in a few days. His behaviour will show signs of stability and better organization.

Studies comparing the effects of normal foetal activity with those of excessive activity, which is characteristic of foetuses whose mothers are suffering from prolonged and intense stress, have revealed a high correlation with post-natal adjustments. Healthy foetuses, who are not hyper-active during the later months of pregnancy, show a quicker and post-natal environment but also during the early part of babyhood.

Beginnings of Personality

Children are born with characteristic temparamental differences as shown in their activity rates and sensitivities. These are the potential qualities from which the personality pattern will develop. Individual differences in these potential qualities are apparent right from birth. These are shown in responses to food, in crying and in motor activities.

There is little evidence that the birth trauma, or the psychological shock that comes to the infant when he is separated from the mother at birth, has any lasting effect on his personality. There is evidence, however, that infants who are separated from their mothers after birth do not make as good an adjustment to their post-natal life as infants who are with their mothers (Yarrow, 1961). There is also evidence that the mother's attitude toward the infant, which is reflected in her behaviour, influences the personality of the infant. If, for example, the mother is not happy about having a baby or if the baby is not of the desired sex, this will be sensed, if not understood, by the infant (Waldrop and Bell, 1966). The attitude of the mother reflected in her behaviour is an important determinant in the development to the personality of the infant.

References

Ambron, S.R. *Child Development*, California: Holt Rinehart and Winston, 1975.

Apgar, V.D.A., Holaday. L.S., James, I.M., Weisbrot and Berrien, E., '*Evaluation of the Newborn Infant*—Second Report', in *J. Amer. Med. Ass.* 1968, 1958.

Bell, R.Q., and Darling J.F., The prone head relation in the human neonate : Relation with sex and tactile sensitivity', *Child Development*, 36, 1965.

Brazelton, T. B., '*Psychophysiologic reaction in the neonate*', 11, Effect of Maternal Medication on the Neonate and His Behaviour, in *J. Pediat.* 58, 1961.

Brim, O. G. R., Fairchild, R. W., and Borgatta,

'Relations between family problems', *Marriage Fam. Living*, 23, 1961.

Clifford, E., 'Expressed attitudes in pregnancy of unwed women and married primigravida and multigravida", *Child Development*. 33, 1962.

Cobb, K.R., Goodwin, K.R., and Saeleen E. 'Spontaneous hand positions of newborn infant', in *J. Genet. Psychol.* 108, 1966.

Denenberg, V.H., *Education of the Infant and Young Child*, New York : Academic Press, Inc. 1970.

Engen, T., Lipsitt, L.P., Kayo, H., 'Olfactory responses and adaptation in the human neonate', in *J. Comp. Physical Psychol*, 56, 1963.

Grossman, H.J., Greenberg, N.H., 'Psycho-somatic differentiation in infancy', in *Psycho Som. Med.*, 1957.

Gold, E.M., 'A broad view of maternity care', in *Children*, 9, 1962.

Harish, Chanda, 'Birth weights of infants of different economic groups in Hyderabad', in *Proceedings of Nutrition Society of India*. Hyderabad: National Institute of Nutrition, No. 10, 1971.

Henry, L.S. Kessen, W., 'Oral behaviour of newborn infants as a function of age and time since feeding', in *Child Development*, 35, 1964.

Hurlock, E.B. *Developmental Psychology*, Bombay: Tata McGraw-Hill Publishing Co., 1968.

James, W., *The Principles of Psychology*. New York: Holt, Rinehart and Winston, 1890.

Jersild, A.J., 'Emotional development', in Carmichael, *Manual of Child Psychology*, New York: Wiley and Sons, 1954.

Kron, R.E., Stein, M., Goddard, K.E., 'A method of measuring sucking behaviour of newborn Infants', in *Psychosom. Med*,. 25, 1963.

Lamberth, J. Mccullers, C., Mellgren, R.L. *Foundations of Psychology*, New York: Harper and Row, Publishers, 1976.

Leventhal, A.S., Lipsitt, L.P., 'Adaptation, pitch discrimination and sound vocalization in the neonate', in *Child Development*, 35, 1964.

Lindzey, G., Lykken, D.T., Winston, H D., 'Infantile trauma, genetic factors, and adult temperament", *J. Abnormal Social Psychology*, 61, 1960.

Lipsitt, L.P., Engen, T, Kaya, H., Developmental changes in the olfactory threshold of the neonate, in *Child Development*, 34, 1963.

Lipsitt, L.P., Levy, N., 'Electro-factual threshold in the neonate', in *Child Development*, 30, 1939.

McCrade, B.J., Kessen, W.J., Leutzendorff, A.M., in the 'Activity human newborn as related to delivery difficulty', in *Child Development*, 36, 1963.

Miller, V.L., *'The miracle of growth'*, in *Urbana*. III, University Ilinois Press, 1950.

Montagu, A., 'Prenatal Influences', in Springfield III chales C. Thomas 1962.

Newton, N. *Maternal Emotions*, New York: Hoeber-Harper, 1955.

Olmstead, R.W., Jackson, E.B., 'Self-demand feeding in the first week of life', *Pediatrics*, 6, 1950.

Peckos, P.S., 'Nutrition during growth and development', in *Child Development*, 28, 1957.

Pratt, K.C., 'The Neonate in Carmichael', *Manual of Child Psychology*. New York : Wiley and Sons, 1954.

Rubin, A., Murphy, P.P., 'The frequency of congenital malformations in the offspring of nondiabetic and diabetic individuals', in J. *Peadiat*, 53, 1958.

Schwartz. P. 'Birth enquirtes of the newborn', *Arch. Peadiat*. 73, 1956.

Shanti Ghosh, Bhargava S.K., Vijaya Bhargava., 'Growth pattern of babies in Delhi area in the first year of life', in *Proceeding of Nutrition Society of India*, Hyderabad, National Institutes of Nutrition, No. 10, 1971.

Smith. C.A., 'The First Breath', in *Scient. American*, 209, 1963.

Sontag. L.W., 'War and foetal maternal relationship', in *Marriage Fam. Living*, 1944.

Spitz, R.A., 'The role of ecological factors in emotional development in infancy', in *Child Development*, 20, 1949.

Spock, B., *The Pocket Book o .Baby and Child Care* New York. Pocket, 1964.

Slone, L.J., and Church, J., *Childhood and Adolescence*, New York: Random House, 1957.

Stendler, F. Lavalelli, C.S., *Readings in Child Behaviour and Development*, New York: Harcourt Brace Jovanovich Inc., 1972.

Stott, D.H., 'Physical and mental handicaps, following a disturbed pregnancy'. *The Lancet*, 272, 1957.

United Nations Children's Fund. Statistical Profile of Children and Youth in India, Sept., 1973.

Waldrop, M.F., R.G. Bell., 'Effects of family size and density on newborn characteristics', in *Amer. J. Orthopsychiat*. 36, 1966.

Weller, G.M., Bell, R.Q., 'Basal skin conductance and neonatal state', in *Child Development*. 36, 1965.

Willie, C.V., 'A research note on the changing association between infant mortality and socio-economic status', in *Soc. Forces*, 37, 1959.

Yarrow, L.J., 'Maternal deprivation toward an experical and conceptual revaluation', in *Psychol. Bull.*, 58, 1961.

CHAPTER 8

Care of the New Infant

Care of the new infant involves careful lifting of the babies, diapering, clothing, bathing and feeding. There are certain basic things about these aspects that have to be learned, in order to give the babies the best of care.

Lifting Babies

A small baby should be lifted by grasping both his feet or thighs with the right hand and slipping the left hand under his neck and head as shown in Figure 4. He is then raised upon the left arm. By this method his entire spine is supported and no undue pressure is made upon his chest. Older infants may be lifted by grasping the body under the arms but should not be lifted by the wrists. A sudden pull at the wrist may cause injury to the elbow or shoulder joints.

Diapering

A clean, old absorbent cloth is good for making diapers at home. There are several ways of folding diapers. Some are illustrated in Figure 5. Many mothers have their own techniques. In 'triangular' folding diapers are best made in an oblong shape, 91 centimetre long and 45 centimetre wide. These can be doubled to form a square and again folded once or twice to form a triangle. This is wrapped about the hips and between the limbs to form drawers. If pinned too tight, it will restrict the baby's leg movement.

Panel folding has the advantage of providing the best padding effect with six thick layers in the area which becomes the wettest. The thick part is put in the back when the baby is on her back, and in front when she sleeps on her stomach. It is always put in front in the case of boys. As the baby grows bigger, the fold from the bottom up will have to be made shorter and eventually left out altogether. This type of fold is particularly useful for small babies.

The 'kite fold' is useful, for bigger babies. It gives four thick layers of absorbing surface and allows more freedom for the baby's legs.

At night, extra padding may be placed in the diaper to absorb the urine. This padding should be of clean, soft, absorbent material. Soiled diapers should be changed immediately and placed in cold water, washed and dried in the sun. A wet diaper should never be kept without washing it. If the baby defecates, the diaper should be scrubbed with a toilet brush or rubbed on the washing stone. It should then be rinsed many times and washed. If the baby has just passed urine, the diaper should be washed in hot soapy water and rinsed thoroughly. Bleaching agents should not be used to clean diapers. It is important to rinse the diapers three or four times until the rinse

Fig. 4. The right type of lifting a baby.

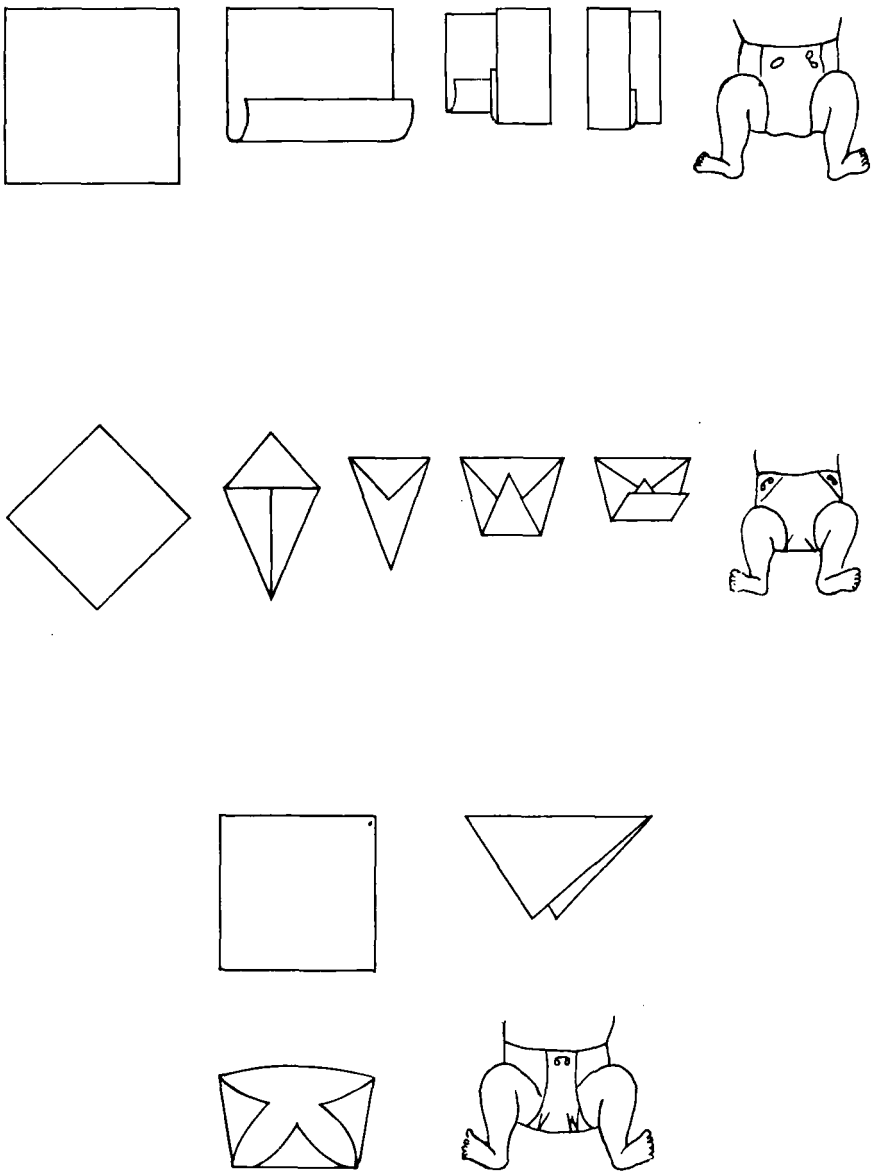


Fig. 5. Ways of folding diapers. Panel fold, kite fold, triangular fold

water is clear, for soap is irritating to the baby's skin. After drying, the diapers can be smoothed and folded neatly.

Diaper rash is not a disease, but a response to an irritant—ammonia—which is formed if urine stands for a while. The skin in the diaper area becomes red and raw and may develop little white pustules. If there is any suggestion of such a rash, the diapers should be given a final rinse in a 2% saturated solution of boric acid. The boric acid which dries on the diaper will neutralize the ammonia as it is formed. The best treatment for diaper rash is to expose the baby's bare buttocks to the open air—either in the sun or in some warm place under shade for several hours a day. With this treatment and with care in changing soiled diapers immediately the rash will clear up quickly. If the rash persists, a doctor should be consulted who may prescribe a powder or an ointment.

Clothing

In warm climates, all the clothing a baby needs is shirt and diaper. In cold climates sweaters can be added in the day time and a long gown and socks to keep the feet warm at night. Overclothing the baby, during the day and night is a common mistake made by most mothers. When a mother feels chilly, she puts automatically more covers on the baby, without finding out whether he needs them. Babies who are overclothed are apt to be restless and fretful. They perspire a good deal and are more likely to suffer from skin itchings. Under those conditions, the best remedy is to use less clothing and only cotton garments next to the skin. Powdering the baby frequently will also help. As for blankets, if the baby's hands and feet are really cold when he is put in bed, he does need more covering. But if his body feels hot and sweaty, he is overdressed or has too many covers. Blankets should be large enough to tuck him in securely under the mattress. They should not have loose ties or tapes that might get wrapped around the baby's neck. For a baby crawling on the floor, overall and slipper-socks are good.

Baby's Cries

Crying is the only means by which the baby can call for help. His cry does not always mean that he is hungry. He may be too hot or cold. The normal body temperature for a newborn baby is 98° to 99°F. His temperature must be taken from his rectum. It may rise if he is too warm, does not get enough water, or has an infection or some other physical disturbance. Helping the child to feel normal is the right treatment in such situations.

Hunger cries are healthy, lusty cries. If the baby tries to put his fingers into his mouth or makes sucking noises, this is a sign that he is hungry. The baby will always cry when he is wet. Cries after feedings may mean there is still some gas that escaped the bubbling, or his formula may not be right and may need adjusting.

Bathing

A daily bath is an honoured tradition. It is a pleasant habit for the baby unless he is unwell. Tub baths have to be deferred until the stump of the umbilical cord falls off; this usually happens by the fifth or sixth day. Before that he should be given a sponge. The bathroom should be warm. There is no need to fear that he will catch a cold if he is exposed. He will not catch a cold unless there is somebody around who has a cold to infect him. A basin of warm water and a soft absorbent towel are all that is necessary for a sponge bath. With the nude baby on a towel in the lap, his face and scalp should be washed with the soft wash

cloth, and soap and the rest of his body, back and front. It is a good practice specially with a fat baby, to put some talcum powder in the skin folds. This will help to prevent chafing (*intertrigo*) in that area. If his nails are long, cut them while he is asleep and not at bath time. With long nails, he may scratch himself and develop an infection.

There are some 'dont's' about bathing. Sick babies should not be given baths, unless ordered so by the doctor. Babies with skin troubles also should not be given baths. Eczema can become worse by the application of soap and water. Too vigorous cleaning, which is often resorted to, may irritate the baby's skin. It is neither necessary to go into the ears and nostrils with pick swabs nor to bathe the eyes or wash the mouth out. However, the soap should always be completely and carefully removed. Oiling will help to mitigate chafing but unless there is a tendency to chafing, powder or oil are not necessary.

It does not matter what time of the day a child is bathed. With older infants in the crawling stage, an evening bath will help to wash off the day's dirt before bed time. Some physical conditions which may come to the mother's attention at bath time are crust on the scalp, chafing of the skin, enlarged breasts, rupture at the navel, unusual redness or discharge from the genital organs.

The Scalp

Sometimes there is a tendency for a crust to form on the scalp. In such a case, it is advisable to soften the crust with oil. If the crust does not clear up, a doctor must be consulted.

Chafing

Chafing of the skin may occur anywhere on the baby's body as a result of too vigorous rubbing, irritating clothing, or the use of too strong soaps. It is likely to occur particularly in the diaper region, if the soiled diapers are not immediately changed. The best treatment is to eliminate the irritating factor and to expose the affected area to fresh air as much as possible. Use of talcum powder between the folds of skin will help prevent chafing which occurs when the skin surfaces rub against each other. The affected area should be bathed with oil rather than with soap and water.

Enlarged Breasts

It is not unusual for infants of either sex to develop prominent breasts. They are not enlarged at birth but become so thereafter. The swelling often lasts for weeks and occasionally for months. There may be some secretion of 'witches' milk' too. This enlargement is caused by the same glandular mechanism which causes the mother's breast to lactate. Some of the mother's glandular secretions are transmitted to the baby just before birth. The important thing is to leave the breasts alone and not to squeeze them. The swelling will disappear in time.

The Navel

In modern medical practice, a surgical dressing over the umbilical cord after birth is no longer considered necessary. However, the cord should be left strictly alone. When it falls off, the navel may appear red for a few days. If this redness does not promptly disappear a doctor should be consulted. A rupture at the navel, called an umbilical hernia, is not uncommon in babies. This part of the abdominal wall is weak and may give way to a small part of the intestine to protrude beneath the skin. Usually the rupture is a small lump, often no bigger than a finger tip, which pushes out after crying or straining. It can readily be pushed back. A small hernia is a matter of no consequence, and will disappear in the course of a few months. However, a larger one—a protrusion as big as a walnut—needs to be attended to. The doctor may want to strap it

with an elastic adhesive plaster. Before applying the adhesive, the hernia must be pushed back and the folds of skin over it drawn together. It is a troublesome problem, for the adhesive plaster tends to slip and has to be replaced frequently. It irritates the skin and has to be applied in a different way. Elastic navel bandages are often used in place of plaster. Rarely is the hernia so large that it will not close itself, and must be operated on.

The Genitals

Any unusual redness or discharge from the genital organs of the babies should be reported immediately to the physician.

The Bowels

During the first two or three days of post-natal life, the baby's stools are small, soft and dark greenish-brown in colour. They are composed of meconium, the material which was in the intestinal tract before the baby was born. Breast-fed infants have more regular bowel movements than bottle-fed infants—usually two or three times a day during the first week and once or twice a day thereafter. The stool of a breast-fed baby is soft, almost loose and is usually smooth, containing no lumps. It is yellow in colour, often with greenish tinge. It has an odour which is not wholly unpleasant. Bottle-fed infants have les sfrequent stools. The colour of their stool is paler. It is more solid and has a somewhat foul odour.

Any obvious change in the stools should be reported to the doctor. Sometimes it may not be important as when colouring matter from vegetables appears in the stool. At other times it may indicate serious illness. Greenish stools are seen commonly when a considerable amount of air is swallowed and passes through the intestine. The stools may be dark brown or black when iron is taken. The presence of fresh blood is a matter of great concern.

When the baby is three or four months old, it is possible to regulate his bowels in such a way as to decrease the number of soiled diapers. By supporting the child on a 'potty' for a few minutes twice a day in the mornings and afternoons directly after a feeding, the mother can anticipate the movement. Such early bowel regulation is easier to accomplish if the baby's meals are on schedule. This will lead to genuine bowel training, when the child knows what he is doing and can anticipate his bowel movement later.

Airing

Most children enjoy being outdoors. Babies who do not get enough fresh air may become pale and languid and lose their appetite. In the hotter parts of the country sun baths are not necessary. But in the cold northern regions, the baby can be placed near a sunny window for five to ten minutes every day.

Sleep

The habit of regular sleep is best established by waking the baby punctually for his daytime feedings, and allowing him to sleep as long as possible at nights. A newborn baby normally sleeps for nine-tenths of the day. At six months, he should sleep at least two-thirds of the day. There is no need to wake him for his 2 a.m. feeding. If he forgets it, he has probably outgrown the need for it. Since he will be in his crib most of the time, the crib should have firm supports or springs and a firm mattress given so that the baby has utmost comfort.

Pillows are quite unnecessary for babies although they are not dangerous. A baby can sleep well on his back or stomach. It will be good to alternate the positions. Many paediatricians favour the stomach position, with the head turned gently to one side or the other. Sleeping on his back may tend to flatten his head, although it will correct itself later. No baby should sleep in the same bed with another

person, since adults and older children may roll over the baby in their sleep and hurt him. There is also the chance of infections.

The baby should gradually be trained to go to sleep when put in his crib. Ten minutes of fussing is natural and normal. He may even cry for half an hour. But if the crying does not subside, the possible causes of restlessness should be checked. He may be too warm or too cold. The diaper pin may be hurting him. He may even be too exhausted to sleep. He may be ill. If nothing is wrong, he should be patted, cuddled, or talked to or perhaps even given a drink of water. He should not be picked up since he may demand such treatment thereafter.

Baby's Food

The basis of most formulas is milk. The paediatrician or dietitian will prescribe the kind that is best for the individual. Many kinds of milk are used; evaporated or liquid modified milk, powdered milk and fresh bottle milk. Even pasteurized, fresh milk should be boiled for greater safety and digestibility. Boiling is one means of modifying cow's milk so that small, soft curds are formed in the stomach, more like those resulting from breast-milk.

The prescription or formula given by the doctor should be used. The items used for preparing the formula should never be used for anything else. They must be kept clean and stored in a clean place.

Equipment required

1 A deep kettle with a rack to hold the bottles. Six 225 millilitre and two 112.5 millilitre bottles complete with nipples and cap.
2 A set of measuring spoons.
3 A long-handled mixing spoon or stirring rod.
4 A funnel-strainer.
5 A pair of long-handled tongs.
6 A can opener.
7 A table knife (for levelling powdered milk or sugar).
8 A nipple jar with perforated lid for sterilizing the nipples.

In the process of sterilization, the nursing bottles and articles come first. Sterile ingredients are used to make the formula, which is then placed in the sterile bottles. The bottles should not be contaminated with hands or unsterile objects. To sterilize plastic bottles, the directions given on the wrapper should carefully be followed. The different steps in sterilization are as follows.

1 Clean all equipment.
2 Put freshly washed bottles in large kettles upside down placing a towel at the bottom.
3 Add water and bring to boil.
4 Put the nipples and caps in jar with perforated lid, place jar upside down in the centre.
5 Put the spoons and strainer in between the bottles. Put the tongs last with handles up.
6 Place cover on kettle and boil for five minutes. Note the time when steam comes out of the kettle.
7 Remove the rack of bottles. The outside of the bottles may be touched with fingers but not the edges.
8 Place other articles from the kettle on a sterile plate ready for use.

In families where it is difficult to follow the above-mentioned procedure, all the items used for feeding the baby can be sterilized together.

How to prepare the formula

1 Wash hands.
2 Boil water in a pan. Fill water bottles.
3 Open the milk can with a can opener.
4 Measure the required amount of water into the measuring cup.
5 Measure the milk powder, level off the spoonfuls with the knife.

6 Stir the formula with long-handled spoon.
7 Fill the bottles with the the formula prepared after straining
8 Pick up the nipples one at a time, snap on the bottle ; cover with cap. With certain types of bottles the nipples fit on the bottle, tips down, the cap and cover. Screw over top.

To prepare a bottle of milk or water for feeding

1 Remove the cap and place nipple in position.
2 Stand the bottle in a deep pan of warm water.
3 Shake off a few drops on the inside of your wrist to test the temperature and the size of the nipple hole. The formula should be warm and should drop from nipple. Discard nipples with too large holes.

Care of bottle and nipples

1 After use, remove the nipple.
2 Empty the bottle.
3 Rinse it well with warm water.
4 Fill with cool water and put aside on a tray in a safe place.
5 Wash the nipples and the caps inside and out with brush, removing every bit of milk.
6 Keep the nipples in a dry jar.

References

Ambron, S.R. *Child Development*, California : Holt, Rinehart and Winston, 1975.

Denenberg, V.H. *Education of the Infant and Young child*, New York : Academic Press, 1970.

Hurlock E.B., *Developmental Psychology*, New Delhi : Tata McGraw-Hill Book Company, 1976.

Lamberth, J., Mccullers, C., Mellgren, R.L. *Foundations of Psychology*, New York : Harper and Row Publishers, 1976.

Needham, M.A., Strong, A.G. *Better Homes*, Revised by Devadas, R.P. Calcutta : John Brown Oxford University Press, 1970.

Stendler, F. Lavetelli, C.S., *Readings in Child Behaviour and Development*. New York : Harcourt Brace Jovanovich, Inc., 1972.

CHAPTER 9

Babyhood

Babyhood is the period from the end of the period of infancy, two weeks after birth, to the end of the baby's second year of life. By the end of babyhood, the average baby is relatively independent of adult aid. Decrease in helplessness and an accompanying increase in independence result from the rapid development of body control which enables the baby to sit, stand, walk and manipulate objects at will. Independence also increases with the baby's improvement in the ability to communicate his needs and wishes to others in forms which they can understand.

Characreristics of Babyhood

Babyhood is critical, dangerous and at the same time appealing. Thus it has a distinctive place in a man's life span.

1. Critical

The period of babyhood is critical in the sense that the foundations for many behaviour patterns, attitudes toward others and towards self and many patterns of emotional expressions are laid at this time (Havighurst, 1953). They become so firmly established that changing them may mean relearning, with accompaniment of emotional tension and confusion.

2. Dangerous

Despite improved medical care in the prenatal and early post-natal months, the severity of diseases and the mortality rate during the babyhood years are still high. Two-thirds of all deaths in the baby's first year of life occur in the first month. After that, the mortality rate decreases rapidly. During the second year of life, accidents may prove fatal or may produce injuries which will permanently affect the course of the individual's life. The baby's strong desire to explore his environment is not held in check by a knowledge of possible harm. As a result, the baby meets with many accidents, some of which may be serious.

3. Appealing

The helplessness and dependency of the small baby appeal to adults and older children. The baby is easy to manage when he is helpless. As his helplessness is replaced by the ability to do things for himself, the baby is less easily managed and more resistant to adult help. Unfortunately parents cannot or are not quick enough to accept this concept of the baby's abilities which will help them to keep pace with his development. As a result, the baby gets frustrated in his attempts, and becomes resistant and negativistic. So the appeal of helplessness is lost.

Developmental Tasks of Babyhood

All babies are expected to learn to walk, take

solid foods, have reasonable control over elimination pattern, achieve physiological stability especially in the hunger rhythm and sleep. They have to learn the foundations of speech and relate themselves emotionally to their parents and siblings to some extent instead of being completely self-absorbed as they were immediately after birth. Most of these developmental tasks will not be completely mastered during babyhood, but the foundations should be laid. There are two important reasons for this. Firstly, the earlier the baby gains control over his body, the sooner he can become self-dependent. Secondly, the time and effort needed to master the other developmental tasks are lessened.

The rapid development of the nervous system, ossification of the bones and strengthening of the muscles make it possible for the baby to master the developmental tasks of babyhood. However, the exploitation of this possibility will depend to a large extent upon the opportunities the baby is given to master them and the help and guidance he receives in mastering them.

Physical Development

Babyhood and puberty are two periods of rapid growth during the life span. During the first six months of life, growth continues at the rapid rate characteristic of the prenatal period and then slows down. In the second year, growth is at a rapidly decelerating rate. During the first year of life, the increase in weight is proportionally greater than the increase in height. In the second year, it is the reverse (Martin and Vincent, 1960).

Weight

After the loss of weight immediately after birth, the baby's weight begins to increase. By the time the baby is four months old, he normally doubles his birth weight. This means that an average four month-old baby will weigh 6.5 to 7.0 kilograms (ICMR, 1968). At one year, the birth weight should be trebled. Weight gain is slow during the second year owing to the greater expenditure of energy in creeping, sitting and walking.

Height

By the time the baby is four months old, he measures between 58 to 60 centimetres in length. At eight months, the average height is 65 centimetres and at two years, approximately 86 centrimetres (ICMR, 1968).

Physical Proportions

Changes in body proportions are slight during the first half year of post-natal life. Thereafter the head appears less enormous than it did at birth, owing to the development of the lower part of the face and the appearance of teeth which makes the mouth seem in better proportion to the rest of the face. The arms (hands) also increase in length. Rapid muscular development takes place in these parts of the body.

Bones

Bone development follows the same general trend as growth in size. Thus bone development is most rapid during the first year of life, followed by a period of relatively slow development during the second year (Harding, 1952). The number of bones in the body increases at this time, with bone tissues gradually replacing cartilage or membrane in certain areas (Thompson, 1962). The soft spongy tissue of the bones of the newborn gradually hardens at different rates in different parts of the body. As the bones are soft during babyhood, the body is pliable (Peckos, 1957) and this explains why a baby can assume strange positions, such as sucking

his toes when lying on his back.

Teeth

Of the 20 'baby', or temporary teeth, approximately 16 may erupt during babyhood. The first tooth to make its appearance cuts through the gum, generally between the ages of six and eight months. The lower central incisors come out first, followed by the upper incisors. By the age of one year the average baby has four to six teeth, and by the second year, 16. The time of eruption of the teeth is variable and depends upon such factors as hereditary tendencies, the baby's health, nutrition and sex. The sequence of eruption is more important than the age of eruption, because when there are irregularities in the sequence, the jaws are likely to be thrown out of position and cause poor alignment of the teeth. As the molars, or 'chewing' teeth, in the back of the jaw, cut through during the second year, teething gives rise to more physical upsets and discomfort which, in turn, lead to fretfulness, and irritability than during the first year of life when the eruption of teeth was less painful.

Nervous System

It has been estimated that one-fourth of the adult brain weight is attained at birth, one half by the age of nine months, and three-fourths by the end of the second year. This rapid growth in the brain is characteristic of both the cerebrum and the cerebellum. The cerebellum, which plays such an important role in postural control and body balance, gains approximately 300 per cent in weight during the first year of life (Thompson, 1962, Vincent and Martin, 1961). As the brain grows at an increased rate during babyhood, it is easily impaired by malnutrition. How great the damage is and how persistent its effects are are yet to be determined and confirmed.

Development of Sense Organs

The sense organs also develop rapidly during babyhood and are capable of functioning on a satisfactory level during the early months of life. With the development of the eye muscles by the third month, the baby is capable of seeing things clearly and distinctly. However, as the eye muscles remain weak for many months, sometimes the eyes no not focus especially at times when the baby is fatigued, hungry or has been crying.

The sense of hearing is acute in babies. At two months of age, babies exhibit a greater acuity to the voice than to such sounds as whistling, knocking, handclapping and the noise of a spoon. Shortly after the baby is two months old, his responses to noises and sounds of all kinds are equal (Breakenridge and Vicent, 1965).

The senses of smell and taste are well developed at birth. They continue to be acute throughout babyhood. The thin texture of the baby's skin and the fact that there are as many sense organs for touch, pressure, pain and temperature in the skin surface of a baby as there will be when he reaches maturity, make a baby highly responsive to all skin stimuli.

Physiological Functions

During babyhood the fundamental physiological patterns of eating, sleeping and elimination are established, even though habit formation may be completed after babyhood.

Sleep Patterns

The mean duration of night sleep increases from 8½ hours at 3 weeks to 10 hours at 12 weeks and remains constant during the rest of the first year (Spock, 1967). During the second year, the baby sleeps generally from 8 p.m. to 6 a.m. with an afternoon nap of two hours.

Eating Patterns

From birth until four or five months of age, all eating is in the infantile form of sucking and swallowing. So food must be in liquid form. In the developmental pattern, chewing generally appears a month later than biting. At first, the baby chews in 'rabbit style', using his front teeth (Figure 6). With reasonable practice and encouragement for biting and chewing semi-solid food, the baby will master the foundational eating skills by his first birthday (Spock, 1967).

Every baby has his own rhythm of feeding. Therefore, the individual baby's hunger rhythm must be taken into consideration. Forcing upon him an artificial feeding schedule will cause frustration and lead to the rejection of food and predispose the baby to other emotional upsets.

Patterns of Elimination

The timing is far more important than the technique in establishing habits of bowel and bladder control. These habits cannot be established until the baby's muscles and nerves are ready for them. Bowel control begins at six months on the average. Bladder control is established between the ages of 15 and 16 months. In both cases, temporary lapses may be expected when the baby is tired, ill or emotionally excited. Bladder control is in a rudimentary state at the close of babyhood. Dryness during the day time can be expected for a major part of the time, except when deviations from the routine of the day, illness, fatigue or emotional tension interfere. Dryness at night cannot be achieved until a few years later (in the average child).

Muscle Control

The development of the muscles, bones and nerve structures, and change in body proportions, enable the baby to use his body in a coordinated manner. He must, however, be given an opportunity to learn how to do this. The approximate ages at which control appears in the different areas of the body and the usual pattern of development are now described.

Head Region

Control of the head muscles comes early in life. Horizontal eye movements develop between the second and third months of life, vertical eye movements between the third and fourth months and circular eye movements, several weeks later. While 'reflex smiling' occurs in the first week of life, 'social smiling' does not appear until between the third and fourth months (Ainsworth, 1964) (Figure 7).

When supported at the chest and abdomen, (in a prone position) the baby can hold his head occasionally erect at the age of one month and at two months; he can raise his head off the shoulder and hold it so for more than three seconds (Phatak, 1977). By the age of four to six months, most babies can hold their heads up (Figure 8). At five months, he turns his head freely when sitting in a chair.

Trunk Region

The two important developments in the trunk region are the abilities to turn the body by rolling and sitting up. By the time the baby is two months old, he is generally able to turn from side to back; from back to side at four months and at six months, from stomach to stomach. The complete turn is generally made at first with several partial turns with rest periods between each turn. When he rolls, the baby turns his head first, then his shoulders, then the pelvis, and with a last pushing-kicking movement of the legs, he makes a turn of his entire body.

A sixteen-week-old baby can pull himself up to a sitting position; at 20 weeks, he can sit with his back erect when supported; and at 28 weeks, he can support himself for some time when placed in a sitting position (Figure 9); the average baby will sit unsuppor-

ted for ten or more minutes between his ninth and tenth months. In the beginning, the baby often bends forward with arms outstretched to maintain his balance.

Arm and hand region

Eye-hand co-ordination, or the direction of the movements of the hands by the eyes, is developed by the sixth or seventh month of life. Random reaching no longer exists then and the baby can pick up even little objects when he reaches for them (Figure 10). The first coordinated hand movement is a defence reaction when some stimulus is approaching the face. Thumb opposition to the fingers, which helps in grasping, normally appears between the eighth and tenth months (Phatak, 1977). Most of one year-old babies acquire a fairly mature pattern of reaching and grasping.

Leg region

The earliest form of locomotion in the leg region comes in the slight shifting of the body as a result of vigorous kicking of the legs. This occurs by the end of the second week of life. Then comes rolling followed by hitching or locomotion in a sitting position in which the body is pushed backward through the combined pushing of the legs and arms. Rolling and hitching characteristically appear by the sixth month.

Crawling, in which the body is prone on the floor with the head and shoulders raised by supporting the weight of that area on the elbows, reaches its peak between the seventh and ninth months. As greater body strength develops, the baby creeps by raising his body from the floor and pushing himself forward on his hands and knees (Figure 11). This generally occurs between the tenth and eleventh months. Sometimes the baby raises his knees from the floor, stiffens his legs and walks on all fours. Standing with support overlaps creeping in the developmental sequence. Gradually the baby will climb stairs resting one hand and a leg first on one step and then placing both together (Figure 11).

The average age for pulling himself to a standing position is between 12 and 15 months with the feet far apart, the toes turned outward and the head and shoulders held forward to give the body a better balance. Enough practice in standing gives the baby self-confidence to take his first step. Gradually, with practice and increased self-confidence he takes more and more steps with support. Several weeks may be required between standing without support and walking.

By 14 months, two-thirds of the babies walk without support and, by the age of 18 months, the average baby walks like an adult. After that time, improved coordination in the arms and legs results in smooth gait.

Babyhood-Skills

The foundations of many other skills are also laid during babyhood. Given opportunities, practice, an incentive to learn and a good model to copy, the baby will acquire these skills. Those skills can be divided into two major categories : (1) hand skills, and (2) leg skills.

1. HAND SKILLS

There is a rapid increase in the use of hands during babyhood. The hand skills centre mainly around independence in feeding, dressing and playing. By the time the baby is eight months old, he can hold his bottle when it is placed in his mouth, and a month later, he can take it out and put it back without help (Figure 12). Around his first birthday, he can hold a cup with both hands, and later with practice, with one hand. At 15 months, the baby can grasp a spoon, but he will usually turn it upside down before it reaches his mouth. By the end of the second year, the baby can properly use the spoon with only a moderate amount of spilling.

While dressing, hand skills appear first in the baby's ability to remove his clothing. At

Fig. 6. Developing eating skill.

Fig. 7. Becoming socially responsive.

Fig. 8. Holding head up at fifth month.

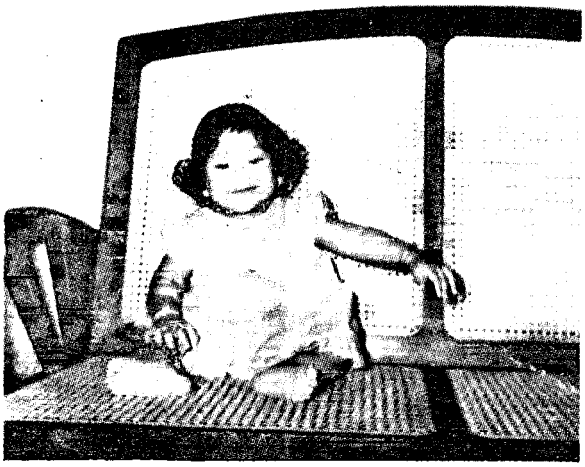


Fig. 9, Sitting is an important development in the trunk region.

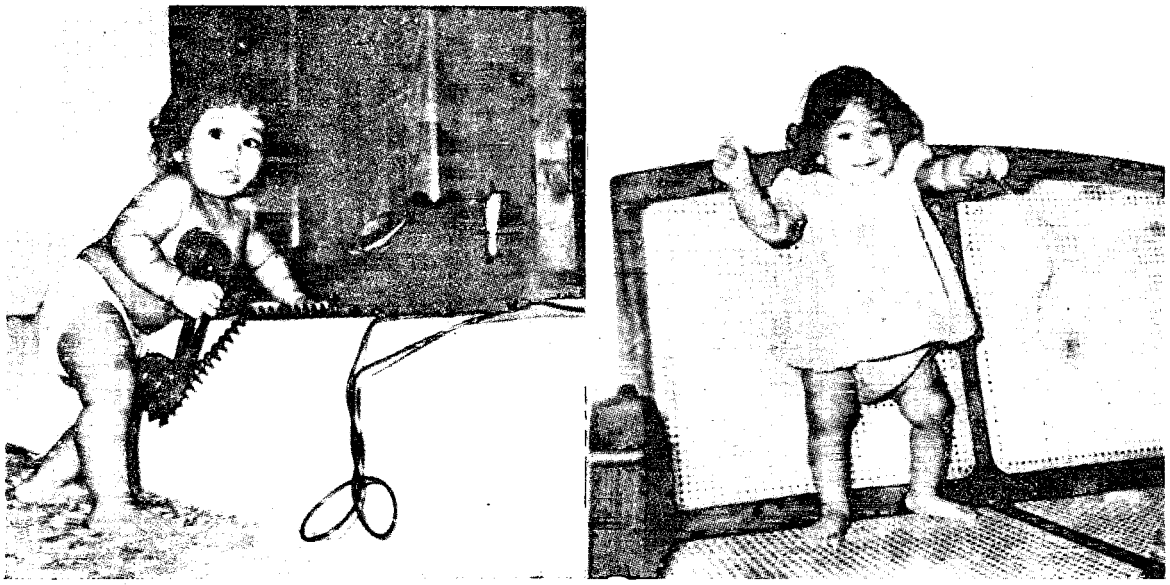


Fig. 10. Eye-hand co-ordination at nine months and twelve months.

Fig. 11. Developments in the leg region.

Fig. 12. Eyes and hands are important tools of learning.

Fig. 13. Hand skills displayed in the second year.

the end of the first year, most babies can pull off their socks and shoes. By the end of babyhood, they can generally remove all their garments unless they are buttoned in the back (Ryan, 1966). During this time most babies want to bathe themselves. They can hold a comb, brush their hair, and also brush their teeth with a tooth brush.

Play skills necessary for manipulating toys do not develop until late in the first year, and mostly in the second year (Dittrichova and Lapackova, 1964). The baby can open boxes, unscrew lids from bottles or jars, turn the leaves of a book, build a tower with blocks, insert pegs in a peg board and string beads before he is two years old (Figure 13). Some babies attempt to roll and even throw balls, but none can do these well before they are two years old.

By the time babies are eight months old, those who are above average in mental and motor development, show a greater degree of hand preference and the preference is for the right hand (Cohen, 1966). However, most babies shift from the use of one to the other hand, depending largely on the position of the person or the object the baby reaches for. Thus during babyhood, the individual is neither left nor right handed, although he shows, especially in the second year, a tendency to use one hand more than the other (Palmer, 1964).

Leg Skills

As the major part of babyhood is spent in developing the ability to walk, the leg skills are only in a rudimentary state of development by the close of the period. For example, running is little more than fast walking. General clumsiness and many falls are characteristic of the baby's first running. Jumping is an exaggerated stepping with one foot and then the other. Climbing up and down steps is achieved first by crawling and creeping. Later, when the baby can walk alone, he climbs the strairs up and down in an upright position, holding on to the railing of the stairs, placing one foot on one step and then drawing the other foot up to it.

Many babies fall below the norms given above in developing control over their bodies. There are many causes for delayed motor development in babyhood (Martin and Vincent, 1960). The most important of the causes are :

1 Lack of opportunity to develop muscle control because of a restrictive environment.
2 Parental fears of the baby's being harmed by using his muscles too soon.
3 Restrictive clothing.
4 Lack of incentive to develop muscle control becauses he is pampered and things are done for him.
5 Prematurity.
6 Body size and proportions which make movements of the body difficult.
7 Low intelligence which delays motor development in proportion to his deviation from average.
8 Fear engendered by previous accidents or constant parental warnings,
9 Poor health caused by disease and malnutrition.

Speech Development

Learning to talk is a long and laborious task. The baby is not maturationally ready for such complicated learning during the first year of life. There are three pre-speech forms which normally appears in the developmental pattern : crying, babbling and gestures.

1. Crying

Crying is the most frequently used of the pre-speech forms during the early months of life. The cries of the newborn baby, gradually, show marked differences so that by the third or fourth week of life, it is possible to tell

what it signifies, from the tone and intensity of the cry and from the bodily movements accompanying it (McCarthy, 1960 and Scott, 1963). For example, hunger cries are loud and interrupted by sucking movements.

Hunger is one of the most common causes of crying during the early weeks of life. As the baby grows older, pain due to indigestion, strong sensory stimuli, strong disturbances during sleep, failure of an intended reaction such as inability to move, loss or removal of a toy, removal of contact with others and fear of strange places are also common causes of crying.

The baby, before he is three months old, will learn that crying is a sure method of gaining attention. At five months, he will cry when an adult stops playing with him and the crying will increase if an adult enters the room and pays no attention to him (McCarthy, 1960). In the initial stages, all crying is accompanied by vigorous limb activity, strong flexor tendencies and disorganisation of postures (Ames, 1964). By the end of babyhood, no more activity occurs with crying than with other emotional outbursts. Babies whose needs have been promptly and consistently met cry little.

Babbling

As the baby's vocal mechanism develops, he is capable of producing a larger number of explosive sounds than was possible at birth. Some of these sounds will be retained and will develop into babbling. By the end of six months, the baby can combine certain vocal and constant sounds such as 'ma-ma', 'da-da' or 'na-na' (McCarthy, 1960). Babbling reaches its peak by the eighth month and then gradually paves way for real speech. Babbling is a form of exercise given to the vocal mechanism as a preliminary control which will make possible imitation of words spoken by others (Dittrichova and Lapackova, 1964).

Gestures

The baby uses gestures as a substitute for speech. Even after he is able to speak a few words, the baby will continue to use gestures, combining them with the words he knows to make his first sentences. For example, outstretching arms and smilies readily communicate the idea that the baby wants to be picked up.

Comprehension

At every age, a child can comprehend the meanings of what others say though he himself cannot give words to his own thoughts and feelings. This is true of babyhood also. The facial expression, tone of voice and gestures of the speaker help her to understand the meaning of what is being said. Pleasure, anger and fear can be eomprehended as early as the third month of life (Bossard and Boll, 1966, McCarthy, 1960). Until the baby is 18 months old, words must be reinforced with gestures, such as pointing to an object, if he is to understand the meaning (McCarthy, 1960). By the age of two years, the average baby comprehends enough to respond correctly to simple commands.

Learning to Speak

Learning to speak involves the tasks of learning how to pronounce words so that they will be understood by others, associating meanings with words and thus building a vocabulary of usable words for communication, and combining these words into sentences. These tasks involve not only control over the vocal mechanism but also the ability to comprehend meanings and to associate them with words which act as symbols for meanings (Keppel, 1964).

Pronunciation

Learning to pronounce words comes partly from a trial and error process but mainly from imitation of a model. The model must be presented slowly and distinctly so that the baby

can hear every sound. Between the ages of 12 and 18 months, most of the baby's speech is incomprehensible because of his mispronunciations and is generally called 'baby talk'.

Baby talk takes different forms, the most common of which are the omission of one or more syllables, usually in the middle of a word, like 'buttfly' for 'butterfly' and substitution of letters, syllables, or even words for the words heard, as 'Didly' for 'Iddly' or Chuk-chuk' for train. Consonants and consonant blends are more difficult for babies to pronounce than vowels and dipthongs. The most difficult consonants are Z, W, S, D and G and the difficult blends are st, stn, sk, dr, and fl (Havighurst, 1953). The final consonant rather than the initial consonant is usually in the omitted pronunciation of a word.

Vocabulary Building

In order to speak, the baby must learn words associated with objects, people and activities. Unless he knows what a word means, and that it is a label for some person, object or activity, it he will not be able to use in its proper context. Each new word the baby learns as a symbol becomes part of her vocabulary.

The baby's early vocabulary consists primarily of nouns related to persons and objects in his environment and of verbs which designate actions common to him, such as 'give', and 'hold'. Shortly before the end of babyhood a few adjectives and adverbs creep into his vocabulary. Adjectives describing his reactions to people and things, such as 'nice' and 'naughty', appear first. Prepositions, conjunctions and pronouns generally are not used until early childhood. The baby learns not only new words as he grows older, but also new meanings for old words (Keppel, 1964 and McCarthy, 1960).

The range of a baby's vocabulary at different ages can be judged by considering only those words whose meanings he knows. It has been found out that at one and a half years, the mean number of different words used by babies is 20 to 25 and at two years 50 to 100. It has been reported that the vocabulary range for the two-year olds is from 6 to 126 words (McCarthy, 1960 and Thompson, 1962). At this age, girls definitely surpass boys in the range of vocabulary. However, there are marked individual differences, because the range of the baby's vocabulary depends upon so many factors, especially intelligence, incentive and opportunity to learn new words.

Use of Sentences

The first sentences used by a baby are generally one-word sentences consisting of a noun or verb accompanied by a gesture. 'Doll', accompanied by pointing to a doll, expresses the meaning 'Give me the doll'. One-word sentences appear in a baby's speech between the ages of 12 and 18 months. Gradually, more words are used in the sentences, but the use of a gesture is not abandoned until mature childhood (Breckenridge and Vincent, 1965).

Delayed speech, like delayed motor control, is serious in babyhood, because, at this age, the foundations are being laid for the tool of communication which will be needed for the later broader social horizon. There are many causes of delayed speech in babyhood, the most important of which are low intelligence, poor social environment, lack of incentive to talk, a defective model, prolonged illness, deafness and multiple births (Bossard and Boll, 1966). Any one or several of these causes can delay the baby's speech by several months.

Emotional Behaviour in Babyhood

From the simple, almost completely identical forms in which they appear at birth, emotions develop into different emotional states which can be aroused by a wide variety of stimuli. With advanced age, emotional responses become less diffuse, less random and more

differentiated. The generale motional excitement which appears at birth, gradually gives way to a variety of emotions like fear, anger, disgust distress, delight, elation and affection. There is also a change in the form of these emotional responses. Crying and screaming, for example, appear in the first few minutes after birth. By the age of four to eight months, calling is added to crying ; between 16 and 20 months, saying 'No' is added, and between 20 and 24 months, asking accompanies 'No'. Similarly, running away from a frightening object does not appear until the age of 12 to 16 months and hiding the face not until 16 to 20 months.

All these emotions are brief in duration, though intense while they last. They appear frequently but are transitory and give way to other emotions when the baby's attention is distracted (Bossard and Boll, 1966, Jersild, 1960). They are easily conditioned at this time.

Common Emotional Patterns

The common emotion patterns which develop in babyhood include anger, fear, curiosity, joy and affection. Details of each of these patterns, along with the stimuli which normally give rise to them and the baby's characteristic responses to these emotions, are as follows.

Anger

Anger is the most common emotion displayed during babyhood. It is often aroused in response to interference with the movements the baby wishes to make and thwarting of some of his wishes. The baby's inability to make himself understood through his early attempts at speech is also a constant source of irritation to him. Typically, in an angry outburst the energy is not directed towards any serviceable end. It is displayed in screaming, throwing objects (Figure 14), kicking the legs, and waving the arms in a random fashion. To add to these actions, many babies hold their breath, jump up and down, throw themselves on the floor, and hit or kick anything within reach.

Fear

Fear-provoking stimuli are relatively infrequent in the environment of a baby. In general, the things most feared at this age are animals, dark rooms, high places, strange persons, objects and situations and loud noises. Babies also fear persons or things associated with loud noises, pain and tactual shock, falling and sudden displacements. Towards the end of babyhood fear of animals, dark places and of being alone begin to disappear (Landreth, 1967).

There are two characteristics that are common to all fear stimuli. The first is that the stimuli are sudden and unexpected, thus giving the baby little opportunity to adjust himself to it. Fear of strangers, for example, rises principally from the fact that a stranger approaches the baby suddenly in the place of the familiar person he was prepared to see. The second characteristic of fear stimuli is that they embody novelty or strangeness. Even a familiar person dressed in an unfamiliar manner as when the mother wears a peculiar dress may frighten a young baby (Jersild, 1960). When he is around the age of six months, it is not at all uncommon for a baby to be frightened by a stranger. This is especially true when he is not among his parents or other familiar people. This 'shy age' or period of 'infantile fearfulness' does not last long but, while it does, it is important. Too frequent or too intense exposure may result in the development of timidity which will be presistent long after babyhood (Sears *et al.*, 1957).

The typical fear response in babyhood consists of an attempt of withdrawal from the frightening stimulus accompanied by whimpering, crying and temporary holding of breath. A frightened baby who has not yet learned to

run will turn his head and hide his face. When he has learned to walk and run, he will hide behind a person or a piece of furniture, often peeping out to see if it is safe to emerge.

Curiosity

For the first two or three months of life, until eye coordination is well developed, only strong stimuli directed towards the baby will attract his attention. However, when the ability to see clearly and distinctly has developed, anything new or unusual will motivate the baby to explore. A young baby expresses his curiosity by tensing his facial muscles, opening his mouth and stretching out his tongues, and wrinkling his forehead. At six months, the baby leans towards the object that aroused his curiosity and grasps it. When he grasps it, he handles, pulls, sucks, shakes and rattles it (Figure 15). This sensori-motor exploration frequently results in damage to the object and harm to the baby (Jersild, 1960 and Spock, 1967). However, it is valuable as a means of learning.

Joy

Joy, in its milder forms, is referred as pleasure or happiness. It is connected at first with physical well-being. By the third month of life all situations will give rise to smiling and laughing and several months later, the baby will respond joyfully to tickling. The most common situations causing laughter in the second year of life are being played with, playing with toys, watching other children at play and funny sounds. Joy is expresse in smiles and laughter (Figure 16). When joy is intense, the baby coos, gurgles or even shouts with glee, and all the bodily movements are intensified. There are definite age trends in these expressions of joy and also in the stimuli that elicit smiles and laughter. At 18 months, the baby smiles mostly at his own activities. The type that amuses him most is his own gross motor activity or his own social approach to a person. At two years, smiles in relation to another person occur less frequently but now these smiles are accompanied by verbalizations (Jersild, 1960).

Affection

An affectionate response is apparent when a baby fixes his gaze on a person's face, kicks, holds out and waves his arms, smiles and tries to raise his body to reach for that person. He can reach for the loved one by the age of six months. Affection is the result of pleasant experiences with a particular person, especially one who takes care of his bodily needs, and plays with him. The baby's affections develop primarily in relation to people and only secondarily in relation to things. During the second year, the baby includes himself and his toys in his affection. These are the 'love objects' which substitute for human objects of affection. When there is a pet in the family that the baby can play with, he develops an affection for that pet (Figure 17). The typical expression of effection in babyhood consists of hugging, patting or kissing the loved object or person. These demonstrative expressions will largely depend the amount of affection he receives from others.

If deprived of these normal opportunities of expression the emotions that develop during babyhood play havoc on the baby's physical and psychological well-being. Fortunately, most babies are not subjected to emotional deprivation. Only those who are rejected by their parents and who remain in institutions and not in foster homes where substitute parents replace their real parents, are likely to experience deprivation of adequate emotional experiences (Yarrow, 1960). When this happens, they do not thrive physically, and they are backward in their motor and speech development and they do not learn how to establish social contacts or how to show affection for those with whom they are associated. As the foundations for these patterns of development are laid during babyhood, being deprived of opportunities to express affection

for others is especially serious and cannot be compensated in future years. On the other hand, if a satisfactory and stable substitute for the missing parent or parents is provided and if the baby is given a reasonable experience of affection as well as stimulation for the other finer emotions which are developing at this time, his development will not be affected.

Social Behaviour

Early social experiences play a dominant role in determining the child's attitudes towards social relationships and the pattern of behaviour in his relationships with others. Denial of opportunities for social contacts is detrimental at any age, but it is especially so form six weeks to six months which is the critical time in the development of attitudes which affect socialization (Bowlby, *et al*; 1956 and Casler 1961).

The first social smile usually appears around the age of six weeks. Between the second and third months of life, the baby's ability to see improves to the point where he can distinguish people from inanimate objects, so he discovers that it is people rather than things that supply his needs. At this age, he shows contentment if he is with people and gets discontented and fussy if he is left alone. The identity of the person who is with him is not important. All he wants is attention from someone. This is the stage of indiscriminating responsiveness to people (Ainsworth, 1964). It marks the beginning of true social behaviour (Jersild, 1960).

Between the second and third month, the baby begins to show interest in people. He cries when a person leaves him. He shows displeasure when a person is not looking at him (Landreth, 1967, Schaeffer, 1964). By the fourth or fifth month, the baby makes anticipatory adjustments to being picked up. He smiles in response to the person who speaks to him, and a month later, his reactions to scolding and smiling, to angry and unfriendly voices are different. During the sixth and seventh months, the baby differentiates between 'friends' and 'strangers' by smiling to the former and by sobering or showing fear to the later. At this time, a sharply defined attachment to the mother appears. 'Attachment behaviour' expressed by smiling and recognizing and crying when that person leaves is more obviously apparent towards the mother than towards any other person. When the baby is eight or nine months old, he attempts to imitate the speech, simple activities and gestures of others. At the age of one year, he can refrain from doing things in response to the warning 'No, No'. In the middle of the second year, negativism, in the form of stubborn resistance to requests and demands of adults, normally appears. It shows itself in physical resistance, in silence, in physical withdrawal, or 'tenseness'. By the end of babyhood, however, the young child can and does cooperate with adults in a number of simple routine activities.

A baby can recognise the presence of another child during his fourth and fifth months of life. In order to attract the attention of the other baby or child, the baby bounces up and down, kicks, laughs or blows bubbles. A month or two later, the baby smiles at other babies and shows an interest in their crying. Between the ninth and thirteenth month, interest in other babies increases as he attempts to explore their clothes and hair, to imitate their behaviour and vocalization, to cooperate in the use of toys and in fighting, when a toy is taken away from him by another baby. From the thirteenth to the eighteenth month, the baby's interest shifts from play materials to his playmates, resulting in a decrease in fighting for toys and an increase in the cooperative use of them (Breckenridge and Vincent, 1965).

Interest in Play

The free and spontaneous play of babies is

Fig. 14. Expressions of anger in babyhood.

Fig. 15. Curiosity in knowing the how-abouts of the immediate environment.

Fig. 18. Play interests.

Fig. 19. Interest in dolls.

Fig. 20. Hide and seek — a favourite game.

Fig. 21. Perceptions develop through sensory explorations.

characterised by an absence of rules and regulations. It is more often solitary than social. The first play of the baby is stimulating his own organs deriving enjoyment from playing with his hands and limbs. By the time he is three months old, control of his hands is developed well enough to enable him to play with toys. At this age, he also derives enjoyment from turning from back to side, kicking, bouncing, wiggling, reaching for his toes, and watching his fingers move.

Between the fifth and eighth month, play is less random and consists of play with the toes, bouncing, squirming, head-shaking, pulling himself to a standing position, and cooperative motor games. In the last quarter of the first year of life, the baby's play consists mainly of kicking, bouncing, rolling, playing with his toes, crawling for a toy, pulling himself to a sitting position, standing, climbing, moving furniture, babbling and examining others shoes, hand bags, locks and keys.

During the baby's second year, play becomes more organized and toys are used for many of the different activities. Characteristically, a 15-month old baby's play consists of an endless exercise of walking, throwing and picking up objects and throwing them again and of putting them in and taking them out of receptacles. Owing to poor muscle coordinations, the baby is often destructive with his toys in his exploratory manipulation of objects. At 18 months, the baby pulls toys, carries or hugs a doll or stuffed animal, imitates many adult activities (Figure 18) such as reading a newspaper or sweeping, and actively gets into everything. At this age, his play is solitary and his role is that of an onlooker, when other children are present. In the last half of the second year, the baby feels, pats, and pounds her toys (Figure 19). He is interested in dolls and stuffed animals. He strings wooden beads, puts them in and takes them out of rolls from the top of boxes, transports blocks in wagons instead of building with them, scribbles with crayons and imitates activities of others.

In the beginning of the second year, a child plays peek-a-boo, pat-a-cake, finger play, visit to market, mirror play and hide and seek behind a handkerchief, a piece of cloth or furniture (Figure 20). A baby usually likes to be amused by being sung to, by listening to music or by having someone tell him a story about himself, familiar persons, animals or household objects. While he understands little of what he hears, he enjoys the rhythmic sounds of rhymes and lullabies.

Beginnings of Understanding

A baby begins life with no understanding of what he observes in his environment. He acquires through maturation and learning, the meaning of what he observes. The meanings will vary partly due to the level of his intelligence and partly due to previous experiences. The association of ideas with objects and situations results in the development of concepts.

The baby's earliest perceptions are achieved through the use of sensory explorations (Figure 21). He looks at, listens to, touches, smells and tastes anything he can get hold of Later, as muscle coordination develops, he is able to acquire more meanings through handling whatever is within reach. As he reaches the end of babyhood, he begins to put together words into sentences. These are generally in the form of questions, beginning with 'who', "what" or 'why'.

The important concepts needed for adjustment to life are learned in their rudimentary forms during babyhood. To the foundations, laid at this time, are added new meanings later, as the social horizons of the baby broaden during the subsequent childhood and adolescent years. The emotional weighing, characteristic of all concepts, becomes an important element of developing concepts during the babyhood years. Of the many categories of

concepts that develop during babyhood, the following are most important; concepts of (1) space, (2) weight, (3) time, (4) self, (5) social aspects and (6) beauty.

1. Concept of Weight

Concept of weight are very inaccurate at first. A baby perceives a small object as light in weight and large object as heavy. As a result of this error in perception, he frequently drops the things he is examining.

2. Concept of Space

Concepts of space is also poor at first. When the baby reaches for an object, he often runs along the wrong direction. Finally, by trial and error, he reaches the object. By the time he is two years old he develops a good sense of space.

Concept of Time

A baby has no idea of the length of time needed for a specific job such as feeding himself or putting on his clothes. Furthermore, he has no concept of time duration and would not know to distinguish morning from afternoon. By the time he is two years old, the average baby knows and uses time indicating time-words, such as 'today' and 'yesterday'.

Concept of Self

The concept of self appears earlier than concept of other people. The physical self-concepts develop first followed by the psychological self-concepts. The baby discovers meanings about his own body through watching and handling the different parts of his body and by looking into a mirror. His ability to distinguish between himself and other people develops in the later part of the first year. His psychological self-concept is a 'mirror image' of the people who are significant in his life, mainly his parents. He will think more favourable of himself if they show affection and approval. Before the end of babyhood most babies know that they are discriminated as 'boys' or 'girls'.

5. Aspects of Social Concept

A child can distinguish between familiar and unfamiliar persons at five months of age. Accordingly he responds to their voices and facial expressions. He can distinguish angry, frightened and friendly voices. However, there is no evidence that even by the end of babyhood he understands the underlying meaning of what he observes in others.

6. Concept of Beauty

Aesthetic perception is first found in colour preferences. From the ages of 6-24 months, the responses to different colours are different. Babies usually enjoy lullabies. Many an emotional outburst can be quietened by singing to the baby.

Moral Attitudes and Behaviour

The baby has no conscience or a sense of values to start with. So his behaviour is not guided by moral standards. Eventually he learns from his parents and later from his teachers and playmates, the moral codes of the group and the necessity for conforming to them. The baby judges right and wrong in relation to the pleasure or pain of the act, rather than in terms of the good or harm to the group. An act therefore is perceived by him as wrong only when it has some ill-effect on himself. He does not, for example, feel guilty when he takes away the toy belonging to others.

Discipline

Throughout babyhood, the baby must be helped to learn to make correct specific

responses to specific situations. Acts that are wrong should be wrong at all times, regardless of the authority. During babyhood, the emphasis should be on the educational aspect of discipline—teaching the baby what is right and what is wrong. He should be rewarded with approval and affection when he does what is right. The baby must be helped to learn what is wrong, before he is punished, Punishment should be reserved for intentional wrong doings and for emergencies when the baby is persistent in doing something forbidden which might lead to his physical or phychological harm. Though only a few babies can understand what is said in praise, most can understand the facial expressions that accompany praise. Praise provides a source of motivation to the baby to repeat the act that will bring such favourable reactions.

Family Relationships

A baby's brothers, sisters, grandparents, and other relatives who come in constant contact with him during the early formative years of life, set the pattern for his attitudes towards people, things and life in general. Although this pattern will be changed and modified as he grows older, the core of the pattern is likely to remain with him permanently and determine his relationships within the family.

The importance of parent-child relationships during the babyhood years can be illustrated best by cases where babies have been separated from their parents and institutionalised. When deprived of an opportunity to love and be loved, the pattern of their personality is seriously affected. When a baby is deprived of close contact with the mother, the substitution of one person to care for the baby, in place of several, brings about changes in the baby's behaviour. The baby with a 'mother substitute' not only learns to discriminate and show recognition of this 'mother substitute', but also shows an improvement in the pattern of his development as compared with babies deprived of this type of social contact.

Satisfying experiences in babyhood alone will not be adequate to compensate for unfavourable factors in the parent-child relationship or for economic deprivation as the child grows older. Although it is true that the foundations of attitudes, behaviour patterns, and the personality structure are laid in babyhood, events of childhood and the later years are of great importance in reinforcing or even changing the character structure tentatively formed in the early years of life.

The attitudes of the parents towards the child determine the degree of his adjustment at home and outside the home. There are marked variations in the child having methods used by different social classes and by different parents within the same social classes. During babyhood, most of the emphasis in child training is on eating, sleeping and toilet training. The methods used may be authoritative, democratic or permissive as explained under the sub-heading 'discipline'.

Parents who are better educated tend to be more permissive in child training than are those whose education has been limited. Parents from the middle socio-economic group are more exacting in their training. They begin training earlier, and they expect greater compliance on the baby's part than do parents from the upper and lower classes (Hurlock, 1974).

The relationship between the baby and his parents changes as the baby changes from a helpless, dependent being to a relatively independent individual. The parental attitude of acceptance or rejection will largely depend on the changing characteristics of the baby and his responses to their demands.

Many mothers build up tensions in their maternal role, which are reflected in their relationship with their babies. This makes the babies tense and nervous, with the result that they cry more than they would normally. They

develop difficulties in eating and sleeping. In his study of concerns mothers had about their young babies, Robertson (1961) reported that most of them were about the baby's physical condition, digestion, bone movements, rash, sleep and crying. As early babyhood is a period of extreme helplessness, it is common for parents to develop the habit of caring for and protecting the baby so completely that the baby's motivation to learn to do things for himself tends to be stifled.

A baby needs the constant care of one person for the first nine to twelve months of his life to give him a feeling of security. The mother is the only person who can be relied upon for this. Denial of the mother's care or the care of a satisfactory mother substitute at this time, is one of the most serious factors in the baby's physical, intellectual, and emotional development, (Mead, 1954). When babies are deprived of their mother's affection, they are found to have 'diffusely impulsive patterned behaviour that is unorganized and remains unorganised. . . .' The behaviour remains infantile as they grow older (Ribble, 1955).

Attitudes toward Siblings

The baby's feelings about older siblings will depend to a large extent upon their treatment. If, they regard him as a 'nuisance', and if they do things for him reluctantly, he will be conditioned to dislike or even fear them (Bossard and Boll, 1966). As interest in and caring for babies is considered more sex-appropriate for girls than for boys, the baby's pleasant associations with his siblings are more likely to be with his sisters than with his brothers.

Personality Development in Babyhood

Babyhood is a 'critical period' in the development of personality, because the foundations for the adult personality structure are laid in that stage. Three factors are inherent in the individual's personality development: heredity, early experiences within the family, and events of later life, which influence the form of the pattern already set in the early years of life. As the baby's environment is limited almost exclusively to his home and as his parents, especially his mother are his most constant companions, his personality is markedly influenced by the parent-child relationship. Casler (1961) and Yarrow (1960) point out how environmental obstructions greatly affect the personality development of the baby. If a baby remains in an institution for a long period of time, the personality distortion will be severe and long-lasting. 'Mothering' *per se* may not be harmful, but the wrong type of mother-child relationship at the wrong time in the baby's learning pattern is at the basis of personality distortions.

Genetic studies of the persistence of personality traits over a period of years have revealed that patterns established early in life remain almost unchanged as the child grows older. Although certain traits of the personality pattern may change, the 'core' consisting of the self-concept remains fundamentally the same. This emphasises the importance of early experiences in the shaping of the personality pattern.

Happiness in Babyhood

The first year of life is one of the happiest in the life span. Adults not only want to cuddle and love the baby, but they are also tolerant in their attitudes towards his crying and the disruption his care brings into their lives. For almost all babies, regardless of where they live or who is responsible for their care, the second year of life is far less happy than the first, for the following reasons:

1 With increased control over his body, the baby is anxious to be independent and to

do things for himself. He resents being 'babied' and shows his resentment by throwing a tantrum neither of which makes him appealing and may even arouse anger in those who are helping him.

2 Rules of discipline begin to be laid at home which makes the child less happy. On the assumption that babies cannot understand words, many parents use slaps, spankings, harsh words, and angry expressions to convey their displeasure at the baby's mistakes. These expressions of anger only make the baby feel unloved and unwanted, because he does not realise his own mistakes.

3 Teething causes even a healthy baby to experience periodic discomfort. He tends to be fretful, irritable and negativistic.

However, all babies are not unhappy as babyhood draws to a close. There are times when they are happy just as there are times when they are unhappy. The reasons and the frequency of these bouts of happiness or unhappiness will decide one's dominance over the other.

References

Ainsworth, M.D., 'Patterns of attachment behaviour, shown by the infant in interaction with his mother', in *Merril–Palmer Quart.* **19**, 1964.

Ames L.B., 'Development of inter-personal smiling responses in the pre-school years', in *J. Genet. Psychol.*, 74, 1949.

Ames, L.B., Ilg F.L., 'The developmental point of view with special reference to the principle of reciprocal neuromoter interweaving', in *J. Genet. Psychol.*, 1964.

Banham, K.M., 'Senescence and emotions, a genetic theory', *J. Genet. Psychol.* 78, 1951.

Bowlby, J., Ainsworth, M., Boston, M., Rosenbluth, R., 'The effects of mother-child separation : a follow-up study', in *Brit. J. Med. Psychol.*, 29, 1956.

Bossard, J.H.S., Boll, E.S., *The Sociology of Child Development*. New York : Harper and Row, 1966.

Breckenridge, M.E., Vincent, E.L., *Child Development*. Philadelphia: Saunders Co., 1965.

Casler, L., 'Maternal deprivation', in *Monogr. Soc. Res. Child Development*. 26, 1961.

Clifford, E., 'Discipline in the home : on controlled observational study of parental practices', *J. Genet. Psychol.*, 95, 1959.

Cohen, A.I., 'Hand preference and developmental status in infants', *J. Genet. Psychol.*, 108, 1966.

Dennis, W., Nagarajan, P., 'Infant development under environmental handicap', in *Psychol. Monogr.*, 71, 1957.

Dittrichova, J., Lapackova, V., 'Development of the waking state in the young child', in *Child Development*, **53**, 1964.

Geisal, G.B. 'Discipline viewed as a developmental need of the child', in *Nerv. Child*, 9, 1951.

Gesell, A. 'The ontogenesis of infant behaviour', in Carmichael. *Manual of Child Psychology*. New Delhi : Wiley Eastern Private Ltd., 1968.

Harding, V.S.V., 'A method of evaluating osseous development from birth to fourteen years', *Child Development*, 23, 1952.

Havighurst R.J., *Human Development and Education*. New York : Longmans, 1953.

Hurlock, E.B., *Child Development*. New Delhi: McGraw-Hill Book Co., 1968, 1972, 1974, 1976.

Hutt, M.L., Gibby, R.G., The *Child Development and Adjustment*. Boston : Allyn and Bacon, 1959.

ICMR. Growth and Physical Development of Indian Children. Part I-A (1968) in Gopalan, C., K. Vijaya Raghavan. Nutrition Atlas of India, NIN, Hyderabad, 1971.

Jersild A.T., *Child Psychology*. New Jersey : Prentice Hall Inc., 1960.

Kennedy, W.A. *Child Psychology*. New Jersey : Prentice Hall Inc., 1975.

Keppel, G., 'Verbal learning in children', in *Psychol. Bull.* **61**, 1964.

Landreth, C., *Early Childhood : Behaviour and Learning*. New York : Knoff, 1967.

Martin, P.C., Vincent, E.L., *Human Development*. New York : Ronald Press Co., 1960.

McCarthy, D., 'Language development', in *Monogr. Soc. Res. Child Development*. 25, No. 3, 1960.

Mead, M., 'Some theoretical considerations on the problems of mother-child separation', in *Amer. J. Orthopsychiat*, 24, 1954.

Merry, F.K., Merry, R.V., *The First Two Decades of Life*. New York : Harper and Row, 1958.

Neilon, P., 'Shirley's babies after fifteen years : a personality study', in *J. Genet. Psychol.*, 73, 1948.

Palmer, R.D.. 'Development of a differentiated handedness', in *Psychol. Bull.*, 62, 1964.

Peckos, P.S., 'Nutrition during growth and development', in *Child Development*, 28, 1957.

Ribble, M.A., *The Personality of the Young Child.* New York : Columbia, 1955.

Robertson, W.O., 'An investigation of maternal concerns by mail survey', in *Child Development*, 32, 1961.

Resenzwoig, S., 'Babies arc taught to cry : a hypothesis', *Mental Hygiene.* 38, 1954.

Ryan, M.S. *Clothing : A Study in Human Behaviour* New York : Holt Press, 1966.

Sears, R.R,, Maccoby, E.E., Levin, H., *Patterns of Child Rearing*. New York : Harper and Row, 1957.

Schaeffer, H.R., Emerson, P.E., 'The development of social attachments in infancy' in *Monogr. Soc. Res. Child Development.*, 29, 1964.

Scott, J.P., 'The process of primary socialization in canine and human infants', in *Monogr, Soc. Res. Child Development*, 28, 1963.

Spock, B., *The Pocket Book of Baby and Child Care.* New York : Pocket, 1967.

Thompson, G.G., *Child Psychology*. Boston : Houghton Mifflin, 1962.

Vincent, E.L., Martin, P.C., *Human Psychological Development*. New York : Ronald, 1961.

Walters, J.D., Pearce Dahms, L. 'Affectional and aggressive behaviour of pre-school children', in *Child Development*. 28, 1957.

Warner, E.E., Bayley, N., 'The eliability of Bayley's revised scale of mental and motor development during the first year of life', *Child Development*, 37, 1966.

Yarrow L.J., 'Infancy in children' Washington : U.S. Department of Health, Education and Welfare, 7, 1960.

CHAPTER 10

Early Childhood

Childhood begins after babyhood at approximately the age of two years, and extends to the time when the child becomes sexually mature at approximately 13 years for the average girl and 14 years for the average boy.

Childhood is subdivided into two periods—early and late childhood. Early childhood is from two to six years and late childhood, from six to the time when the child becomes sexually mature. As the age of six marks the beginning of the compulsory school period in our culture, it serves as a convenient dividing line between early and late childhood. This dividing line is significant because when the child leaves his home environment and enters school, new pressures and new expectations lead to great changes in the patterns of his behaviour, his attitudes, interests and values.

When the child has become sexually mature, he is known as an 'adolescent'. There are marked physical and physiological changes in the child during this long period which is roughly 11 years for girls and 12 years for boys. Some of these changes arise out of maturation but most come from learning. As cultural pressures and expectations to learn certain things at one age are different from the pressures and expectations at another, a child in the early part of childhood is quite different from a child in the later part of the period.

Characteristics of Early Childhood

Early childhood is the pre-school age and also known as the 'pre-gang age', the 'problem age', and the 'age of exploration'. Educators refer to early childhood as the 'preschool age', the period preceding the child's entrance into school. A growing number of young children are sent to preschools and kindergartens these days. To the psychologist, early childhood is the 'pre-gang age', the time when the child is learning the foundations of social behaviour. This learning will prepare him for the more highly organized social life of the school.

Early childhood presents many behaviour problems for parents. The child gradually develops a distinctive personality and demands an independence which he may be incapable of handling successfully. A young child may be an obstinate, stubborn, disobedient, negativistic and antagonistic individual. He may have frequent temper tantrums, irrational fears and suffer from jealousies.

Early childhood is the period when the major development is that of control over the environment. Having acquired a workable control of his own body during the first two years of life, the child is now ready to explore his environment. He wants to know what his environment is, how it works, and how he can be a part of it.

Physical Development

Growth during early chidhood is not a rapid as it was during babyhood. Early childhood is a time of relatively even growth, although there are seasonal variations.

Height and Weight

The heights and weights of children during early chidhood, as summarised by the Indian Council of Medical Research (1968) are presented in Table 4.

Table 4 : Heights and weights of children by age and sex

Measurements	*Age in years*					
	Males			*Females*		
	3	*4*	*5*	*3*	*4*	*5*
Height in centimetres	88.8	96.0	102.1	87.2	94.5	101.4
Weight in kilograms	11.8	13.5	14.8	12.2	12.9	14.5

During early childhood, the average increase in height is 7.5 centimetres annually. By the age of five years, the average child measures from 101-102 centimetres. The child's weight increases at a slow rate during this period, with an average of 1.7 kilograms annually. The average girl weighs 14.5 kilograms by the age of five years. The weights between boys and girls at this stage do not differ much.

During early chilhood, body proportions change and the 'baby look' disappears. Changes in proportions follow the law of developmental direction. The young child's head is broader in relation to its length (Breckenridge, Vincent, 1965, and Thompson, 1954). The arms and legs lengthen and the hands and feet grow bigger. There are marked variations in the size and shape of feet during early childhood, though boys, at every age, have slightly larger feet than girls. The arches of the feet are well developed by the time the child is five years old (Bayley, 1965).

Body Build

Most babies have similar body builds, though some are fatter than others. However, as body proportions begin to change in early childhood, differences in body build become apparent. Some children show a tendency towards endomophy—excessively fat bodies; some towards mesomorphy—hard, heavy and rectangularly outlined bodies and some towards ectomorphy—long, slender bodies (Garn *et al.*, 1960)

The bones gradually harden throughout early childhood so that the chances of their becoming misshapen from pressure or poor posture grow less and less each year. Ossification proceeds at different rates for different parts of the body following the laws of developmental direction. At every age, ossification is more advanced in girls than in boys.

The muscles grow larger and stronger throughout early childhood. This makes it easier for the young child to participate in more activities with less fatigue than he did when he was a baby. However, this will vary with his health. After an illness, for example, the child's muscle tone is lowered and he tires more quickly than he did before the illness. At every age, boys have slightly larger and stronger muscles than girls, though girls are superior to boys in flexibility and use of their muscles (Martin, 1960).

During the first four to six months of early childhood, the young child generally cuts the last four of his baby teeth. These are the back molars. As they are large and flat, their eruption is often accompanied by discomfort if not actual pain. As baby teeth are soft in texture many young children suffer from dental caries. Poor nutritional and hygienic habits, and eating too many sweets and not rinsing the mouth after every meal cause this.

During the last half year of early childhood, the child begins to lose his baby teeth, which are replaced with permanent teeth.

When he is ready to go to school, the child generally has one or two of his permanent teeth and a gap or two where the permanent teeth have not yet replaced the fallen baby teeth. Shedding of teeth follows the order of appearance of the first teeth; the first teeth to come out being the front central incisors. This means that, during the later part of early childhood, most children have some permanent teeth in front and some gaps where permanent teeth will eventually replace the baby teeth.

Girls usually shed their temporary teeth earlier than boys, and they get their permanent teeth also earlier. Children who are healthy and have good nutrition not only suffer less from dental caries (Devadas *et al.*, 1979) but they also get their permanent teeth earlier than children who are less healthy or whose diet is less well-balanced.

Permanent teeth have an important psychological significance for the young child. They mean that he is leaving babyhood behind and growing up. The shedding of baby teeth changes the child's appearance as well as his feelings about himself. As Church and Stone (1960) have pointed out, 'As the child loses his baby teeth, his physical appearance alters in ways that quite accurately mirror the inner changes taking place'.

Although young children may suffer from many kinds of illnesses, the most common ones as listed by the Indian Academy of Paediatrics, the Institute of Child Health, Hyderabad, and the Co-ordinating Agency for Health Planning, New Delhi (1973) are protein calorie malnutrition, cold and cough, cough with fever, sore throat, diarrhoea and vomiting, skin infections, ear infections, sore eyes, fever and head lice. Most illnesses during early childhood are physiological in origin. Some, however, such as anorexia, nervous ulcerative colitis, enuresis and allergic reactions, are psychosomatic and are the result of tensions between parents and children.

When authoritative methods of child training are used, the child tends to become nervous, and this predisposes him to illness. On the other hand, if parents permit the child to eat whatever he wishes, whenever he wishes, or to go to bed when it suits his convenience, the child's health will not be good enough to resist illnesses. Since parents tend to be more cautious with their first-born than with later-born children, the first-borns are less subject to illness.

Physiological Habits

During early chilhood, the physiological habits whose foundations were laid in babyhood, become well established. This is also the time when many patterns of behaviour, normal for the age, become troublesome to parents. The important physiological habits are those of eating, sleeping and elimination.

It is no longer necessary to provide specially prepared food for the child in early childhood. His appetite is no longer as ravenous as it was in the early part of babyhood, partly because his growth rate has slowed down and partly because he has now developed marked likes and dislikes of food. He may want to eat the foods prepared to suit adult tastes, which may sometimes be highly seasoned for the young child. This is the age when 'eating problems' reach their peak because of family pressures on the child to eat and the child's stubborn resistance to these adult proddings.

Sleep patterns, well established in babyhood, are often disrupted by the young child's revolt against naps and against going to bed on time at night. In his attempt to stall off the inevitable, the young child is likely to work himself up into a state of emotional tension. This prevents relaxation, which is essential for falling asleep. In spite of daily variations in the duration of sleep, depending on the child's physical amount of activity during the day three-year-olds sleep approximately 12 out of the 24 hours. Each successive year during childhood, the average daily duration of sleep

is approximately one half hour less than in the previous year.

In India, even today adults narrate stories to children or sing lullabies and positively prepare the baby to go to sleep. Many of the sleep problems of young children can be traced to unfavourable adult attitudes. Parents who are over-anxious about their children's sleep patterns become punitive in their attitudes, and this arouses resentment in the child. Other parents are too unconcerned and, as a result become lax in fostering good sleep habits.

When the child is three or four years old, bladder control at night should be achieved. Many young children, however, have occasional bed-wetting at night especially if they had been tired or excited during the day. This is true also of day time. When the child is ready to enter school bladder control is so complete that even fatigue and emotional tension might not interfere with it (Macfarlane *et al.*, 1954).

Emotions of Early Childhood

The emotions of early childhood are more common and more intense. It is a time of imbalance when the child is out of focus in the sense that he is easily aroused to emotional outbursts. As a result he is difficult to live with. This is true of the major part of early childhood ; it is especially true of the ages 2½ to 3½ and 5½ to 6½ years (Ames, 1952).

Although any emotion may be heightened in the sense that it occurs more frequently and more intensely than is normal for that particular individual, heightened emotionality in early childhood is characterized by temper tantrums, intense fears and unreasonable outbursts of jealousy. Part of the intense emotionality of children at this age may be traced to fatigue from strenuous and prolonged play, from their rebellion against the enforced habits, taking naps and from eating too little for their needs. A study on the impact of nutritional status on the emotional expressions and mental abilities of pre-school children shows that positive emotions will occur with more frequency in better nourished children (Sarada Devi *et al.*, 1972).

Difference in the child's health and his environment influence the patterns of emotional behaviour established during babyhood. The child who, as a baby, was kept in a quiet environment and whose needs were met promptly and consistently, is less likely to suffer from intense emotional outbursts as he grows older than the child who, as a baby, lived in a noisy environment, with his needs unattended.

The arrival of a new baby also sparks off intense emotions. The young child who has been accustomed to his mother's undivided attention may bitterly resent her preoccupation with a new baby and show it by frequent and intense outbursts of anger and jealousy. His changes from being a happy, claim child to a tense one, comes mainly from the change in his environment.

The child's sex and his position within the family will have a marked influence on his emotionality. The first-born child has more status to defend than has the second but is handicapped in his struggle with his sibling by parental restrictions. Second children, encouraged by their parents to defend themselves, are less hesitant to express their anger and so attack directly.

The emotional stress is greater for the child if his sibling is of the other sex or if there is a large age difference. The child, whose parents expect him to measure up to the standards they set, will experience more emotional tension than will the child whose parents are more permissive (Frank, 1955).

During babyhood, it is possible to control the environment so that the baby will experience a minimum of the unpleasant emotions and a maximum of the pleasant. During early childhood, this can no longer be possible. The more independent the child, the more

situations to frighten, anger, annoy or frustrate him. If he experiences too many of the unpleasant emotions and too few of the pleasant, his outlook on life will become distorted and the development of an 'unpleasant disposition' will result. In addition, he soon acquiries a facial expression that makes him look sullen, or generally disagreeable—an expression that contributes to the decline in his appeal. Since unpleasant emotions can become habitual, steps should be taken to reduce these emotions to a minimum—by preventing fears, anger, jealousy and anxiety whenever possible, and by trying to counter-balance them, with stimuli that will give rise to pleasant emotions of happiness, joy and affection.

This does not mean that a young child should be protected from all unpleasant situations. It only means that prevention of unreasonable fear, jealousy and anger should be attempted. When that is not possible, attempts should be made to explain to the child why he cannot do certain things and why he cannot have as much attention as he may want. If he learns to tolerate frustrations when he is young, he will avoid aggressive attacks on all frustrations.

Young children experience most of the emotions normally experienced by adults. However, the stimuli that cause them and ways in which children express their emotions are markedly different. The emotions are:

1. Anger
2. Fear
3. Jealousy
4. Curiosity
5. Joy
6. Affection
7. Socialization

1. Anger

Anger is the most commonly expressed emotion in early childhood, partly because many anger-provoking situations arise in a young child's life, and partly because a young child discovers soon that the expression of anger is a quick and easy way to get what he wants. The situations which most frequently cause anger in young children are conflicts over play things, over toilet and dressing, interruptions in their activities, thwarting of wishes, vigorous attacks from other children, or another child's use of offensive language.

When a young child becomes angry, he expresses his anger by intense outbursts, or 'temper tantrums'. Tantrums are characterized by crying, screaming, stamping, kicking, jumping up and down, striking, throwing oneself on the floor, holding the breath, stiffening the body or making it limp.

The social environment of the child's home plays an important role in the frequency of occurrence and the intensity of the young child's anger. Temper tantrums have been found to occur, when there are many guests and where there are more than two adults. Similarly, the child with siblings has more temper outbursts than the only child (Breckenridge and Vincent, 1965). The methods used for discipline and child training used by parents influence the frequency and intensity of the child's angry outbursts. When parents, for example, try to transform and pattern the child's natural responser into socially acceptable forms, as in the case of eating behaviour, he is likely to retaliate with anger (Sears, 1954).

By the age of four years, anger responses are directed more towards a given end than towards a younger child. They reach their peak of severity between the ages of three and four years. As early childhood draws to a close, these become shorter in duration and give way to sulking and brooding. Many last for one to three minutes only. Up to the age of three years, there are no apparent differences due to sex in the number and severity of temper tantrums. After that age boys exhibit more frequent and more intense tantrums than girls (Garrison, 1959).

2. Fear

The young child is afraid of more factors than

the baby or the older child. The development of his intelligence makes it possible for him to recognize potential dangers in situations which formerly had not been recognized as such. In a situation with an evident physical threat, young children are frightened at first by the novelty of the situation.

As children become older, fear responses become increasingly more specific. The typical fear responses of young children include running away and hiding, avoiding situations that frighten them and making such verbal responses as 'take it away', 'I don't want to go', or 'can't do it'. Crying and whimpering usually accompany these responses.

Conditioning, imitation and memories of unpleasant experiences play an important role in the development of fear in young children. Fear of certain specific events, such as darkening the room for screening a film, may lead to fear of darkness. Stories and pictures with frightening elements, and even radio and movies with loud noises, may give rise to many types of fears.

Fears often develop from imitating a person who is frightened. It is quite common for preschool children to show fears similar to those of their mothers. Finally the fears develop as an after-effect of some unpleasant experience, such as fear of doctors or dentists.

The number and severity of fears decrease as children grow older. This is partly due to the child's realization that there is nothing to be afraid of in the formerly frightening stiuation and partly due to adult guidance in acquiring a dislike towards things he formerly feared.

As fears decrease, 'anxiety' which is a 'painful uneasiness of mind concerning impending or anticipated ill' often develops. Children who feel insecure in their homes feel uneasy, if not afraid. In the case of death of a parent, for example, they feel as if they have been orphaned or abandoned, but are unable to understand the reason (Arthur and Kemme, 1964). This uneasay mental state may, in course of time, become generalized and take the form of a 'free, floating anxiety' in which the child will react with fear to any situation which he perceives as a potentialthreat (Sontage *et al.*, 1958). To escape the unpleasant feelings which anxiety brings, the child may become timid and withdrawn, thus freeing himself from the threats to his security that accompany anxiety.

3. Jealousy

Jealousy is the feeling of angry resentment directed towards other people. It is always evoked by social situations, especially those involving individuals whom the child loves. Among young children, jealousy is invariably aroused when parents or those who have taken care of the child, seemingly shift their interest and attention to someone else—especially a new arrival in the family. Jealousy often begins between the ages of two and five years, with the birth of a younger sibling. Preparing the child well in advance to the anticipated arrival of the sibling does not always avoid jealousy (Jersild, 1960).

The young child may also be jealous of an older sibling who is granted more privileges, a situation, which he frequently interprets as parental favouritism. Or he may be jealous of a sibling who because of poor health must be given more attention. The child is far less likely to be jealous of children outside the home than of his siblings, because his contacts with outsiders are limited.

Young childrn are often jealous of their fathers. They develop a proprietary attitude towards the mother, because of her constant association with them. Therefore, they resent when her affection is turned towards their father.

During early childhood, jealousy expresses itself in almost the same way as anger does, except that it is usually directed against another person, the supposed usurper. Sometimes

Fig. 22. Young children are 'into' everything.

Fig. 23. Expression of joy in early childhood.

jealousy causes the child to revert to such infantile forms of behaviour, as thumbsucking, bed-wetting, general naughtiness, bidding for attention by refusing to eat or by pretending to be ill or afraid. Jealousy is more common among girls than among boys. First-born children display jealousy more often and more violently than do their later-born siblings. Jealousy is more common in small families of two or three children than in larger ones.

4. Curiosity

Young children are 'into' everything as illustrated in Figure 22. Nothing escapes their interest. If the object is different from what they have seen before, they explore every part intensely. They are curious about their own bodies, the bodies of other children and of adults. They want to know why bodies differ and how they work. Maw and Maw (1961) have described the behaviour of a curious child as given below :

"He reacts positively to new, strange, incongruous or mysterious elements in his environment by moving toward them, by exploring them or by manipulating them. He exhibits a need or a desire to know more about himself and his environment, he scans his surroundings seeking new experiences, and he persists in examining and exploring stimuli in order to know more about them."

The "questioning age" begins between the second and third years and reaches its peak at the sixth year of the child's life. The child's curiosity is satisfied, only when his questions are properly answered. His curiosity gets dampened otherwise.

Young children greatly vary in the degree of curiosity they experience and in the ways they express it. Bright children are more active in exploring their environment, and ask more questions than those with lower intellectual abilities (Maccoby et al. 1965). Fear holds back many children in their desire to explore. Themore secure children are, the more they will express their curiosity (Medinnus and Love, 1965).

6. Joy

When a young child is happy, he is literally 'happy all over' (Figure 23). They find many sources of joy and laughter. Physical well-being, incongruous situations, sudden or unexpected noises, slight calamities, or a play on words, never fail to bring forth a laugh. Mocking others, playing pranks on other children or adults and putting animals or other children in a predicament leads to feelings of superiority, all make children happy.

One of the most common causes of joy in early childhood is achievement, especially when it comes as a climax of the child's great effort. The degree of joy this achievement will lead to, will largely depend on other people's reactions. Should the mother, for example, expect more than the child is capable of, her reaction to his achievement will take away the joy he otherwise would have experienced.

The 'joy response' of the child consists of smiling (Figure 24) laughing, clapping hands, jumping up and down, or hugging the object or person who elicited the emotion. The manner in which the child will express his joy will depend not only on the intensity of the emotion, but also on the social pressures on him to control it (Ames, 1964).

7. Affection

The young child learns to love those who give him pleasure and satisfaction. Expressions of affection are given not only to human beings but also to animals and inanimate objects. (Bossard and Boll, 1966). At this age, the emotional connection between a child and the people significant in his environment is first established. The values the child learns from such attachments will vary according to their treatment. The child who does not receive affection from others is likely to become 'self-bound'. This will interfere with his

emotional exchange with others. Equally serious is the development of too strong an affection for one person, expecially for one parent. A constant rejection in the home may stunt the child's capacity for giving affection, or may cause him to seek affection from individuals outside the home. Over-affection and indulgence may have as undesirable effects as lack of affection or rejection. Over-affection for one or both parents will tend to exclude affection for children of the child's own age level.

Another serious consequence of a too strong emotional tie between parent and child is that it predisposes the child to feel insecure and anxious whenever the parent's behaviour suggests a threat to the child, such as when he is punished for misbehaviour or when his parent pays attention to another sibling. The child who continues to be emotionally dependent on his parents or on one parent will find it difficult to establish friendly relationships with other children (Heathers, 1965).

The expressions of affection by young children may be physical or verbal. The verbal expressions are more frequent than physical, as children grow older. They hug, kiss, and pat the loved person or object. They want to be with the loved one constantly and they cry or whimper when the loved one leaves them. They want to do what the loved one is doing. Children feel much the same way about favourite pets and toys, as they do about beloved persons. They want to have the pet or toy with them constantly, even when they go to bed. During childhood, affection shifts from family members to outsiders. Girls tend to be more affectionate than boys, and both choose children and adults of own sex for their affectionate responses (Watson, 1954). The expressions of affection also change from seeking reassurance to seeking attention and approval.

8. Socialization

The important forms of social behaviour, necessary for successful social adjustments, begin to develop during early childhood. Early childhood is the 'pre-gang' stage of social development. As such, it is a crucial stage in development because the basic social attitudes and the patterns of social behaviour are established then (Mussen *et al.*, 1263). The child acquires the preliminary training and experience to become a member of a 'gang'. Subsequently this will help him to be an acceptable member of a group. The number of contacts young children have with their peers increases with each passing year. They not only play more with other children, but also talk more with them.

The kind of social contacts the young child has is more important than the number. If he enjoys his contacts with others, even if they are only occasional, his attitude towards future social contacts will be more favourable than if he has more social contacts of a less favourable (unpleasant) kind. Furthermore, these social contacts will determine the way in which the individual will handle his social behaviour in future.

As the social world of the young child expands, he gradually outgrows his parental attachments. Children then become more and more interested in the relationships with individuals outside the family circle. The young child's success in adjusting to outside social contacts is influenced markedly by the type of social experiences he has had at home. Children who have been brought up democratically appear to make better social adjustments outside the home than those from authoritative home environments (Atit, 1967). The child's position in the family—whether first-born, last-born or only child, and the type of relationship he has with his siblings also influence his social adjustments outside the home. Children who have received constructive guidance in their early social experiences find the adjustments more pleasurable and so increase their desire to repeat them. Their motivation to learn to behave in a socially approved manner, in order to increase their acceptance by their

peers, also increases.

Children under three years of age show definite social interactions with other children. Thereafter a marked increase occurs in their social interaction. The period from three to six years, therefore, is the most 'crucial' age (Mussern *et al.*, 1965) in the child's socialization in terms of the quality and quantity of social behaviour developed. The child's dominance, leadership, dependence, submissiveness and conformity or compliance with the wishes of others, would largely depend on his environment and the child's relationship to it. Follow-up studies on growing children reveal that social attitudes and behaviour established during the pre-school years persist with little modification and change (Kagan and Moss, 1962).

In the process of socialization, some important forms of social behaviour appear to be unsocial or anti-social. However, each such form is important to the socialization of the child. They are :

a. Negativism
b. Blind imitation
c. Rivalry
d. Aggression
e. Quarrelling
f. Non-cooperativeness
g. Ascendent behaviour
h. Selfishness
i. Sympathy
j. Social approval
k. Sex cleavages
l. Companions in early childhood
m. Stability of play-mates
n. Social acceptability
o. Subsitute companions
p. Leadership in early childhood.

Negativism

Negativism is the result of self-assertion, self-protection and resistance to excessive pressures. Resistance to adult authority begins in babyhood. At the age of two or three years, negativism is a normal phase of ego development. It generally reaches its peak between the ages of three and four years, after which there is a rapid decline. The negativistic child usually becomes cooperative when he has established himself as an individual and has learned to gain satisfaction from complying with the wishes of others. All children, including the well-adjusted, show negativism but the well-adjusted ones are negative less frequently and less severely than poorly-adjusted children (Hymes, 1960).

The usual expressions of negativism are verbal and motor responses. As children grow older, they often pretend not to hear or understand a request ; they dawdle over routine activities or completely neglect them. Between the ages of four and six years, a decline in physical resistance and an increase in verbal forms usually occur.

Iimitation

The models for the earliest forms of imitation are parents. The child imitates their speech, actions and emotions. If the child finds his relationship with the mother satisfying, he will imitate her speech and actions. Later, he will accept her interests and values as his own (Emmerich, 1966). When he begins to show an interest in other children, he identifies himself with the group and imitates those whom he admires. He does not imitate everyone with whom he is associated. Instead, he tries to imitate those for whom he as a warm attachment and with whom he wants to be identified. When a young child has a close, personal attachment with an older sibling, that sibling becomes a model whom the young child tries to imitate in every possible way.

Rivalry

The desire to excel or out-do others is apparent as early as the fourth year of life. The young child's bragging about his parents or possessions is a form of rivalry, found commonly in the home, especially where sibling jealousy exists. It is more often found in families where the children are of both sexes, or where the

mother shows a preference for one child.

Aggression

Aggression is a common reaction to frustration. Aggressiveness is especially strong in children who want power and dominance or who imitate an aggressive adult. Boys as a rule are more aggressive than girls. Children who are popular, express their aggression within the context of their play and have generally a definite, single object of their aggression. Unpopular children tend to attack any one they are with, whether they deserve it or not.

Children tend to be more aggressive when there is an adult around, whose attention they want to attract. Aggressiveness in childhood increases during two and four years of age and then declines. When the child is four or five years old, he expresses aggression verbally more often than by direct physical attack. As he grows older, his verbal attacks generally take the form of name calling or blaming.

Quarrelling

Quarrelling generally starts in a conflict over property, such as toys. So when a young child quarrels, he takes away the toys that the other child has been playing with. Quarrels may also start when one child teases or bullies another. The quarrelling child often destroys the other child's work. He generally screams, cries, kicks, hits and bites. The outbursts, though intense, are usually short in duration. When they are over, they are forgotten, and the friendly relationship that prevailed before the quarrel is resumed.

Quarrelling between siblings at home is common during early childhood. Improved social adjustments bring about a decrease in the frequency and intensity of quarrels. Boys are more quarrelsome than girls specially in the presence of other boys. The number of social contacts a child has with other children, influence the frequency of quarrel. However, quarrels have a socialising value in that they teach the child what will and will not be tolerated.

Non-Cooperativeness

As young children are self-centred and quarrelsome, there is little cooperation in their play with other children. Even with adults, they cooperate least because the adult has a tendency to give into the child and allow him to have his own way. By the end of the third year, however, cooperative play and group activities are more frequent and longer in duration. With practice, the child learns to cooperate with other children and to play in an increasingly harmonious manner. The stronger the ties of friendship between young children, the more cooperative is their play.

Ascendent Behaviour

From three years of age, ascendency increases with the increase in opportunities for social contacts. This reaches its peak around the fifth year. The ascendent behaviour in the form of bossiness, leadership, or undifferentiated ascendence, will depend partly on the child's environment. Girls are significantly more dominating than boys in their play with other children during the pre-school years (Koch, 1961).

Selfishness

Selfishness reaches its peak between the fourth and sixth years. As he had been the centre of attention during the early part of his life, the young child is egocentric and wants everything his way. He learns playing with other children, only after then he tries to submerge his self interest under those of the group. He even begins to be more generous with his possessions and is willing to share them with his playmates. However, generosity is still in a very undeveloped form during early childhood.

Sympathy

Sympathy requires an understanding of the feelings and emotions of others. Occasionally a three-year-old will respond sympathetically

to persons whose distress is made apparent. The child shows his sympathy by attempting to help others, by trying to remove the cause of distress, by protecting those in distress, by warning and telling others about the individuals in distress and by suggesting solutions. Occasionally, however, unsympathetic responses such as laughing at a person in distress also occur (Breckenridge and Vincent, 1965).

Social Approval

At first, the approval of adults is more important to the child than the approval of other children. The young child seeks the approval of adults by glances, questions, comments and urgent responses for overt notice. Boys seek the attention of women more than of men (McCarthy, 1960). Unlike the baby who is often afraid of strangers, the young child tends to be more influenced by strangers than by parents. As interest in being with the group increases, the desire for approval from his companions becomes more important to the child than approval from adults. This may lead to the child being naughty and disturbing. Socially unacceptable behaviour is frequently noticed by the child's preference for approval from his companions to that from adults (Mussen *et al.*, 1963).

Sex Cleavages

Boys and girls play together harmoniously with no real preference for members of either sex, until they are four years old. After that a cleavage between the sexes begins to appear it becomes marked, after five years of age. At first, children show a preference for certatin types of play with members of one sex and certain other types with members of the opposite sex. Later, they show a preference for play only with the members of their own sex and a tendency to treat members of the opposite sex with disdain if not with actual contempt. The social norms, culture and aggressiveness of the children, especially the boys toward the girls and vice versa decide the degree of this difference.

The child begins to grow restless between the ages of two and three years, if his companions are limited to adults. At this time, he shows a distinct interest in watching other children and attempts to make social contacts with them. 'Parallel play', in which the child plays independently, besides children rather than with them, is the earliest form of social activity with his contemporaries. Following this, comes 'associative play' which the child plays with other children in similar, if not identical, activities and 'cooperative play' in which he plays as a part of a group. Frequently children play the role of an onlooker in which they watch other children at play. When the child is four years old, he shows the rudiments of 'team play'. He becomes conscious of the opinions of others and tries to gain attention by 'showing off'.

Companions in Early Childhood

Normally, the young child's companions are limited in number and variety. For the most part, they consist of adults in the family, siblings and children in the immediate neighbourhood. The child who comes from a large family will have more companions than the only child or the child from a small family. The circle of a child's companions outside his home enlarge to some marked extent only when he starts attending nursery school. Children, who are emotionally dependent on their parents, make proper social contacts with members of the peer group. Children who have been brought up with strict, authoritative child training, tend to be more withdrawn and less talkative when with other children than do children whose home training is more democratic. As a result, they are less often chosen as companions, though they are not actually disliked or rejected. Companions of the same age group and level of maturity are important at this time.

Stability of Play Mates

Young children show far less stability in their

choice of companions than older children. In a study of Kindergarten children, Speroff (1965) found that, during a ten week period, boys changed their friends more often than girls and the most frequent changes came between the fourth and sixth weeks. Boys changed from girls to boy playmates to avoid being considered 'sissies' by the other children. They shifted from one boy to another when they found that a boy they played with was a 'toughie'. Girls, likewise, shifted from boy to girl friends, showing the beginning of sex preference which is so strong in friendships developed during childhood.

Social Acceptability

When the child begins to play with other children, his acceptance or rejection by them soon becomes apparent. The outstanding trait that makes for popularity among young children is the acceptance of a situation, such as willingness to do what others do, complying with requests and accepting gracefully what happens. The popular child is particular about conforming to the group ways. The unpopular child at the pre-school age, on other hand, is one who attacks vigorously, who strikes frequently or pushes and pulls, refuses to comply with the requests of others and fails to conform to the routine.

The child who is rejected by others often tries to force himself into the group and this increases his unpopularity. Rejection by others tends to make a child 'self-bound' and this sets up barriers which interfere with possible acceptance in the future. Girls at this age are more popular than boys with members of both sexes.

Substitute Companions

The young child who has few companions either at home or outside is lonely and restless. He often substitutes imaginary companions to satisfy his desire for companionship. This is a natural developmental phenomenon and is especially characteristic of the age $2\frac{1}{2}$ to $4\frac{1}{2}$ years. Such a child is likely to acquire the habit of dominating his playmates which is possible with an imaginary playmate, but not with a real child. When he discovers that the technique that worked so successfully with his imaginary playmate does not work with real children, he is likely to become a maladjusted member of the group. Another form of substitute companion that meets the social needs of a lonely young child is having a pet to play with.

Leadership in Early Childhood

In early childhood, the leader is characteristically superior in size, intelligence and usually in age to the other members of the group. Superiority in age and intelligence make it possible for a child to offer suggestions for play which the other children, because of their habitual reliance upon adult suggestions, are willing to follow. A big child has the advantage over smaller children because children tend to respect size as a result of their constant contact with adults and their habits of obedience to adult requests (Bossard and Boll, 1966).

Development of Understanding

New experiences lead to new meanings which create new association with meanings, established earlier in babyhood. The child now begins to notice details which formerly had escaped his attention. As a result he will not usually confuse objects, situations, or people that have elements in common.

Due to the young child's limited vocabulary and limited experiences with people and things, many of his concepts are likely to be incomplete, inaccurate or actually faulty. Furthermore, when concepts are heavily weighted with emotional accompaniments there is a resistance to change even when new knowledge would increase the accuracy of formerly learned concepts (Weiner, 1964).

The most common and important of concepts developed in early childhood are the following.

1. Life and death
2. Space
3. Weight
4. Number
5. Time
6. Self
7. Social
8. Aesthetics
9. Music

1. Concept of Life and Death

Young children believe that all subjects have the same life qualities as humans 'Living' is more often applied to inanimate objects than 'having life'. Animism or the tendency to ascribe living qualities to inanimate objects is responsible for many of the faulty concepts of young children. Adults also encourage animistic thinking in young children by their emphasis on the living qualities of the child's toys and by telling them stories about inanimate objects which act as if they were alive. For example, children think that a person is actually behind the radio and sings.

As young children ascribe living qualities to every thing, it is difficult for them to comprehend the meaning of death. To them, anything that 'goes away' or disappears is 'dead'. A young child, for example, believes that a bike 'dies' when the wheel falls off. He is incapable of comprehending the fact that death is a final process because he looks upon everything as having living qualities.

2. Concept of Space

His play with tricycles, carts blocks and other toys, makes the child familiar with common cues which help him perceive short distances if they are studied in relation to his body. Longer distances are unrelated to his body and so are still very difficult to be judged accurately. By the age of four years, the child's perception of short distances is similar to that of an adult. The child's ability to perceive differences in form increases gradualy from two to six years (Estes, 1961).

The child's ability to distinguish between the right and left side begins to develop at about five years of age and develops rapidly thereafter. He can distinguish right from the left side in relation to his body before he can make this distinction in relation to other objects or places or directions.

Perception of relative size also develops at this age. At the age of three years, children can select the largest and the smallest from a group of objects of varying sizes. By the age of five years, they can select middle-sized objects. The concept of roundness is well established between the ages of three and six years (Terman and Merrill, 1960).

3. Concept of Weight

The child is apt to estimate weight exclusively in terms of size until he learns that different materials have different densities. A large ball of cotton, for example, would be judged heavier than a rubber ball of smaller size.

4. Number Concepts

Numbers mean little to young children as Padmini (1972) has reported. Their concepts may develop rapidly if emphasis on the development of number concepts as a preparation for entering the first class in school is laid either at home or in their nursery school.

5. Concept of Time

Young children have no idea of the length of time nor do they have the means to judge it. Children of five years, however, can make accurate estimates of time, by associating specific activities with different times of the day, with the days of the week and with the seasons of the year. By the time they are four of five years old, most children know what day of the week it is. The month, season or year must, however, be brought to their notice at

home or in the kindergarten. They cannot read the time by a clock before six years of age. They are likely to have an idea about seasons before the age of six years (Russell, 1962).

6. Concept of Self

The concept of self develops very rapidly during early childhood because of the child's interest in himself. By the time he is three years old, he should know whether he is a boy or a girl, his full name and the physical location of his nose, eyes, mouth and hair. At this age children know all the different parts of their bodies and the corresponding articles of clothing. The young child's concepts of the functions of his body are, however, still incomplete and will remain so for sometime even after entering the school (Geller, 1962).

When the child begins to play with other children, he compares himself with them. If his comparison is favourable, he will develop a favourable concept of himself. If unfavourable, his concept will be self-conscious, shy and deleterious. When he is five years old the young child has a good idea of appropriate sex roles. He shows these in the patterns of his play and in his general behaviour. Children with older siblings learn appropriate sex roles earlier than those who have younger siblings or are the only children.

7. Concept of Social Behaviour

As a result of their constant contact with parents, brothers, sisters and playmates, young children learn to 'size up' these individuals with a fair degree of accuracy (Landreth, 1963). Due to their limited contacts with strangers, they size them up incorrectly. Much of the tactlessness of young children can be traced to poor social perception (Jersild, 1960). Children who attend nursery school or kindergarten develop social concepts more rapidly than children whose environment is limited to their home and neighbourhood. As Estvan (1966) has pointed out, the nursery school period is one of rapid development in social perception.

8. Aesthetic Concepts

The young child's perception of beauty depends largely on his ability to understand the meaning of what he sees or hears. He likes pictures of familiar people and animals doing familiar things. The younger the child, the more he likes colours which are bright and gaudy.

9. Music

Liking for music of certain types is strong among young children. They prefer songs and music with definite tunes or rhythm.

Speech During Early Childhood

Learning to speak properly in early childhood is important because speech is an essential tool in socialization. The child who can communicate with his peers with intelligible words, makes better social contacts and is more readily accepted as a member of the play group than the child whose ability to communicate is limited. He will be handicapped educationally and socially, until he speaks as fluently as his classmates in school.

The foundations for speech are laid in babyhood. On these foundations are built the speech skills which, after early childhood, are so well established that the child's future speech competence is influenced greatly by them. For this reason, early childhood is a critical period in the development of the speech pattern of an individual. In the early years of life, speech development parallels motor development. As the neuromuscular systems mature and lay the foundations for motor skills, they also lay the foundation for speech skills.

Tasks in Learning Speech Skills

The major tasks in learning to speak are :

1. Increasing comprehension
2. Building a vocabulary
3. Mastering pronunciation and
4. Combining words into sentences.

The child should make rapid strides in these four tasks during early childhood. If he is deprived of opportunities and guidance, his speech ability will be lower than his potential, and that of his age mates.

1. COMPREHENSION

The first step for communication is the ability to understand what others say. Otherwise, his speech response will be unrelated to what they say and his social contacts will be jeopardised. This is illustrated well in the case of children who are deaf. As they cannot hear what others say they become socially isolated.

Normally, the young child can understand most of what others say to him either through comprehension of the words used or the gestures and facial expressions that accompany the words spoken. When he enters school, the child would have enough comprehension to understand the instructions given to him and to understand the meaning of stories read to him and the songs sung or taught (McCarthy, 1960).

The child's comprehension is influenced greatly by his attentiveness to what is said. Children who are the only child in the homes or who have older siblings have been found to be more attentive listeners than children from larger families or those whose ordinal position is that of the first-born. The more intelligent the child, the better listener he is (Brown, 1965).

2. BUILDING A VOCABULARY

The child's vocabulary increases rapidly throughout the pre-school years, owing partly to direct teaching of words and partly for his curiosity about word meanings, which leads him to ask people what particular words mean. The young child not only learns many new words every day but also new meanings for old words. A young child does not easily understand words that sound alike but have different meanings.

In addition to building up a vocabulary that will be of general use, young children learn many words of a specific kind. For example, the child learns to use words such as 'Thank you', 'Please' or 'I am sorry'. He also acquires a vocabulary of colour so that at the age of five years he can distinguish blue, yellow, green and white. He learns the meanings of numbers so that by the age of five years, he can count up to hundred.

By the time children are five or six years old they can distinguish between coins. The pre-school child knows and uses such words which denote time as 'morning', 'afternoon', 'night' and seasons such as 'winter'. and 'summer'. Many young children pick up slang or even swear words from their older brothers and sisters, their parents or their playmates. Children often use these words in parrot-like fashion without any comprehension of their true meaning or context.

The range of the young child's vocabulary at different ages will depend not only on his intelligence but also upon the opportunities he is given and his motivation to learn. Many children have larger vocabularies than they seem to have because they have a number of different meanings associated with the same word. Girls, at every age have been reported to have larger vocabularies than boys (Lipsitt, 1966).

3. PRONUNCIATION

A young child's pronunciation improves rapidly depending upon the correctness of the models he imitates and the guidance he receives in correcting mispronunciations.

Learning to pronounce all words correctly is difficult for a child, but certain sounds and sound combinations have been reported to be especially difficult. Consonants and consonant blends are more difficult for the young child than vowels and diphthongs. Among the consonants which are difficult to pronounce are z, w, d, s, t. The difficult consonant blends are are st, str, dr and fl. Some of the easier consonants to pronounce are t, b, p, m and n; the easy vowels are i, a, e, and u.

4. Forming Sentences

The formation of sentences follows a fairly definite and predictable pattern in early childhood. Two-year-old children and more commonly three-year-olds usually use short sentences of three or four words. These sentences have an excess of nouns but lack verbs, prepositions and conjunctions. Many of the child's early sentences are incomplete (Hass, 1965). After three years, complete sentences of six to eight words appear frequently in a young child's speech. All parts of speech are then used.

Young children tend to increase the length of their sentences by combining two or more simple sentences with the conjunction 'and'. Bright children and those from the higher socio-economic groups usually use longer, more complex and better constructed sentences than children of the same age who come from less favourable environments or who are not so bright. Young children of today speak in longer and more accurate sentences than did young children of the past generations. Several factors account for this change. The radio and the growth of nursery schools afford more opportunities for language stimulation outside the home. Stimulating environments for children at home and the modern permissive treatment of the society with its greater acceptance are some of the other facilitating factors.

Speech Errors

As learning to speak is a difficult task, it would be suprising or even unnatural if young children did not commit errors. When words sound alike, as in the case of hair, heir, die, dye, read, red, and steal, steel it is logical that the child will associate wrong meanings with certain words. Some young children pronounce words clearly and distinctly; some do not. It is not unusual for infantile pronunciations to persist until the child is three or even four years old. By the fifth or sixth year, most infantile forms of pronunciation disappear.

Up to the age of three or four years errors in grammar are common. The major difficulties are in the correct use of pronouns, verbs and verb tenses. The typical errors in the use of verbs relate to the confusion in the use of 'can', 'may', 'lay', and 'lie'. For example, it is difficult for young children to understand why one does not say 'foots' instead of 'feet' or 'mans' instead of 'men'. Another error is that they use the single form of verb with a plural subject. There appears to be a high correlation between the grammatical mistakes made by the young child and those made by his parents (Cazden, 1966).

Speech Disorders

The term, 'speech disorder' refers to a serious form of erroneous pronunciation. Some disorders of pronunciation come from organic causes, such as nasal obstructions, malformations of the teeth, jaws, lips or palates or a tongue-tied condition. Most, however, come from emotional disturbances. As McCarthy (1960) has pointed out : 'Evidence is accumulating in the literature indicating that most articulatory disorders . . . which do not have an organic basis are associated with neuroticism in the parents and poor quality of parent-child relations.'

Some young children develop speech disor-

ders in addition to errors in speech. The three most common forms of speech disorders which children tend to develop during early childhood are :

1. Lisping
2. Slurring and
3. Stuttering

1. *Lisping*

Lisping or letter sound substitution, for example, s or z and w or d for r is one of the most common speech disorders of early childhood. For example, some children say 'rip' for 'ship'. During the transitional stage when the first tooth falls and the second is yet to appear there is likely to be a gap in front of the jaws where the second teeth will eventually cut through. At this time, there is often a slight lisp which, unless corrected as the new teeth develop, may become established into a habit (Breckenridge and Vincent, 1965).

2. *Slurring*

Slurring is an indistinctness of speech caused by inactivity of the lips, tongue or jaw. The inactivity may be due to the child's timidity but it more often arises from excitement and a desire to tell things quickly because they are important and he is excited about them. As speech in the preschool years has not yet become habitual, the child must give conscious attention to what he is saying, to what words he will use and to how he will combine them into sentences. If he tries to speed up, he runs his words together causing slurring. Later, when he has mastered the tasks of speech, he can talk quickly and distinctly.

3. *Stuttering*

Stuttering is a repetition of sounds, syllables, or even words. It is often accompanied by deadlocking of speech usually referred to as 'stammering' in which case the individual is unable to produce any sound for a time and then suddenly sounds come out in a torrent.

Like slurring, stuttering is caused mainly by nervous and emotional tension. Between the ages of two and four years slow, repetitious speech is more or less characteristic of all children. Stuttering also occurs frequently between the fifth and sixth years. This period represents an important break in the child's life. During the years from two to four the child is breaking away from babyhood and from the fifth to sixth year he is breaking away from the home environment, establishing himself in the broader social environment of the school and neighbourhood. Stuttering in a minor from is part of the early speech pattern of all children.

Content of Speech

At first, speech is generally thinking aloud. For example, when a little boy is playing with his train, he says, 'Now I'll put the train on the tracks'. Early speech is a monologue in the form of a running commentary on the child's activity rather than an attempt at conversation.

As children grow older they talk more. The most frequent topic of conversation among young children relates to themselves and their activities. When a second person is the subject of a remark, the remark is generally a command for that person to do something. Topics such as likes and dislikes among people, clothes, where one lives and matters of everyday routine, predominate the young child's conversation. Boasting is common at all ages. The young child boasts about material possessions such as his toys, his clothes or the family garden, car or television.

Need for Speech Guidance

If speech is to fulfil its major function—an aid to socialization—the child must learn to speak in a way that will win the acceptance not only of his agemates but also of adults. Proper guidance for the manner as well as the matter for speech should be given otherwise undesir-

able types of speech like name calling, boasting, criticising others or talking about oneself almost exclusively will become habitual.

Marshall's (1965) extensive observations of the activities of preschool children among members of the peer group, suggest a possible way for parents to help their children in social adjustments to peers at the preschool level. For example, if the parents and adults talk with the preschool child about what the child can use in play with other children, the child does the same more frequently with his pre-school peers and has a better chance of social acceptance in the preschool group.

Variations in Speech

The variations found in the young children's speech, depends not only on intelligence but also on opportunities for learning. In large families, for example, the first-born child has more opportunities to learn to speak and more encouragement than those born later.

Children who are brought up in orphanages or who had been hospitalized for a long time have been found to be backward in their speech development. The socio-economic status of the family, and the encouragement he receives to learn words and to combine them into correct sentences, influence the child's mode of speech (Deutsch, 1965). A comparison of the language abilities of preschool children in rural and urban areas done by Geeta Devi (1970), using Watt's vocabulary test, has shown that children from higher socio-economic strata were better.

The child whose parents use a foreign language at home is confronted with the problem of bilingualism and must use a different language when he tries to communicate with outsiders. It adds confusion to his learning and is likely to retard his speech development in both languages.

There are marked variations not only in how young children talk but also in how much they talk, what they talk about and whom they talk to. The brighter and more mature the child, the more he is likely to talk. Children who grow up in a liberal atmosphere talk more than children from a strict home with the dictum—'Children should be seen but not heard'. First-born and only children are encouraged to talk more than later-born children.

The persons whom young children talk to vary greatly. Younger children's talking is more directed toward adults. As they approach the end of early childhood, they talk more and and more to their peers and playmates. Children with siblings close to them in age, learn to talk to them. This opportunity is denied to only children or children with much older siblings.

There are also marked variations in the subjects young children prefer to talk about. If they have been permitted to or even encouraged to talk about themselves, their possessions, and their achievements, their speech will be egocentric even long after other children of the same age have started to engage in socialized speech.

Common Interests in Early Childhood

The interests of the young child broaden and intensify as his environment expands and as he comes into contact with more and more people outside his home. At this age, his interests centre chiefly on himself and all that pertains to his own possessions. Some other usually universal interests among young children are interests in : (1) Religion, (2) Human body, (3) Sex and (4) Appearance.

1. Interest in Religion

Religious beliefs do not have any meaning to a young child. However, he is curious about religion when he is exposed to rituals, celebrations and prayers at home and school. Thus his curiosity about religion is greatly kindled. He then asks many questions relating to

religious matters as he perceives them. 'What is pooja ?' 'Why do we kneel and pray in the church' and 'Why does mummy put her saree on her head while in the mosque ?' are a few examples of the questions children ask.

Early childhood is also the 'fairy-tale stage' of religious beliefs. That is why religious stories have a strong appeal to young children. Stories of Hanuman, mischievous Balakrishna, and loving Jesus who had all the children on his lap attract children very much. They think of god as a person who can and will do things for them.

2. INTEREST IN THE HUMAN BODY

From the age of three years, children show greater interest in their own bodies than they did earlier. This interest takes the form of comments and questions about the various parts of the body, of examining those parts, calling attention to them and occasionally of exhibitionism. The areas that attract a young child's attention most are those connected with elimination, although their attitutde towards them are matter of fact and unconcerned at that stage. They recognize anatomical differences between boys and girls. They regard them as incidental characteristics. The clues they use to distinguish between the sexes are differences in clothes, hair styles and names. They are curious about 'germs', how they cause 'sickness' and how medicines and food cure sickness. When a person dies, they are curious to know what happens to the body and how it will reach heaven.

3. INTEREST IN SEX

At four years of age, children become intensely curious about the origin of babies and ask questions frequently about it. This curiosity is intensified if a new baby arrives in the family or neighbourhood, or if a pet animal has offspring. Many children believe that they had come from a hospital or a store or dropped by God as a gift to the parents.

4. INTEREST IN APPEARANCE

The young child has little interest in his appearance, but his interest in his clothes becomes strong at five years of age. At an early age he discovers that clothing attracts attention to himself. New clothes have a special appeal to a young child. He likes to wear new clothes daily and thus make others notice him. If they fail to notice, he calls their attention to his clothes with comments such as 'I have a new shirt' or 'I have new socks. My grandmother gave it to me'.

Skills in Early Childhood

Acquisition of basic skills is of great personal importance to a child. This leads to independence. Skills well learnt are an asset to the young child in his early attempt to make social contacts. Early childhood is the most favourable period to learn skills which are basic to life. The young child enjoys repetition and is therefore willing to repeat an activity until he has mastered it. Being adventurous, he is not afraid to try new movements. He is not conscious of the ridicule of his associates, if he is funny in his trials. As his body is very pliable, he learns the manipulative skills quickly and easily.

In the early stages of development of skills, the movements of the child are clumsy, awkward and uncoordinated. Gradually, unnessary motions are eliminated and the movements become purposeful, graceful, coordinated and rhythmic. In the effective acquisition of skills, practice must be directed constructively. Directed practices make learning quick and the end-results satisfying to the child and the teacher.

Playing helps the child to develop many skills. The child who has the necessary skills to manipulate his toys does not have to depend upon someone else to amuse him. This will eliminate the boredom that would make young

children unhappy, or get into mischief. The most important value of these skills is the effect they have on the child's concept of himself. Skill is an ego-satisfying factor to a child. As Havighurst has explained, 'A child's conception of himself is tied up with the skills he has. It is as though his acceptance of himself comes in part from his ability to master different forms of the world outside himself.'

The skills a young child learns, depends partly upon his maturational readiness to learn, and mainly upon the opportunities he has and the guidelines he receives in mastering them quickly and efficiently. Early in childhood, boys are pressurized to learn such play skills as are culturally approved for members of their sex and to avoid skills that are girlish. For example, they are encouraged to learn skills involved in ball play while girls are encouraged to learn skills related to homemaking. All young children learn certain common skills, although the age of learning and the proficiency with which they learn may be different. The common skills are divided into two categories:

1. Hand skills and
2. Leg skills

1. Hand Skills

Skills in self-feeding and dressing, begun in babyhood, are perfected in early childhood. By the time the child is three years old he can feed himself without spilling. As hand skills at this age are still in the formative stage, the child must concentrate on what he is eating or doing.

Improvement in dressing skills comes between 3 and $3\frac{1}{2}$ years of age. It is therefore important that the young child is given ample opportunity and time for dressing himself with minimum help from others. From the age of two years, children enjoy manipulating buttons. By the time they are three or four years old, they can unfasten and fasten garments. When they are six years old, they can handle all types of fasteners in any position.

Brushing the hair and bathing are skills which can be acquired easily in early childhood. At first, the child needs help in getting a straight parting in his hair and in reaching the different areas of his body while bathing. With practice, he will gradually take over more and more responsibility for these tasks. By the time he reaches five years, he would be able to bathe, dress, tie his shoes and comb his hair with no assistance.

Between the ages of five and six years, most children become proficient in throwing and catching balls. A three-year-old can drive nails into wood with a hammer, a six-year-old can use his carpentry skills to make simple objects like boats, carts and carriages. Children in the nursery school and kindergarten can use scissors in following the outlines of pictures. They can mould different figures with clay. Young children are able to colour pictures, draw or paint pictures of their own by using crayons, pencils and paints. At this age, it will be easier for the child to acquire hand skills with his right hand. Handedness should be trained and not left to chance, since manual dexterity can affect an individual's educational and vocational success. On the other hand, Ames and Ilg (1964) sound a word of caution about putting too much pressure on the young child to learn to use his right hand in preference to his left. Best results will be obtained by non-interference with the child's natural expression of handedness other than, perhaps, to present objects nearest to his right hand.

2. Leg Skills

The young child first masters the skill of walking. Once he establishes skill in walking, he turns his attention to learning other skilled movements which require the use of his legs. He learns to hop, skip, gallop and jump by the age of five or six years. At this time, he can run with very few falls and also play games. At three years, a child can ascend and

descend stairs or ladders. Between the ages of three and four years he can learn tricycling and try stunts, such as riding backward or turning the corner sharply. Other skills acquired by young children include jumping a rope and balancing on rails or on wooden logs.

A child who has been pampered by overprotective parents because of a fear of accidents or warnings to 'be careful of environmental obstacles', or lack of opportunity to practise, becomes awkward in skills. He cannot keep up with the activities of other children. As a result he is left out of their play. This further limits his opportunity to learn and makes him more backward in his social contacts. As young children have no way to assess their abilities other than by comparison with their age-mates, the young child whose skills are inferior to those of his age-mates and who as a result cannot keep up with them in play, soon comes to think of himself as 'inferior'—a feeling which, in time, may become generalized and develop into an inferiority complex.

Family Relations in Early Childhood

The young child's attitudes towards people, and life in general, are patterned by his family. Generally the child who is brought up in a democratic home makes better adjustments than the child from an authoritative home. A study of relationship of parental attitudes to social behaviour of children in a nursery school has shown that the democratic attitudes and consistency between parents in their attitudes exert a positive influence on social behaviour of children (Atit, 1968). Child training methods alone are not responsible in deciding the personal and social adjustments of the young child. The child identifies himself with the parent for whom he has a warm and close feeling and imitates his attitudes, emotions and behaviour patterns.

The child learns new values and attitudes from what the parents say and distinguishes between socially acceptable and unacceptable behaviour. Parents who are well adjusted, pass on to their children through personality transmission, attitudes and behaviour patterns that will contribute to the success of the child in his adjustments. In contrast, disturbed parents produce poorly adjusted and self-rejecting children.

Changes in Parent-child Relationship

It is normal to find changes in parent-child relationship in early childhood due to many causes. Firstly, the young child is no longer the soft and cuddly helpless infant. He is now a rebellious, assertive, mischievous individual. He gets into everything, demanding attention and refuses to do what he is asked to do unless it strikes his fancy. Secondly, as the young child becomes more independent, parents feel that it is no longer necessary to devote as much time to his care as they did earlier. The young child still wants parental attention and resents neglect. The third common cause is the fact that parents have definite concepts of what they think a 'good' child should be like. When the child does not come up to their expectations, they become critical and punitive in their attitudes. Fourthly, parent-child relationships change when young children begin to show a preference for one parent.

Sibling Relationships

Siblings are important aids to the socialization of the young child. They act as a 'school of mirrors'. The young child learns to evaluate his behaviour by comparing with others. Comparing it with others and their opinion of him influences his own. Older siblings serve as models for imitation. In this way, the child learns not only socially approved behaviour patterns, but also

those that are considered appropriate for his sex. It does not matter if his siblings are older or younger than himself but they help him to show his affection for others. In a family where there are siblings every child learns to play a certain role, depending on his sex, his ordinal position in the family and the age difference between him and his siblings. This also is an important aid to his socialization because, he will be expected to play either the role of a leader or a follower in his peer-group.

Personality Development in Early Childhood

The personality of the child, the foundations for which had been laid in babyhood, begins to take form in early childhood. Parents, siblings and relatives constitute the social world of the child. Their feelings about him and their treatment are therefore important in the shaping of his self concept. The child's concept of himself as a person is formed 'within the womb of family relationships'. As the mother plays a more important role in the young child's life than any other single person, her attitudes toward the child and her treatment toward him are significant influences in his personality development. Nalina Devi (1968) found that the child-rearing practices in a rural area revealed that the behaviour problems of children increased substantially as the severity of methods of handling them increased. Hence child-rearing methods used at home distinctly contributes to the development of self-concept. Strict, authoritarian discipline and frequent and harsh corporal punishments tend to build up resentments against all forms of authority and feelings of martyrdom.

The aspirations of parents for their children also affect the young child's self-concept. If these are unrealistically high, the child is doomed to failure. Failure leaves an indelible mark on their self-concept and lays the foundations for feelings of inferiority and inadequacy throughout life.

A Happy Child is the Nation's Pride

Early childhood should be happy period in life. If the child is to be happy, his basic wants and needs must be fulfilled. The following suggestions will emphasise the important role of parents in making a child happy.

1 A healthy child has the potential for happiness. With careful attention to his diet, sleep, rest and play, he can be in good health for most of the time. Even when ill, a child can be happy if he feels that his parents are doing all they can to help him to be comfortable.
2 A child is happy when he is not annoyed. Parents must recognize that the behaviour which annoys a child such as constant asking of questions, temper outbursts following a necessary thwarting of a desire, or quarrelling with siblings and playmates is a normal accompaniment of early development. Even more important is to show the child how to satisfy his needs in a more social way to make himself a more attractive and amicable person.
3 A child needs constant reassurance of being loved in order to be happy. A well-planned, consistent and comprehensive disciplinary policy will dispel the beliefs that the child may harbour that he is not loved when punished or unfairly treated. When emphasis is placed on the naughtiness of his act, rather than on him he will have no reason to feel that he is rejected.
4 Guidance in learning how to get along with other children in play situations will increase the young child's feeling of being accepted and loved by his siblings and playmates outside the home and thereby ensure his happiness.

5 Every child must have a reasonable amount of affection to be happy. Parents must show their affection for the young child by an interest in his activities and pride in his achievements. But affection alone will not satisfy his needs, unless it is geared to his level of development.

6 A child must be helped to like himself— He cannot like himself if he feels that he is a failure. Parents therefore have the responsibility to help the child not to develop a failure complex. This can be done by showing appreciation for what he has done and by showing him how it could have done better and not comparing the achievements of the young child with an older sibling or playmate. Parents must help the child to have a goal within his potentials and thus achieve it.

The most important factor is an atmosphere of happiness at home at all times. The child's home is his immediate environment. If the prevailing atmosphere of the home is happy, the child will be able to overcome temporary unhappiness without distorting his outlook on life and continue to be happy.

References

Allport, G.W., *Pattern and Growth in Personality*. New York : Holt, 1961.

Ames, L.B., 'The sense of self of nursery school children as manifested by their verbal behaviour', *J. Genet. Psychol.* **81**, 193-232, 1952.

Ames, L.B., Ilg, F.L., 'The developmental point of view with special reference to the principle of reciprocal newsmotor interwearing'. *J. Genet. Psychol.* **105**, 195-209, 1964.

Archibald, H.C., Bell, D., Miller. C., Tuddenham, R D., 'Bereavement in childhood and aduit psychiat ric disturbance', *Psychosom. Med.* **24**, 343-351, 1962.

Arthur, B., Kemme, M.L., 'Bereavement in childhood', *J. Child Psychol. Psychiat.* **3**, 37-49, 1964.

Bayley, N., 'Research in child development : a longitudinal perspective', *Merril-Palmer Quart.* **11**, 183-208, 1965.

Bossard, J.H.S., Boll, E.S., *The Sociology of Child Development*. New York : Harper & Row, 1966.

Breakenridge M.E., Vincent, E.L., *Child Development*. Philadelphia : Saunders Co., 1965.

Brown, C.T., 'Three studies of the listening of children', in *Speech Monogs.* **32**, 129-138, 1965.

Brownman, M.T., Templin M.C , 'Stories for younger children in 1927-1929 and in 1952-1955',*Elem. Sch. J.* **59**, 324-327, 1959.

Cazden, C.B., 'Subcultural differences in child language : an interdisciplinary review', *Merril-Palmer Quart.* 12, 185-219, 1966.

Church, J., Stone, L.J., 'The early school years', *Children.* 7, 113-114 1960.

Clifford, E., 'Discipline in the Home : a controlled observational Study of parental practices, *J. Genet. Psychol.* **95**, 45-82, 1959.

Conn. J.H., 'Children's awareness of sex differences. II. Play attitudes and game preferences', *J. Child Psychiat.* **2**, 92-99, 1951.

Deutsch, M., 'The role of social class in language development and cognition', *Amer. J. Orthopsychiat.* **35**, 78-88, 1965.

Emmerich, W. 'Continuity and stability in early social development. Teacher ratings', *Child Development.* **37**, 17-27, 1966.

Estes, B.W., 'Judgement of size in relation to geometric shape' *Child Development.* 32, 277-286, 1961.

Estvan, P.J., 'The social perception of the nursery-school children', *Elem. Sch. J.* **66**, 377-385, 1966.

Frank, L.K., 'Play in personality development', *Amer. J. Orthopaychiat.* 23, 576-590, 1955.

Garn S.M., Clark, A., Landkof L., Newell. L., 'Parental body build and developmental progress in the offspring', *Science*, **132**, 1555-1556, 1960.

Garrison, K.C.. *Growth and Development*. New York : Longmans, 1959.

Geeta Devi, P.P., 'Language ability of children in a rural and urban pre-school', an unpublished Master's Thesis, University of Madras, 1970.

Gellert. E., 'Chidren's conceptions of the content and function of the human body', *Genet. Psychol. Monogr.* **65**, 293-405, 1962.

Gutteridge, M.V., 'A study of motor achievements of young children', *Arch. Psychol.* N.Y. No. 244, 1939.

Hass, W.A., 'Noun phrases and labeling in nursery school children', *Disseration Abstract.* **26**, 3477, 1965.

Havighurst R.J. *Human Development and Education.* New York : Longman Co., 1953.

Heathers, G., Acquiring dependence and independence : a theoretical orientation. *J. Genet. Psychol.* **87**, 277-291, 1965.

Hurlock, E.B., *Developmental Psychology.* Bombay : Tata McGraw-Hill Publishing Co., 1968, 187-235.

Hymes, J.L., 'Early childhood', *Children.* **7**, 187-235, 1960.

ICMR, Nutrition Atlas of India. Hyderabad : NIN, 1971, p. 141.

Jersild, A.T., *Child Psychology.* New Jersey : Prentice Hall Inc., Englewood Cliffs, 1960.

Johnson, M.M., 'Sex role learning in the nuclear family', *Child Development.* **34**, pp. 319-333, 1963.

Kagan. J., Moss, H.A. *Birth to Maturity : a Study in Psychology Development.* New York : Wiley Sons, 1962.

Koch, M.B., 'Anxiety in pre-school children from broken homes', in *Merril-Palmer Quart.* 7, 1961, pp. 225-331.

Landreth, C., 'Four-year old's notions about sex, appropriateness of parental care and companionship activities', *Merill Palmer Quart.* 9, 175-182, 1963.

Levinson, B.M., 'The inner life of the extremely gifted child as seen from the clinical setting', *J. Genet. Psychol.* **92**, 83-88, 1961.

Lipsitt, L.P., 'Learning processes of human newborns', *Merrill-Palmer Quart.* **12**, 45-71, 1966.

Maccoby E.E., Dowley E.M., Hagen, J.W., Degarman, R., 'Activity level and intellectual functioning in normal pre-school children', *Child Development*, **36**, 761-770, 1965.

Macfarlane J., Allen L., Honzix, M.P., 'A developmental study of the behaviour problems of normal children between twenty-one months and fourteen years', Berkeley : University California Press, 1953.

Mariamma, J., 'Play interests of selected 2½ to 6 year old children', an unpublished Master's Thesis, University of Madras, 1974.

Marshall, H.H., 'The effect of punishment on children', *J. Genet. Psychol.* **106**, 23-33, 1965.

Martin, P.C., Vincent, E.L., *Human Development.* New York : Ronald, 1960.

Maw, W.H., Maw E.W., 'Nonhomeostasis, experiences, as stimuli of children with high curiosity', in *Calif. J. Educ. Res.* **12**, 57-61, 1961.

McCarthy, D., '*Language Development*', *Monogr. Soc. Res. Child Development*, 25, No. 3, 5-14, 1960.

Medinnus, G.R., Love, J.M. 'The relation between curiosity and security in preschool children', *J. Genet. Psychol* **107**, 91-98, 1965.

Murphy. L.B., *Personality in Young Children.* New York : Basic books, 1957.

Mussen, P.H., Conger, J.J., Kagan. J., *Child Development and Personality.* New York: Harper & Row, 1963.

Nalina Devi. R., 'Child rearing practices in rural families at two income levels', *Indian Journal of Home Science*, Vol. 2., No. 1, 44-47, 1968.

Padmini, A. 'Influence of preschool on concept formation of children of 3-5 years', An unpublished Masters Thesis, University of Madras, 1972.

Peckos, P.S., 'Nutrition during growth and development', *Child Development*, **28**, 1957 273-285.

Rama M.A., 'Relationship of parental attitudes and social behaviour of nursery school children', in *Abstracts of Home Science Research Series-6*, Coimbatore : Sri Avinashilingam Home Science College, p. 30 1967,.

Reavy, W.R. 'Child sexuality', in the *Encyclopaedia of Sexual Behaviour.* New Jersey : Prentice Hall Inc., Englewood Cliffs, 1961, pp. 258-267.

Russell, D.H., 'Qualitative levels in children's vocabularies, *J. Educ.Psychol.* **53**, 170-174, 1962.

Sarada Devi V. J., Nalina Devi, R., Rajammal, P.D., "Impact of nutritional status on the emotional expressions and mental abilities of preschool children', *Indian Journal of Home Science.* Vol. 6, No. 2, 1972, pp. 88-90.

Sears, R.R., Maccoby, E.E., Levin, H. *Patterns in Child Rearing.* New York : Harper & Row, 1967.

Sontage L.W., Baker, C.T., Nalson V.L., 'Mental growth and personality development : a longitudinal study', *Monogr. Soc. Res. Child Development*, 23, No. 2. 1958.

Speroff, B.J., 'The stability of sociometric choice among kindergarten children', *Sociometry*, **10**, 129-131, 1965.

Stith M., Connor, R., 'Dependency and helpfulness in young children', *Child Development.* **33**, 15-20, 1962.

Strong R.M., *An Introduction to Child Study.* New York : Macmillan, 1959.

Templin, M., 'Certain language skills in children, their development and interrelationships,' Minneapolis : University of Minnesota Press, 1957.

Terman, L.M., Merrill, M.A. *Stanford–Binet Intelligence Scale.* Boston : Houghton Mifflin, 1960.

Thompson, H., 'Physical growth', in Carmichael L.

Manual of Child Psychology. New York : John Wiley & Sons, 1954, pp. 292-334.

Watson, G., 'Some personality differences in children related to strict or permissive parental discipline', *J. Psychol.* 44, 227-449, 1954.

Weiner P.S. 'Personality correlates of accuracy of self-appraisal in four-year-old children', *Genet. Psychol. Monogr.* 73, 329-365, 1964.

Willy, P.A., 'Studies of children's interests : a brief Summary' *Elem. Eng.* 37, 469-475, 1960.

CHAPTER 11

Preschool Education

Need for Preschool Education

The education of the child begins with conception (Mahatma Gandhi). Ultimately it is the human being that counts, and if the human being counts, well, he counts much more as a child than as a grown up—Nehru spoke. The children of today should be prepared for the vastly complex and rapidly changing world of tomorrow. This calls for an integrated, meaningful educational system. The current system will have to undergo drastic changes. Their impressionable age enables the children to change their behaviour without any resistance along the desirable directions through education.

If the citizens of tomorrow are to be equipped with for freedom, intelligence and physical skills, the foundations must be laid in the nursery and pre-primary schools which must cover all the rural areas. Nearly 40 per cent of the total population of India are children below 12 years. There are 23 million children who belong to the age group of three to six years. Therefore, educational programmes for child welfare are the most imperative need of the day.

In connection with the celebrations of Children's Day in 1962, Dr. Rajendra Prasad, the first President of the Indian Republic, said, "If one's childhood is well spent, well regulated and well organised, the better will he take up the responsibilities of a full grown citizen". His illustrious successor, Dr. Radhakrishnan proclaimed, "Our nation's future, its prosperity or poverty, strength or weakness depends on the care with which we build up the character and habits of our children."

However, as Prime Minister Srimathi Indira Gandhi has warned, the child is a thoroughly neglected element of rural life—the toddler is left untrained, unwashed and unwatched over and the older child is deprived of schooling because of he should take care of the younger children. All parents, in spite of their love for their children, are not equipped to give them proper guidance and training. Even those who have the knowledge, rarely have the time, struggling with poverty or the increasing pace of modern living. The changing patterns of society, due to rapid industrialization, demand that the children are given greater attention than ever before. Establishment of good Balwadies, nursery schools or preschools can help in this endeavour. Preschool education needs to be recognised as a prerequisite for the healthy mental and emotional development of children.

During the preschool years children have a rapid physical, mental and social growth. They gather information and form them into patterns of knowledge that become integrated with their life. They begin to work and play cooperatively with other children. In their play, they show skills and ingenuity. These are the years of the 'flowering of the self'. As the rate of growth and development is fast,

any stimulation along these lines will have its maximum effect during early childhood.

This stage is also crucial in terms of the child's development of interests, attitudes and values. The extent of ultimate development and achievement is practically fixed by the experiences the child has already had undergone during this period. Rapid growth at the preschool stage necessitates the provision of a suitable environment for optimum development.

The preschool child, whether he be two and a half, three, four or five years old is one who needs space to be vigorous, alone and or part of an active group, for his happiness, concern and self-expression. He needs materials which are appropriate to his size, ideas and feelings. He needs an understanding adult to help him to help himself, to explore manually and verbally, and to learn the lessons of life from both people and objects. Many families are not in a position to provide such an enriching and stimulating environment to children because they themselves live in deprived conditions and they do not know how to give the desirable stimulation to their children. The more experiences the child recieves at this stage, the richer will be the dividend. Pre schools with good management, able personnel, enough space for free movement and proper equipment to play are the source of these experiences.

More than 40 per cent of the primary school dropouts are from the first and second grades. This is a heavy loss in terms of human and monetary resources. Therefore, the need to improve the environment of primary schools which provide the basic minimum of series of intellectual development and stimulation for the preschool children is crucial. Dakshayani (1969) found that a child who goes to a nursery school before joining the primary school adjusts himself much better and stands high in academic achievement in the class. In his study of the subsequent development in the first grade, Salomy (1971) roported that their children showed better emotional control, developed proper habits of eating, health and hygiene because of the influence of their nursery school experience. Thus preparation in the nursery school helps the child considerably in his mental readiness and subsequent education.

Economic pressures, impact of education, social and national duties take many mothers away from the home during the day time for careers outside the home. They face the problem of leaving their children at home. Preschool education thus becomes a 'must' for all such children whose mothers are working.

Numerous other dynamic changes are taking place in the society. The joint family system is rapidly breaking down and nuclear families are springing up. Children who love to play with other children hardly have the opportunity to do so. After two and a half years, the peer group becomes increasingly important and the need for companionship is also great. In a nursery school a child gets the oportunity for playing with other children and thus learns to share, wait for his turn, cooperate with others and acquire several other social skills.

Many mothers, both uneducated and educated, do not appear to understand the significance of the demands of growth in early childhood. They either tend to baby their children too much or ignore them. Thus, even in educated homes, the environment may not be fully satisfying and challenging for the optimum growth of children. Persons who are trained and experienced in guiding young children, as those in nursery schools, are in a better position to meet these needs. These persons, together with the parents, will be able to achieve better results.

The Objectives of the Nursery School

The promoters of the preschool education movement in different countries at different

times have put forward various objectives, aiming at the all-round development of the child—physical, social, emotional and intellectual.

1. Providing for the Child's Physical Wellbeing

Preschool offers an excellent opportunity to supplement the home diets of children and overcome the nutritional deficiencies, if any. Through well-planned meals (Figure 24), the nursery school can make up the imbalances in the diets, meeting one-third of their daily requirements. Devadas *et al.* (1971) have reported about the tremendous improvement in the food habits of children after their participation in the preschool feeding programme.

A good preschool also provides for the child's physical well-being, by protecting his health and safety; and adequate exercise in the fresh air; by setting aside time for sleep and elimination and by giving him time for rest and relaxation. It offers space for free movement. It provides chances for activities such as climbing, jumping, sliding. swinging and pedalling for practising bodily control and mastering the basic motor skills involving the large muscles (Figure 24a). The preschool also offers numerous activities for coordination and concentration such as threading leads, painting, drawing, cutting and pasting. These facilitate the development of finer muscular coordination.

2. Developing Good Health Habits

In a well-planned preschool, children are taken to the toilet at regular intervals and trained for washing hands before and after meals, as the first step towards habit formation. Children learn through informal talks, songs, stories, dramatisation and puppetry the need for developing proper health habits of regular elimination, brushing their teeth, taking a bath, combing their hair and being neat and tidy always. Jaya and Anandan (1967) organised and evaluated a rural preschool. They found significant improvements in the health habits of children who had attended the school. The children who attended could do their own work and were self-reliant. They had also built up the basic skills necessary for personal adjustment such as dressing themselves and eating.

Radha, the first-born in her family, came to the nursery school at the age of three and a half years with some problems, the chief being that she and her mother were involved in a struggle that was deeply distressing to both. The problems dated from her second year. Her mother's major anxiety during this time was her inability to feed Radha adequately and Radha's tension was heightened by the mother's increased panic. Eventually, the mother admitted the child in a well-planned nursery school where feeding time was one of the satisfying experiences which children shared. No one in the preschool forced Radha to eat. There was no coaxing, bribing, threatening or punishing. Radha was allowed time to taste new foods, study a new flavour or texture, and to decide for herself if she liked the food. A few months later, Rrdha was the first girl to finish her lunch happily and proceed to rest.

Kavita was brought to the preschool with her mother who threatened to exclude her from home for soiling her clothes. In her home, the bathroom was the most important room. It was built at the far end. It was cleaned frequently and throughly. Her mother always insisted that Kavita should go there for toileting and finish that routine soon. Kavita did not want to walk such a long distance. As a result, she soiled her clothes without her mother's knowledge. When the mother noticed the habit, she started inspecting the child many times a day and paid a lot of attention to her, which she would not have given otherwise. Kavita developed the habit of soiling and wetting as an attention seeking device. When Kavita came to the nursery school, she

Fig. 24. Children enjoying a well-planned meal in a nursery school.

Fig. 24 (a). Activities for practising body control and mastering the basic motor skills in the preschool : climbing and swinging, climbing and riding.

Fig. 25 Fostering interest through opportunities to explore and experiment.

Fig. 26. Opportunities for the development of positive emotions.

was not hurried and a 'bad' or 'naughty' conotation was not attached to the toilet. The child then learned to see a certain 'cause and effect' relationship between what she did and why she did it. In the complexities of family life, it is not easy for a young child to understand why he must perform this or that ritual.

3. Satisfying the Educational Needs

A good preschool aims at satisfying the educational needs of the young child by providing the atmosphere, teaching equipment and materials which are challenging and stimulating, by allowing each child to understand the world in which he lives, and by fostering new interests through opportunities to explore, investigate and experiment (Figure 25). A young child is very curious. His questions must be answered directly to satisfy his curiosity. A child can take in many things if they are properly explained to him. At the same time, the child should be encouraged to investigate, experiment and learn to be desirable intellectually. The educational programme in the nursery school provides opportunity for :

a) Wider understanding of concepts such as colour, texture, number, elasticity, size and shape, magnetism, days and time,
b) Extension of vocabulary through the functional use of new words,
c) More effective use of language because of more careful pronunciation,
d) Developing an interest to read through the use of books; experiences such as listening to and telling stories, learning and participating in the recitals of rhymes and songs,
e) Developing memory power through repetition of songs, stories and associating the events with objects and persons, and
f) Independent thinking since the child is encouraged to express his ideas in his own way and the teacher strives constantly to preserve originality and to develop the child's faith in the worth of honest creative effort.

4. Promoting Emotional Growth

Every child needs affection, approval, acceptance and emotional maturity can be developed by guiding the child to express, understand, accept and control his feelings and emotions. Development of emotions has two aspects, namely (a) providing opportunities for the development of 'positive emotions' such as trust, love security and sense of accomplishment, and (b) channelizing the 'negative emotions' such as fear and anger.

5. Cultivation of Positive Emotions

The preschool can help to develop positive emotions such as trust, love, a sense of belonging, achievement, tolerance, equality and dignity of labour through providing a variety of activities such as painting (Figure 26), gardening, and carpentry work. A few illustrations are given below.

a. Trust

Trust can be developed in children in the preschool in three main ways :

i. Planning the environment and arranging the equipment in such a manner that a child can take them independently and carry them to the place where he wants to play. When a child gets used to such independence, he begins to trust his ability and the environment. These, in turn, will lead to the development of initiative. For example, Gita has been in the preschool for six months. Her neighbour Uma has just joined and does not know what to do. Gita with great self-confidence beckons her, 'Tell me what you want. I can show you where you can get it. I can also help you to choose the book you want'.
ii. Assuring the child of the teacher's help when he needs it, and allowing him to act

on his own initiative. For example, Kissan who has climbed on the jungle-gym says, 'Please help me to get down'. The teacher complies with his request. Kissan gets down with feelings of both achievement and security.

iii. Helping the child even without the verbal request, because the teacher had discerned the need. For example, Rani is talking to the teacher. She stands on one foot and then on the another repeatedly. (This may be an indication that she wants to empty her bladder). The teacher asks, 'Rani, would you like to go to the bathroom with me? Rani states 'Yes', and feels relieved.

b. Love and affection

Children learn to love others by being loved first. The fact that they are loved can be shown in many ways in the preschool, for example, by foreseeing danger and preventing it. Here is an instance. The preschool teacher is engaged in making a hay mattress. Rajendran enquires, 'Why are you making it?'. The teacher answers, 'I am going to put it near the steps, so that when you jump, you won't hurt yourself'. Rajendran runs to his friend Devakumar, and says, 'Do you know why the teacher is making the mattress? So that we don't hurt ourselves, when we jump down'.

The comfort a child receives from the teacher, when he is hurt either physically or emotionally, also helps to develop love and affection. For example, Prabu is riding very fast on the tricycle. The teacher cautions him to slow down. He does not listen but soon encounters a fall. The teacher rushes to lift him and says, "Let me see where you are hurt and how much—I think it is only slight". Prabhu is drawn toward the teacher because she shows concern for him, though he had not listened to her. But, if the teacher had said, 'I told you not to go fast', the child would have run away in tears. Other means of developing love and affection in children are :

i. Allowing them to care for pet animals like rabbits in natural surroundings.

ii. Telling stories like the 'lion and the rat', and the 'elephant which will not hurt the cat', and

iii. Displaying pictures of mothers, birds and animals caring for their young ones.

c. Sense of belonging

The sense of belonging, which boosts the concept of self 'ego', is created by allowing the child contribute to group living and group activity. For example, when the children sit down to eat, the teacher requests for the help of the other children saying, 'Sunil, can you assist me to pass the plates to others?' At another time the teacher announces, 'Tomorrow I'm going to talk to you about cats. If any one has a pet cat, can you bring it to the school for others to see?' Next day some one who usually comes to school crying, rushes in with a beaming face, carrying his pet cat, named, 'Sita'.

c. Accomplishment

The sense of accomplishment a child gets in his play activities, facilitates his successful participation. For example, absorbed in the picture puzzles, Monty exclaims to the teacher "I can complete this picture before you count 10". Allen who is near by says, 'My daddy bought a puzzle for me. It has many, many pieces. But I could complete the picture'. The feeling of accomplishment is further promoted by the appreciation the teacher shows for the work of the children. Latha has just finished painting a mountain, a river and a girl. For the adult's eye, these may appear as splashes of different colours, but the teacher removes the paper from the easel, comments that it is well done, writes Latha's name on it, and preserves it along with other works of Latha, who feels highly satisfied. Can there be anything more to help Latha develop a 'feeling of accomplishment'?

e. Tolerance and equality

In the preschool, the 'bigger' child should

v tolerance towards the 'smaller' and the 'faster' child towards the 'slower'. While each child is allowed to work at his own pace, certain situations like prayer, group singing and eating require the children to get together, wait for one another and act in harmony. Some children may have developed a dislike towards certain people. The teacher should detect such situations and help the children to overcome their feelings of dislike. For example, Jeffrey is a boy with a fair complexion. He does not like to sit near Mani who has a dark complexion nor join hands with him. The teacher notices this attitude. One day, when Jeffrey looks for a companion to play ball with him, the teacher invites Mani. Then both Jaffrey and Mani enjoy the ball game. Similar associations in play help Jeffery to become closer to Mani.

An impartial teacher plays an important role in building up a sense of equality among children. For example, Selvakumar, an older boy, is riding the bicycle. Sampath, the youngest boy in the group, cries for that bicycle. The teacher explains, "Sampath, you have to wait for your turn. Let Selvakumar take five rounds and then he will be ready to give it to you. So let us count the rounds". Selvakumar agrees and leaves the cycle after his five rounds.

f. Dignity of Labour

A nursery school, with its philosophy to develop initiative and independence in children, can offer many opportunities for 'self-help' such as spreading or folding the mats for sleeping, taking the plate to the sink, watering the plants and putting back in place the play-materials used. These experiences create the attitudes of 'dignity of labour' and also a respect for public property.

Preschool also helps in channelising the negative emotions such as anger and fear.

i. Anger

When a child is interrupted or frustrated in his play, he is likely to get angry. The teacher should understand such feelings and give help immediately. For example, Banu is building a tower with blocks. Shekar, who rushes into the room, knocks the tower down. The teacher holds Banu's hand says, "I know you are angry because Shekar has knocked down your tower. I would be too. Perhaps, you can ask him to build it for you." Shekar, who has been listening, offers to build the tower.

Vijay is working at the puzzles. He cannot complete it even after long trials. He is frustrated and throws away the pieces. The teacher holds him and says, "If you have finished playing with the puzzles, let us go out and see the butterflies. You can try the puzzle again some other time."

j. Fear

Fear is an emotion commonly expressed by children. It should not be ridiculed. The teacher must recognize the fear and help the child to get over it. For example, Meena is new to the nursery school. She clutches the handkerchief she has brought from home. To her that piece of cloth is the sole link between her and her home. When Rathi takes it away, she cries. The teacher does not ricicule her, but secures the kerchief for her from Rathi. Some children are afraid of animals—dogs, cats or others. Films showing children having these as pet animals, and stories bringing out the good qualities of these animals would help the children to get over their fears regarding animals.

These are some of the ways in which positive emotions can be inculcated and the undesirable and negative ones discouraged. The behaviour caused by the different feelings need to be observed constantly, and channelized toward educating the child at all stages. A teacher with an alert mind, keen eyes and a sensitive and loving heart can greatly help in the 'cultivation of the heart' in early childhood.

5. CATERING FOR SOCIAL DEVELOPMENT

The nursery school encourages healthy group participation by providing materials which enable the children to enjoy sharing and playing together. It teaches children their rights and privileges in being a member of a social group and encourages them to take care of the property belonging to others. The preschool helps children to work in groups and conform to the group demands. Responsibility and other desirable social attitudes and good manners are cultivated through the relationships with the peer group (Figuie 27) and with adults.

6. STIMULATING AESTHETIC APPRECIATION

There are numerous beautiful objects in the environment. Nature has bestowed beauty all around. Children's attention should be drawn to these. For instance, children in the preschool can be helped to appreciate beauty in the pretty flowers, colourful butterflies, moving clouds, whispering trees and growing plants. The experiences conducive for the aesthetic expression and appreciation are those which provide:

a) Opportunity to express ideas and to experiment with colour, balance, symmetry, pattern and design through a variety of media such as paints, clay and blocks;
b) Opportunity for imagination through the shared enjoyment of books, songs and stories; and
c) Opportunity for finding beauty in nature through excursions, nature walks and appreciation for the right things at the right time.

The Preschool Building

The preschool is the living place for an organic community of growing children, primarily intereseed in educating them the 'gracious art of living' and not a place of formal learning where the main purpose is to communicate a certain prescribed quantum of knowledge. The preschool environment thus helps or hinders the realization of these goals. The building or the physical plant which houses the preschool may be stimulating or stifling and may be conducive or inhibiting to the development of children.

The first prerequisite for the achievement of the objective, 'gracious living' is a clean, pleasant and well-maintained building. Children spend most of their time during the day in the preschool rooms or grounds. Naturally the surroundings are bound to exert a far-reaching influence on their growth and health. The interaction, that is the cause and effect relationship of many elements which characterizes the total situation of a building, significantly influences the behaviour of the children. Therefore, the school building, its situation, design, lighting and ventilation all have important roles to play in the behaviour and welfare of the children.

Essentials of a Good Building

The essentials of a good preschool building are :

1 Surroundings
2 Site
3 Plan

1. SURROUNDINGS

The surroundings greatly influence a child's health, attitudes and development of personality. A preschool then, cannot be built any where and everywhere, if it is to discharge its functions efficiently. Perhaps this is the reason why the early Aryans had located their schools in the midst of forests blooming with the beauties of nature, far away from the dust and din of human inhabitation. Gurudev

Rabindranath Tagore also established his 'Shantiniketan' in the lap of nature.

The psychological basis for providing wholesome surroundings is the unconscious response of children to aesthetic stimuli. Anyone who is facing a choice between two objects, normally chooses the more beautiful without being able to assign a reason for his choice. Therefore, if the aim of the preschool is to bring about mental, moral and physical development of children, the school building must be located amidst desirable surroundings.

On the other hand, unclean surroundings are detrimental to the mind and body. Ugly surroundings act directly on the subconscious mind, and bring about adverse effects on character formation. There is a world of difference between the outlook of a person raised in clean, healthy and adequate surrounding and one who had spent his childhood in crowded, dirty and unclean surroundings.

2. Site

Site includes:

a) Vicinity
b) Soil
c) Aspect and Evaluation

a. *Vicitiny*

The vicinity of a preschool must constitute a refreshing environment, avoiding stagnant pools, swamps, sewers or other settings which are sources of disagreable odour or mosquitoes, flies and harmful micro-organisms. There should be a good water supply.

The preschool may be located at a short distance from the towns to get fresh air and have less risks of epidemics. This will also reduce the cost of the land to be purchased or of the building to be rented.

The preschool must be near a road, but well back from the road and not on its brink. It should not be in close proximity to a burial or cremation ground. The foul odour emitted from the graveyard and its ghastly scenes will have deleterious effects on the children.

The vicinity must be such as to permit any future expansion. It must be a place away from the problems of industrial noise, dust, smoke and pollution. It should also avoid the physical danger of factories, rail roads or bus service.

Proximity to a garden or a public park permits direct play of sunlight even in the remotest corner of the school building for the greater part of the day. It will also add to the influence of the preschool on children's appreciation of beauty. Vicinity of a grove of trees or high buildings is not desirable.

b. *Soil*

Soil makes the school building strong, safe, congenial and educational. The following points need to be considered in selecting the site with regard to soil conditions. It should be : (i) a raised area and (ii) dry and have natural drainage free from water logging.

c. *Aspect and Elevation*

The following features are important to obtain ideal aspect conditions for the preschool.

i. The site should allow the construction of the school building to face south.
ii. Varandahs should be planned on only one side of the rooms for free access of light.
iii. Planting of trees on the other side will help to serve as sun-breakers specially in places which are very hot most of the year.

3. Building Plan

The plans for the preschool buildings would vary with the needs. The following suggestions would facilitate evolving a desirable blueprint.

a) The building should be planned to conform strictly to the laws of sanitation, hygiene, ventilation and lighting, to allow the life-giving suns rays to reach all the rooms without filtering through house-tops and without being obstructed by high buildings around and to permit free and easy access of fresh air to all parts of the building.

b) The building should fulfil the minimum requirements of play rooms, lavatories and wash rooms. Every child must have at least 1.5 square metre of floor area. No play-room should be more than nine metres in length. A single-storey building is preferable for convenience and safety.

Rooms

Rectangular rooms lend themselves more readily to activities of the children then square ones. The rooms should be free from hidden areas to facilitate supervision. Walls with a variety of pleasant colours can add beauty and a feeling of spaciousness if properly selected from primary colours such as red, blue and yellow. They should be skillfully used to challenge the imagination of children and yet not overstimulate them. All the rooms should be provided with an outlet and inlet. They should avoid opening into each other. Lighting should always be at left so that the incoming light strikes the child's left shoulder, when he is facing the teacher.

The rooms for indoor play should be large enough for children to live and work together freely without regimentation for space. The work space should be adaptable, flexible, livable and home-like. The amount of space should be adequate in relation to the number of children to move about freely at 1.5 square metre per child. Ceilings at heights ranging from three metres and above are desirable to relieve noise and provide for freedom of movement.

Walls

The wall space should be functional and lend itself to promote activities. An abundance of 'pinning space' at the eye level of the child is desirable in order to have picture boards. The arrangement of windows and doors should allow large spaces for bulletin boards, for attaching things to pull on and for black-boards.

The walls should be coated with a suitable, washable, porous material to deaden the noise. Shifting walls provide for a wide variety of activities and better use of space.

Floors

The floors, especially that of the dining hall, should be of such material that can be cleaned easily and maintained in a sanitary condition.

They should help to deaden or absorb sound and be suited to hard wear. Since many of the child's activities are conducted on the floor, it is necessary that warmth and freedom from drafts are ensured.

Windows and Doors

The doors (exits) and windows are important parts of the learning environment of the young child. Therefore, their placements need careful consideration. The windows should be low enough to enable a child to look out and should be fitted with shades or blinds. They should be easily operated. Translucent shades or venetian blinds help in regulating the light. However, care must be exercised in adjusting the blinds to avoid bands of bright light or direct sunlight. An overhanging shade may help to regulate the glare. All windows need to be fitted with guards, screens or both. The windows in the areas used for preparing and eating food must be screened to keep off flies and mosquitoes.

All doors should be light in weight so that children can handle them easily. The heights of door knobs should be with in easy reach of

the children and of the type that he can readily turn without being hurt.

Ventilation, Heat and Light

Draft-free cross ventilation through open windows is desirable, depending upon the climatic conditions of the given area. Adults should be alert to control the light during the changing conditions through the day, ensuring an ample quantity of good light evenly distributed over the room. Too bright light is distracting and even frustrating to the child. Skilful use of paint often helps in making dark areas lighter and soften the areas which are too bright.

Sanitary Facilities

Water facilities are essential for the cleaning up activities in the preschool. The toilet and washing facilities should be easily accessible from both the indoors and outdoors. One large or two small rooms would be needed for this purpose. One toilet for every ten children is essential. The toilet floor should be of washable but not slippery tiles. Toilet fixtures with seats varying at heights from 25-30 cm from the floor are desirable. The sizes must be according to the sizes of the children who will use them. Fixture of the suitable size assists in the development of routine habits and also promotes self-confidence and independence in the child. Care must be taken to see that the sinks and toilets are equipped with disposal drains.

Storage Space

Storage space is necessary in the preschool for keeping play equipment, linen, books, teaching aids and records. Supply cupboards can be built-in sections, so that they are easily movable to make centres. These should be equipped with drawers and open shelves according to the specific plans for use. Storage space should be provided for large toys, blocks and supplies as well as for the smaller articles. All storage space should be well ventilated, and kept free from insects and cobwebs.

Outdoor Space

Children need playgrounds which are accessible and large enough to be interesting and safe. A minimum area of two square metre of play-space per child is desirable. If several groups of children use the area and the space is limited, a schedule for using the playground should be provided so that all children are not outdoors at the same time.

The play area should be marked by the balance of space in the sun and shade and include the following.

i) Hard surface area where wheel toys can be used and balls bounced.
ii) Grassy plot for playing, running and romping.
iii) Spot for pets, gardens and digging.
iv) Sand box for sand play and manipulative activities and space for waterplay.

The outdoor area should be regular in outline so that outdoor play can be supervised satisfactorily. It should be securely fenced with a non-splintering material and kept in good repair, with a gate that can be locked. All play space should be free from nails, rocks, broken parts and edges and glass pieces. The places reserved for digging should be protected from animals and covered when not in use. The proportionate relationship between indoor and outdoor space will not only differ according to the school's location and situation, but also in terms of the budget, other infrastructure and programmes to be developed.

Plan for a Preschool Building

Keeping the requirements in view, we can consider a plan for the building for a preschool, with the minimum requirements of space met.

If consists of two play-rooms measuring 7m × 8m, a kitchen cum store-room 5m × 5m and a wash cum latrine of 5m × 3m and an outdoor area of 100 square metre. If funds do not permit, the number of play rooms can be reduced to one. The details of the built up space with approximate cost are given in Table 5.

Table 5 : Details of space and cost for a preschool

Types	*Plinth area of built up space*	*Total area*	*Cost* Rs.*
Preschool with two play rooms	218 sq. m.	318 sq. m.	37 000.00
Preschool with a single play-room	164 sq. m.	264 sq. m.	27 900.00

* As on 30th May 1980 in Coimbatore city.

The design for preschool buildings and their use will undergo changes due to one or more of the following reasons :

1 Technological developments in construction method, engineering skills, building material and school equipment.
2 Research and experimentation in building design.
3 Socio-economic influences, on the needs of the preschool and the methods of financing them.
4 Instructional innovations, especially the emphasis on audio-visual aids, and new methods of education.
5 Ever-mounting emphasis on the utilization of the school as a community centre.

The physical environment of the preschool determines to a large extent the quality of healthy living of the children. Effective use of the environment will greatly benefit the young child. Recent research emphasizes that appropriate facilities and equipment can ensure healthy living. The preschool teacher should be alert to the utilization of the facilities in the preschool and provide optimum opportunities to children for learning.

Even well-planned rooms may not contribute to the development of desirable habits and attitudes, if they are not kept clean and pleasant. It is essential that attention is given not only to the adequacy of the environment but also its effective use towards developing the physical, mental and social health of children. Children learn best when they are involved in situations concerning health and safety and helped to practise consistently what they have learnt. The preschool building has a vital role in helping young children develop the desirable habits for life.

Play Equipment

Play equipment is among the basic needs of a preschool. Play gives children emotional satisfaction. It keeps them occupied and prevents boredom. Play materials give the child opportunities for exploration. The keep him happy and help to reduce his strains and anxieties. It has great intellectual value. It helps children learn, practise and develop new skills all the time. It teaches them to use their hands and coordinate them with their eyes. Play helps children to observe, concentrate and experiment. It teaches them how things are made and work, and how to take care of their possessions. It aids them to cooperate with others and develop friendly relationships. It helps them to learn to be honest, to lose with equanimity and team spirit. Outdoor play gives scope for exercise in the fresh air and thereby improves health and strength.

Selection of Play Equipment

Toys are the tools for play and childhood is the age of toys. They need to be chosen carefully in order to facilitate learning. In selecting

Fig. 27. Play with peer group encourages desirable social relationships.

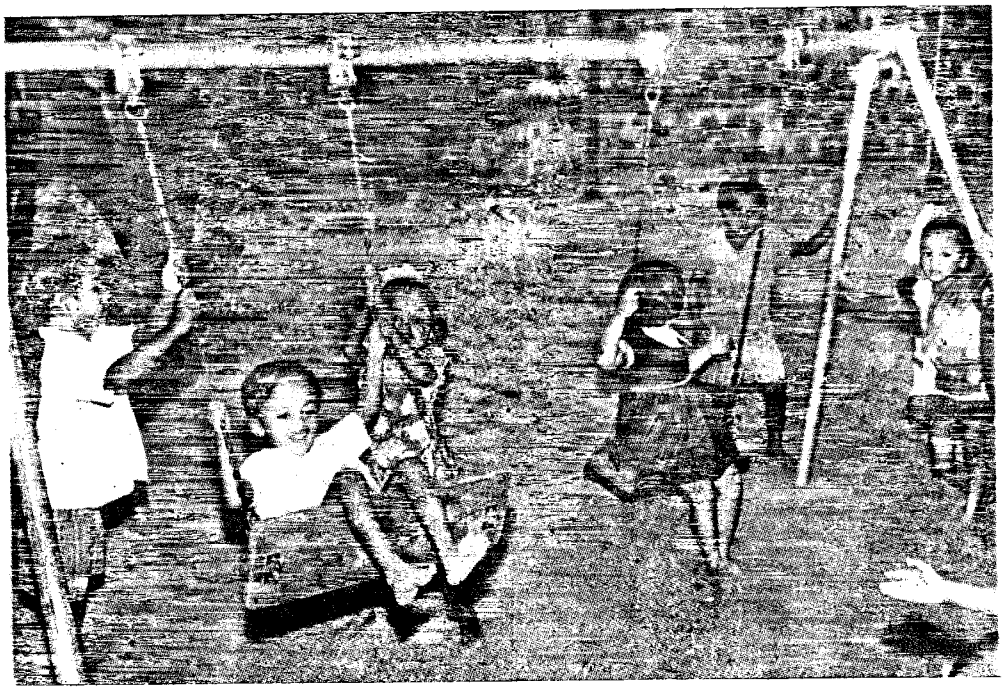
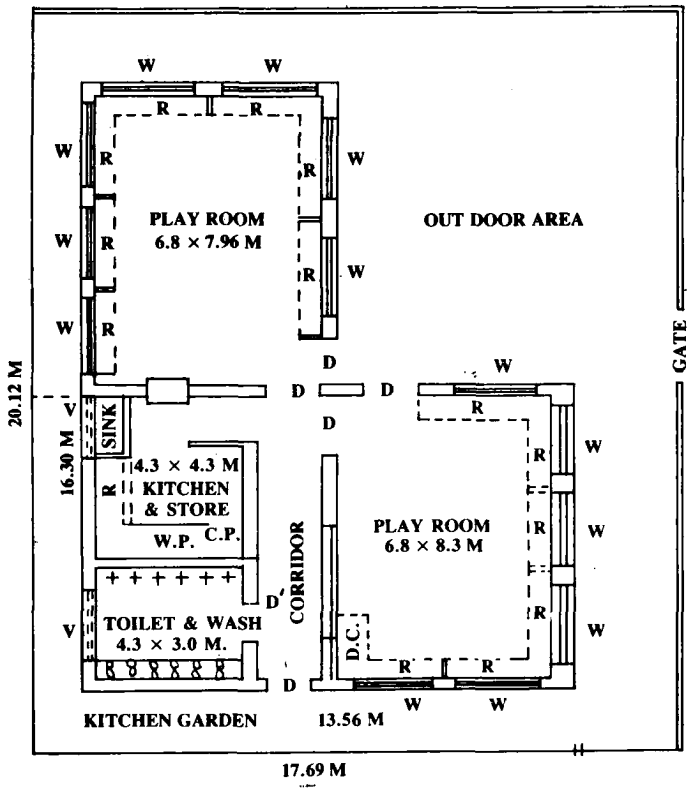


Fig. 28. Swings suitably designed for young children.



PLAN OF PRESCHOOL

SCALE = 1 C M = 0.57 M

REFERENCE

AREA OF THE SITE ——— 351.36 Sq.M.
AREA OF THE OPEN SPACE - 33.36 "
AREA OF THE OUTDOOR — 100.0 "
D —— DOOR - 1.22 M × 2.13 M
D' —— DOOR - 0.91 M × 2.13 M
W —— WINDOW - 2.23 M × 1.22 M
V —— VENTILATOR - 1.52 M × 0.61 M
R —— RACK
W.P.— WORKING PLATFORM
C.P. — COOKING PLATFORM

Fig. 28 (a). A plan for a preschool building.

Fig. 29. Low cost equipment for a preschool.

toys, parents, teachers and other adults must bear in mind the following points :

1 The price of the play materials should be proportional to the value of play and to the expected life of the toy. A toy which is expensive but can remain in use for a long time will be actually be cheaper and more economical in the long run.
2 The play equipment should be suitable to the age and maturity of the child, although developmental stages among children of the same age can vary.
3 The size of the toy must be proportionate to the control, competence and safety of the child (Figure 28). Until the age of five years, the child needs simple, large play materials. As his manual dexterity matures, he will be able to handle smaller and finer things.
4 Toys should be sturdy and durable. Toys for long-term use must withstand hard wear and tear. Only then the child can establish, over a period of time, the important personal relationship of companionship with a toy. It is also important that children are helped to learn, little by little, how to deal with delicate objects and protected from the sorrow of having a toy broken unintentionally.
5 One of the basic principles involved in the selection of toys is safety. Although there is no absolute safety against accident and injury, reasonable precautions should be taken to avoid dangerous toys and materials. It is important to see that the toys themselves, or parts which can be detached are not sharp to hurt the child ; that they are not so small that they can be inhaled or swallowed ; that they are not easily flammable and that the paint does not come off.
6 Simple toys usually hold more challenge than the complicated ones and have more different uses. The construction and the mechanism of the toy must be easy to understand and manipulate.
7 In the choice of play materials, attention should be given to equipment that involves the use of large and smaller muscles and things that stimulate imagination, creativity and concentation. Children like best toys with which they can imitate familiar, adult activities.

Very few preschools can afford to have expensive equipment and materials. Much depends on the imagination, resourcefulness and creativity of the teacher. If resourceful she can have a good collection of equipment as shown in Figure 29 and work materials for children's activities from the things in the environment. Instead of selecting sophisticated and expensive equipment, the imaginative teacher should always go in for sturdy and easily replaceable play things. She should be constantly in search of new equipment and materials that will challenge the children. She should be well-informed about the indigenous materials available in the surroundings and what could be bought from the market.

Proper arrangement of play equipment would facilitate their use. All the materials should be arranged attractively in the room and placed on low open shelves, so that children may take them out themselves. In this way, children will learn that there are fixed places for things to be kept and that they may take out any item they like from the storage places but they should put it back in place when the play is over. This, in turn, will help the children to learn to use and care for equipment and materials.

Proper care, maintenance and replacement of worn out equipment deserve constant attention from the preschool teacher. At the end of each term, the teacher should condemn worn out equipment and try to replace them. She should repair the broken toys, repaint the old and make them attractive, new and usable again. For this repair work, she can solicit the help of parents, who are good with tools.

Many parents may like to contribute play materials to the school when their children grow up. The teacher can explore this possibility also.

The Preschool Teacher

Teachers are the architects of new India. They have a unique role in developing the character and vision of the citizens of the future. Manu, the ancient law giver said, 'The teacher is the image of Brahma—the creator'. Mahatma Gandhi expressed his view "it is possible for a teacher situated miles away to affect the spirit of the pupils by his way of living".

The future of education depends upon dedicated teachers. 'Just any one' cannot teach and care for the preschool child. Good teachers alone can understand and teach young children.

Teaching is both a science and an art. It is a science because it involves careful planning of objectives, and methods, and evaluation of contents and experiences. It is an art, because the teacher should possess fine qualities such as sensitivity to the needs, interests and progress of the pupils, sympathetic personal relationship and skills in working with children and adults.

Responsibilities of a Preschool Teacher

A preschool teacher has responsibilities to herself, the children, parents, other teachers in the school and the community.

1. To Herself

The responsibilities of the preschool teacher to herself are to

a) remain in good physical and emotional health at all times;
b) be progressive;
c) be enthusiastic always; and
d) grow professionally.

2. To the Children

The preschool teacher needs to fulfil the following responsibilities to the children in her group. She should

a) meet their needs
b) enjoy working and being with them
c) respect them as individuals
d) build desirable relationships with them and
e) help them build a good self-image.

3. To the Parents

The preschool teachers' responsibilities to the parents are to :

a) provide good counselling
b) value them and their ideas
c) plan with them for the well-being of the child and
d) bridge the gap between the home and the school.

4. To Other Staff Members

The responsibilities of the preschool teacher with respect to other staff members are to :

a) support them
b) share ideas and knowledge
c) value them and their ideas, and
d) Involve them in the programme

5. To the Community

The preschool teacher needs to fulfil the following responsibilities in regard to the community.

a) Be aware of the problems of the community and try to solve them.
b) Participate in local professional organizations pertaining to the welfare of children.

Regardless of the type of curriculum or method used, the basic qualities of the teacher exert greater influence on the learning of the child (Elkind, 1970 ; Katz, 1969 ; Levin, 1964 ; Seifert, 1969).

The guidance given to the child at the early impressionable years will determine the type of person he would be in adult life. The effectiveness of the guidance depends upon an understanding of the young child, his environment, and goals and aspirations of the parents, teachers and other adults with whom he comes in contact. Guiding the child along constructive channels is a challenge to the preschool teacher. She can follow the suggestions given below.

1 Be dressed appropriately. Clothing should be dignified, comfortable, easily cared for and permit freedom of movement.
2 Be on time. The teacher who is ready to receive the children before they arrive will find the day smoother. Once the children 'get ahead of the teacher', it is difficult for the teacher to gain control.
3 Take advantage of available literature and professional periodicals that furnish timely information on being an effective teacher.
4 Make sure the preschool setting is a child-centred one. Give the necessary support needed but give the children an opportunity to explore and solve problems.
5 Allow time for children to help themselves.
6 Get to know each and every child well. Build a good relationship with each one.
7 Know how many are in the group each day; know where they are and what they are doing.
8 Plan ahead. Have the next activity ready before warning children that it is time to move from the present activity. Make sure that all the necessary materials are readily available before beginning an activity (For example, sponges for finger painting, table and books for story time, aprons for water play, etc.). Give time for children to finish their play or to put things away.
9 When another teacher or adult is handling a situation do not interfere unless help is requested.
10 Be a good 'house keeper' both indoors and outdoors so that the school is always clean and attractive. At the same time, avoid being so involved in cleaning, leaving children unsupervised.
11 When discipline is necessary, see that the rules are set, understood and maintained. Be consistent in what is expected of the children.
12 Use voice as a teaching tool. A soft, pleasant voice will receive better response than a loud gruff one. Get to the child's level by kneeling or sitting, if necessary. Use verbalization as a technique in gaining cooperation from the children. Help them to understand what is expected of them.
13 Make sure that words and actions indicate the same thing. When it is time to go inside, for instance, tell the children and then go inside first.
14 Share ideas and experiences with other staff members.
15 In all ways, support the person who is planning the daily activities.
16 Be enthusiastic and enjoy being with the children. Relax and smile.

Planning Programmes for Children

The individual child is the basis for planning the programme for the group. Their individual needs and interests, their past experiences and the age levels of the children are to be considered while planning the activities. For example, while the three-year-olds are still becoming acquainted with surroundings, materials and possibilities the four-year-olds will be improving and exploring with materials, ideas and personal relationships. Their abilities and maturation stages are very different and plans should be made accordingly.

The plan should include a variety of

experiences allowing time for interpersonal relationships, sensory experiences, exploration of natural and physical surroundings, intellectual stimulation, development of large and small muscles, and opportunities to hear and use language. Provision should be made also for periods of active play and quiet play. Celebration of national and community festivals and functions should find a place in the programme.

How to Plan the Programmes for Children?

The following questions will help the preschool teachers towards effective planning and implementation of programmes for children.

1 What do I want to teach?
2 Why do I want to teach it?
3 What do I need in order to teach it?
4 What do the children already know about the subject?
5 Are the materials obtained, the best for the purpose?
6 How will I teach? What methods will I use?
7 What are the new terms to be introduced and defined?
8 Are the concepts geared to the developmental level of the children?

The curriculum for the preschool children provides for teaching interrelated aspects simultaneously. For example, a particular experience may include teaching new words, the process of order and sequence of events, new concepts, new techniques and/or social skills. It is impossible to teach isolated ideas which are related to one experience.

The plans must be simple for the new entrants. They must be given plenty of time to become familiar and assimilate new ideas. As the children become more familiar with the setting and the programme, new experiences can be added gradually. The teacher needs to go over the previously taught concepts at frequents intervals to refresh the child's memory.

Adults tire of repetitions. But young children thrive on them. The first time they are exposed to an experience, they explore its many possibilities. They may not use it in intended way, and the adult may feel that the experience was unsuccessful or even chaotic. But when they become familiar with any experience or activity, the children find their own new, specific uses for it and the different ways it can be done. For example, the first time a child is exposed to a new creative material such as clay, he may taste, smell, feel and pound it, or even sit on it. After several trials, he may use it only as dough. Similarly with musical instruments, he may just see how much noise he can make with them. Later he will combine rhythm, sound and skill into a satisfying musical experience. Therefore, the teacher should provide broad guidelines and then allow freedom for the children to experiment. A lot of thought will have to go into each activity for such framework. Regardless of the many years of experience a teacher has, she can still learn from children and other adults. This sharing of ideas profits all concerned. Therefore, the preschool teacher needs to keep an open mind and absorb as much as possible from others.

The teacher needs to know the growth norms of children at specific ages. The activity which is approriate for one stage of development may be inappropriate for another. Planning above the developmental level of a child will frustrate him. Planning below his level will bore him.

The readiness of the children must be determined and the plans built upon it. Teachers who capitalize upon the readiness of children taking cues from them find great response. Children should have sufficient time in which to play out facts which are important to them.

The plans far each day should include free

play (both indoors and outdoors), creative time for children to explore materials and express their feelings, sessions of music and story and eating time for snack or lunch. Intellectual stimulation, social relationship, muscle development and opportunities for language development need to be interwoven into these activities.

Some teachers find planning easier if they use a theme for the day or week. Other teachers want to try unrelated materials. Whether or not a theme is used depends upon the philosophy of the head-teacher. Either way can be successful if well planned. Sufficient time should be allowed at the end of each session, after the children leave, so that the teachers can evaluate the day. With the sharing of experiences, problems and ideas, this is a valuable learning experience for teachers. Suppose a teacher had felt inadequate to handle a child with temper tantrum, a discussion may give constructive suggestions to help her in dealing with such a problem in the future.

The teacher needs to be specific in planning. The objectives and concepts which are to be achieved should be clearly defined for all staff members. Rather than indicating, 'Today we are teaching about turtles' she should state. 'Today we are teaching that turtles live in shells, walk very slowly and eat flies.' Then there is no question about the information which the teachers want to impart to the children. While children need to have freedom for self-development, there are values in being a member of a group. Therefore, there should be at least one activity which will bring the children together as a group each day. Through interacting with other children, a child learns about himself, and about property rights, sharing, and taking turns. He also learns about interests and ideas of others. He also gains a more realistic self-concept, tries new techniques and adequately expresses himself verbally.

Planning should facilitate smooth transition from one activity to another. A teacher could be assigned to finish up one activity, while another teacher is ready to move on to the next. Thus the teacher should be 'one step' ahead of the children. The children should be involved in 'clean up' also. If a child begins to lose interest in a certain activity, he should be encouraged to put away or clean up the things he has been using. Materials and equipment should be placed in easily accessible levels. This is a sure way of encouraging independence and creativity.

The teacher should plan to bring real objects to the attention of the children. If they are not available or if it is impossible to bring them to school, the next best way to teach about them must be planned. Pictures and other aids are good but should not be used if the real objects are available. Children need first-hand experiences rather than vicarious ones.

The plans for the day should not be rigid. Allowance should be made for changes and additions, but by writing down the activity for the day, the teacher is aided to plan thoroughly. If a copy of the plan is posted on the notice board, all the staff members can be aware of the activities planned for a particular day. Each day, before the preschool begins, the teachers should meet together for a few minutes and go over the plans for that day. In this way, they can make the day meaningful to the children.

Adult—Child Ratio

There could be no hard and fast rule as to the number of teachers needed for a preschool of a particular size. The number of the staff will be influenced by the programm, finances, fees, plan of the building, provision of equipment, the age group, and number of the children enrolled, characteristics of children, abilities of the teacher and the training and experience of the teachers. It is generally agreed that there should be one adult for every 15 children.

Other Personnel for the Preschool

A physician or a nurse is desirable on the staff of a preschool as a part-time worker. He or she can be responsible for the physical examination of the children and for the morning inspection too. He or she should also be on hand in case of accidents or emergencies. The doctor or the nurse should, if possible, be a person used to children and who knows how to gain their cooperation. The more easily the physician or the nurse can fit into the nursery school routine and methods, the more valuable he or she will be to the school.

Assistant

The house-keeping services needed in any preschool like cleaning, washing the linen and aprons, care of the grounds, putting up new sheets on the bulletin and easel board, putting on and taking of the equipment and mending should be done by persons who love children. They must not become irritated by noise or confusion. They should be ready to cooperate in keeping the school clean. Since the children spend much of the time on the floor, the floors must be cleaned daily to be without dust and they must be free of broken equipment, glass pieces, loose nails and other hazards. The assistant needs to be on duty in the toilet room and washing area helping the children and the teachers to handle the situations effectively.

Cook

The preschool teacher plans menus, supervises the preparation and serving of food. Meals must be prepared by a cook. The cook should be ready to take directions from the teacher and prepare nutritious, tasteful food on time.

Summary

The crucial role of leadership the preschool teacher plays in shaping the attitudes, skills and learning of children makes her the key to the successful programme in the preschool. She needs to be sensitive to the needs of young people, respect the dignity of the individual, recognize the existence of individual differences in human personalities and human capacities. She should also think of education in terms of life's problems as people face them today.

A good preschool teacher gives human orientation and social direction to her teaching. She endeavours to emphasize the best of the cultural heritage with the ever-expanding fund of knowledge in order to provide learning experiences relevant to the demands of contemporary society.

The Preschool Programme

A good preschool curriculum should offer many learning opportunities correlated with children's readiness and interests. Good teaching does not just happen—it is the result of careful planning and foresight. Creative and thorough planning is required to carry out wholesome and appropriate learning programmes for preschool children. The goals for a preschool programme are short-term and long-term ones.

Some realistic goals to be achieved through a good programme in a preschool are to help children develop

1 A good self-image
2 A thirst for knowledge
3 A good start toward reaching their potentials
4 Their whole bodies through (a) first-hand experiences in the social relationships, (b) finding acceptable outlets for their emotions, (c) physical development of large and small muscles, and (d) stimulating experiences which encourage them to think, analyse problems and arrive at different possible solutions.

5 Ability to express themselves through materials, movements and language by providing ample time and adequate opportunities.
6 Language facility through hearing and using language.
7 An awareness of the five senses.
8 Independence
9 Their knowledge by asking questions and exploring their environment and curiosity through providing ample first-hand experiences.
10 Foundations for future learning.
11 Ability to mingle with other children of the same age and
12 Positive attitude towards the preschool and learning.

Principles of a Preschool Programme

The following principles should guide programme-planning in a nursery school.

1. MEET THE OBJECTIVES OF PRESCHOOL EDUCATION

Preschool education aims at the all-round development of the child—physical, social, emotional and intellectual. The programmes should stimulate the total development of the child.

2. CATER TO THE DEVELOPMENTAL LEVEL AND NEEDS OF CHILDREN

If an activity is introduced to the child before he is ready for it, it becomes difficult for him to master it and requires much trial and error. At times it may even make him avoid the activity. On the other hand, if it is introduced at the proper time, when the child is ready for it, then the child masters it with ease and it gives him pleasure to do the activity.

3. BE FLEXIBLE TO SERVE THE NEEDS OF THE CHILDREN

The nature and duration of the activities in the preschool should depend on the interests of the children. For example, on a rainy day, children may like to float boats and observe water running from the higher to the lower levels. In that case, the teacher should be ready to change her scheduled plan and give the children an opportunity to continue playing with the rain for a longer period of time.

4. BE BALANCED BETWEEN INDIVIDUAL GROUP ACTIVITIES

Many different types of activities are provided during the free play period. Children must be free to choose any activity they like. If a teacher finds that a child only indulges in solitary play, she can gradually bring him to a group activity. Similarly if she finds that a few children are always together in a group, she can divert them to individual work.

5. ALTERNATE BETWEEN ACTIVE AND QUIET PLAY

If the children are involved in too many physical activities they may become exhausted. Therefore, provision of some restful activity after a spell of active work is essential. Similarly sedentary work should be followed by active play, it will be difficult for children to remain quiet for a long period of time.

6. BE FUNCTIONAL AND MEANINGFUL

The teacher must have an objective for each activity; otherwise it may become meaningless. If the teacher requires the children to sit in rows for listening to a story, she should let them know why she wants them to sit so. Similarly the programme should be related to life in the community and society. It should inculcate in children the approved social skills of the community and the society.

7. SATISFY THE NEEDS OF EACH INDIVIDUAL CHILD AND THE GROUP

Children are unique. A particular child may

need more attention in health habits while another may need help in language skills. The preschool programme should cater to both and many more.

8. PROVIDE CONCRETE FIRST-HAND EXPERIENCES

At the preschool stage, the child's understanding is at a sensory-perceptual level. Verbal explanation and descriptions may not make much sense to him. But he will understand what he sees, hears and feels. He learns by doing things and also through participation in celebrations (Figure 30). He understands the world around him through the medium of play. Therefore, the teacher should try to develop his concepts through play, by giving him opportunities to explore, compare, classify and handle a veriety of objects.

Planning programme for a preschool calls for long-term and short-term planning, on annual, monthly, weekly and daily basis.

LONG-TERM PLANNING

Long-term planning is chalking out a programme for the whole year in advance, with regard to learning experiences, teaching aids, budget, materials and play equipment. In planning the learning experiences, the teacher should have a clear idea of the final goal and plan the different steps through which the goal will be reached. As regards the equipment and play materials, repairs and replacements, will be necessary and some new equipment will also have to be procured. The teacher, needs to plan the budget accordingly and devise a long range plan for the acquisition of all these requirements.

SHORT-TERM PLANNING

For the effective functioning of the nursery school it is necessary that the programme for the whole year be divided into smaller units, terms/month wise. Certain experiences like drawing and painting are provided to children right from the beginning of the year, but there are other experiences such as field trips and project work, which are not done during the first term. They can be started only when the children are adjusted to the school and have become familiar with its environment. The experiences provided differ also according to age of the children.

WEEKLY PLANNING

Weekly planning includes chalking out the activities to be undertaken during the week. It includes details of the arrangements needed, collecting the aids and materials, and contacts and approaches to be made with the parents.

DAILY PLANNING

Daily planning implies trimming of the activities or modification or refinement according to the needs of the individual children, exigencies and sudden alterations at times.

EVALUATION

Every preschool teacher should evaluate her programme critically to assess whether she had been able to accomplish what she had planned for the children, and whether the children had benefited from the programme. She should make a note of the points she could not put across and plan the subsequent programme based on the experiences thus gained.

The Daily Programme for a Preschool

Taking into account the age, interests and abilities of the children enrolled, a flexible schedule can be planned as given in the table.

In the schedule suggested, the activities are so planned as to allow for

1 Healthy alternation of vigorous and quiet play

	Hours	*Activities*
Forenoon :	9.00—9.30 A.M.	Arrival of the children and health inspection.
	9.30—10.00 A.M.	Outdoor play
	10.00—10.20 A.M.	Toilet, washing and assembling for morning snacks
	10.20—10.35 A.M.	Prayer, informal talk and sharing experiences.
	10.35—11.15 A.M.	Free indoor play—play with constructive materials, drawing and painting, paper cutting, tearing and pasting, collage work, problem solving with puzzles and clay and other craft work.
	11.15—11.45 A.M.	Music and dancing
	11.45—12 Noon	Toilet, washing and getting ready for lunch
Afternoon :	12.00—12.30 P.M.	Lunch
	12.30— 2.30 P.M.	Sleep and rest
	2.30— 2.45 P.M.	Toilet and washing
	2.45— 3.15 P.M.	Story telling
	3.15— 3.30 P.M.	Snacks
	3.30— 3.45 P.M.	Games (outdoor or indoor)
	3.45— 4.00 P.M.	Departure

2 The individual child to follow his own interest.
3 Plenty of opportunities for practising social relationships
4 Freedom to be alone, if a child so chooses and
5 Variety through organizing special activities like painting, pasting, science and nature experiences.

A good nursery school programme offers many learning opportunities through the following experiences.

1. MUSIC

Children require outlets for their feelings. Music is one of the constructive ways in which children can give vent to their feelings. Developing an appreciation for music will be a life-long asset. The world is full of sounds. Even the still stone gives music to the listening child. The wind, the rain, the popping of the car, the cooing of pigeons, chirping of birds, sounds in the kitchen, the ticking of the clock and the telephone rings are all sources of music to the child.

A child can develop through exposures to music. He must be encouraged in large or small muscular activities. Music can change his temper, mood and expression. He can increase his immediate knowledge by expression with the use of music. How does a duck walk? How does a horse neigh? What sounds are made by the clock on the wall? By helping the children to be observant to these activities around them, they can be helped to incorporate music in their lives, increase their awareness and appreciate many things which

ordinarily go unnoticed.

A child can also learn about the different types of musical instruments such as string, wood-winds and percussion. He can further this knowledge by having an opportunity to explore them and express himself through their use.

A child gains concepts of rhythm through experiences with music. A shy child can be helped to join with other children in music after he has had the opportunity to observe and he feels comfortable.

The Role of the Teacher in Teaching Music

The most important role of the teacher is to discover the developmental stage of each child in her group and then plan experiences which will be beneficial to him. The teacher must discover the interests, concepts and abilities of the child and plan the programme accordingly.

A wise teacher will have a wide acquaintance of songs. She should be able to enjoy music with the children. She should encourage use of music through spontaneous expression both indoors and outdoors. The teacher should be flexible in the use of instruments. She should encourage the children to be creative in the use of instruments rather than follow a stereotyped procedure. The teacher must use music often so that children have a chance to get better acquainted with it through repetition. The teacher should incorporate music during other activities—creative dramatic play, free play or snack time in order to create new interests and ideas.

The teacher should provide such music experiences as will help the children to constructively release their feelings whether anger, hostility, joy or appreciation. The teacher must set up and maintain necessary limits with the use of music. She should not require a child to remain in the musical setting if the child is not willing to do so. She can provide an alternative quiet activity for him so that he will not distract others from the experience.

2. LITERATURE (LANGUAGE, STORIES AND BOOKS)

A child increases his knowledge through language. Books open up a new world for him. He tries out his ideas, expresses his concerns, learns about his environment, imitates activities, learns social techniques and communicates with adults and peers through stories and books.

Literature in the curriculum of the preschool helps children to

a) Enrich or supplement their first-hand experiences
b) Build correct concepts
c) Stimulate new ideas
d) Clarify existing ideas
e) Share experiences
f) Build sound social relationships
g) Foster aesthetic appreciation
h) Present information
i) Provide literary experience (Figure 31) through a variety of ways, such as stories, poetry, information, nature, inspiration and everyday living.
j) Encourage verbal communications with other children and adults.
k) Provide a period of quiet activity, a change of place or repetition of an enjoyable book.
l) Acquaint the children with another way of learning.
m) Encourage good reading habits and
n) Care for the property of others

ROLE OF A TEACHER

The teacher/adult should have a place to display attractively a few books to stimulate the interest of the children. She should be selective and keep her standards high when selecting books for young children.

Since the attitude and feelings of the teacher/adult herself will greatly influence the children's interest in the story, she should have positive attitudes towards the provision of

literature for the preschoolers. Story-telling is one of the activities by which the teacher becomes acquainted with the children and thus builds relationships with them. The teacher also grows through planning and executing story experiences. The size of the group should be small and the setting informal. Most children are comfortable if they are sitting on the floor. The teacher takes her cues from the children for the duration for the story. If they are restless, the story should be fairly short; if they are extremely interested and absorbed, more time could be given.

Criteria for the Selection of Stories and Books

In order to gain maximum value from the story-telling experience, it is important that the following criteria are observed for the selection of books and stories. The contents should be :

a) Realistic, since children of the preschool age have much difficulty in distinguishing between what is real and what is fantasy.
b) Of interest to the young children.
c) Entertaining. Colourful pictures and an element of surprise are necessary.
d) Accurate in information. Inaccurate information would be detrimental to young minds. They need clarification of concepts and not confusion.
e) With humour.
f) Promoting the child's learning by supporting his first-hand experience.
g) Interesting in words, sounds or play on words. This is of interest to the child as he experiments and explores the use of words. Some repetition adds to the child's enjoyment. It may be in the form of phrases, repetition of incidents of ideas.
h) Short in length. Three-year-olds may remain interested for 6-10 minutes; four-year-olds from 8 to 12 minutes; five-year-olds from 10 to 15 minutes. There may be variations within a single age group.
i) Acceptable in terms of the effects on the child. If it contains familiar elements and helps to promote sound concepts, it is generally acceptable. If it contains fear, fantasy or morals, it is best left for later years. Nightmares, poor social relationships or emotional upsets can result from such elements.
j) Simple in style, form and mannerism and well-developed. Unnecessary details should be eliminated.
k) Simple in words, descriptive and within the understanding of the appropriate child. Appropriate language is essential. The number of words per page should be limited. Direct conversation should have larger proportion.
l) Have illustrations which closely represent the written text. Illustration is another way of conveying information. Therefore, the illustrations and text should accurately support each other. Many unnecessary details in poems detract from their value.

3. Science Experiences

Modern man lives in a world of scientific actions. 'Science' means Chemistry, Physics, Biology, Home Science and other science subjects. The preschool children can learn a great deal about those subjects, if they are observant, deeply interested and stimulated. Science concepts can be simplified and conveyed to them in many ways.

Values of Science Experiences for Preschool Children

The values children gain from science experiences help them to

a) Gain necessary first-hand experiences
b) Develop basic concepts and increase basic knowledge
c) Increase their skills of observation
d) Give them opportunities to use tools, equipment and familiar materials
e) Aid them in problem-solving

f) Stimulate their curiosity, desire for exploration, discovery and seek answers to their questions and
g) Aid in their sensory, physical, emotional, intellectual and social development.

Role of the Teacher

As with the other aspects of the curriculum, the teacher's role in using science is distinctive. She must adapt the science experience to the level and interests of the children to be of value to them. She must be convinced about and comfortable with the science experiences she prepares for the children. She should pretest the experiences before she demonstrates or presents them to the children. She should take time to enjoy the science experiences with the children. Continuous exploration of nature and of natural phenomena can help her develop scientific and aesthetic appreciation.

The teacher should be able to clarify, explain, reinforce and discuss with the children, the many questions which come to them as they explore their surroundings. If children fail to ask questions or make comments about the world in which they live, the teacher should motivate them through pictures, songs, stories or planned incidents, so that they become sensitive. She should always supply accurate information, using a vocabulary which is within the understanding of the children. At the same time she should not hesitate to introduce and define certain scientific terms to increase their vocabulary.

The teacher should accept her ignorance if she does not know the answer to a child's question. She can promise to find out the answer next day or in the immediate future and convey the information to the child. The teacher must make sure that the experiences she plans are simple, safe (not dangerous), cater to the child's needs and interests and are around familar things. She must always relate the unknown to the known, in order to increase the knowledge of children. She should nurture the child's curiosity about living things, animals, insects, plants and other aspects. She must encourage spontaneous science experiences and provide planned ones also. She should follow up or get the feedback after a science experience. Songs, pictures, poems, audio-visual aids, simple experiments and excursions are valuable in teaching science to young children.

There are several experiences that could be offered for preschool children in physical and biological sciences.

Physical Science

Experiences that could be provided in physical science are:

1 Listening to sounds made by vechicles, trains, boats, airplanes, buses, bicycle (a record or tape proves to be excellent).
2 Observing machines at work.
3 Obeying signals while crossing the street.
4 Observing mist, rain, fog, frost, snow, etc.
5 Talking about various methods of communication—telephone, telegraph, radio, newspaper, magazine, post office.
6 Discussing various fuels and methods of heating—coal, oil, gas, electricity, steam.
7 Familiarizing with gravity by the use of slides.
8 Talking about balance with weights, observing the weighing process.
9 Using a magnifying glass to examine various materials and objects.
10 Discovering the use of a magnet—things which are attracted and things which are not.
11 Exploring the uses of household tools and appliances.
12 Performing simple experiments—dissolving salt or sugar in water.
13 Exploring light and shadows by using a flash light.
14 Discussing friction.
15 Investigating water (Figure 32). Water evaporates, cleans things, is in different forms (liquid, gas, solid) and is used for many purposes (drink, mix, paint, play).

Fig. 30. Providing first-hand concrete experiences through celebrations.

Fig. 31. Experiences with literture.

Fig. 32. Investigating water.

Fig. 33. Children interested in blowing soap bubbles.

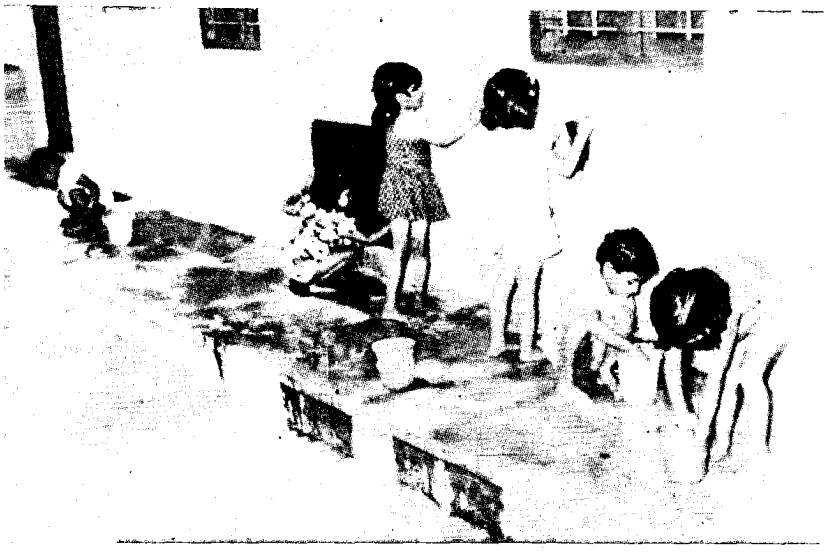


Fig. 34. Cleaning the school.

Fig. 35. Playing with water in a basin or tub.

Fig. 36. Observing characteristic movements of animals.

It can be an excellent emotional release. Some suggestions for experiences with water are :

Siphoning from one container to another, floating objects, showing effects of size and weight, observing reflections;
Blowing soap bubbles (Figure 33)
Washing and drying doll clothes
Building dams and canals
Feeling the force of water as it comes from the tap
Freezing ice and watching it melt using ice cubes to set jelly.
Evaporating water.
Showing that water goes through some things better than others (fabrics, plastic, paper, rubber), watering plants.
Discussing wearing apparel for water (boats, umbrella, apron)
Cleaning the school (Figure 34)
Observing moisture in a glass of ice water on a hot day
Boiling it to produce steam.
Pouring it through a funnel or from one container to another.
Preparing food and cooking it.
Changing the consistency of materials such as sand and flour.
Playing with water in a basin or tub. (Figure 35)
Using it to wash or bathe.

16 Observing shapes (round, square, oblong. freeform, triangle, hexagon, octogon, etc.) and things that are of these shapes.
17 Mixing colours and observing the changes.
18 Observing inanimate things near by (rocks, soil, liquids, air).
19 Discovering the use of a lever.
20 Discussing different kinds of wearing apparel for different types of weather.
21 Discovering the use of wheels that aid in our work and play, wheels in the home (sewing machine, clocks, motors and pulleys), exploring sound and movement.
22 Providing substances and their opposites—wet and dry, long and short, hard and soft, hot or warm and cold, sweet and sour, rough and smooth.
23 Talking about the changes in the sky—sun, moon and stars.
24 Exploring the weather—seasons, time of day, changes.
25 Observing cloud formation, movement on windy or rainy days.
26 Discussing wind using kites, pin wheels or balloons, watching smoke, observing dry leaves when wind blows, discussing how hard the wind is blowing.
27 Exploring air.
28 Observing the difference in temperature, between the cool of the shade or heat of the sun or different seasons of the year.
29 Studying things which look alike but are different (salt, powdered sugar, soap flakes, flour, corn starch, starch, baking powder).
30 Feeling various textures (fabrics, wood, glass, metal, sand paper, egg shells, rocks, nails)
31 Smelling various odours (perfume, cooking ingredients, household commodities)
32 Listening to various sounds (transportation, things in school or playground)
33 Testing various flavours.

B. Biological Science

Animals

1 Discussing insects and how they protect themselves (wasps, bees, mosquitos and flies).
2 Observing characteristic movements of animals (Figure 36), (some swim, some fly, some hop, some walk, some crawl).
3 Observing characteristics of various animals (flipper, wing, web, claws, number of legs).
4 Discussing or feeding various animals and observing what they eat (hay, grain, milk, carrots and nuts).

5 Observing and discussing reproduction of animals or insects.
6 Observing frogs in various stages of development (egg, tadpole, frog).
7 Bringing and rearing pets in the school.
8 Discussing and observing various housing methods of animals (nest, hole, house, cage).
9 Observing animals feeding their young.
10 Observing animals with their young.
11 Imitating sounds made by various animals.
12 Learning the names of animal babies, male and female.
13 Discussing how animals protect themselves (liberation, claws, odour, horns).
14 Feeling the covering of various animals (shell, fur, wool, skin, feathers).
15 Observing animals at work (mule, bee, ant, spider, squirrel)
16 Discussing ways in which animals help us (work, food, clothing, protection, transportation)
17 Discussing ways we use for the care of animals and limits in handling them.
18 Observing wild animals at a park or zoo.
19 Visiting a poultry farm.
20 Visiting and watching the activities in a dairy.
21 Observing eggs hatching.
22 Watching and feeding birds.
23 Observing various bird nests.
24 Watching a caterpillar spin a cocoon.
25 Making an ant farm.

PLANTS

1 Providing a museum shelf to include cones, rocks, shells.
2 Gathering various kinds of seeds (flower, vegetable, weed).
3 Observing changes in nature.
4 Discussing uses of plants for food, clothing and shelter.
5 Discussing the cycle of a tree and its uses.
6 Observing the growth of seeds—roots growing down and stems coming up.
7 Caring for plants—they need air, water, sunshine and soil.
8 Exploring the growth of plants (potatoes growing on root and corn growing on stalk).
9 Observing growth of vegetables in water.
10 Planting and caring for a garden.
11 Planting bulbs in cans or cartons.
12 Taking a nature walk.

FOOD

1 Discussing the different tastes of food (sour, sweet, bitter, salty, etc.)
2 Discussing food that grows in water (fish, crab).
3 Preparing vegetables and fruits for eating and cooking.
4 Observing the different colours of fruits and vegetables.
5 Feeling the different coverings of fruits and vegetables.
6 Tasting fruits or vegetables in various forms (raw, cooked, juice).
7 Making butter.
8 Making ice cream.
9 Observing the difference when heat is applied to eggs.
10 Making bread and cake.
11 Providing dishes which contain a certain food commodity in various forms (e.g. sugar—raw, refined, brown and powdered).

HUMAN BEINGS

1 Learning about the different parts of the body.
2 Observing a mother bathing, feeding or dressing a baby.
3 Talking about the roles of various family members (mother, father, sister, brother, baby, and grandparents).
4 Discussing various community helpers (policeman, fireman, doctor, nurse, farmer, cook, teacher).

5 Inviting one of the community helpers to the school.
6 Observing the different characteristics of people (hair-colouring, skin colouring eye-colouring, height, weight, and sex).
7 Discussing ways to keep up the physical well-being.
8 Discussing things the child can do now that he could not do when he was younger.
9 Discussing the occupations of father and mother of the children in the group.

Excursions

The purposes of an excursion for young children are to

1 Help them learn about the world in which they live, through first-hand experience at their developmental level.
2 Help them have a group experience and build good relationships with other children and adults.
3 Increase and clarify existing concepts.
4 Have fun.
5 Help them become more aware of the things around them through guided observations.
6 Develop initiative and creativeness in dramatic play.
7 Increase their frame of reference.

An excursion if properly conducted is an aid to young children. If young children are taken on an excursion before they feel comfortable in their new setting, it can produce fear and anxiety. A group of children between $3\frac{1}{2}$ and $4\frac{1}{2}$ years were taken for a trip to the nearby botanical gardens. One child kept repeating, 'But my daddy won't know where I am'. The teacher tried to assure him that they were close to the nursery school and would return before it was time for his father to pick him up. This offered no consolation and the child kept repeating the same concern. He felt uncomfortable throughout the entire period he was away from the school. Upon his return, he heaved a sigh of relief and began exploring the play-yard.

Excursions should be planned with the needs, interests and stages of the particular children, as bases. What would be appropriate for one age may not be appropriate for another. The number of excursions to be under taken during any period of time should be based on the number of children in the particular age-group involved, the route to be used, the transport available and above all, the learning and recreational possibilities offered. In such trips construction and other dangerous areas must be avoided. A walk, with an empty bag, to bring back the many 'treasures' which will be found as children explore, to be used in future activities (on science table or for creative expression) is always an exciting, thrilling experience.

Pre-visit

One of the prerequisites for a successful excursion is the teacher's pre-visit of the location in advance. A successful excursion is one which involves the children and stimulates them to learn more about the particular subject.

Time

Time is a big consideration in planning an excursion. Plenty of time must be allotted for children to observe, at their own pace. An otherwise successful excursion can be ruined by hurrying children. It is better to allow them too much rather than too little time. The busy times of the day should be avoided. The time during the pre-school period, during which the excursion is planned, is also of importance. It is usually more successful if it occurs near the beginning of the period because children are less likely to be fatigued or involved in another activity.

Adults involved

Before leaving for an excursion, the adequacy

of adult help must be ensured. There should always be at least two adults, regardless of how few children are in the group. Five children per adult, depending upon the ages and activeness of the children, would be sufficient. An adult should stay behind at the school, in case a child decides he does not want to participate in the excursion. Planning ahead for this possibility saves confusion and time. If sufficient staff members are not available, parents' help could be sought to participate with the group. In that case, one whose child is secure in the group must be selected. An insecure or aggressive child may cause concern to both the teachers and parent during the excursion.

Parents

It is wise to check in advance with the parents and obtain their permission for the excursion. Some parents prefer to take the children themselves to certain places, while others are appreciative, if a preschool does it. The following form may help in obtaining the permission.

Dear Parent,

We are planning to conduct an excursion for the children of the preschool.....
on.....at.....to visit .....
.....We will be glad to have your child
.....in the trip. In token of your permission kindly sign below and return.

Child's name .....

Parent's or Guardian's Signature

Transportation

In arranging transportation for excursions, precautions must be taken to see that the drivers have valid licenses, carry adequate insurance and are capable of the task.

Preparation of Children

Children should be prepared for the excursion as close to the time of the excursion as possible. If children are told of an excursion a week or even a day or more in advance, it may detract their attention from the event. Give the children an idea of what is in store for them on the excursion. Behaviour limits for the particular excursion should be clearly defined.

Stories, pictures, songs and dramatizations can add to the learning experience of an excursion. Creative materials can also be used. Children need more than one exposure to a thing, if they are to develop correct concepts and a sound foundation.

Evaluation

As soon as the excursion is over, the experience should be evaluated by the teacher to know the strong points and the weak points. What concepts were gained by the children? How could it have been employed to increase knowledge and understanding of children.

Some suggestions for the places of interest to young children

Park
Farm
Railway station
Airport
Central bus stand
Bakery
Fire station
Flower garden
Dairy
Aquarium
Post office
Factory
Laundry
Pottery unit
River bed or stream
Temple
Dam
Hill stations
Zoo

Museum
Circus
Laboratory conducting experiments on animals
Sports events
Musical events
Photo studio
Super market
Bank

Records and Reports for a Preschool

Records are of great value in guiding the behaviour and planning the education of the individual child, for evaluating programmes, methods, and outcomes in relation to the objectives of the nursery school in order to improve techniques used by the staff. They are also valuable for parent education as basis for discussions and to keep the parents informed of behaviour and progress of their child at school. Records are indispensable for helping the doctor and other specialists in their understanding of the child and for the information of successive teachers under whom the child would study. Evaluative records can serve as devices for teaching students who are preparing themselves for work in nursery schools.

Another important value of carefully kept records is from the point of view of research. The data on the pattern of child development in India are meagre. Therefore records maintained well in the preschools all over the country should yield a great deal of research material for undertaking studies on child growth. Every preschool teacher should keep in view that records are not maintained for purposes of storage. If they are not used for guiding the children, they cease to serve the purpose for which they are kept.

Types of Records

The following records are essential for a preschool.

1. HEALTH RECORD

The child's height, and weight measurements are to be made once a month, at the same hour of the day under the same conditions of clothing and eating time. These systematic monthly measurements of height and weight, when noted carefully, will furnish both teachers and parents a simple index of the child's nutritional status. Such records are often reassuring to an anxious mother. Results of the medical check-up and recommendations can also be entered in the health record.

2. ATTENDANCE RECORD

The attendance of children maintained daily in a record helps to note the number of days the child attends school in a month. The reasons for absenteeism can be studied towards taking remedial steps and the impact of the school assessed in relation to attendance.

3. STOCK RECORD

Adequate details about the stock maintained will help to know what is essential in the present and future. How far they help to understand and guide the growth and development and behaviour of young children can be appraised. All the articles and other items such as accessories must be recorded in an inventory register with proper headings.

4. RECORD OF GENERAL INFORMATION OF THE CHILD

This record will include :

Detailed information about the parents or guardian of the child (their age, educational qualifications, occupation, income, etc).

Information about siblings
Type of family (single or joint)
Information about relatives staying at home
Facilities at home

The languages used at home
Order of birth of the child and
Whether or not both the parents are alive and live together

The general information is given by the parents after the child is admitted to the school.

5. Record of House Visits

Home visits should be recorded in terms of date of visit, purpose, information elicited, response of the parents and observations made. For this purpose an interview schedule can be used by the teacher, when she undertakes home visits. The teacher holds informal talks with the parents for some time, notices the home set-up, facilities and elicits detailed information regarding the habits of the child and his history:

Record of illnesses
Mannerisms
Toilet habits
Sleeping habits
Eating habits
Interaction with the family

Disciplinary methods to which he is exposed and interests and facilities that he enjoys.

All these details give a clear picture of the child and his family. Without such background information, it will not be possible for the teacher to understand the behaviour of the child. On subsequent visits, she records only the changes if there are any, in the different aspects.

6. Record of Teacher's Estimate on the Individual Child

The teacher rates the child in the different aspects of development—emotional, personal-social, language and intellectual. In addition she checks against the factors that interfere with his development, his special interests and abilities and his special problems. Comparison of ratings by different teachers will help fostering an analytical attitude on the part of the teacher with regard to her estimate of a child's behaviour. The need for modifying her techniques, while working with particular children will also become evident. In such ratings on behaviour and development, the teacher has an opportunity to observe behavioural incidents which have significance in indicating a particular child's level of development or need for specific help.

7. Record of Admission Forms

An admission form is given to the parents when they make their first contact with the school. The parents are required to give information regarding the name, address, age and sex of the child, the father's occupation and economic status of the family. In addition they are to give information regarding the immunization record of the children. In case the required vaccinations had not been given to the child, the parents are advised to get these done before the child is sent to school.

On one corner of the admission form, the date of registration and number on the waiting list at the time of registration are recorded. At the time of admission, the date and roll number are also entered. Similarly, at the time of withdrawal the date, age and reasons for withdrawal are recorded.

8. Record of Parent's Meeting and Parent Participation in the School

Record of parent's meeting and parent participation aims to determine how much the parents participate in the school programme. The various activities in which parents take part at school, the nature of their participation and frequency of participation are also noted. This record might show whether or not the parents are interested in, and aware of, the preschool programme. Reports about discussions in the parents' meetings, suggestions

interchanged and decisions reached by both the parents and teachers can all be recorded.

9. RECEIPT FORMS

A record of receipts is essential to be issued to the parents upon payment of fees. The receipts should be numbered, kept in bound books and made out in duplicate. Every receipt must be accounted for to the auditor. The parent gets the original, the school keeps the duplicate carbon in the book. Receipt forms ensure easy and accurate book-keeping.

10. RECORD OF GROUP EXPERIENCE

The preschool teacher needs to keep a record showing the group experiences of the children. Such a record serves as a basis for group experience plans for the subsequent years and for evaluating the general progress of the group. It also serves as a guide to the next teacher either in the kindergraten or in the first grade, in planning experiences for the children.

Records facilitate the total evaluation process. Individual and group records provide the best means for a teacher to determine the direction of progress made by the children under her supervision. A good evaluation culminates in a report of the child's progress. As a teacher puts her philosophy into practice, examines all the records and evaluates them, she works still further and re-evaluates her work. Thus she gains a deeper vision of how she can help the child through. As she grows in her ability to evaluate the experiences the children undergo and as she becomes increasingly aware of the progress they make, she herself grows personally and professionally in the process.

Home-school Relations

The family has a significant role in the development of the personality of children. It sets the stage for the development of many important characteristics, both within and outside the school. Parents are the first socializing agents for the child. Then comes the school. Therefore the school and home need to work efficiently with proper understanding of each other, guiding the children co-operatively. The teacher can not understand the child's interests, needs and motivation without an intimate knowledge of his home. Only when the teacher works through the parents, she can create a healthy and favourable environment in the preschool.

The home-school relations help to create:

1 A better understanding between parents and teachers concerning what children are like;
2 A better understanding with regard to what is preschool education;
3 Opportunities for parents to meet other parents and learn from their experiences; and
4 Understanding of the new techniques of child-rearing and training practices.

If these goals are achieved, the children will have a nourishing, rich and full life in the school and at home. Teachers should help the parents to gain confidence in themselves to play the role of parenthood effectively, and to learn more about their children. The teacher is perhaps the best agent through whom new trends could be communicated to the parents.

The following points will help to make the home-school relations effective. A teacher should:

1 Understand the needs, feelings and expectations of each parent
2 Focus her attention on what the parents want to know
3 Cater to the needs of the parents regarding their children and achieve good co-operation from them
4 Be less critical of children and more positive

5 Respect the parents for what they are
6 Avoid hasty conclusions and remarks
7 Be impartial and not compare children
8 Be comfortable, free and friendly with the parents
9 Be willing to learn from parents
10 Avoid boasting and dominating
11 Convey the fact that the teacher is interested in the welfare of the child and seek cooperation of the parents to do her duty more efficiently.
12 Avoid being defensive and putting the parents on the defensive
13 Be a good listener and encourage the parent to communicate
14 Accept the parents' suggestions to the extent possible
15 Avoid discussing the child in his presence with his parents.

In order to maintain sound and effective home-school relations, a forum for parent education should be organized (Figure 37). The methods and contents used in this session will depend upon the objectives of the particular school, socio-economic status, and educational level of the parents, financial conditions of the school, the community and the interests and abilities of the teachers. Home visits, sending written materials, individual conferences or counselling, parents' meetings, observing and participating in the school programme and other means can be used effectively in parent education.

Home Visits

Home visits is one of the effective methods used in parent education programme from time immemorial. For example, Vishwamitra Rishi of Ramayana visited the famous palace of the King Dasharadha to talk about his son Sri Rama. As Prescott (1967) points out the first objective of home visit is to establish a friendly rapport with the parents and children, to explain to them the aims of the preschool, how it functions and what it expects from them. The second purpose is to make the parents see the teacher's eagerness to see the child through the parent's eyes. Thereby she gets to know the child's birth history, his background, needs, motivation and his behaviour at home for the cumulative record, which will be of great help for her to guide the child in the school. A friendly social visit will make the child, as well as the parents feel comfortable. The child will also feel important when his teacher visits his home. Parents also feel that the teacher takes good care of their children. If, after a home visit, the teacher feels that the child does not get proper attention from the mother at home (maybe due to the arrival of another sibling or due to her ill-health) the teacher tries to give extra attention and love to the child in the school. If the teacher feels that the child is under too much pressure at home, she provides certain activities in the school to help the child let out some pent-up aggression and thereby minimize his strain. Thus the home visits and the information collected thereby about the home background of the children are necessary for the guidance of the child.

Individual Conference or Interviews

An individual conference or interview with the parents gives the teachers and the parents a chance to talk freely about the child, and understand the child even better than before. Even shy parents, who never talk in a meeting, may freely express their views to the teacher when they are alone. Some parents may not like to talk about the problems of their children. But if they are given the opportunity to discuss with the teacher, they may benefit. The individual conference can be planned or casual. Parents can always give information to the teacher when they come to the school to leave their children in the morning and when they take the children back in the evening. The

Fig. 37. Parent education as a forum for home-school relationships.

teacher can also take advantage of such situations to inform the parents anything about the child. She can request the parents to meet her whenever it is convenient for both of them.

Parents' Meeting

Parents' meetings in the preschool help to establish contacts with the teacher and the preschool itself. They also give them opportunities to meet with other parents. The teacher needs to plan properly to impress upon the parents the need for, and the purposes of, regular parents' meetings. In a planned meeting, the parents must be given a chance to discuss about their children and their expectations. The frequency of the parents' meetings may be decided in the beginning of the academic year according to the convenience of the majority of the parents and the teachers. While planning, the interests, and needs of the parents should be considered to ensure effective parent participation. Besides the informal discussions in such meetings, additional information can be given by demonstrations, films, lectures and displays.

The preschool teachers should chalk out the programme for the parents' meetings for the whole year with the help of enthusiastic parents. She may form a parents' programme committee with a few willing parents, and entrust the work to that committee. She herself may help, guide and co-ordinate the committee's work. The ultimate aim is that the parents should derive benefit from those meetings.

Organization of children's festivals is an important part of the parents' programme. On such occasions, samples of children's work can be exhibited and a short programme of half an hour's duration by the children, and games for parents can entertain both the parents and children.

Inviting Parents to the Preschool

Another aspect of the parents' programme is that they are invited to the preschool to observe the programme and their children at work. This will enable parents to understand the significance of, and necessity for, special programmes in a nursery school rather than only reading and writing which are demanded by most of the parents. They will also come to know that almost all the children are alike in their needs and behaviour. Parents can also be invited to join the picnics and outdoor trips. Many may willingly come and lend a helping hand to the staff in arranging the transportation of getting permission from an institution.

Sending Printed and Written Materials

The preschool can maintain a diary for each child to communicate with the parents. Any message or information to be given to the parents can be written in the diary and sent home with the children. The parents can return the diaries noting the information. Periodical newsletters containing the news about the children's activities in the school and some information about child development, child, rearing practices, new trends in the education of young children, new songs and stories will help parents to guide their children better. Written notes may be sent to parents regarding the child's progress in school.

The home-school relationship is a vital aspect of the preschool programme. The schools, however efficient, cannot stimulate optimum development of children, unless they work in close co-operation with the parents. The major responsibility for the children's growth still remains with the parents. Parents are also becoming aware of the new trends in education of children and like to know more about their duties to bring up healthy and well-adjusted children. Therefore the task of the

nursery school teacher extends beyond guiding the children, in educating the parents also. Every preschool has the obligation to integrate its educational programme with the child's education in at home. Parents and teachers are partners in this great endeavour, and should work together to make it a success.

References

Arya, S C. *Infant and Child Care for the Indian Mothers.* Vikas Publications, Delhi, 1972.

Christionson, H.M., Rogers, M.M., Ludlum, B.A. *The Nursery School—Adventures in Living and Learning.* Boston: Houghton Mifflin Co., 1961.

Dakshayani, R. 'Influence of nursery school experience on subsequent development of children', *The Indian Journal of Home Science,* No. 1, Vol. IV, April 1970.

Desai, M.M. 'Balwadis meet the basic needs of children', *Kasturba Memorial* Kasturbagram: Kasturba Gandhi National Memorial Trust, 1962.

Devadas, R.P. 'Preschool education', Child Development. A Symposium. New Delhi: NCERT, 1964.

Devadas, R.P., Jayalakshmi, S.S., Visalakshi, R. 'Impact of the nursery school lunch on the food habits of children', *Indian Journal of Home Science.* Vol. 5, No. 2, Oct. 1971.

Education Commission. Report of Education Commission—1964-66 Delhi: Government of India, 1967.

Elkind, David. 'The case for the academic preschool: fact or fiction ?', *Young Children.* January, 1970.

Gandhi Mahatma., Cited by Baraton Kumarappa, *Towards New Education.* Ahmedabad: Navajivan Publishing House, 1956.

Gardner, B.D., *Development in Early Childhood.* New York: Harper & Row, 1964.

Green, M.M., Woods, E.L., *A Nursery School Handbook for Teachers and Parents.* Delhi: Universal Book Stall, 1969.

Hammond, S.L., Dales, R.J., Skipper, D., Witherspon, R.L., *Good School for Young Children.* New York: The MacMillan Co., 1965.

Hess, R.D., Croft, D.J., *Teachers of Young Children.* Boston: Houghton Mifflin Co., 1972.

Indian Association for Preschool Education *IAPE Newsletter.* No. 47, Jan. 1973.

Smt. Indira Gandhi cited by Barroct P.P., *Nursery School in India.* New Delhi: Sahitya Prakash, 1959.

Jaya, N. 'Organisation and evaluation of a rural balwadi', in *Indian Journal of Home Science,* No. 1, Vol. II, Jan. 1968.

Katz, Lilian, G., 'Children and teachers in two types of head start classes', *Young Children,* September, 1969.

Levin, C.W., 'The teacher in the nursery school, *Young Children.* November, 1964.

Modak, Tarabai. Balwadis in Rural Areas. New Delhi: Directorate of Extension and Training, 1958.

Muralidharan, R., *Preschool Education as an Instrument of Change in a Developing Society.* New Delhi: IAPE, 1969.

Muralidharan R., Preschool Education—What it should give in Report of the seminar on the preschool child—ICCW., New Delhi, 1971.

Muralidharan, R., Banerji, U.A. *Guide Booklet for Nursery School Teachers.* New Delhi: NCERT, 1969.

Nehru, Jawaharlal. *Jawaharlal's Speeches.* Government of India: Ministry of Information and Broadcasting, 1968.

Dr. Rajendraprasad and Dr. Radhakrishan cited by the Indian Council for Child Welfare. Children's Day Special. New Delhi: 1962.

Ranjit Bhai, 'Voluntary efforts in preschool education', in Muraidharan, R. *The Systems of Preschool Education in India.* New Delhi: IAPE, 1968.

Robinson in Parker, R.K. *The Preschool in Action: Exploring Early Childhood Programmes.* Boston: Allyn & Bacon, 1972.

Rose Mukerji, 'Teaching is', in Katherine, Read Baker. Ideas that work with young children. Washington: National Association for the Education of Young Children, 1972.

Salomy, K.C., 'Influence of nursery school experience on, the subsequent development in the 1st grade Children—an unpublished UGC research, 1973.

Seifert, Kelvin., 'Comparison of verbal interaction in two preschool programme', *Young Children,* September, 1969.

Sharrock, A.N.,—*Home School Relations: Their Importance in Education.* Glasgow: The University Press, 1970.

Singh, M.P., *School Organisation.* Amritsar: City Book Depot, 1962.

Taylor, B.J., *A Child Goes Forth—A Curriculum Guide for Teachers of Preschool Children.* Provo, Utah: Brigham Young University Press, 1972.

Verma, Amita., A Survey of 40 Preschool Institutions in the city of Baroda. Baroda: Dept. of Child Development, 1966.

Zaheer, B.A., 'Child's all-round development—core of preschool education,' in *Yojana.* Vol. XIII, No. 1, 1969.

CHAPTER 12

Late Childhood

Late childhood extends from the age of six years to the time when the individual becomes sexually mature, when he is called an 'adolescent'. Late childhood begins when the child enters the primary school. Entering the school for the first time is an important milestone in the child's life. Life in school will be responsible for the many changes that will take place in his attitudes and behaviour.

Late childhood has also been designated as the 'elementary school age'. It is the period when the child is expected to learn the rudiments of knowledge that are considered essential for successful adjustments to adult life. It is also the time when certain essential skills are learned through the formal curriculum of the school and the extra-curricular activities it provides.

Parents regard late childhood as the 'smart' or 'big in-turn' age, the time when the child thinks he knows everything and does not hesitate to inform others of his 'superior' knowledge. This 'in-turn' makes him rebellious and antagonistic towards rules. He demands more independence than what his parents are willing to give him.

To the psychologist, late childhood is the 'gang age'. At this stage, the major concern of every normal boy or girl is to be accepted by his contemporaries and to be regarded as a member of a 'gang'.

Developmental Tasks of Late Childhood

As the world of the child expands to include the school and community, he is faced with new social expectations. No longer his 'childish' behaviour is accepted with the same tolerance and understanding extended when he was younger. Now he is expected to 'act his age' and to act in accordance with adult expectations.

New and varied social contacts in late childhood result in greater awareness of the child, how he compares with members of the peer group leading to new expectations and aspirations. He needs to adjust to the greater demands from the anvironment and from within himself (Breckenridge and Vincent, 1965). In order to achieve a place in the social group, the older child must master the developmental tasks, society expects of him. Failure to do so will result in an immature pattern of behaviour which will militate against acceptance in the peer group. It will also end in failure to cope with the pace set by his age mates, who have mastered them.

The mastery of developmental tasks in late childhood is also the responsibility of the teachers and, to some extent, members of the peer group. For example, developing fundamental skills in reading, writing, calculating and attitudes towards social groups and institutions, becomes as much the responsibility of the teachers as the parents.

However, if the child lacks the motivation

to learn the developmental tasks of his age level, and if he remains on a lower level of development, teachers and peers can do little to help him to achieve the attitudes and behaviour patterns appropriate for his age. The reason for this failure whether inadequate foundations, lack of motivation or both, the child will pay the penalty in subsequent years in terms of poor personal and social adjustments.

Physical Growth in Late Childhood

Height

Late childhood is a period of slow and relatively uniform growth until the puberty changes begin approximately two years before the child becomes sexually mature. Increase in height is at the rate of five to six centimetres annually. At the onset of puberty, an average girl of eleven years should have a height of 139.2 centimetres and the average boy of the same age, 138.3 centimetres. As boys begin their puberty growth-spurt approximately a year later than girls, they tend to be slightly shorter than girls of the same age.

Weight

Increases in weight are also slow and fairly uniform at this age. At the onset of puberty, the average girl of 12 years should weigh 29.8 kilograms and the average boy of the same age 28.5 kilograms. The heights and weights of children from six to twelve years as reported by the ICMR (1968) are given in Table 6.

Weight for children of the same age is influenced by their socio-economic status, birth weight and height. Girls, at every age during late childhood, tend to be slightly heavier than boys, and this difference is increased when girls begin their puberty growth-spurt sooner than boys in the closing years of childhood.

The appetite of the young child increases after six years of age. Thereafter children tend to eat more than they did earlier. Many even over-eat and become obese. The child who is overweight loses out in active play. As a result he misses the opportunity to acquire the skills so essential for social success. His age mates often tease and taunt him because of his weight, to the point of his feeling inferior or martyred. As Sontag points out, 'The unconscious cruety of children towards any one whose body does not conform to theirs in size, form and functioning may be an important factor in the emotional adjustment of children lacking this conformity'.

Body proportions change during the late childhood years. The disproportion of a too large a head decreases; and the lower part of the face increases in size, thus eliminating some of the facial disproportion of the early childhood. The gradual eruption of permanent teeth changes the shape of the mouth (Martin and Vincent, 1960). During the transition from baby teeth, changes in occlusion occur, if the two jaws do not fit together, affecting the shape of the face seriously. A dentist must be consulted immediately.

As childhood progresses, the trunk elongates and becomes slimmer. The chest broadens

Table 6 : Heights and Weights of Indian Children

Sex	*Measurements*	*Age in Years*						
		6	*7*	*8*	*9*	*10*	*11*	*12*
Girls	Standing height in centimetres	107.4	112.8	118.2	122.9	128.4	133.6	139.1
	Weight in kilograms	16.0	17.6	19.4	21.3	23.6	26.4	29.8
Boys	Standing height in centimetres	108.5	113.9	119.3	123.7	128.4	133.4	138.3
	Weight in kilograms	16.3	18.0	19.7	21.5	23.5	25.9	28.5

and flattens, the neck becomes longer, permitting the shoulders to drop and the pelvis increases in size. The arms and legs are thin with no marked development in their musculature. The hands and feet grow slowly in late children. The hands and feet are generally larger for boys.

Common Diseases in Late Childhood

Late childhood is normally a healthy age. However, during the late childhood children are easily subjected to different infectious diseases such as measels, mumps, chicken pox and whooping cough. Occasional colds and stomach upsets also occur. While these illnesses rarely affect the physical well-being of the child, their psychological effects are serious. Illness upsets body homeostasis and consequently the child's behaviour and attitudes. The sick child becomes irritable, demanding and difficult to live with. Absence from school and inability to join playmates in play after school, deprive the child of opportunities to learn the skills his agemates consider important for membership in play group. He feels isolated and let down. Losing attendance in school, the child suffers in his performance and progres in studies. Ultimately he may have to repeat the year. This in turn causes disappointment and resentment in parents and damages family relationships.

Just as some children are accident-prone, some are illness-prone. This may be due to a hereditary weakness or poor parental environment. Both permissiveness, allowing the child to eat, and sleep as he pleases, and strictness and authoritarianism, causing constant. emotional tension to the child make him prone to illness. Often illness may be imaginary. Children realize that when they are ill, they receive more attention. So when unpleasant conditions arise, they use illness as a form of escape. Thus, illness-prone children are often imaginary invalids (Cruickshank and Johnson, 1967).

Physical Disabilities

Children suffer from different types of physical defects some congenital and some acquired at different times of childhood as a result of illness, accident or neglect. The most common defects include dental caries, visual and auditory impairments, orthopaedic disabilities and diseased tonsils and adenoids. How these defects affect the older child is influenced by how much they disable him, and how other people treat him, especially the peer groups.

Emotions and Emotional Expressions in Late Childhood

When a child enters late childhood, he gradully discovers that violent expressions of emotions, especially the unpleasant are unacceptable to his contemporaries. Therefore, he tries to make his emotional expressions pleasant. For example he giggles or laughs uproariously, squirms, twitches or even rolls on the floor. In general, he shows a release of pent-up emotions. However, all emotional expressions at this age are not pleasant. Outbursts of temper do occur and the child suffers from anxiety and feelings of frustrations. Girls often dissolve into tears or temper outbursts. Boys express their annoyance or anxiety by being sullen and moody.

The common emotions of late childhood differ from those of early childhood in two respects. (1) In the type of situation that gives rise to the emotions, and (2) in the form of expression. These changes are the result of broadened experience and learning rather than maturation. The broader experiences help the older child to discover how different people feel about different emotional expressions.

Emotional Pattern of Late Childhood

After the child becomes adjusted to school, the emotionality tends to subside because

1 the roles of the older child are well-defined, and he knows how to play them;
2 he has a ready outlet for any pent-up emotional energy through games and and sports this helps to clear his system, and
3 because of the improvement of skills, the child no longer experiences the frustrations he formerly experienced when he tried to do something and failed.

The common emotional patterns of late childhood are: fear, jealousy, curiosity, affection and joy.

FEAR

Objects, situations, animals and people which terrify young children, are accepted calmly by older children. On the other hand, fears of fire, darkness, disease, doctors, dentists, operations, being hit by a car and being bitten by a dog are common at this age. Girls show more fear than boys.

While fear aroused by concrete and tangible stimuli decreases with age, there is a marked increase in the degree of fear of imaginary, fanciful, supernatural or remote dangers and of matters associated with corpses and death. Older children are also afraid of being 'different', or being ridiculed or teased and of being a failure in what they undertake (Maurer, 1965).

Family or school problems, problems related to personal and social adjustments or to health are the most common worries of older children. School worries include failing a test, being late for school or being left behind in school. As the older child is aware of the social disapproval of his friends when he shows his fear, he tries to avoid any situation that might be frightening, thus saving himself from the humiliation of being seen in a state of fear. Generalized anxiety which is a painful uneasiness, concerning impending or anticipated illness is more common than any specific worry. It is greater in children who are unpopular, and among girls than boys. It increases as the child grows older and as he faces more pressures.

ANGER

More situations provoke anger in late childhood than in early childhood, because the older child has a stronger desire for independence. He is therefore more frequently frustrated in his efforts to achieve independence than the more docile, younger child.

The older child becomes angry when an activity is interrupted, when he is constantly criticized and when unfavourable comparisons with other children are made. He is annoyed when he is blamed or punished for something he did not do, when he sees someone cheat, tell lies or do unfair things. He also becomes angry, when his achievements fall short of his goals.

The older child experiences more frustrations, or feelings of helplessness when a drive is blocked, than the younger child. Some children react in an aggressive way by striking out at the offending object or person. Other children react in a passive way, withdrawing from the block. In free unrestricted social situations, in which adult authority and discipline are absent, aggressive reactions are more frequent and more violent (Jersild, 1960).

JEALOUSY

Sibling jealously continues even when the child enters school. Sometimes, it is intensified because the child feels that, during his absence from home, the younger child has the whole of his mother's attention. He may transfer his jealousy to his classmates, especially towards those who are popular or who excel in studies or sports. He will show his jealousy directly

through quarrelling, carrying tales, ridiculing, teasing, bullying, criticizing or instigating quarrels. He may express his jealousy indirectly by ignoring the child of whom he is jealous, by sarcastic comments, by engaging in day dreams of the martyr type, or by lying and cheating. As childhood progresses, indirect expressions of jealousy are more common than direct expressions.

Curiosity

Curiosity is as strong in the older child as in the younger. This may be explained partially by the fact that there is less for the older child to explore because he is already familiar with the common-place things in his daily life, and partly because he has learned from experiences that curiosity can get him into trouble. The older child, however, is curious about new things that appear in his environment. He satisfies his curiosity in much the same ways as he did when he was younger. He examines things that mystify him, and he frequently takes them apart to see how they work. In addition to direct explorations, he asks innumerable questions to supplement what he has learnt by himself. By the time he reaches the third class, be reads well enough to understand what he reads. Thereafter, reading becomes increasingly a source of information to him.

Affection

Affection is expressed only slightly by older children. Boys feel that they are too old to be sissied or hugged. They are likely to be embarrassed if such demonstrations are made in public. They even resent being addressed by words of endearment. While girls are not so restrained, they too dislike being fussed over because both boys and girls dislike having people show affection to them. Their affection is shown indirectly by their desire to be constantly with those whom they love, to do things for them or to assist them in any way they can. When they show affection, it generally comes in bursts at unexpected times.

Joy

Children derive joy from things which roused pleasant emotions when they were younger. They never fail to smile or laugh at incongruous situations, violations of conventions, absurdities, slight calamities, sudden or unexpected noises, or anything that seems out of place in a situation. The older child gets more pleasure from a play on words and from jokes. He laughs at his own predicament to convince others that he is 'good sport'. Anything that gives him a feeling of superiority, such as practical jokes, and eating forbidden foods gives him pleasure.

Social Behaviour

The older child is no longer satisfied playing alone at home, or doing things with members of his family only. From the time he enters the school, until the physical changes of puberty begin to develop, the desire to be with, and to be accepted by the gang becomes stronger and stronger. Therefore interest in peer activities, an increasingly strong desire to be with the group, mark the late childhood which is rightly called the 'gang age'. At this time, social development is taking place rapidly. The child passes quickly from the self-centered individual, whose social contacts are characterized by constant disagreements and fights, to the point where he is a cooperative, well adjusted member of a social group composed of his peers.

At this time immature patterns of behaviour of the early childhood are replaced by mature patterns. For example, negativism recedes after the age of six years, although boys often experience another peak of negativism between 10 and 11 years, when they rebel against adult authority as a way of asserting their sex appropriateness.

Children's groups

Children's 'groups' or 'gangs' are only play groups. A typical childhood gang is composed of individuals of the same sex, with three or four members, to start with. With their growing interest in sports, the gang becomes larger to have enough players to make a team. Boys' gangs are usually larger than girls'. The size of their gangs is influenced by the number of boys available and by the activities of the gang members. Often they are found engaged in socially unacceptable activities such as breaking and destroying things. In contrast, girls' gangs are less frequently engaged in socially unacceptable behaviour. They spend most of their time in talking, playing games, making things or enacting plays.

Gang activities vary from community to community and among the different social classes within a community. When a conflict arises between parental standards and those of the group, the child is likely to conform to the latter rather than to the former. From their contacts with the gang, children learn to compete with others, cooperate, work as a member of a team, accept responsibilities and see them through, take the part of others when they are mistreated or neglected, and to be a good sport in adversity and in success. This training in socialization, which can be derived through no better medium than contact with peers, is of immense value to the child throughout the remaining years of his life.

The leader of a gang represents the gang's ideal. In the case of boys, the boy must be a good athlete, a good sport and an all-round superior individual. As boys and girls of this age develop an attitude of hero-worship towards someone who possesses qualities they admire, the leader who can hold the respect of the gang and thus assure his popularity must be superior to the rest of the group in almost all respects, especially in intelligence, dependability, diplomacy, self-confidence, emotional stability, athletic ability and awareness of the wishes of others.

Social Acceptability

Children in late childhood are keenly aware of what their classmates think of them and whether or not they like them. Children who are socially unacceptable to their peers are usually the quiet, withdrawn, reserved, aggressive or 'problem' type that antagonises other children. As they spoil the play for other children they are rejected by the group. Girls who are impulsive and show off are perceived as 'tomboys' by their peers and are also rejected as playmates. Bright children are better liked than those of average or below average intelligence. This is because they can suggest activities for the enjoyment of the group and act in a more mature way. Children who are dull are ignored and disliked because of their slowness in learning and their immaturity of behaviour.

Friendship in Late Childhood

In friendship, both boys and girls prefer definitely the companionship of individuals of their own sex. Many factors influence the older child's choice of friends. He chooses those whom he perceives as similar to himself and those who meet his inner needs. In this context, the tendency to choose friends from their own grades, neighbourhood, proximity in school is strong.

Personality traits are important determining factors in the choice of friends. Cheerfulness, friendliness, cooperativeness, kindness, honesty, generosity, even temper and sportsmanship rank high. The child shows also a preference for friends of his own socio-economic, racial and religious groups.

Children's friendships are rarely static. The child shifts from best friend to enemy or from casual acquaintance to close friendship, quickly and often for little or no reason. Quarrelling,

bossiness, disloyalty or underhandedness, conceit and incompatibility are the reasons given by children for changing friends. However, as children grow older, their friendships become more stable.

Increase in Understanding

The child's world expands with his entrance into school. So does his understanding of the world. Of the different types of concepts that change during the late childhood period, the following are the most important: concepts of space, numbers, money, time, life, death, bodily functions, beauty, self and social concepts.

CONCEPT OF SPACE

In early childhood, the concept of space is vague. It is no longer vague or meaningless for an older child. School work in arithmetic helps him to formulate more definite ideas of space and distance. From the use of weights and rulers, he comes to learn the meaning of kilograms, centimetres and kilometres.

CONCEPT OF NUMBERS

Numbers take new meanings for the older child as he begins to count his belongings and as he works with numerical problems. He learns to deal with simple fractions, multiplication and division by the time he is eight years old.

CONCEPT OF MONEY

When children reach the school age, their concept of money begins to form. They can identify different coins and associate the right numeracy with them. They help parents in purchasing small items from the local shop.

Children who handle money at home, and who earn money from after-school jobs, or assist in doing household chores, learn more about the meaning of money than children who just receive money as allowance or as rewards (Marshall, 1964). As the child's contacts with his gang increases, he views money as a necessity to project a symbol of prestige to spend for sweets, beverages and other snacks which his friends enjoy. Spending has great prestige in the eyes of the peer group, and wins popularity. In addition, money gives him a feeling of independence, and being 'grown up'.

CONCEPT OF TIME

The rigid time-table of the school day, with the ringing of the bell at the end of every period, learning social studies in school, with their emphasis on the manners, customs and modes of living of people in other lands and in different periods of history, broaden the child's concepts of time. Through these concepts, the older child can estimate time more accurately in terms of what he can accomplish in a given period of time (Lovell and Slater, 1960).

CONCEPT OF LIFE

The older child does not attribute life qualities to inanimate objects. While some children at this age find it difficult to distinguish between 'living' and 'has life' qualitites in such objects as a tree, the moon or a river, they become increasingly aware of the fact that movement is not the sole criterion of life (King, 1961).

CONCEPT OF DEATH

Children whose lives are touched by death in the family or the death of a pet, react to it in the same manner as their parents. If parents are grief-stricken, the child is confused, anxious and disturbed by their absorption with their own grief and apparent unconcern about him. This colours his concept of death. What concept the child will have of the after-life of the person who has died, will depend on what

he has learned about life after death from home, religious instruction, priests, church, or from his friends. He may think that the person or pet will go to heaven, where they will be happy or he may believe that they went to hell and eternal punishment for doing wrong acts during life. The child whose religious instruction is limited or who has little interest in what instruction he has received will have little interest in what happens after death. As a result his concepts will be unformed and blurred (Alexander and Adlerstein, 1958).

Concept of Bodily Functions

By the time the child reaches the school age, he has well-developed concept of bodily functions but these, for the most part, are inaccurate until he begins to learn about his body in the courses in health in the elementary school. Equally erroneous are the older children's concepts of the causes of illness. While some school-age children still believe that illness results from being, 'naughty', most believe that illness comes from germs. To them germs are abstract figures or living things like flies or worms.

Concept of Beauty

The older child learns to appraise beauty in a more mature way than he did when he was younger (Figure 38). No longer are things beautiful or ugly just because he likes or dislikes them. Beauty and ugliness of colour, nature, picture and of the human face and form are conditioned by group standards rather than by individual reactions (Udry, 1966).

Concept of Self

The child's concept of himself as a person gets more and more clarified when he sees himself through the eyes of his teachers and classmates and when he compares his abilities with those of his peers. In discussing how self-concepts develop among older children, as pointed out by Frank and Frank (1956), 'The child learns to think and feel about himself as defined by others. He develops an image of self as the chief actor in his "private world". This image develops primarily from the parents, teachers and other significant persons who punish, praise or love him'. The older child is aware of sex differences and of appropriate sex roles which become part of his self-concept. Both boys and girls are well aware, even before chilhood ends, that the male role is more favourable and carries more prestige than the female role.

Shortly after the child enters school, he becomes aware of his caste, group of any and religious group members, and of the attitudes his peers have towards them. These attitudes influence his self-concept. Towards the end of childhood, the meaning of social class status, in terms of parental occupation is added to his self-concept.

Social Concepts

The child's social concepts include prejudices towards members of rich and poor socio-economic strata, caste system and prejudices against members of the opposite sex as well as against those of minority groups. When adults encourage children to differentiate between their boy and girl companions and expect them to behave differently towards members of the two sexes, the child learns to view the two sexes differently and to regard one as superior to the other.

Concept of Right and Wrong Behaviour

The older child's moral code is influenced greatly by the moral code of the group to which he belongs. He learns that stealing is wrong regardless of whether it means stealing money, material possessions or the work of others as in cheating. Similarly, the older child regards lying as wrong, whether the lie is told to a parent, a teacher or a classmate. As the

Fig. 38. Appraising beauty in a mature way.

child reaches the end of childhood, his moral code reflects that of the adult with whom he is associated, and his behaviour conforms more closely to adult standards (McDonald, 1963).

Speech Improvement in Late Childhood

As the child's horizons broaden, he discovers that speech is an important tool for belonging to, and living in, a group. He learns that the simpler forms of communication such as crying and gestures are socially unacceptable. This gives him an added incentive to improve his speech. The importance of speech as a tool for social belonging has been illustrated by cases where children are unable, for one reason or another, to communicate with members of the peer group. For example, deaf children become socially isolated because they cannot hear what other children say, and hence cannot participate in group conversations.

Children have difficulty in talking to other children whose dominant language is different from theirs. When they try to speak others' language, their accents, misuse of words and grammatical mistakes affect the attitudes of their listeners. Children who speak little because they were not permitted to do so in authoritarian homes are usually neglected. By contrast, children who are encouraged to talk at home and who learn to talk about play activities or other topics that are interesting to their playmates are usually popular.

One of the most serious handicaps to social acceptance is defective speech. The child who uses baby-talk is regarded as a 'baby'; the one who lisps is looked upon as a 'sissy'; and the one who has a more serious speech disorder, such as stuttering, is usually teased, mimicked or laughed at because of his 'funny speech'. Normally, great improvement takes place in children's speech after they enter school. As the child learns to read, he adds to his vocabulary and becomes familiar with correct sentences. Mispronounced words and wrong associations with words are quickly corrected by the teacher. Speech is important for success in school. Garrison (1959) remarks:

> 'The number of words the child knows determines in a large measure his school progress. Words are the means by which the child learns about his world. If his knowledge of words is grossly inadequate, the interpretation of his environment will be correspondingly so.'

Therefore, the primary school has a great responsibility to give all children ample opportunities to improve their speech.

Vocabulary in Late Childhood

Throughout late childhood, the child's general vocabulary grows in leaps and bounds. From his studies in school, reading and listening to other people and the TV/radio, the child builds up a vocabulary which he uses in his speech and writing. However, his comprehension of vocabulary exceeds his use of the vocabulary. He vaguely knows the meaning of many words and can understand them when they are used in combination with other words, gestures and facial expressions. However, he does not know them well enough to use them himself. Participating in general family conversation and listening to the radio/TV help to improve the child's comprehension, vacabulary and good listening. It has been estimated that the average first grader knows between 20,000 and 24,000 words, or 5 to 6 per cent of the words in a standard dictionary. By the sixth grade, he knows approximately 50,000 words (Wolman and Barker, 1965). The older child not only learns many new words daily but also finds new meanings for old words, thus enlarging further his vocabulary. Children from better educated families increase their vocabularies more than those from families where parents have less education. Girls, on the whole, build up larger vocabularies than boys (Schwebel, 1966), because of their greater interest in colours

(Hurlock, 1978).

By the end of the first class, the child's etiquette-vocabulary becomes as large as that of the adults of his environment. From the study of arithmetic and out of school contacts with money, the older child learns the names and meanings of numbers and different denominations of money. His time-vocabulary also increases and is as large as that of the adults with whom he comes in contact (Breckenridge and Vincent, 1965). Simultaneously, slang and swear words also become an important part of the older child's vocabulary. He learns them from brothers, sisters, classmates and peers in the neighbourhood. Secret language also makes its appearance in late childhood. It is used in the child's communication with his intimate friends. Written forms of this secret language consist of codes formed by symbols to express words or complete thoughts. Kinetic language usually consists of gestures and the formation of words by means of fingers. Girls use secret language more frequently than boys. They also spend more time in developing symbols and word-signs than boys.

Pronunciation

Errors in pronunciation are not common in late childhood. A new word may be incorrectly pronounced the first time it is used, but after hearing its correct pronunciation once or twice, the child is generally able to pronounce it correctly. This, however, is less true of children of the lower socio-economic groups, who would have heard more mispronunciations in their homes and neighbourhood than children from a more favourable home environment.

Forming Sentences

The six-year-old child can command nearly every kind of sentence structure. The length of his sentences increases until he is nine or ten years old. After nine years of age, the child begins to use shorter and more compact sentences. As sentence construction is difficult for a child, grammatical errors are common. The number and seriousness of these errors vary according to the correctness or incorrectness of the speech the child hears at home or among his playmates.

Content of Speech

The older child's speech is less egocentric than that of the preschool child. The shift from egocentric to socialized speech depends not so much upon is age, as upon whether or not his personality his egocentric or social, the number of social contacts he has had, the satisfaction he has derived from them and the size of the group in which he is speaking. The larger the group, the more socialized the speech will be. When the child is with his contemporaries his speech is generally less egocentric than when he is with adults.

Although children can talk about many topics, their favourite items of conversation are when they are with their peers. These consist of their own experiences in the home and family, games, sports, movies, gang activites, sex, sex organs and their functions. Boasting, as a rule, is very common between the ages of 9-12 years, especially among boys. The older child also likes to criticize and make fun of other people. Sometimes he critizes people openly. When the child is with adults, the subject of his talks is largely determined by the adult. When he is criticizing the adults, he generally clothes his criticism with a suggestion or complaint as 'Why don't you let me do so?' or 'You won't let me do what my friends do'.

Improvement in the content and presentation of the older child's speech depends on the level of his socialization. Children who are popular have a strong motivation to improve the quality of their speech. They learn from personal experience, that words can hurt and that children whose speech adds to the enjoyments of their peers alone are popular.

Speech Disorders

Speech disorders are far less likely to begin in late childhood than in early childhood. However, stuttering and slurring which might have started several years earlier may grow worse as time goes on, unless remedial measures are taken. As these disorders trace their origin to nervous tensions, they are likely to grow worse after the child enters school, owing to the child's embarrassment, when other children laugh at his 'funny speech'. Children who stutter show more and more serious symptoms of maladjustment than non-stutterers.

Moral Attitudes and Behaviour

The older child's moral code is greatly moulded by the moral code of the group to which he belongs. At this stage, the child's concepts are neither narrow nor specific. Gradually he learns that the social group attaches different degrees of seriousness to different acts. As the child reaches the end of childhood, his moral codes approach gradually those of the adults with whom he is associated and his behaviour conforms more closely to their standards.

Discipline

In late childhood not only new techniques of discipline but also shifts in emphasis on the different aspects of discipline are essential. Changes in the three essential elements of discipline—education to build up moral concepts, punishment for intentional wrong doing and reward for right behaviour must meet the developmental needs of the older child. When children are young, they like to feel that parents know best. By late childhood, they rebel against their parents and parental standards. Too strict discipline is liable to lead the child to misbehave to prove to himself and his friends that he is independent. On the other hand, too lenient discipline will confuse the child and create a feeling of insecurity. Long-term consequences are more important than the immediate consequences of discipline.

Development of Conscience

One of the important developmental tasks of late childhood is developing a conscience. By conscience is meant a conditioned anxiety response to certain types of situations and actions which have been built up by associating certain acts with punishment. Conscience is a type of 'internalized policeman' which motivates the child to do what he knows is right and thus avoid punishment (Boehm and Nass, 1962).

Guilt is 'special kind of negative self-evaluation' which occurs when an individual acknowledges that his behaviour is at variance with a given moral value to which he feels obligated to conform. Shame, by contrast, is an 'unpleasant emotional reaction of an individual to an actual or presumed negative judgement of himself by others resulting in self-depreciation vis-a-vis the group'. Shame, thus, relies on external sanctions alone, though it may be accompanied by guilt. Guilt, by contrast, relies on both internal and external sanctions (Hurlock, 1978).

With the development of shame and guilt an adolesecent develops a willingness to confess or admit misbehaviour. This may be to relieve the tension caused by shame and guilt, or it may be a method of gaining forgiveness which will lighten the punishment. Shame is thus a powerful agent in the development of moral behaviour.

Factors which Influence Conscience Development

The effectiveness of a child's conscience as a motivating force in directing his actions into channels that will lead to moral behaviour will depend on the type of punishment he has

been accustomed to receive. The punishment the child receives influences parent-child relationships which, in turn, influence the development of conscience. When parents are warm and understanding, children resist temptations better than when parents are cold and punitive. The child, because of affection for his parents, thus becomes insulated against misbehaviour. As girls have a closer relationship with their parents at this age than boys, they have a stronger motivation to live up to parental expectation than boys (Peck and Havighurst, 1962; Proteus and Johnson, 1965). A combination of the wholesome forms of punishment and wholesome parent-child relationships can be regarded as conscience-building devices.

Misdemeanor in Late Childhood

Many misdemeanors in late childhood are a result of the child's testing of authority and his attempt to assert his independence. Such acts reflect strivings for social esteem. Older children, especially boys, frequently delight in doing things they know are wrong because of the sense of personal importance they derive from the admiration of the members of the peer group. Much of the misbehaviour in the school and neighbourhood by gangs of older boys or girls is motivated by such desires. Just as younger children disobey and become troublesome when they are tired or not feeling on par physically or when they are emotionally disturbed, so do older children. The most common forms of misbehaviour in the school are stealing, cheating, lying, using vulgar and obscene language, destroying school property and materials, truancy, annoying other children by teasing and bullying, reading comics during school hours, chewing gum, whispering or talking during class, being boisterous, clowning and fighting with other children.

Play Interests and Activities in Late Childhood

Late childhood is called the 'play age' since during this period, there is an overlapping of play activities characteristic of the younger years and those of adolescence. Children of different socio-economic backgrounds engage in leisure activities which are both quantitatively and qualitatively different. Boys and girls are keenly aware of the sex appropriateness of different types of play, and they shun play activities that they know are regarded as inappropriate for their sex, regardless of personal preference.

Bright children, especially as they grow older, are more solitary than social in their play, and they participate in fewer activities that involve strenuous physical play than do children who are less bright. The type of neighbourhood in which children live also has a marked influence on children's play because it determines the opportunities available for play. Regardless of these variations, play becomes less active as childhood progresses, and other amusements in the form of movies, radio, looking at comics and reading popular magazines gain more popularity.

The forms of group play a child chooses is determined largely by how popular he is or how much he is liked by others in the group. Children who are accepted members of groups engage in play activities with other children more than in activities that are carried out in solitude. The reverse is true of less popular children. Among the most popular forms of play in late childhood are constructive play, collecting, games and sports (Figure 39) and amusements such as reading, movies, radio and television, dramatics (Figure 40) and day-dreaming.

Constructive Play

Constructive play activities such as drawing, painting and clay-modelling decrease gradually in popularity as childhood advances. Singing is a form of creative play the older child enjoys. He usually likes to sing with his friends when he is away from the listening ears of

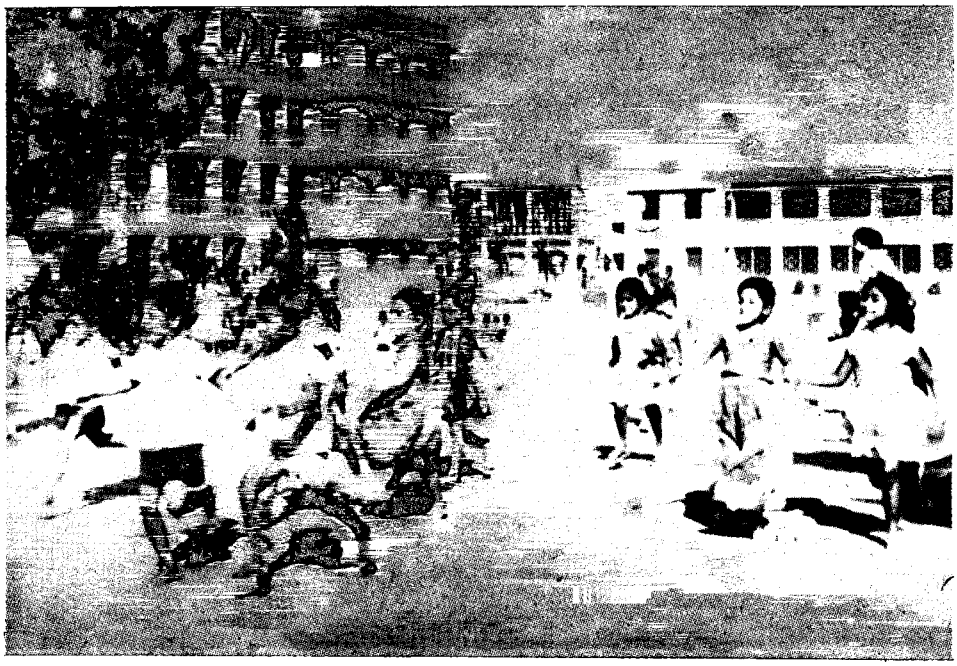


Fig. 39. Children in late childhood love sports.

Fig. 40. Interest in dramatics is on the increase in late childhood.

teachers and parents. Boys make little attempt to sing well, and their fun comes from making a noise and from caricaturing the songs (Gesell *et al.*, 1966).

Collecting

Collecting as a form of play increases in popularity as childhood progresses. The older child is more selective in his collections than the younger. He now limits his collections to a few special items, such as toy cars, picture post-cards and tries to get a wide variety of each items.

Games and Sports

Early in the school life of a child, his games are the simple, undifferentiated type. However, he is anxious to play games with older children and begins to practise basketball, football, baseball and hockey. By the time the child is ten years old, his games are largely competitive in spirit. He concentrates on acquiring skill and excellence, rather than on merely having fun (Hartley *et al.*, 1968).

Games and sports have great value as socializing agents for the child. He learns to co-operate, get along with others, play the role of follower as well as leader and to evaluate himself and his abilities realistically by comparing himself with his teammates (Gesell *et al.*, 1966).

Reading

In late childhood, the sex difference in reading interests is marked. Older children show an interest in reading magazines and newspapers. At first most of their 'reading' consists of looking at the pictures and the comics. Later they read the headlines and may even read larger portions if they relate to topics in which they are specially interested.

Movies

Attendence at movie houses becomes an increasingly popular form of amusement as childhood progresses and is one of the favourite activities of children's groups. Comics and Mickey Mouse cartoons are their favourites up to the age of nine or ten. Thereafter they may prefer adventure stories.

Radio

Stories, comedies, humour and music are popular at all ages. With advancing age, children become more interested in the serious types of programmes, such as plays and presentations dealing with science and facts of skill. Boys become interested in sports programmes, while girls show a greater interest in programmes of songs, stories and skits.

Day-dreaming

The child who is poor in his adjustments at school and who, as a result, has few opportunities for contact with other children is likely to spend more time in day-dreaming than the socially well-adjusted child. Children who are lonely at home such as the only children, the first-borns or children who are distantly placed from their siblings tend to day-dream more than children who have playmates among their siblings.

Typically, the day-dreams of this age is of the 'conquering-hero' type. The dreamer sees himself as he would like to be in real life. While the background and setting of childish day-dreams vary, the dreamer is invariably the hero or the heroine of the dream. Day-dreaming gives the child an opportunity for self-glorification which may prove to be a substitute for real social contacts.

Other Childhood Interests

The other common interests in late childhood are religious activities, personal appearance and clothing. Some children may develop hobbies.

Religion

Religious teaching in the early years of life has important effects on the older child's mind. Most children have a fairly clear concept of God. The child's concepts of sin and forgiveness is influenced by his religious teaching and the way he has been treated when he misbehaved. As he grows older, his vague concepts of religion gradually become clearer and more accurate, and he can comprehend the abstract theories better.

The Human Body

The older child is anxious to know what goes on inside his body. Being unable to observe bodily functions directly, he tries to satisfy his curiosity by asking numerous questions and by reading stories or books that describe the body and how it works.

Appearance

Appearance is of little concern to the older child. He is not bothered by his height and weight, unless they deviate so markedly from the height and weight of his classmates that he feels conspicuous. No physical defects such as freckles, crooked teeth or string hair bother him. By the time they come to the fifth or sixth class, girls begin to show more interest in their appearance than they did when they were younger. Tidiness then begins to be important to them. Boys of the same age, on the other hand, prefer an unkempt appearance because they believe it is more 'masculine'.

Clothes

The older child is keenly interested in clothes as a badge of conformity to the group. The older child's clothes do much to increase his self-confidence and to add to his feeling of 'belonging'. His friends' opinion about his clothes is quickly sensed by the child, and this influences not only his attitude towards his clothes but also his attitude towards himself. The importance of clothes to the older child has been expressed by Ryan (1966) thus: 'Children do like clothes and find real satisfaction in them. Bright colours or gay materials, the feel of different textures in clothing, the comfortable, familiar garment as well as the new one—these are all things that bring pleasure to the child'. Clothes make a contribution to the process of growing up, when they are right from the child's standpoint.

Sex

The older child is not only keenly aware of, and interested in, genital differences, but also wants to know in more detail the relations between sexes, the birth process, how development takes place within the mother's body and the relation of the father to reproduction. As he becomes older, his curiosity is less outspoken and more disguised because of the unfavourable attitudes of parents towards the child's questions or because of their avoidance of the subject.

At this stage sex exploration takes many forms, the most common being peeping, direct observation of the reproductive anatomy, exhibitionism, oral contacts and masturbation.

School

The healthy young child eagerly looks forward to the time when he can learn to read and write. Going to school to him means growing up. For the first year or two most children like school, they enjoy their studies and they like their teachers. There are marked variations in children's attitudes, from a strong absorption in studies to an equally strong dislike which makes them rebel against going to

school. Many factors influence their attitudes towards school. The most important are: attitudes of parents, siblings and friends towards school; social adjustments to school, academic success, attitude towards work, how the teacher treats him and how the discipline and attitudes of the teacher compare with those he has been accustomed to at home. If the child's attitude towards school becomes less favourable, his motivation to do what he is capable of doing academically also gets weakened. Ultimately he becomes an under-achiever.

Status Symbols

Status symbols are signs which proclaim the child's status in his social group. With the growing realization of the role played by socio-economic status, the child's interest in symbols which proclaim a favourable status increases. He uses them as cues in judging the status of others. Visible symbols such as the variety and type of clothes they wear, the size and type of house they have, the number and types of equipment, utensils in the family and whether or not house work is done by the mother or the servant are all used to judge status.

Not until the childhood years draw to a close can children appreciate differences in quality. To them, quantity and size are synonymous with superiority. As children spend increasingly more time outside the home, they demand more autonomy, and resent the over-protectiveness of parents, which they associate with babyhood. They also resent the feelings of inadequacy which develop when they are not encouraged to learn to be independent.

Accidents and Accident-proneness

The older child meets with fewer accidents than the younger child, but they tend to be more severe. Most of their accidents occur outside the home. Some children seem to be accident-prone. They are, as a rule, over-active, restless, anxious, implusive, adventuresome, resistant to authority and less popular with their peers than children who have fewer accidents. The latter, on the other hand, have been found to be timid, submissive and controlled.

Skills of Late Childhood

When late childhood begins, the child has a markedly large repertoire of skills learned during the preschool years. The skills the child learns will depend upon his environment, partly upon the opportunities for learning among his classmates. Marked sex differences, for example, exist not only in play skills at this age but also in the level of perfection of these skills. Girls, as a rule, surpass boys in skills involving finer muscles, such as painting, sewing, weaving and hammering, while boys are superior to girls in skills involving the grosser muscles, such as basketball throw, standing, running and long jumps.

The level of perfection in these skills, will depend not so much on the opportunities the children have but rather on the guidance and practice they are given, while they are learning, especially when the foundations of the skills are being laid.

Types of Skills

The major categories of childhood skills are: self-help skills; social help skills; school skills and play skills.

Self-help Skills

Skills connected with eating, dressing, bathing and grooming are developed by six years of age. Thereafter the child needs only occasional help in these skills. The results may not be up to adult standards but, with practise, these

skills will be perfected to the point where the child can perform them with as much speed and excellence as an adult.

Social-Help Skills

Skills learned in relation to helping in tasks at home, such as dusting, sweeping, washing and drying dishes, making beds or cooking, not only give the child pleasure but also add to his feeling of self-importance. Even more important is the fact that they encourage the child to learn to be co-operative, a trait which will contribute greatly to his acceptance as a member of the peer group. Similarly, the skills which help to contribute to the community give unique satisfaction.

School Skills

At school, the child develops the skills needed in writing, drawing, painting, clay-modelling, dancing, singing, sewing, cooking and carpentry. Although many of these skills are used also in the child's play, in school they are learned under the guidance of a teacher, and the child is expected to practise them in a more serious way than as mere sources of entertainment.

Play Skills

Play skills such as throwing and catching balls, riding bicycles, and constructing things from wood-clay or other materials are learned in connection with the child's play. Children who have superior skills make better adjustments to school and in their social relationships outside school, than children whose skills are inferior.

Handedness

The child's hand skill is influenced by whether he is right or left-handed or ambidextrous. By the time he reaches his sixth birthday, the child has usually established hand dominance in the sense that he uses one hand predominantly and shifts from the use of one to the other very rarely. If he has learned to use his right hand, his adjustments will be easier than if he has learned to use the left hand. The child who is left-handed, for example, will be confused and frustrated when he tries to use materials designed for right handed people or when he attempts to learn new skills by imitating models for the right-handed. This is well-illustrated when a left-handed child tries to imitate the writing model of his right handed teacher.

If guidance in establishing hand dominance had not been given in early childhood, and if the older child sincerely wants to become right-handed, there is little evidence that doing so will lead to speech disorders and nervous tension, as many believe. However, to avoid the psychological damage that often accompanies changes in handedness, the child should be under six years of age, more placid and easy going, above average in intelligence so that he will be able to learn easily, and most important of all, agreeable to change.

The child whose motor development lags behind that of other children of his age is greatly handicapped. When he is awkward and lacks skills other children have, he is likely to withdraw from the group and develop unhealthy attitudes towrads himself and towards social life. A serious and deep-rooted cause of awkwardness in the older child is the tension and anxiety built up from the way important people in his life reacted to his childish clumsiness. Ridicule, sarcasm, scolding or laughing at a child's clumsiness in the early learning stages, or at the inevitable slips which cause dropping of objects, stumbling or falling, may cause an emotinal blocking or result in tense movements and awkwardness throughout life.

Family Relationships

In spite of the broadening horizons of the

older child, his home still exerts great influence on his development. The importance of the home to the older child has been stressed.

In no area of the child's development do family relationships play a more important role than in his developing personality. What he thinks of himself as a person is a direct reflection of what he believes the different family members think of him, as judged by the way they treat him (McCord *et al.*, 1951) If they accept him and his abilities without constant pressures to live up to impossible expectations, he will become well adjusted; if not, the pressures will result in emotional disturbances of minor or major seriousness. The important role of the family in shaping the personality of the child has been expressed by Law Nolte in the following statements;

If a child lives with criticism, he learns to condemn.
If a child lives with hostility, he learns to fight.
If he lives with fear, he learns to be apprehensive.
If he lives with pity, he learns to feel sorry for himself.
If he lives with jealousy, he learns to feel guilty.
If he lives with encouragement, he learns to be confident.
If he lives with tolerance, he learns to be patient.
If he lives with praise, he learns to be appreciative.
If he lives with acceptance, he learns to love.
If he lives with approval, he learns to like himself.
If he lives with recognition, he learns to have a goal.
If he lives with fairness, he learns to value justice.
If he lives with honesty, he learns to value truth.
If he lives with security, he learns to have faith in himself and others.
If he lives with friendliness, he learns that the world is a good place in which to live.

Factors which Influence the Relationships of the Child with His Family

Many factors influence the type of relationship the older child has with different family members. The following are of speical importance: the personality of the parents; the ways they respect each other, parental expectations; methods of child training; attitudes towards parenthood, socio-economic status; parental occupations and family solidarity.

Personality of Parents

Well-adjusted parents provide a better home environment and maintain better relationships with their children than poorly adjusted parents. Mothers, for example, who are self-conscious and feel inferior are likely to have children with problems in behaviour. The unhappy and silent mother tends to have inhibited and sober children.

Parents' Relationship

Some parents have high and often unrealistic ambitions for their children. These are likely to make their children feel insecure and unaccepted when they fail to live up to parental expectations (Crandall *et al.*, 1964). By the time the child enters school, most parents expect the child to assume responsibilities for the care of his possessions, for help around the home and for routine activities, such as going to bed on time. Whether or not the child will live up to these expectations will depend partly on the personality of the child and partly on his previous training in assuming responsibilities.

Methods of Child Training

Parents who cling to the traditional concept of the parental role, which includes exercising considerable restraint over the child to guarantee that he will be successful and avoid too

much love and affection for fear of spoiling the child, produce an unfavourable home climate for good parent-child relationships. Parents who perceive their roles negatively and regard family life a burden tend to have poor relationships with their children. On the contrary, when parents perceive their roles as close to their ideals, children show better social and emotional adjustment, and the home climate is more favourable for all the members (Nichols, 1962).

Socio-economic Status

When the child goes to the homes of his friends and has an opportunity to compare his home with theirs, he is satisfied if he has as much or more than them in the way of material possessions. But he is dissatisfied and unhappy if his home falls below the standard of the homes of his friends. This might lead to complaints and criticisms at home attitudes that lead to an unfavourable climate at home.

Parental Occupations

For the older child, parental occupations has a cultural significance that gives him prestige or denies it. How his peers feel about it will be reflected in the child's attitude towards the occupation and also towards his father. Some children accept the mothers working without question, while others resent it bitterly. His feelings are also influenced by the types of substitute for the mother when she is away from home (Radke-Yarrow, 1962).

Solidarity of Family

When the family is held together as a unit and participates in different family rituals together in harmony, the home climate is favourable for all. When on the other hand, the home is broken by death or divorce, the remaining parent may be overprotective or may reject the child, thus establishing an unhealthy relationship. When the missing parent is replaced by a step-parent, the older child is likely to resent the step-parent bitterly and cause friction at home.

Family Friction

With the addition of each new member of a family, whether it be a sibling or a relative, the number of interpersonal relationship increases markedly. This often results in increased friction. The changed attitudes of the older child towards his parents and the changes in his behaviour are usually accompanied by a changed attitude on the part of the parents also towards him. Part of this change may come from parental absorpation in the care of the younger child in the family.

By the end of childhood most children protest against parental rules and advice, and argue with their parents about friendship. In addition to the friction with his parents, the older child of this period is also in constant conflict with his siblings. Furthermore, the antagonism between the sexes that develops outside the home is carried into the home and leads to conflicts between brothers and sisters. This does not mean that there is always conflict. Peace and harmony are found in the home many times. There are times when older children show real affection for and interest in their siblings, even to the point of helping in the care of the younger. They also follow the advice and pattern of behaviour set by the older siblings. It is the duty of the parents to see that more of these favourable expressions prevail at home.

Parental Preferences

As the mother is likely to be more constantly present than his father, the child becomes accustomed to turning to her for aid. Furthermore, because mothers as a rule, have a more tolerant and understanding attitude towards the troublesome behaviour of older children than fathers, a stronger bond grows up between the mother and child than between the father and child (Droppleman and Schaefer, 1963).

As children grow older, they perceive differential treatments according to sex. Although most of them perceive the father as the boss, there is a tendency for girls to feel that their

mothers are stricter with them than with their brothers and for boys to feel that their fathers are more lenient in their relationships with the girls in the family.

The older child is also more critical of his parents' behaviour. Boys are more critical and less satisfied with their parents and home condition than girls. Both boys and girls resent their fathers scolding them, losing tempers, being cross, being careless about their appearance, or having poor manners. On the other hand, they approve parents who are companionable, affectionate, understanding, good-natured, sympathetic, interested, and concerned about doing all they can to make the home a cheerful place (Hess and Torney, 1962).

From their contacts other children and their parents and from reading the older child forms a concept of the ideal parent. He then compares his parents with the ideals. If his parents fall short of the ideals in any way, as they invariably do, he becomes critical of their shortcomings. This critical attitude soon becomes general, spreading to everything parents do or say (Yarrow and Cambell, 1963) and finally the child gets disillusioned and frustrated.

Personality Development

As the child's social horizons broaden, new factors of importance begin to influence the development of his personality. He revises his concept of himself frequently. He sees himself as his teachers, his classmates and his neigbours see him. As the child's attitude towards himself is affected by the attitudes of significant people—his parents, teachers, siblings and peers—towards him his self-concept is made up of reflected appraisals. If these appraisals are favourable, the child will have a favourable self-concept; otherwise, he will tend to devalue himself (Bledsoe, 1964).

As childhood draws to a close and the child begins his worship of characters in history, fiction, stage, screen, or in the world of sports or national affairs, he forms a concept of the ideal self, the kind of person he would like to be. At first, this ideal is patterned along the lines set by parents, teachers and others from the immediate environment. Later, as his horizons broaden, people he does not know but has heard or read about form the nucleus of this ideal self. From these many sources which he uses as a model, the older child builds up a composite picture of an ideal self.

Personality Factors

The child's concept of self is affected by his general appearance. For example, the child who is large for his age, or is larger than the children he associates with is often expected by parents and teachers to behave more maturely than they would expect if his size were more in keeping with his age. An overweight child is likely to develop feelings of inadequacy, especially if his classmates ridicule him and give him a nickname that indicates their disapproval.

Children who suffer from a physical defect, such as blindness, deafness, or lameness may try hard to conform to the demands of their social environment. Handicaps make the child more vulnerable to feelings of threat and cause greater emotional instablity, thus affecting the personality pattern (Cruickshank and Johnson, 1967).

If the child belongs to a minority group and if there are pressures against these groups, the child begins to sense the prejudices soon after he enters school. This gradually builds up a feeling of inferiority which, in time, is expressed in poor social adjustments, antisocial behaviour, and a negative outlook on life. In the Indian culture, social prestige is associated in the child's whole life with a favourable socio-economic status of the family. Whether or not the child' home is located in a rural or urban area will also influence the type of personality pattern he develops. The school environment exerts a marked influence on the development

of a child's personality. Well adjusted teachers do much to bring about good adjustment in their pupils. Poorly adjusted teachers may have the opposite effect on their pupils. Teachers who are happy in their work and like children do much to facilitate the child's personality development.

Poor grades, lack of promotion and indiscipline make the child feel inadequate. They play havoc with the developing personality of the child. Similarly, the acceptance or lack of acceptance by his classmates also influence his personality through their effects on his self-concept. In this respect 'stars' and isolates' are especially affected.

Intelligence that is below the norm of the group invariably exerts a detrimental influence on the child's personality. The child who is duller than the rest of the group quickly senses his intellectual inferiority and the attitude of the group towards him. He develops personal inadequacy, becomes shy, introverted and apathetic or aggressive, hostile towards those who reject him. By contrast, the very bright child not only feels superior but also generally develops an intolerance towards those not so bright children.

Although the home environment becomes increasingly less important in shaping the personality as the child grows older, family relationships continue to exert a marked influence (Slater, 1962). The child's ordinal position, whether the oldest, youngest or the middle has been found to be an important factor in shaping his personality.

Happiness in Late Childhood

In late childhood, the child assumes responsibilities in the school and at home. Successful achievement in these responsibilities will add to the child's happiness.

There are many factors that contribute to an older child's happiness. The child whose health and energy are normal will find satisfaction in doing what he wants to do.

As his skills have greatly improved, the older child is no longer dependent. He can do much of what he wants to do without relying on the help of others. He will have ample opportunity for play and enjoy reasonably unless some unusual conditions exist in his family life.

As school begins to occupy an increasingly large part of the older child's time, his feelings about school especially about his teacher, his academic achievements, and his classmates can be a source of real happiness. The child who does well academically, who gets along well with his teacher and his classmates, and who enjoys learning new things will have an added reason to be happy.

Parents are largely responsible for the happiness or unhappiness of the older child. They are directly responsible to ensure that his health is good. Since, parents are responsible for determining the home climate and eliminating friction by keeping it to a minimum, they can do much to add to a child's happiness. His happiness will be greatly enhanced if he enjoys a relaxed, cheerful and appreciating climate in his home.

The parents are indirectly responsible for an older child's happiness through their attitudes towards his achievements at home, in school or with his playmates. If they have unrealistically high aspirations for him, they will lead the child to feel that he is a failure. If they provide a model of friction, and critical, derogatory speech to achieve their ends, the child would develop socially unacceptable habits of behaviour. This will affect his relationships with his teachers and peers. A child who learns to see himself realistically and accepts his failures as a challenge to improve his goals will be spared the unhappiness that comes from repeated failures and their accompanying feelings of inadequacy and inferiority.

References

Alexander, I.E., Adlarstein, A.M., 'Affective response to the concept of death in a population of children and early adolescents', in *J. Genet. Psychol.* 93, 1958.

Bledsoe, J.C., 'Self concepts of children and their intelligence, achievement, interests and anxiety', *J. Indiv. Psychol.* 20, 1964.

Boehm, L., Nass, M.L., 'Social class differences in conscience development', *Child Development*, 33, 1962.

Bossard, J.H.S., Boll, E.S., *The Sociology of the Child Development*. New York: Harper and Row, 1966.

Breckenridge, M.E., Vincent, E.L., *Child Development*. Philadelphia: Saunders Co., 1965.

Crandall, V.J., Devey, R., Katkovsky, W., Preston, A., 'Parents attitudes and behaviour and grade school children's academic achievements', *J. Genet. Psychol*, 104, 1964.

Cruickshank, W.M. and Johnson, G.O., *Education of Exceptional Children and Youth*. New Jersey: Prentice Hall, 1967.

Droppleman, L.F., Schaefer, E.S., 'Boys and girls reports of maternal and paternal behaviours', *J. Abnorm. Soc. Psychol.*, 67, 1963.

Dubois, F.S., 'The security of disciplines', *Mental Hygiene*, 36, 1952.

Frank, L.K., Frank, M.H., *Your Adolescent at Home and in School*. New York: Viking Press, 1956.

Garrison, K.C., *Growth and Development*. New York: Longmans, 1959.

Gesell, A., Ilg, F.L., Ames, L.B., *Youth: the Years from Ten to Sixteen*. New York: Harper and Row, 1966.

Hartley, R.E., Frank, L.K., Goldensen, R.M., *Understanding Children's Play*. New York: Columbia Press, 1968.

Hess, R.D., Torney, J.V., 'Religion, age and sex in children's perceptions of family authority', *Child Development*, 33, 1962.

Hurlock, E.B., *Developmental Psychology*. Bombay: Tata McGraw-Hill Publishing Co. 1978.

Indian Council of Medical Research. 'Growth and physical development of indian infants and children-Part I A (1968), in *Nutritiou of Atlas of India*. Hyderabad: NIN, 1971.

Jersild, A.T., *Child Psychology*. New Jersey: Prentice Hall, 1960.

Kennedy, R.J.R., *Modern Marriage and Family Living*. New York: Oxford Press, 1957.

King, W.H., 'The development of scientific concepts in children', *Brit. J. Edu. Psychol.* 31, 1961.

Kuppuswamy B., *A Text book of Child Behaviour and Development*. Vikas Publishing House Pvt. Ltd., Bombay, 1976.

Lovell, K., Slater, A., 'The growth of the concept of time, a comparative study', *J. Child Psychol. Psychiat.*, 1, 1960.

Marshall, H.R., 'The relation of giving children an allowance to children's money knowledge and responsibility and to other practices of parents', *J. Genet. Psychol.*, 104, 1964.

Martin, P.C., Vincent, E,L., *Human Development*. New York: Ronald Press, 1960.

Maurer, A., 'What children fear', *J. Genet. Psychol.*, 106, 1965.

McCord, W., McCord, J., Howard, A., 'Familial correlates of aggression in non-delinquent male children', *J, Abnorm. Soc. Psychol*, 62, 1961.

McDonald, F.J., 'Children's judgements of theft from individual and corporate owners', *Child Development*, 34, 1963.

Mussen, P.H., Conger, J.J., Kagan, J. *Child Development and Personality*. New York: Harper & Row, 1974.

Neisser, E.G., 'Emotional and social values attached to money', *Marriage farm-living*, 22, 1960.

Nichols, R.C., 'A factor analysis of parental attitudes of fathers', *Child Development*, 33, 1962.

Peck, R.E., Havighurst, R.J., *The Psychology of Character Development*, New York: John Wiley Sons, 1962.

Peckos, P.S., 'Nutrition during growth and development', *Child Development*, 28, 1957.

Perkins, H.V., 'Factors influencing changes in children's self-concepts', *Child Development*, 29, 1958.

Porteus, B.D., Johnson, R.C., 'Children's response to two measures of conscience development and their relation to sociometric nomination', *Child Development*, 36, 1965,

Radke-Yarrow, Scott, M.P., Deleuw, L., Heinig, C., 'Child rearing in families of working and non-working mothers', *Sociometry*, 25, 1962.

Rai B.C., *Educational Psychology*, Prakashan Kendra, Lucknow, 1976.

Ryan, M.S., *Clothing: a Study in Human Behaviour*. New York: Holl Press, 1966.

Schaefer, E.S. 'Children's reports of parental behaviour: an inquiry', *Child Development*, 36, 1965.

Schwebel, A.I. 'Effects of impulsivity on performance of verbal tasks in middle and lower-class children', *Amer. J. Orthopsychiat.* 36, 1966.

Slater, P.E. 'Parental behaviour and the personality of the child', *J. Genet. Psychol.* 101, 1962.

Terman, L.M., Merrill, M.A., *Standfort Binet Intelligence Scale*. Boston: Houghton Mifflin, 1960.

Thompson, H., 'Physical growth', in Carmichel, L., *Manual of Child Psychology.*

Udry, J.R., 'A research note on children's concepts of beauty', *Merrill-Palmer Quart.* 12, 1966.

Wang, J.D., 'The relationship between children's play interests and their mental ability', *J. Genet. Psychol.*, 93, 1958.

Wolman, R.N., Barker, E.N., 'A developmental study of word definitions', *J. Genet. Psychol.*, 1965.

Yarrow, M.R., Campbell, J.D., Person perception in children, *Merril Palmer Quart.*, 9, 1963.

CHAPTER 13

Adolescence

Adolescence

Adolescence has been defined in a number of ways, from different points of view, as a period of physical development, a chronological age-span or a sociological phenomenon. The term adolescence comes from the Latin verb, 'adolescence', meaning, 'to grow into maturity'. In this sense, adolescence is a process rather than a period, a process of achieving the desirable growth, attitudes, beliefs and methods for effective participation in society as the emerging adult. Whatever may be the definition, the psychology of the adolescent, who is no longer a child, but not yet an adult, is important in the study of human behaviour.

Adolescence—a Period of Physical Development

The concept of adolescence as a stage of physical development requires an understanding of the events leading to that stage. For example, pubescence or 'preadolescence' refers to the period of about two years preceding puberty and to the physical changes taking place during that period. It is characterized by a spurt in physical growth, changes in body proportions and the maturing of primary and secondary sex characteristics. Puberty is the climax of pubescence. It is marked by certain indicators of sexual maturity; in girls by the menarche or the first menses and in boys by a number of signs, the foremost being the presence of live spermatazoa—the male reproductive cells in the urine.

Early adolescence is from the beginning of the pubescent growth spurt until a year after puberty, when the new biological functions are fairly well stabilized. Late adolescence is more difficult to define, lasting until physical growth is relatively complete during the late teens or early twenties.

Adolescence—an Age-span

Adolescence has also been defined chronologically by age. For example, Hurlock (1978) designates the years from ten to twelve as preadolescence, 13-16 years as early adolescence and 17-21 as late adolescence. However, such arbitrary age designations do not serve any purpose since neither psychological nor biological maturity is reached so precisely or all at once. The ending of adolescence is so gradual that it defies identification in terms of points in time. There is also considerable variation in developmental patterns among individuals. The only use of arbitrary age designations is to provide a definite frame of reference to understand the various stages in life.

Adolescence—a Sociological Phenomenon

Viewed as a socio-cultural phenomenon, adolescence is the period in one's life when society ceases to regard him as a child, but

does not yet accord him full adult status, role or functions. The period of adolescence serves as social apprenticeship filling the interim between biological maturity and sociological adulthood. In this sense, adulthood is a cultural creation, indicating that a person is no longer in a dependent status, but is ready to accept the full obligations and privileges of an adult in the society.

Religious, governmental and familial groups have their own rules and customs for adults. Early marriage, crises in families and economic necessity thrust adulthood on some individuals even at an early age of 12 to 15 years. Sometimes adolescents may remain as children in the psychological sense even long after puberty, because of special situations or familial patterns. In the developed, prosperous countries, better health and nutrition have brought earlier physical maturing. Consequently the increased precocity of children leads to earlier social maturing. In such settings adolescents are given certain privileges of adulthood, such as achieving economic independence. They exact span of the adolescent period varies from individual to individual and from culture to culture.

Need to Understand Adolescence

The important reasons for understanding adolescence are

1 The special problems and stresses of adolescence
2 To assist youth in solving the problems
3 To utilize stress for total development.

1. *The Special Problems and Stresses of Adolescence*

Just as every other stage of life, adolescence has special problems which must be understood and solved by appropriate techniques based on a sound knowledge of the psychology of the adolescents. Most of the problems of adolescence arise from the confusion over the adolescent's role and status (role being the patterns of behaviour expected of youth in specific situations, culture and status) and the obligations and privileges attached to the role. Unfortunately, neither the role nor the status of the adolescent is clear in the Indian society. For example, an adolescent boy is treated like an adult man when working on a job, and like a child at home by his parents. Vagueness about the stage of adolescence and ignorance about the physiological, psychological and emotional needs of the most rapidly growing stage cause several stresses.

2. *Assist Youth in Solving Their Problems*

A knowledge of the psychology of adolescence is required to assist youth to cope with the special stresses which occur during the period. Over the years adolescence has been portrayed as a period of storm and stress, inner turmoil, transition and a way-station in development. In 1951, Hall wrote: 'Every step of the upward way is strewn with wreckage of body, mind and moral . . . there are new repulsions felt towards home and school and truancy and run-aways abound'. According to Josselyn (1959), the normal adolescent is inevitably a 'mixed up person although not psychologically ill. On the other hand, many psychologists reject the concept that adolescence is a stormy, mixed up period. In fact, some psychologists view that certain amount of conflict during this period may be desirable as a reflection of the adolescent's effort to find his place within society, without sacrificing his individuality. Apparently confused behaviour is simply exploratory and goal-seeking and examplifies the frustrations which normally accompany problem-solving behaviour.

Others may handle them temporarily but may become victims of their unhealthy outcomes. All need timely assistance. There is special stress at all stages and adolescence is no exception. Crow and Crow (1956) studied 100 college students, 50 men and 50 women who recalled unpleasant experiences occurring during the different stages leading to adulthood

from childhood. Each stage had its problems. Unpleasant experiences between ages 6 and 12 years centred around being forced to do unpleasant things and being disciplined. Disturbances during ages 12 to 18, related to personal inadequacy and insecurity, school failure, or denial of desired objects.

To understand the distress and the unwholesome features within the teen culture, a knowledge of the psychology of adolescence is necessary. Weaknesses within the culture, for example, unstable life due to economic upheavals, impart feelings of rootlessness. Within the peer group itself, the adolescent may be exposed to shallow standards of popularity and amusement. The members of the group may engage in an endless search for excitement and challenges, but since they also lack a sense of proportion and value, their excitement is often shallow and without satisfactions.

3. *To Utilize Stress for Total Development*

The stressful experiences an adolescent has had have significant influence on his total development. This is another reason for understanding the psychology of adolescence. Many factors add to the critical nature of adolescence and patterns established at this stage become a way of life. Problems left unresolved by the end of adolescence tend to persist. For example, the youth who fails to emancipate himself from his parents, is likely to remain dependent and immature all his life.

Adolescence is critical because the likelihood of modifying undersirable behaviour is greater than it would be subsequently. The very instability of early adolescence makes it easier to sort out childish way of thinking, feeling and acting to re-organize them on a more mature basis for development.

Adolescence is a critical period, also for the whole society, because individuals who fail to make the normal transition to adulthood become misfits, delinquents, criminals and their problems spill over to their children. The importance of adolescence must be measured by its presistent and prevasive influence. Parents, teachers and other significant adults must be ready to help the teenager, to pass the psychologically damaging experience and utilize them for his total development.

Since adolescence is critical in its long-term effects, the study of the psychology of adolescence is required to assist the teen-ager to accomplish certain developmental tasks particularly those his culture expects him to achieve. Havighurst has made important contributions towards identifying and defining developmental tasks as a frame of reference in which to study human behaviour and to plan educational programmes related to the characteristics of human beings from infancy through adulthood. Society demands that the adolescent during the ages 12 to 20 accomplish the following developmental tasks.

1 Accept his own physique and physical characteristics.
2 Learn satisfactory ways for getting along with agemates of both sexes.
3 Learn new and satisfactory ways for getting along with adults.
4 Achieve emotional maturity.
5 Achieve a measure of economic independence.
6 Achieve a degree of intellectual maturity and
7 Evolve a philosophy of life in harmony with the values which society upholds.

Adolescents do want to grow up in order to meet the expectations of their society. But most of them are forced to remain in a submissive position because of a host of factors, including the pervasive authoritarianism of the parents. Furthermore, the achievement of independence is dependent upon successful completion of still another developmental task, that of choosing and training for a vocation.

There is an urgent need for parents and society to understand the psychology of adolescence in the light of these considerations and facilitate the adolescent's achievement of total

development. The total development of adolescence heading to mature adulthood involves:

1 physical development, and
2 emotional development.

Physical Development

The physical self is of great concern in adolescence, than in any other stage of life, except perhaps, old age. Eevery human being is concerned about his body and its impressions on others, which in turn, influence his goals, moods, morals and popularity. Hence appearance counts at all stages and particularly so in adolescence. In adolescence new sensations, features and body proportions emerge. Consequently there is a great need for the developing young person to adopt the changes to his life and to the perceptions of others.

The physical changes occurring during adolescence symbolize with the termination of childhood. Adult proportions begin to take shape, although the nature, extent or duration of the changes are flexible. Therefore, the adolescent is anxious all the time. His concern on his physical parts exert an important influence on his emotions, frustrations and satisfactions. 'The changing body becomes a symbol, not only of being different from last month or year, but of a new attitude towards self, towards others, towards life' (Stolz and Stolz, 1944).

Puberty

Puberty is that time in the life cycle when the reproductive organs attain functional maturity and the individual is potentially capable of reproducing his kind. Pubescence is a period within which a series of changes occurs. The time of first menstruation, menarche, is the general criterion for the onset of puberty in girls. While no such single standard exists for assessing the pubertal status in boys, the first ejaculation may be considered as a landmark, although certain stimulations may produce it prematurely. Boys' maturity is reflected by changes in facial hair and voices, and the maturity of girls can be seen in terms of their figure and breast development. Boys, in general, mature about two years later than girls.

The order of pubescent changes in girls is: enlargement of the breasts; appearance of straight, pigmented pubic hair, maximum growth; menarche and growth of auxillary (underarm) hair. In boys, the order is: growth of the testes, pubic hair, first ejaculation, maximum growth, auxillary hair, marked voice changes and facial hair growth. Growth in adolescence is continuous rather than periodic, gradual rather than cataclysmic. There are also psychological reactions to changes involved in normal physical maturation.

The pubertal changes causing varied reactions in body build are also directly correlated with temperament and personality. Sheldon's classification identifies three body types with a corresponding personality type for each. However, subsequent research has found these relationships nonexistent, although they can be established in psychological and social terms. For example, the boy with a sturdy body-build, 'the mesomorph', tends to succeed in his social relationships simply because his figure approximates the cultural ideal. Since athletic prowess is valued and his body permits easy adaptation to sports, this boy has a comparatively better chance for approval and to become a leader among his peers.

The way the individual evaluates his body in terms of norms, has psychological effects of body build. Everyone evaluates his body according to the norms for his sex. Extreme deviations from the sexually appropriate figure can be embarassing. The adolescent who deviates physically may lose social status, especially with the other sex. Hence there is great concern among adolescents to improve their body build through diet, exercise, clothing and even psychiatry.

i. *Height*

A structural feature of the special concern in adolescence is height. Growth in height is rapid during infancy and early childhood. Thereafter it slows down and becomes steady until early puberty when it speeds up again. In the post-pubertal period, it levels off until maturity.

Concern over height increases with the degree of variation from the norm, modified by the individual's perception. Tallness in the male is desirable. The very tall one may win distinction in sports if he is also well coordinated and muscular. If he is not, his ego may suffer from failure to live up to expected physical standards.

Shortness isincompatible with the male ideal of dominance. Society takes the 'shorty' less seriously. Such a male may over-compensate by going in for exaggeration of masculine behaviour such as walking with great strides, bragging and bossing.

The very tall girls has even greater problems. Women's entrance into male professions has however made height something of an asset. Shortness is a problem for girls only when it is extreme or conflicts with personal aspirations for a career where personal height is a requirement. Height deviations are special problem for the shy persons who dislike being conspicuous. The well-adjusted individual can absorb considerable variation into his self-concept without being disturbed or undermining his/her ego.

ii. *Posture*

While height is related to posture, emotionally satisfying experiences help in maintaining a good posture. The individual who feels inferior tries to shrink his body in order to make a smaller target for other eyes. Tension contracts muscles and makes him stoop. Other causes of poor posture are an attempt to hide developing breasts, lack of self-confidence and poor health. If poor posture is related to health, a medical examination is required. Rest and suitable diet plus corrective exercises can ensure good posture. Adolescents must be encouraged to stand up straight and not stoop. Tall adolescents should be helped to realize that the one who stands straight is less conspicious and that the tall, straight figure possesses a certain dignity unachievable by shorter persons.

iii. *Weight*

The distress of overweight is a crucial problem during addescence. A fat person meets constant frustration. He hears humorous allusions to fatties and potbellies. The fat girl is spurned by boys. Clothes also do not fit them smartly. Therefore, all teenagers are worried about their weight.

A tendency to become fatter may be normal and temporary. For example, the body may accumulate fat before the limbs lengthen enough to take care of the additional fat. There is a weight spurt for girls between the ages of 10 and 14 and for boys about two years later. In general, fatty tissue decreases in boys and increases in girls after puberty.

The causes of overweight are both physiological and psychological. The individual's reaction to his own excess weight varies according to his behaviour under stress. Some obese persons avoid people, especially those of the other sex. Some may withdraw into day-dreams where they make romantic conquests that real life forbids. Others may resort to drugs and wrong diets. In an effort to retain group status they may adopt the role of a funny guy or scapegoat. An obese adolescent must seek the help of a physician and dietician.

The problems of the underweight adolescent are also serious. The girl may deplore that she lacks the softness associated with her sex. The boy may be concerned with the overall lanky appearance, which makes it difficult to find suitable clothes. Both sexes may acquire anxiety about the need to eat foods which they dislike. A thorough check-up by a physician can determine the desirable weights for them. Modifications in diet may take care of some of the problems. In other cases, underweight may be

related to other conditions such as excess fatigue, anxiety, irregular meals, poor food and habits of smoking, the causes of which are psychogenic in origin, call for the help of a clinical psychologist or psychiatrist. Long-standing problems of weight, of whatever origin, require expert assistance.

A negative attitude towards food (anorexia) in early childhood, when acquisition of proper eating habits is a major developmental task is at the root of many under-weight problems. Refusal to eat becomes an easy way to frustrate an impatient or unloving mother. Or it may be a way to get attention. In any case, eating has somehow come to mean something that awakens severe anxiety.

iv. *Motor Development*

Among the effects of physiological changes are problems associated with motor development which have far-reaching implications, especially for boys. motor performance reaches its peak during adolescence, in girls at about 15 years of age and in boys at about 18.

Both sexes decline in gross physical activity during adolescence, because there is less enjoyment in such activities. How much of this decline is a function of maturity is not known. Girls fear that by physical activity they are developing bulging muscles and unwomanly body movements. The significant skeletal changes are in the long bones and large muscle groups. It is in these areas that poor coordination is also found.

The relationship of motor ability to emotional well-being needs understanding. For boys, motor ability is important because of its association with aggressiveness and leadership. Mere teaching of motor skills will not ensure carefree, whole-hearted participation by either sex. Factors other than skills also influence the attitude of youth towards participation in sports. They include shyness, sensitivity, willingness to be roughed up, to be tested and to be defeated. The physical education progrmme therefore should proceed on a broad front with full consideration of all the objectives of education including aims for personality development.

Menstruation

Unless fertilization takes place, the menstrual flow occurs in females at intervals of about once a lunar month. Menarche, however, is not a reliable index to the progress of puberty. It may occur at various stages in the pubertal period. Banerjee and Mukherjee (1961) compared the age at menarche of girls belonging to the urban and rural areas from two South Indian states, Tamil Nadu and Kerala. They found that the mean age at menarche was 12.76 years and 14.16 for the urban and rural areas respectively. In a study of 305 medical college students in Delhi, Rao (1963) found the age at menarche to be 13.8 years. Madhavan (1965) reported the age at menarche for South Indian girls as 14 years. Natu (1966) computed the age at menarche to be between 13 and 14 years in a study with 613 college girls in Poona.

Logambal and Rao (1969) studied 500 healthy medical students and nurses in the erstwhile Madras state. They came across the mean age of menarche at 14.84 years. Gopalan (1973) found the mean age at menarche in rural and urban populations as 14.30 and 12.86 years respectively. In a study of nutritional status and menarche with 100 girls in Coimbatore, Gandhimathi and Jaya (1974) reported that about 70 per cent had menarche during 13-14 years. Those with better nutritional status as judged by weight and height standards attained menarche by 12 years.

The attitude of women towards menstruation varies greatly. To some girls, menstruation symbolizes the mother role to which they aspire. It makes them feel sexually mature and grown-up. It is also a handy way to get attention or avoid disliked duties. Menstruation is a traumatic experience for a considerable number of girls because of its sudden and dramatic onset. Thus a girl's attitude towards first menstruation is influenced by the nature

and accuracy of the information she possesses at the time, her general feelings about sex role, and the many ceremonies, customs and prescription about puberty in her culture.

Nocturnal Emission

Nocturnal emission is not as dramatic in onset or as potentially disturbing to the boy as menstruation to the girl. Nevertheless, boys may become anxious, if they are ignorant of the significance of this function. The major causes for the ejaculation are masturbation and erotic dreams.

Changes in Secondary Sex Characteristics

The Breasts

At puberty, the girl has a special problem of adjusting to breast development. Normally, development of the breast involves four stages. In the infantile or bud stage the nipple does not project above the surrounding surface. In case of gonadal insufficiency, the breasts do not develop beyond this stage. At about the age of 11 years, the nipple and surrounding nureola become slightly elevated. Further increase in the amount of fatty tissue results in the third stage resulting in the primary breast. In the fourth stage the breast enlarges still further to full adult size. Although some women never reach the last stage, they should understand that the primary breast functions just as well as the mature one.

Body and Facial Hair

A hairy face causes concern to both sexes and brings opposite reactions from each. For the girl facial hair is a cause for great anxiety. Hair in the face of women is called 'hirsutism' and is usually genetic in origin. When it is pronounced and other male secondary sex characteristics are also present, the cause is usually traceable to glandular dysfunction.

Auxillary or underarm hair is the same for both sexes. In addition, males have pigmented hair on the forearms, legs, thighs, around the nipples and on the chest. Boys, however, desire a dense growth of body hair because it is commonly associated with masculinity. Girls dislike it for the same reason. Pubic hair is important to the girl as a sign of pubescence.

Voice

Changes in voice in the male is initiated in early puberty and reaches an accelerated stage between the ages of 16 and 18 years. Male voice change is caused by the lengthening of the vocal cords. The boy may feel embarassed by unexpected shifts in his tone until he learns to handle his new voice.

Psychological Importance of Good Looks and Grooming

A combination of 'looks' and 'grooming' is of greater importance to a person's emotional health than any other single trait in general appearance. Among both sexes there is a high correlation between peer ratings of general attractiveness and appeal to the other sex. Hence efforts to win peer approval include careful grooming.

Emotional Development

Emotional development of the adolescent has three main aspects: (a) a mental component since it is a conscious experience on the part of the individual and involves feelings such as happiness, anger, excitement or fear, (b) a physical component since it embraces a vast complex of internal changes for each individual including muscular, chemical, glandular and neural activities and (c) a motive component since it involves continuous readaptation to the problems inherent in an ever-changing environment. The motive is often the centre, or core, of the person's emotional state.

Emotional experiences have therefore certain dimensions. They include the following.

a) Intensity of feeling ranging from a barely noticed twinge to the most powerful of passions.

b) Strength of motive or the impulse towards action—the individual who is sad desires to isolate himself; the one who hates wants to destroy.
c) Hedonic tone: the experiencing of emotion has a quality of pleasantness or unpleasantness or both.
d) Complexity or degree to which basic emotions such as delight, love and anger combine in varying and unknown degrees to produce complex patterns like romantic love, patriotism, sacrifice, awe and contempt. Actually most emotions are mixed, blending like adjacent colours in the spectrum. Even pleasant and unpleasant feelings may be mixed together causing ambivalent emotions.
e) Integrative or disintegrative effect, contributing to or detracting from goal-directed behaviour. The experiencing of emotion can serve such integrative functions as energizing the individual's behaviour, maximizing his strength in an emergency and lending effective tone to his experience. Disintegrative effects include unhappiness, mental confusion and undue demands on individual's energy resources. Regardless of its effect—positive or negative—emotion infiltrates every aspect of human life.

Emotionally Healthy Behaviour

An emotionally healthy person accepts his right to be human, laughs with gusto, expresses normal anger or fear without feeling guilty about it. He discriminates between appropriate and inappropriate circumstances for showing emotion. He controls his emotions, they do not control him. He experiences an inner freedom derived from confidence in his ability to utilize emotions properly. He also discriminates between positive and negative aspects of emotion. He recognizes that mild fear, worry and anxiety may be stimulants to right actions. He avoids the excessive tension that paralyses action.

Persons who guide adolescents should be able to distinguish between behaviour which indicates integrative emotions, and that which indicates disintegrative emotions on the part of a particular individual.

Emotional maturity is characterized by continuous readaptation of solutions to meet changing demands and establishment of that sort of relationship between self and environment which permits a manner of self actualization consistent with social welfare and external realities. Emotions appear in patterns varying with the situations.

Emotions during Adolescence

Love

Among the positive, integrative emotions, love and compassion are the most important. Montagu (1953) said 'The most important thing to realize about the nature of human being is that the most significant ingredient in its structure is love'. Love has a very special significance for the adolescent. He must satisfactorily sort out the different kinds of love he feels for family, friends, and mankind in general. Love may be active, promoting another's welfare; or it may be passive, simply accepting loving behaviour; or it may be mutual, with each of two persons engaged in promoting the happiness and growth of the other.

Love's companion is compassion, which involves entering into kinship with others who are in distressful experiences—sorrow, shame, fear or despair. The compassionate individual is not merely sensitive to how another person feels but he also cares why that person so feels. The adolescent's acquisition of a capcity for compassion depends on his experiences and adjustments. Exposure to experiences is necessary to permit him an intelligent comprehension of the situations to which different persons have different reactions.

Feelings of Inferiority

Inferiority feelings involve emotions of depression and shame arising from unfavourable

self-evaluation and are based on deficiencies either imagined or real. A person may have inferiority feelings in areas even where he really excels, simply because he falls below his own standards. These feelings are damaging and manifest themselves in many unfortunate symptoms. The person who feels inferior is hypersensitive to criticism. He feels that others are actively seeking his down-fall. He has tendencies to shyness, seclusion and daydreaming.

Several factors contribute to the development of feelings of inferiority. The adolescent's experiences in his home, peer group, school and society influence his personality structure. The adolescent may be hypersensitive to failure to live up to parental goals; he may feel inferior when his parents compare him unfavourably with siblings and peers. The adolescent is also deeply affected by the opinions of his peers. At this age, when physique becomes important in bargaining for sex favours, visible body defects may also give rise to inferiority feelings.

Some young people may feel inadequate because they belong to certain groups (caste). Achievement in the intellectual sphere is found to be significantly related to feelings of adequacy. Since the greater part of a young person's life is spent in school, his feelings about his scholastic achievement play a large part in determining his view of life as a success or failure. Help for the individual adolescent who feels inferior lies in guidance which will assist him in (a) identifying his deficiencies and finding ways to remedy them then and there and (b) adopting goals more appropriate to a realistic preception of himself.

Shyness

Shyness is more a manifestation of feelings of inferiority that an emotional state. The shy person feels self-conscious when he is with other people and withdraws from them. He has no confidence in his own social qualifications and fears exposing himself to ridicule.

There are several reasons for manifestation of shyness during the teen years. It is a socially oriented age; life revolves around the peer group. The teenager desparately wants to prove himself, and the very intensity of his need makes him more sensitive to his failure. At the same time, problems of self-classification occupy the forefront of his consciousness and make him very much aware of himself as a person distinct from others. The adolescent's shyness may also be residual from childhood experiences, especially from parental over-protection.

The problem of shyness can be solved best within the context of social situations. The shy adolescent should have ample participation in class-room projects and team work which provide social contexts and help divert his attention from himself. He should be assisted to develop the kind of personality and the type of social skills which will make his social contacts successful. Development of special interests, talents and skills which build his feeling of ego will increase his confidence and decrease shyness.

Feeling of Guilt

Guilt is a feeling of wrong-doing, of transgression. When a person sees his own action as having violated what is 'right', 'ethical' or 'moral' in a certain situation, he feels guilty and a sense of guilt is distressing and painful. Adolescents often experience feelings of guilt, born out of strong impulses in areas of conduct hemmed in with social taboos. They are accentuated by a cultural tendency to examine acts in terms of goodness and badness. The harrassing effects of feeling guilty are now listed.

1 Distortion of the expression and enjoyment of normal functions, such as sex behaviour and righteous indignation.
2 Becoming a need which, if unresoved, causes the individual to blame himself.
3 Leading to concentration on the goodness or badness of one's act, rather than on its effect.

4 Leading to apparently meaningless compulsions more serious results, such as delusions of sin or even suicide.
5 Causing an individual to feel that any pleasure-producing activity is wrong and an ascetic pleasureless life is right, and
6 Ultimately leading to self-rejection.

When oppressed continuously by feelings of guilt the individual can no longer relate his feeling of guilt to specific acts but sees his whole self—not his acts—as bad. On the contrary, a healthy individual perceives himself of his act, responsible for it but not made 'bad' by it.

Fears

Fears, worry and anxiety are feelings which arise as a result of one's relations to other people or to actual or imagined happenings in his environment. Fear is specific. It impels action to escape an immediately threatening and identifiable situation whereas anxiety is less sharply defined and therefore is persistently pervasive and makes its victim feel helpless and lacking in capacity to cope with the threat. Fears may be normal, exaggerated but limited to one area of life experiences, or as phobias, which are fears so irrational, intense and pervasive, that they threaten physical and mental health. Minor fears should not be ignored simply because they are common. Adolescents who seek advice as to how to deal with their fears should not be ridiculed. Their reaction to fears should not be minimized. For, every fear becomes an obstacle to full self-realization. Furthermore, to be told that his fear is silly, will only make the youth feel cowardly and inferior. He should be encouraged to talk about his fear. Verbal catharsis would enable him to let off tension and analyse its cause. If he fears water, he should be guided to take swimming lessons from an instructor who is skilled in dealing with timid persons. Once he is armed with the skill he needs in order to cope with situation he fears, he should be encouraged to deal with it, provided fear is the only obstacle to his doing what he wishes to do. Phobias are intense, persistent fears without reasonable foundation. They are more difficult to trace and explain than fears. Treatment of phobias requires professional help.

Worry

While fear subsides when the feared stimulus is removed, worry involves repeated mental rehearsal of the fear-producing situation. Worry is non-adjustive and involves continuously increasing tension which further reduces the worrier's capacity for effective action. Worry involves fear, anxiety, tension, and self-reproach in a complex state of mind. Adolescents are susceptible to many worries over choice of a vocation, school work, relationships with other people and sex. By questioning 18,000 high-school students Remmers and Hackett (1950) found that their worries centered round their weight, postures, study, expressing self, grades, unpopularity, conversation, friendships, temper, regrets and vocation. For both sexes, worries over examination were acute. In a study of 300 boys and 300 girls ranging from 15-20 years, Saraswathi and Jaya (1970) have reported social and recreational activities, adjustment to school/college work and personal and psychological relationship as problem areas about which adolescents got worried. The following suggestions may help the teenage worrier to overcome his problem. He should:

a) Allot sometime to consider his problem;
b) Confide in someone he trusts and talk it out. An impartial observer or trusted older person is best. Unfortunately, teenagers are often indiscreet in the choice of confidants;
c) Obtain full and authentic information concerning his difficulties.
d) Do something active concerning the source of worry; and
e) Seek professional help if he is not able to overcome worry.

Anxiety

Anxiety cannot be explained as clearly as worry and fear, because it is a blend of many emotions. Anxiety is more generalized, having reference to vague feelings of impending doom. The adolescent experiences many situations which are likely to serve as reservoirs of anxiety. Anxiety arises chiefly from strong impulses that are blocked by social taboos for example, anxiety over masturbation and sex impulses. Another threat to contentment is the need to make a vocational decision. Anxiety is also caused by school examinations, the need to meet social obligations and keep the head above the crowd. Adolescents whose early home environment was sad suffer from a certain amount of basic anxiety. Teenagers are subject to all the anxieties which had beset their families and culture. Anxieties—like the worries to which they are related—vary with the individual, his age, sex and circumstances.

There are no specific formulae for treating anxiety. Success hinges on discovering the causes of distress and removing them. Prolonged therapy may be required in the case of chronic anxiety involving reevaluating one's own resources and the threats offered by the external world.

Jealousy

Jealousy is a special form of resentment. It arises in an adolescent when he is threatened by actual or supposed loss of affection or prestige by a rival. Jealousy may be made up of varying combinations of threatened love, fear, anger, hate, anguish, failure, dejection and shame. The stimulus to jealousy is always social in origin. Adolescents tend to feel jealous with respect to their achievement in various areas—school, athletics, sex and in peer relations.

In order to overcome jealousy, adolescents' need to be helped to understand that their emotion is the natural outcome of their own deep feelings of inadequacy, based on real or imagined deficiencies. Their success in overcoming this feeling will depend on their arriving, either by themselves or through the help of others, at approved ways to win their full share of respect, admiration and love.

Depression

The emotional state of depression lacks the excited drives which characterize anger, fear and anxiety. Depression stems from failure to achieve some important goal, inability to solve some persistent problem, or from being involved in a life plan one does not enjoy. Essentially, depression is a self-punishing, harmful method of adjustment representing passive acceptance or resentment, instead of constructive solution. The more basic, though unconscious, causes of depression among adolescents are feelings of guilt and unworthiness. Depression is also likely to result from failure to achieve their self-ideal or from unpopularity.

Solution to depression necessitates discovering and dealing with its specific causes. Expert professional help may be needed. The depressed must decide upon action instead of passive resignation. His action may consist of analysing his problems and taking concrete measures to correct them. It may consist in seeking positive emotional experience which will throw out the depressive thoughts. Doing things for others will specially help him, because his activity is then directed outside and his thoughts are externalized. He may find it helpful to restructure his environment. Or, he may need to modify his goals, thus permitting the building of self-esteem through successes.

Hostility

Hostility is an act of showing enmity. Unlike depression which is passive in nature, hostility is active and seeks an object for attack. Anger is the underlying stimulus to hostility which is a condition of enmity, usually directed towards a person or person or none in particular.

A common cause of hostility is frustration. Persons in authority are more likely to arouse hostility in the adolescent, because they 'block' his road to independence.

The adolescent needs plenty of hard driving sports and creative activities to release his tensions arising out of hostility. Adults should cease interfering unduly with his goal-directed activity. His achievement of autonomy should be encouraged in proportion to his effort.

Helping Adolescents to Solve Their Emotional Problems

Solution to the problems and difficulties of the adolescent involves recognizing factors associated with their stresses and taking measures that will prevent the arising of emotional problems and helping them. Emotional stability in an adolscent results out of the interaction among the needs arising from within the individual forces, from the environment and the predisposition of the individual (Shanmugam, 1975). Adolescents differ with respect to emotionality, IQ, social class, family adjustment, sex behaviour and their environment. The sexes differ in terms of emotional stimulus, extent of emotion and degree of neuroticism.

The most important aspect of helping adolescents is prevention, that is, eliminating the conditions that threaten their mental health, and structuring their environments to make them conducive to the development of positive emotions. In this task, emotional deprivation, over-protection and severe discipline must be avoided. A start can be made by fulfilling the following common basic needs of all adolescents.

a) Assured and steady contact with persons of integrity and kindness.
b) A set of positive expectations.
c) Varied opportunities for wholesome expression of emotions (If emotions are properly channeled, they are unlikely to spill over and cause destruction).
d) Plenty of success in legitimate forms of behaviour. Adolescents can then develop favourable attitudes towards their way to good adjustment. If sound emotions already exist, it is hard for unhealthy ones to move in. It has been shown that healthy attitudes as measured by predominance of likes over dislikes, correlate positively with good adjustment (Anderson, 1952).

A healthy emotional climate alone is not enough, if the adolescent is to achieve emotional maturity. He must be helped to organize his life according to the principles of mental health. Only then, he will be able to adopt health as his standard rather than simply the absence of neurotic traits. He will be able to stand strong in the midst of all the common weaknesses. The well-adjusted adolescent will easily accept the unfortunate factors of life which he cannot change. He will recognize the inevitability of struggle between individual and social needs. He will adjust gradually to the facts of emotional conflict and their effects. He will accept the necessity of continuous readaptation and preservation of healthy emotions.

The following roles will facilitate adults in helping adolescents deal with their problem.

a) Recognize the crucial importance of establishing rapport with the young person, a comfortable relationship involving mutual trust. Even when an adolescent decides to seek help he may remain mistrustful and ready to revert to rejection and hostility. The adult's attitude towards the young person must express genuine respect.
b) Develop a nondirective approach, and help the adolescent understand his own feelings rather than prescribing rules.
c) Be permissive and remain calm, unshocked, expressing neither approval nor blame.
d) Guard against assigning motives to the adolescent's behaviour. Causes must not be confused with symptoms. An adolescent

may be aggressive and feel good about it or guilty about it. He may be unaggressive but have a fierce desire to be aggressive. Guidance, therefore must involve helping the youth see the effect of his attempts at adjustive behaviour.

e) Maintain proper record of the troubled individual's rate of progress, Progress may be very slow; behaviour which has taken a long time in making, is resistant to change. Signs of progress should be noted and praised because growing confidence will invite self-explorations.

f) Help the adolescent develop hobbies, sports and temporary distractions.

If improvement does not occur, perhaps the needs of adolescents have been diagnosed incorrectly, therapeutic means need modification, his difficulties may lie outside the normal range; or possibly the adult standards of evaluating improvement are inadequate or invalid. If the problems prove persistent, professional psychotherapeutic help will be needed.

The Adolescent in The Peer Group

The peer groups are composed of children or adolescents of approximately the same age, with similar interests and ideas. These groups often arise spontaneously to meet certain needs. A youth's association with a group may last a short or long time according to circumstances. Some groups are only slightly cohesive, others more closely knit. They may be social, anti-social or creative.

The adolescent's peer group relationships perform the following essential functions for him. They

a) satisfy group-hunger,
b) help the adolescent to clarify his self-concept,
c) define his social role,
d) broaden his values, and
e) help to win social approval.

a. Satisfaction of Group-hunger

The drive to escape loneliness is basic for the adolescent and he is hungry for the group. Peer relationships satisfy his group hunger.

b. Help to Clarify his Self-concept

Interactions with members of a group help to clarify self. Helen Keller, once reported that she was unable to acquire a real sense of self until she learned how to communicate with others. Each person sees in the looking glass his social self or his self as others see him. The individual's attitudes towards himself and his real or psychological self are modified as he looks at himself through other's eyes. When a person evokes praise or criticism he unconsciously develops self-attitudes that range from blissful self-love to extreme self-abnegation. The individual's socialization is like the working of a radar. He learns to send out signals to bounce them against targets--his peers and by the way the signals are reflected, he judges how acceptable they are to the receivers. The reactions of other people tell the individual whether or not he is on the beam. The development of sensitivity to others is an essential ingredient in the process of socialization. A positive relationship exists between an individual's self-acceptance and his approval by others.

c. *Defining One's Social Role*

Defining one's social role means organizing social standards and skills in the manner most rewarding to self and acceptable to others. Rich benefits accrue to an individual who behaves in ways approved by the group.

d. *Broaden the Adolescent's Values*

Through associating with groups, the adolescent picks up attitudes on varied subjects such as drama, cinema, nutrition, politics, marriage, space research and so on. The greater the opportunity for contacts with well-adjusted, thoughtful, intellectual groups, the more wholesome will be the ideas and attitudes acquired.

e. *Help to Win Social Approval*

As the adolescent learns what is his most useful and respected social role and acquires an understanding of others, views and sensitivity for their feelings, he is helped to win approval and establish a secure place for himself in the group. His identification with the group follows. The good of the group becomes his good. Civilization depends on both specialized individual effort and team work. Industrialization requires the training of a labour force made up of many groups with diverse functions. Further more, the delicate problems of living together in crowded housing colonies can be solved easily through respect for others. For social harmony, the concept of neighbourliness must be established firmly. Sufficient understanding of, and appreciation for, groups far-removed in geography, cultural background and political ideology must be developed in the adolescent, to permit peaceful coexistence and mutually beneficial contacts and interchange of ideas in adulthood.

Social relationships attain heightened significance in adolescence, which, is a crucial stage in personality formation with development of a unique pattern of traits characteristic of the person. It is at this stage that the teenager needs an opportunity for reflection in order to gain perspective an the fundamental issues of life as they relate to living with others. The adolescent is influenced by group pressures in the decisions he begins to make at this age. In his recreational interests, moral, religious and social beliefs, in his choice of a vocation, even in his selection of a mate, and in his decision as to when he will get married, he is likely to be influenced by the opinions of his crowd.

While adolescents reflect the values of the world and the social trends of the day, the peer-group patterns vary with communities. Their interests, conversation and activities become increasingly oriented towards the life goa ls of marriage and vocation. Some conflicts also develop, chiefly over the denial of privileges by adults. At the point of conflict, the adolescent peer group operates as a pressure group to win back the lost privileges for its members, and freedom from adult controls.

The peer group besides helping the adolescent develop independence plays an important part in building up his ego. The young person is given a social identity which has so for been denied to him by the society at large. He accepts responsibility for his share in the group's activities. He proves himself as a valued team worker. This status-giving function is very significant for the teenager. His crowd also becomes a means of obtaining a sense of beloning. At this time, the peer group holds up a frank mirror in which the adolescent sees himself as he appears to his age mates. Although his parents and siblings may refrain from being candid, the peer group makes both his success and his failures crystal clear.

Many factors enter in to social adjustment and behaviour, each sex has its own standards for appraising the other. Traits such as cooperativeness, helpfulness (Figure-41), unselfishness, good look, courtesy, cheerfulness, enthusiasm, friend liness, self reliance (Figure 42), consideration, self-control, even temper, initiative, resourcefulness, and dependability enhances ocial acceptability. On the other hand, talkativeness, restlessness, selfishness, vulgar language, conceit, swearing and bragging are disliked by peer groups.

Judgements of the other sex vary according to different ages. Good looks are rated increasingly important during the adolescent period. Girls like boys who are tidy, masculine and have a sense of humour. One factor that has constantly been shown to affect popularity is whether an adolescent is being physically mature. Early maturers are generally more self-confident, independent and capable of playing the adult role in interpersonal relationships.

Among the environmental factors, a happy family life correlates more closely with social effectiveness. Parents who restrict their

children's social contacts seriously affect their children's peer relations in contrast to those who send their children away to camps or open their homes freely to their children's friends.

Adults are generally indifferent to the existence of the peer societies, probably because they are not aware of the dual social system in which children and adolescents live today. They expect a youngster to follow the rules of his group without violating those of the adult world. Such conflicting demands place him in a dilemma. His instructors demand long hours of study while his peer group involves heavy social obligations. The unhappy adolescent is caught between these opposing pressures. If adults are to understand the adolescents, they must become aware of the dynamics of peer groups and their influence on the lives of their members.

Adolescent peer groups may be either formal—those with a reasonably permanent structure like a club rotaract, scouts, youth club and associates or informal, those which tend to appear and disappear, assemble or dissolve, depending upon the occasion. The most common informal adolescent groups are friendships, cliques, and crowds. The typical late childhood peer group, 'the gang' disappears by adolescence, giving room to adolescent gangs.

Formal Groups

Participation in organized clubs is important to adolescents for several reasons. They gain experience in planning goals, programmes and activities co-operatively and intelligently. They have opportunities for sharing special interests and skills like hobbies and sports. They learn group roles such as constructive leadership and fellowship.

Adolescents need opportunities for developing initiative and responsibility. They need adult guidance also. Research should be devoted to determining how organized adolescent activities may be utilized more effectively in the development of adolescent personality.

Informal Social Groupings

Friendships

Close friends or chums, usually of similar age and social class meet together. Propinquity is a major factor. For example, college students who stay in hostels tend to choose friends from the same floor of residence. Developmental stage has a big effect on friendship. Younger children choose friends who will fit certain roles as playmates. Older children care more about personal characteristics. For this reason, friendships in adolescence have more qualities similar to those in childhood, in dominance, self-sufficiency, self-confidence, security and social adjustment generally. Sometimes traits are complementary rather than identical. Each friend fulfils some special need in the other. The boy who is hungry for power seeks someone he can dominate. The pretty girl associates her-self with a plain one.

In general, girls put a higher value on their close friendships because they have fewer outside interests. Boys have more confidence in their friends than girls. Friendships become increasingly stable with age. As a close friend serves a person as a mirror helping him to see his faults better than anyone else can, friends tell each other about conflicts that might otherwise be repressed. Uma confesses to Usha her fears about sex, thereby lessening them somewhat, because she has talked about them. A close friendship is a solace to many youngsters because of the difficulties of social orientation they experience during adolescence. Being valued as a friend enhances feelings of security and self-respect.

However, the effects of friendship are not always good. The ideals of one may be unhealthy or incompatible with those of the other. For example, Ramesh urges Prakash to smoke and drink. These are practices Prakash had

never known before. Another illustration is Srikanth and Ravikanth who have grown so dependent upon each other that they seek no contacts with others.

Adults can assist youth in developing desirable friendship by providing the right type of opportunities for young people to meet each other. They can also stress the cultivation of such traits and skills which will make others seek their friendship.

The Clique

The clique is a small exclusive group made up of three or more individuals who possess similar interests and sometimes a strong affection for each other. Some cliques may be due not so much to affection as to the bonds felt when excluded elsewhere. The members of a clique are usually of similar social status, although someone with a different background may be admitted if he shares the same interests and can contribute to the clique's activities. Younger cliques are usally of one sex. Girls are more cliquish than boys, possibly because they have less chance to gain status through jobs and sports.

The Crowd

The crowd is larger than the clique and not so closely knit. It is also more impersonal. There may be one or more cliques within a crowd. Generally, a crowd begins with a clique as a core and new members are added gradually. The additions may come in singly, in groups or as whole cliques. Sub-groups within a crowd may cooperate or retain a considerable degree of autonomy.

The crowd differs from the groups of childhood in several important ways. The members of the crowd are carefully chosen presenting a closed door to outsiders. A non-member cannot simply join. Childhood groups look for adventure while crowds may get into mischief. The members of childhood groups are of the same sex; while crowds are fairly evenly divided between the sexes.

Groups are effective instruments for social action and education (Figure 43). They provide opportunities to their members for absorbing the manners, morals and culture of the community. The crowd's leaders are its arbiters and the members ordinarily fall into line in observing the rules. Conversations in the crowd provide opportunities for judging people of many sorts and for understanding their ideas and emotions. Members also get opportunities to clarify their views on character, motives and life in general.

The Gang

The adolescent gang possesses some of the characteristics of both formal and informal groups. The gang evolves spontaneously from the play groups of pre-adolescence which it closely resembles. It is an aggressive action group, usually of one sex only, with concrete goals and a structured organization. When it comes into conflict with law, its defences are : strong group solidarity, strict loyality, secrecy and physical strength. Years of close association and resistance to authority weld gang members into a close-knit and highly complex system in which the status hierarchy is rigid and each has his role.

As for their leaders, such assets as physical prowess, ingenuity, fearlessness, cleverness and fighting ability are requisites. The leader has great power and no decisions are made without his consent. At the same time, when he deals with gang members he must be fair, loyal and generous.

Certain kinds of situations combine to strengthen the gang. Segregated areas like a slum permit a separate subculture to exist. Within a given gang, a characteristic type of activity predominates with a more or less fixed routine. To avoid conflicting interests, a gang's operations are restricted to its own sphere of influence, the violation of which may lead to open warfare with other gangs. Eventually the members approach adulthood, find better jobs, get married and settle down to observe the

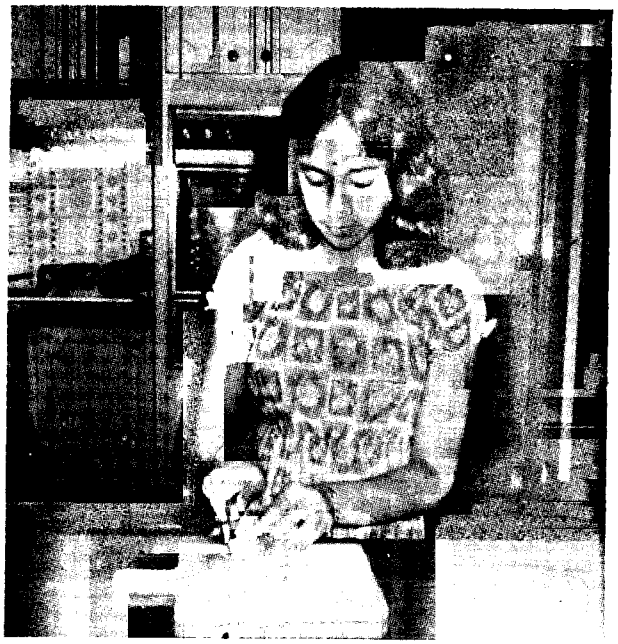


Fig. 41. Being helpful.

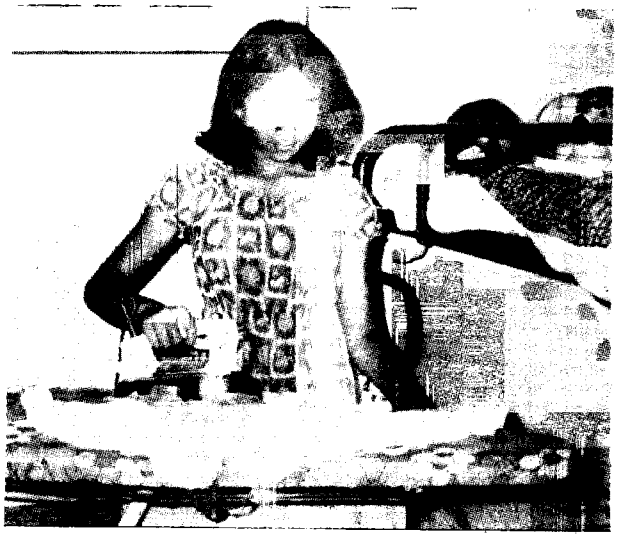


Fig. 42. Being self-reliant.

Fig. 43. Group endeavour by adolescents.

codes of society disintegrating the gang.

The functioning of any group involves a division of roles among its members. The nature of these roles depends upon the composition of the group and on its special needs. A group of intellectuals may require a leader of high creative ability to organize its activities. Designating roles help each member of the group know what to expect of the other member. Thus the continued functioning of the group is assured.

Certian problems of social development or 'pitfalls' exist in these groups. They deserve special consideration. The most obvious is the failure of an adolescent to achieve even reasonably adequate social adjustment. Everyone is familiar with the boy or girl whose rating by the crowd is low. Those with low popularity ratings are of three general types: (a) the do not care type, (b) the overlooked type and (c) the rejected type.

a. The Do not Care Type

A few are mavericks who care little for getting on with the group. Vinod has such a consuming interest in mechanics that he spends most of his time in his father's automobile shop. Ragunath matured early and the activities of his age mates seem insipid, shallow, and meaningless to concern him seriously. Latha is so sensitive that she cringes before the frankness and boisterousness of her peers and chooses to keep away from them. Ashok felt himself rejected by his fellows when he was a boy. He did not know how to get along with people and has had to compensate for his isolation by learning to enjoy what he does by himself.

b. *The Overlooked Type*

This type is not so much socially rejected as socially neglected. Such persons are overlooked. They lack stimulus value. Their social interaction may be increased by having them work with small groups, putting them in minor positions of responsibility and building up their self-confidence. Their introduction to group activities should be gradual so that the small social skill they possess will be sufficient to cope with the situation.

c. *The Rejected Type*

This type of adolescents is fully aware of being socially rejected. They would love to belong but are rebuffed. They just do not know how to deal with others. Such socially rejected adolescents are in addition to not being liked, generally untidy, restless, talkative and not good-looking. They lack the necessary qualities, grooming, and social skills to be successful.

The plight of the teenage isolate is rendered more acute by the highly exaggerated emphasis on popularity by his peers. The adolescent's status is largely measured in terms of the number of friends he has, regardless of the quality of the friendships.

The typical adolescent holds the conviction that he must conform in order to be popular. This is manifested by his slavish submission to group norms. Determined not to jeopardize his status, he goes to any extreme to avoid offending some one who counts in the peer group. Yet the insecure individual who overconforms is likely to forfeit the respect he so desperately seeks. Many adolescents swim with the social stream largely from habit, a habit so ingrained that they feel uncomfortable when they do even the slightest original act.

Assisting Adolescents in Achieving Social Maturity

Stone and Church (1957) spell out the major goals of socialization as (a) satisfactory human relationships, (b) concern for social problems, (c) a democratic code of ethics, which means sensitivity to others' feelings and a respect for their integrity. According to Jourard (1958), healthy interpersonal relationships have seven main characteristics. Each member in a

desirable relationship has the following charecteristics.

1 Has an accurate concept of the other's personality
2 His likes of the other's traits are considerably more than dislikes.
3 Feels concern for the happiness and growth of others.
4 Act in ways which will promote the growth and happiness of others.
5 Communicates fully with others.
6 Imposes no unusual demands on others and expects nothing unreasonable from them.
7 Respects other's rights.

The essence of these specifications is that the adolescents should learn how to function effectively as a member of the group without jeopardizing his own integrity as individual. Adolescents need help from adults individually and collectively for this purpose. Adults need to help them in their social development, by skilful activities. Small group activities may be planned in order to encourage the shy individuals to come out of their shells. Less popular individuals should be permitted to demonstrate their abilities trips, seat mates, fellow committee members and the like through arranging field. Help can be given to make friends.

Special-interest clubs should be organized with specific roles for adolescents. In such clubs selective membership must be discouraged. A healthy class-room atmosphere is also important. The teacher who keeps a cheerful room sets the stage for friendliness. On the other hand, the teacher who shows favouritism sets an example for snobbery. The one who maintains an authoritarian atmosphere allows his less popular pupils become scapegoats. Any hostility that the class feels towards the teacher, but cannot express, may be turned on weaker classmates.

Recreation centres can help in promoting social adjustment among adolescents. Even more basic for the adolescent is a continuing concern for his total development. The way a person gets along with others is deeply rooted in the complexities of personality. The insecure, unhappy individual is likely to be introverted, that is, preoccupied with his own problems and on the defensive against others. In numerous ways, everyone projects his own personal problems into his dealings with others, thereby colouring the quality of each relationship. Hence, the task of adjusting social relationships can proceed soundly only within the context of total personality development. Research into the dynamics of human behaviour based on full case histories is needed.

Mental ability encompasses not only intelligence but also all the factors which an individual is able to work at a given time while coping with his environment. Ability is a compound comprising intelligence persistance, physical endurance, attitudes and cumulative learning experience. Certain characteristics of mental growth in adolescence and the relation of this period to the total life-span, have special significance for education and guidance. Firstly adolescents continue to grow mentally even though the rate might have declined. It may be the last period for most persons when the individual can allocate a high proportion of his time specifically to mental growth.

Each individual's mental growth pattern is unique. The growth of some individuals alternates between heightened quickenings and slowings. Others are relatively stable, manifesting fairly steady progress without spurts or lulls. Still others are both labile and stable. Hence as Bayley's finding suggests there is need for the individualization of the curricula. Some adolescents are ready to delve deeper into the subjects earlier than others. Some may not be ready for more complex material until often they have climbed again following a long period on a plateau.

Some adolescents reach their peak before others. Repeated testing of every teenager is

needed to determine whether, in fact, an increase in mental capacity has taken place and if so, to introduce more challenging materials to him. In any case, one must go by the individual's own growth curve instead of some composite curve in helping him to define his goals.

Another characteristic of adolescents is increasing mental stability, and this is true despite the uneven mental growth patterns of some individuals. Therefore the teenager's chances of maintaining his relative position in the group are better than at earlier ages. Thorndike (1948) concluded that IQ is sufficiently stable by adolescence to make guidance on future educational plans possible and feasible. This stabilization helps vocational choices.

Mental ability has many-sided aspect. By adolescence, the psychological and physical traits which greatly modify mental performance, such as stamina, persistance and attitude, are fairly well-established and increasingly resistant to change. Mental growth contributes to self-realization of the adolescent and has a significant place in his total development.

The ability to deal with abstractions and to manipulate ideas gives an individual feelings of confidence and power which help to counteract the vicissitudes of growing up.

The Mentally Superior Adolescent

Every adolescent has special problems of mental development, reflecting his own unique needs and mental growth pattern, but some groups require more differentiation of education than others. For example, the complexity of modern problems requires concentrated attention in developing the capacity of mentally superior youth. Some of the mentally superior are unusually high in creativity rather than in IQ, whereas others are very high in IQ but not in creativity. Both groups prove equally superior in school achievement but the more creative ones are more humorous and imaginative and introduce a playful theme into fantasy productions. Little has been done in our school systems to help gifted youth to realize their talents to the maximum. In some instances their ability is simply dormant, while others are hungry to learn but are left to grab for mental fare.

Many schemes have been tried or proposed for making the most use of intelligence, each with its special advantages and drawbacks. A child who is double-promoted several times may have difficulty in adjusting to classmates who are physically and emotionally more mature. 'Skipping' may also involve omitting certain of the essential learning activities. There is a need for bright students to be steered into the kinds of programmes which challenge them to maximum motivation. A second need is to educate the public to put a proper value on the contributions of bright persons like the renowned scholar of mathematics, Sri Ramanujam and the great poet and leader of India, Sri Subramanya Bharati. Unfortunately, creative intellect is more often tolerated than actively encouraged. Methods must be found to dispel the mistrust that make people rationalize their wrong attitudes towards the unusually brilliant. One means is to assist the bright to achieve maximum self-realization, thereby reducing any tendencies to build self-esteem at the expense of less able individuals. A second means, and this is more important, is to enhance appreciation of ordinary degrees of talent so that the just average individual has a better concept of himself and hence, less reason to envy his really brilliant peers. Furthermore, increased differentiation of curricula will lesson competition for the same goals between persons of unequal ability.

The bright children generally have their own special problems. They suffer from being identified with the stereotype of the weak intellectual. Teachers often resent being pushed to the limit of what they know by smart boys who are more likely than girls to issue instructions on the spot. Reared to be more aggresive,

boys raise tougher questions and demand the answers. Under such situations, help for these boys may take several forms.

1 Achievements of boys in intellectual fields should be played up by the schools ignoring superficial performance.
2 Bright, personable male teachers should be employed to give the superior male a figure with whom he can identify.
3 Exciting learning experiences should be provided for brighter youth, who readily perceive the higher value of such experiences as compared with more shallow satisfaction.
4 Teenage culture might be reoriented to provide less distraction from mental pursuits.

Problems of the Bright Girl

Various obstacles are in the way of the mental development of the bright girl. The cultural climate in India is still far from being favourable to the female intellectual. Generally girls accept the common view that women have less to offer intellectually than men. The result is that girls become discouraged from seeking higher learning.

The Slow-Learning Adolescent

At the other extreme are the slow learners whose first requirement is that some one should discover the cause of their individual retardation. Many are mentally normal but poorly motivated. Others are simply late maturers. Still others appear to be genuinely handicapped. IQ tests and interviews are needed to distinguish among these conditions. Teachers should refrain from scolding a mentally retarded child without proper understanding, asserting that he could learn if he only would.

The dull child is an unhappy misfit in the schools. Teachers and peers all too often look down on him as a lower order of being. They treat his failure to learn with impatience, as something to be punished or due to disobedience or lack of moral character. By adolescence, he stands dejectedly on the lowest rung of the intellectual hierarchy, already firmly entrenched. Therefore he leaves school as soon as possible. In some cases it is better for the dull child to leave school and be helped to find a suitable job. A job, at least an unskilled one, may serve to focus his energies, build his self-respect and give him a purpose in life.

The Adolescent in the Family

The home and family have special significance during adolescence. In spite of the rapid changes within the modern family, the home is still the most potent factor in regulating the behaviour of young people. Parental standards help adolescents to face the challenges when they are on the threshold of a new world, with its threats and complexities in life. When the adolescent is faced with conflicting standards and counsel in areas where society has no clear-cut answers, parents are the refuge for him.

Family Climates

The climate of the home is significant because of its far-reaching effect on its every member. It is the over-all tone arising from the various experiences and conditions of the family. Encouragement at home is necessary if a child is to establish good relations with people. Hence a healthy home atmosphere and the factors that produce it are very important influences on the adolescent's outlook and life. The climate of the family has many dimensions: emotional, economic and physical.

Emotional Climate

Among the ingredients of a healthy climate is the type of emotional atmosphere which helps create in each member of a family a habit of being happy. Here the parent sets the tone. The emotionally healthy child is the child of emotionally healthy parents. A happy child subsequently becomes a happy adolescent.

The essential characteristics of the emotionally healthy climate at home are parents' adequacy, warmth and freedom. The parents should reflect feelings of adequacy and satisfaction with each other. Parental sex difficulties and conflicts, dominance of husband or wife may lead to poor adjustment in the child. Children's emotional disturbance may also be closely associated with other inter-parental tensions such as those caused by lack of co-operation or poor health.

A second ingredient in a healthy home climate is a warm but not possessive attitude of the parents towards the child. Thirdly, a real home is a place where the adolescent can be himself witbout suffering untoward consequences. Here he can revert to childishness if he needs to. Wise parents recognize the teenager's need for a place in which he can let his guard down. They see his regression to younger ways in proper perspective. The teenager needs active response and encouragement, a tonic of recognition for his ego, and vitamins of affection for his emotional diet.

Economic Climate

Another important aspect of home climate is its economic well-being at all times, particularly during adolescence. Refreshments at the canteen, club memberships, outings and many other obvious and not so obvious necessities of social life require money. Money is important in indirect ways as well. Living in a good house and having a vehicle give the adolescent an increased feeling of adequacy. Self-esteem increases as he rises in the eyes of his peers. Lack of money has the reverse effects. The deleterious effects of poverty on the personality of the adolescent are well known.

The economic climate of the home involves not so much the actual cash available, but a sense of economic well-being derived from wise management and healthy family attitudes. Better management achieved through discussion by the family as a group, gives the teenager valuable experience in dealing with money. The economic strain in a family may be eased if other family members supplement the bread-winner's income. Mother's working for income and part time jobs for the teenager may lessen the burden. Job may also make the adolescents more mature provided it is visely chosen and does not interfere with his schooling.

The Physical Environment

Financial hardships limit the physical facilities of the home, space and amenities. An over-crowded household produces personality problems at any age. Enough space for the teenage child is particularly important when he is becoming increasingly conscious of himself as a distinct personality. He wants a room of his own for privacy.

The home should be attractive as well as functional if the adolescent is to be happy. The boy's special need is for a place to entertain his friends, or a place all to himself where he can work on hobbies or have a party all his own.

It is important that the rights of the family are also respected. Younger children will resent giving up all the facilities of the house to teenage siblings. Some compromise must be worked out to avoid tensions and frayed feelings.

Role of the Adolescent in the Family

Family climate is a product of the interactions of all the family members who, as a result of interactions, come to assume special roles. Each relationship is unique. Among the most important factors which determine the quality of the relationships are the number and spacing of siblings and specific situational factors within the family.

Family roles persist but adolescence brings modifications. The role of the child is no longer appropriate to the adolescent and growing up requires change. The family baby must assume more responsibility and the family tomboy

must subdue her behaviour. Sometimes, a role-lag occurs because parents may persist in perceiving the adolescent as a child or the adolescent himself may feel no urge to change.

Situational factors account for role modification. If the father dies, the eldest teenage boy becomes the family wage earner, Consequently, the son skips entirely adolescence in its essential aspects. His responsibilities and worries become those of a man. In such emergencies, the relatives or the surviving parent name a tendency to make a scapegoat of one child, often the eldest. But when all work together, individual personalities are strengthened and family harmony increased. Role modifications are set by sex also. The boy's role becomes more dominant at adolescence because normally in the Indian culture, an older male acquires heightened prestige and greater prerogatives.

Family roles are interdependent, in which the three important special relationships are sibling relationships, parents' attitudes towards teenage children and teenage children's attitudes towards their parents. In the context of these relationships, the most important factor in role modification is the adolescent's effort to find himself. He tries himself out in a new role in an effort to enhance his personal status. But families often make an unsatisfactory audience for this role-play; parents criticize and siblings tease. Parents need to understand sympathetically these fumbling efforts to prop up personality and help by their positive comments and actions. The teenager discovers the forms of behaviour that produce effective results through trying out various roles. Parents can reinforce the desirable features of these roles in many ways.

Sibling Relationships

The sibling relation is an intimate one. Within the same home, brothers and sisters share the same facilities and work and compete for what their home has to offer, including privileges and affection. Much research needs to be done to determine the effect of sibling relationships on adjustments. Landis (1954) reports that the number of siblings in a family affects their achievements, experiences and problems. However the optimum size of the family needs to be studied. Parents can have greater impact on chlidren who are spaced wide apart. On the other hand, siblings have greater effect on children who are close togethers in age. In largers families the oldest may be something of an assistant parent. Reviewing relevant studies, Rogers (1957) concludes that:

'The advantages of having siblings outweighs disadvantages. The presence of siblings affords a situation in which the child can learn to get along well with other children. He learns the lesson of give and take, to share his possessions and defend his rights. Older siblings afford a measure of guidance (Figure 44) and pave the way for him in his peer world. The older child benefits from living up to the ideal of the younger sibling, the younger child from having his older brother or sister as model. His feeling of belongingness is increased because he has more affectional ties'.

While sibling position does have definite effects, the interplay of factors is too complex to predict the effects of position alone. Each factor modifying the sibling relationship derives its significance from the way it functions within a specific situation. Sibling relations of adolescence are rooted in childhood. Several principles can help adolescents improve this. First, the adult must try to discover how the teenager perceives each of his siblings in the light of his own special needs. For example, Krishna looks to his older brother Shyam for guidance in the process of freeing himself from parental domination. To appeal to the parents would be to confess his dependency. Balu, who is 17 years old and unpopular with his peers, seeks to solve his ego by domination over his younger brother Shiva. Shiva, in turn, may either submit or fight back. The same is the situation with regard to an

Fig. 44. Guiding siblings.

over-bearing parent. Adults who appraise sibling relationship must take the longitudinal point of view. They must dig into the past and attempt to discover that the future outcome will be. Thirteen-year-old Anandi quarrels with her eight-year-old brother Gopal. The quarrel may be founded on jealousy that began at his birth. However, relations between siblings tend to become more amicable with the passing of time.

Adolescents' Relations to Parents

The personal prestige of the teenager is tied with his parents. Hence, at an age when social status counts heavily, the adolescent views his parents more critically than before. A problem basic to parent-adolescent relations is conflict over authority and submission, including the adolescent's right to achieve emancipation and methods of discipline. For many reasons the parent has difficulty deciding just how much authority he should exercise over his adolescent child.

In a study with a group of 60 high school students, Jaya (1978) found most of them highly complimentary about their parents. The typical replies indicated that the parents gave them everything they wanted. They talked together about the future of their children, their education, college and social life. They have their friends over whenever possible. They set standards, but the adolescents did not mind obeying them because they knew they are for their welfare.

Adolescents also meet with conflicts with parents. I was just longing for freedom when I was in high school, but my parents continued to think of me as a little boy. Everytime they questioned 'Where are you going'? 'With whom?' and said, 'Get in within half an hour or before', it aggreived me—this is the usual adolescent complaint. Quarrelling with and teasing a brother or sister and disobedience can also be the causes of parents' complaints about adolescents. Difficulties may not arise so much from conflict situations as from the way they are handled.

Parents are often torn between pressures to be lenient or strict. The picture today is one of declining authority in the home. The young person's right to maturity takes precedence over the parent's demand for obedience.

Confusion arises from conflicts between the roles of parent and child. Adolescents seek adult privileges while resisting the responsibilities of the mature. Parents, in turn, insist that their sons and daughters act as if they were mature but deny them adult privileges. Eighteen-year-old Kalyan wants to drive the car but his father says, he is too young to use the car. Kalyan resists the idea and thinks that he is no longer a child. Parents vary widely in their attitudes towards the emancipation of the adolescents. Restrictive fathers tended to be submissive, suggestible and little self-assured. They fed their ego by asserting authority over their children or by prolonging their dependency.

The mother is more likely to be over-protective, because she is charged with the child's care. His misdeeds and failings are attributed to her faults. The father is away at work all day, while the mother is in closer proximity to her child. She feels the impact of his problems more keenly. Her existence has revolved around the axis of her children. To acknowledge that they have ceased to need her is to concede that her major functions in life no longer exist. When the father is absent for long periods from the home or is dead, the children's dependency on the mother increases.

Certain subgroups within the culture have their own special handicaps blocking the way to emancipation. In this regard the differences between the treatment of the two sexes are great. Boys' problems in seeking emancipation centre around specific privileges such as spending money, returning home late and smoking. The problems of the girls are more basic, centering on the issues of proper sex role. Parents

are more likely to impose strict goals upon them, interfere with their personal affairs, friend-ship with boys and the like. The daughter's dependency ties are not severed at the end of adolescence. Parents' attitude tends to verge on domination and to persist right up to the girl's marriage—regardless of her age. But the sons are given more freedom to be on their own.

The double standards of sexual morality, which is hard on girls for misconduct continues. Overprotection is a result of parental rationalization of the need to prevent the girl from falling in with bad company or from getting a bad name. The adolescents' reaction to such treatment depends on the emotional climate in which the domination occurs. If they had been subject to firm but not harshd omination, accompanied by loveand affection, they may benefit. Such dependency has always brought its rewards. On the other hand, in other cultures as Lewin *et al.*, (1939) point out, over-strict control may have far-reaching adverse effects on the developing presonality, with such opposite consequences as passive dependence or aggressive social behaviour.

Achievement of a proper balance between freedom and dependence is not the task of one stage, that is, adolescence, alone. It is a continuous gradual process which begins in childhood and continues to involve the acquisition of many skills and attitudes needed for self-reliance through the subsequent stages. The individual who ultimately achieves independence from parental control accepts the necessary authority with grace. This soon-to-be-an-adult is a person in his own right. Parents must not consider his demand for money or a room of his own as trivial or unnecessary. These concessions are important for what they symbolise his growing up and assuming responsibility as a person. To understand his point of view, adults must have constant reference to his age mates' opinions and ways of doing things. Adolescents reared with such understanding are more cooperative, self-reliant, considerate of others and have better relationships with their parents. Gandi Damayanti and Anandam (1967) studied the disaggreements between adolescents and their parents in the concepts how adolescents should behave, on 50 adolescent girls of 15-20 years of age, and their brothers in the same age group and their parents. They found that maximum number of disagreement occurred between adolescents and their parents in the area of relationship with adults and teachers and the least in the area of social participation. Among the variables in family background, mother's age (the older the mother) and father's travel (the greater the level) outside the home were associated with a greater number of disagreements between adolesents and their parents. The reverse was true in the case of mother's travel outside the home. Education of either parents did not affect the disagreements between adolescents and their parents in any particular manner. Parental adjustment to adolescents is as crucial a test for the parent as for the adolescent himself. On both sides there should be preparation for the time when the children will be on their own.

An important aspect of the authority versus submission problems is when and how parents exercise discipline and administer punishment. Scolding appears to be the most frequent form of punishment. Slapping is also frcpuently resorted to.

In assessing the effects of punishment, parents must distinguish carefully between what is firm but fair and what is harsh and perhaps unfair. Some degree of strictness strengthens the growing child's personality. When strictness approaches rigidity, the boundaries and standards become so sharply defined as to confine rather than guide. Harsh, too-strict punishment has undesirable long-term efforts. Thereby a permanent wedge may be driven

between the parent and the child. The child's resultant feelings of hostility, resentment and fear may generalize towards all authority.

The adolescent's attiude towards authority is based upon the reactions he had learned towards his parents in his childhood. Whether passively accepting under stress, conditionally accepting, overtly rebellious or resentful, will have their overtones in subsequent stages throughout an individual's life. Any situation requiring his submission to a superior, unconsciously reactivates his feelings towards authority figures in the home, a fact especially significant for job adjustment.

Unwise punishment has many other unfortunate by-products. Punishment affects girls more adversely than boys. Teenage girls are more directly under their mother's jurisdiction, and take punishments emotionally when administered by the mother with whom they identify sexwise. Further more, since girls are taught to be chaste they experience stronger guilt feelings when they disobey.

Punishment rightly used in adolescence is a helpful tool of guidance. Ever-present social reality demands that young and old be taught to control their urges and to adjust their personal wishes and desires to those of others. Unless boundaries are made clear, the adolescent is tempted to determine just how far, with impunity, he can go. Punishment that is fair and consistent will accomplish its purpose if the parent-child relation is good.

One aspect of the emancipation problem is the conflict arising from the teenagers' insistence on following fashions and peer standards concerning dress, hours, places of recreation and the like. For the same reason, parents who curtail their children's freedom may insist on the priority of their own demands over those of the peer group. They may also disapprove certain typical adolescent behaviour.

Intelligent parents realize how essential is the adolescent's need to be accepted by his group. They perceive development of group loyalty as a healthy part of the trend away from self-centredness. Therefore wise parents often compromise or even concede in matters that are less serious. They save the flat 'no' for the crucial situation. Even then, they show the youth they know how he feels and they make it as clear as possible why they are giving the veto.

In most cases parent-youth conflicts subside at the end of adolescent period, if the youth leaves home. However, the residual effects of conflict on personal and social adjustments are far-reaching. Since a great number of girls than boys experience increased conflict during the pubescent period, residual damage in the woman is likely to be correspondingly greater. Hence the effects of conflict should not be belittled. They should be reduced or avoided intelligently.

Role of Parent in the Life of Adolescent

The quality of the child's adjustment is more dependent upon his interaction with his mother than on any other socializing factor. While parents mean everything to their children, their most important duty is to offer affection. The awakening of sex impulses at puberty may lead to early parent fixations, with the consequent attachment for the parent of the opposite sex. Attachment to either parent is natural. This devotion might alternate with periods of love and hate. Girls who are constantly thwarted by their mothers depend more than usual on their fathers. Boys, sometimes weary of proving themselves as men in a world that does not yet accept them as such regress to clinging to their mothers. These frustrations suggest the importance of parents as a source of loving care and approval. Youth derive status from the recognition that their mothers and fathers are pleased with them. Their feelings of self-worth have to be reinforced

again and again by such recognitions.

Parents are also important as comrades to adolescent children. Another related role is that of mothers or guides. When the parents do not fulfil these roles, the adolescents may feel let down and fall prey to unhealthy influences outside the home.

Each child perceives his parent's role according to his own needs. The parents, who may be viewed by the dependent child as a loving protector, may be seen by the more independent one as a prohibiter. Parents need to modify their roles according to their childrens' needs. Latha has a physical handicap. Her parents have a special function as her morale boosters. Balu is an 'inventor'. His parents should serve as generous critics and suppliers.

Healthy Parental Attitudes towards Adolescents

Adolescent children need certain special understandings and attitudes from their parents. Parents must be aware that the attitudes of their sons and daughters towards them, reflect their ways of treating their own children, and project their conflicts.

Parents must also understand that youthful revolts are not against them. A certain amount of rebellion is normal, an essential preliminary to the act of attaining the independence required for establishing and maintaining one's own family. The overt expression of conflict serves as catharsis which, if repressed, takes the form of anxiety. Parents should treat their teenagers not as children, but as adults in the making. They should guard them from the traumatic experiences that being terror, humiliation and heartbreak while at the same time avoid too much of guidance. Prescriptions for a specific parent-child relationship cannot be laid down. Much depends on how parents and children have learned to feel and act towards each other. Thc best relationship is one that contributes to the walfare of both the parent and the child. Parents who lack insight or are deeply involved in their own difficulties may meet troubles. It is basic that they recognize the needs of their adolescent children and adjust theirs accordingly.

Healthy acceptance is worm support to the child without being overly possessive. children whose attachment to their parents is moderate are actually happier than those whose relation is a 'very intimate' one. Adolescents do need complete confidence in the love of their parents. They should know that their parents will support them always, no matter what the situation is. Parents must also develop the inner resources which will protect them from the unconscious need to bind their children close to them, a form of possessiveness often disguised as well-meaning protection. They should arrange enough joint activities at home to develop mutual appreciation and habits of co-operation.

The rejecting parent is one who rebuffs his child, failing to accept certain behaviours that are basic to the child's personality. The mother who denies an active daughter her need to play net-ball rejects the child to some extent.

Rejection may take the form of severe restriction or hostility. In this case, they either may go out of her way to frustrate or annoy her child. One such mother always assumed that her daughter would always do the wrong thing. When her daughter had an ice-cream cone in her hand, she would say sarcastically, Now you are going to spill that on your dress. Thus the child would be forced unconsciously into behaving in ways that could be punished for no fault of her own.

Extreme rejection may take a form in which the child is hemmed in by iron-clad rules in order to ensure the parents' peace of mind. Leela insists that her sixteen-year-old son Raju keep his room spotlessly clean, always admonishing him to mind his manners. Although her rules go beyond reason, she believes they are necessary for his socialization.

Raju discovers that his interests are ignored and his opinions considered unimportant. No matter what he tries to do, he encounters arbitrary refusals and dictatorial commands. Raju is simply not wanted and made to feel so. This subtle form of rejection is harmful to the child and parent.

Sometimes active rejection takes the form of overprotection. Prema fervently wishes that her son Narayan had never been born. Yet she dare not openly express those feelings. She lavishes gifts on Narayan while neglecting him in other fundamental ways. This ambivalent feeling is an often expressed inconsistent behaviour. Wavering between the punitive or forgetful at one time and the overly attentive at another is a disastrous behaviour.

A child rejected by both parents is likely to be aggressive. Enuresis in boys is associated with rejection by the father, accompanied by rejection or over-protection by the mother. The child's feeling of self-worth is damaged. No wonder the rejected adolescent wants to get away from his home as soon as possible. In moments of desperation a boy may run away, or a girl may grab at the chance of a hasty marriage.

Parents are often perturbed while providing the right amount or quality of guidance to their teenage children. They may be too preoccupied with their own problems such as menopause, vocational unstability and disease. Parents' problems may affect the teenagers in several ways. At a time when the teenagers face difficult problems themselves they meet the additional problems to cope with worried parents. The latter, preoccupied with their own difficulties, have little time for their sons and daughters.

Many adolescents think that they understand their parents better than their parents understand them. Various obstacles to understanding exist. Parents do not remember their own teenage conflicts and even when they remember, they are inclined to assume that their teenage children must feel as they did, even though times have changed.

Several approaches may be used to overcome these obstacles and achieve mutual understanding. The lines of communication must be kept open. Parents must be good listeners when children bring their problems to them. They must place themselves in the adolescents' situation and understand their problems from their stand-point. Another aid is planning in the family in such a way that each child shares what he comprehends from the time he is able to put his feelings into words. The family sassions should be genial and relaxed. The more actively each member of the group participates, the fewer will be the problems of discipline, and the greater the friendliness and co-operation and mutual adjustments.

The school can also assist parents as a group to understand teenagers better. Panels may be arranged in which teenagers discuss their problems at parent meetings. Panels may also be composed of parents who discuss their views with an audience of other parents. Still other panels may be composed of experts, including clinical psychologists, guidance workers, or youth leaders. Parents may be invited to school to gain a new perspective on teenagers as they work and play together.

Teachers should be suitable adult models with whom their adolescent pupils may identfy. They should give advice only when their counsel is needed. After all, the teacher is often the only adult trained in developmental problems to whom the child has ready access. Parents need to realize that adolescents in the process of becoming emancipated from the family prefer to turn to adults outside the family. This may be a blow to the parents; but if they accept it the process of adjustments will be smoothened.

The school and teacher can assist the adolescent in the classroom in several ways, including provision for panel discussions, making

available books on guidance for teenagers, individual counselling, and in extreme cases referral to experts. Discussions should relate to the family as an institution, roles of family members and general principles for dealing with conflict. When the teenager has an opportunity to hear the views of others, he can select suggestions that he feels will apply to his own situation. Besides, he finds some comfort in the fact that others have problems similar to his own.

These discussions would help the adolescent to realize that negative feelings such as hostility and frustration are normal. This point is important because in a culture where it is sacred for every one to obey his parents, he is likely to feel wretched when he resents his parents, even when the resentment is justified.

The teacher needs to exercise great discretion when dealing with youth and their parents. The parents may be wrong; but they can be troublemakers. Therefore the teacher should simply lend an ear and offer sympathetic understanding. He should make every effort to further the adolescent's own adjustment and to strengthen his ego so that he will have the fortitude to deal with or endure the problems at home. Healthy emotional experiences at school can help much to offset the handicaps of growing up in the family even in a problem home.

References

Anderson, J.E., 'The relation of attitude to adjustment', *Education*, Vol. 73, 1952.

Banerjee, D., Mukherjee, S.S., 'Menarche in Bengalee Hindu girls', *J. Ind. Med. Assoc.*, Vol. 37, 1961.

Bayley N. 'Individual patterns of development', *Child Development*, Vol. 27, 1956,

Cole, L., Hall, I.N., *Psychology of Adolescence*. New York: Holt, Rinehart and Winston, 1970.

Crow, D,, Crow, A., *Adolescent Development and Adjustment*. New York: McGraw-Hill Co. 1956.

Dutt, N.K., *Psychological Foundations of Education*. Delhi: Doaba House, 1974.

Gandhimathi, A.P., 'Nutritional status and menarche', Thesis submitted to University of Madras, 1947.

Hall, in Fleming, C.M., *Adolescence*. New York: International Universities, 1951.

Hilgard, E.R., Atkinson, R.C., Atkinson, R.C., *Introduction to Psychology*. Bombay: Oxford and IBH Publishing Co., 1975.

Hurlock, E.B., *Developmental Psychology*. Bombay: Tata McGraw-Hill Publishing Co. 1968.

Jaya, N. Unpublished report, 1978.

Josselyn, 'Psychological changes in adolescents', *Children*, Vol 6, 1959.

Kagan, T., *Understanding Children, Behaviour, Motives and Thought*. U.S.A.: Harcourt, Brace, Jovanovich Inc. 1971.

Landis, P H., 'Teenage adjustment in large and small families', *Washington Agricultural Experimental Station Bulletin*, No. 549, 1954.

Logambal, A., Rao, B.K., 'Age of menarche in Madras state', *J. Obstetric Gynecology*, Vol. 19, 1969.

Medinnus, G.R., Johnson, R.C. *Child and Adolescent Psychology*, New York: John Wiley and Sons, 1976.

Montagu, A. *The Meaning of Love*. New York 1953.

Mussen, P.H., Conger, J.J., Kagan, J., *Child Development and Personality*. New York: Harper and Row Publishers, 1974.

Natu, M., 'Study of menstrual pattern of college girls, *Ind. J. Public Health*, Vol. 10, 1966.

Rao, A.R., 'A study on menstruation in adolescents', *J. Ind. Med. Assoc.* 40, 1963.

Remmers, H.H., Hackett, *Lets Listen to Youth*. Chicago: Science Research Associates, 1950.

Rogers, D., *Mental Hygine in Elementary Education*. Boston: Houghton, 1957.

Rogers, Dorothy. *The Psychology of Adolescence*. New York: Appleton Century Crofts, 1972.

Saraswathy, G. 'The problems of adolescents', *Indian Journal of Home Science*, 4, 1970.

Semmens, J.P., Krantz, K.E., *Adolescent Experience*. London: The Macmillan Co., 1970.

Shanmugam, T.E., *Adolescent Personality*. Madras: University of Madras, 1975.

Stolz, H.R., Stolz, L.M 'Adolescent problems related to somatic variations', in Henery, N B. *Adolescence. 43rd Yearbook of the National Committee for the Study of Education*. Chicago: University of Chicago Press, 1944.

Stone, J.L., Church, J., *Childhood and Adolescence*. New York : Random House, 1957.

Thorndike, R.L., 'Growth of intelligence during adolescence', Vol. 72, 1948.

CHAPTER 14

Sex Education

'Sex' means 'being male or female'. It is one of the divine endowments to human beings. It is the instrument for seeing an indispensible function in the life of the race. Therefore it should be treated with reverence. Sex is natural and wholesome in the context of the family. It is a part of growth, of personality and of love. Sex appeal is the attraction that draws the male and female to each other. It is the basis for their intercourse and consequent pregnancy and child birth, the processes which are vital for human relationships and existence. As part of love, sex is an expression of the desire to find meaning and fulfilment in another person and make him/her the centre of kindness and affection for the basic happiness of human living.

Need for Sex Education

Sex education is the inculcation of the correct moral attitudes towards sex. It means all the educational measures which prepare young people to meet the problems of life centred around the sex instinct. Thus sex education is a part of the wider family life programme which aims at :

a. better interpersonal relations and adjustment within and outside the family;
b. strengthening the family unit in its various relationships; and
c. proper understanding of sex and related matters with the ultimate aim of raising happy and healthy families in the future.

Today, all over the world, the following questions are raised. Should sex education be imparted? If yes, when and how? Sex impulses, when left unbridled, in the absence of proper knowledge may give way to unhealthy sexual expressions and habits which would lead to disastrous consequences such as unwanted pregnancy and sexually transmitted diseases (STD—venereal disease). Population explosion is a deterrant to social progress. Therefore sex education is essential to promote healthy and happy family living and to act as an effective means to check the explosive growth of population.

In the Indian society it is a taboo to talk about sex, venereal disease and related factors. The conservative attitudes of the elders, including some parents and teachers, towards sex education prevent teenager from knowing healthy facts of sex life. A survey conducted by the Association for Moral and Social Hygiene in India reveals that nearly 10 to 15 per cent of the Indian population has contracted venereal diseases at one time or the other. A very sizable majority of the patients were teenagers (CSWB, 1973). Sex education is therefore needed in overcoming veneral diseases, child neglect, illegitimacy, juvenile delinquency pornography, early marriage, abortion and sex crimes.

The atmosphere in which the present day child grows has changed radically. Sexual matters are projected everywhere through different mass media like the cinema, magazines, newspapers, radio and advertisements. The living atmosphere is saturated with sexual awareness, that no one can be shielded from its impact. Therefore it is imperative that parents unfold the true significance of sex in the wholesome development of the young into healthy and intelligent adulthood. Otherwise adolescents will pick up unwholesome information from the street corner, gutter and the polluted lips of vulgar language. Finally this type of unhealthy sex knowledge will lead to erotic and erratic forms of social indiscipline (Muthiah, 1964).

The influence which the first impressions and conception of sex make upon the plastic mind of youth is likely to influence his viewpoint for several years, if not for life. Like soft wax, his character receives impressions which gradually harden and shape it for sexual pleasure or woe.

The discoveries in genetic psychology, psychiatry, social hygiene, public health and pedagogy must be made available to the young through systematic instruction by physicians, teachers and extension and social workers. Failure to instruct and train youth concerning the guidance and control of sexual drives will result in fissured and misshaped personalities. Ignorance in these matters is neither innocence nor prophylaxis against erroneous conceptions. It is a positive danger to the normal and wholesome development of youth into a healthy and intelligent adult.

The Beginning of Sex Feelings

Sex education starts almost at the beginning of a child's life. During infancy, children start fondling their genetalia, because of the pleasurable sensations they receive. If they are punished or frightened at this stage, they will develop an approach of voidance or conflict while they are simultaneously motivated to indulge in the same act. The ultimate effect of such a conflict depends on the intensity of the fear and the situations to which it is transferred. An intense fear reaction to masturbatory behaviour may generalize to adult sex behaviour and hinder the development of mature social behaviour (Kendler and Kendler, 1971).

Any time from the age of $1\frac{1}{2}$ and onwards, the child's sexual curiosity intensifies and he becomes interested in his body organs and in urination and bowel movements. The attitude towards physical functions that the parents pass on to him will be the basis for his feeling of pride and righteousness or shame and worry about the way his body works.

At the age of 2 or 3 years, when the child is talking and active enough to take an interest in his own body and those of the people around him, he generally begins to ask specific questions. The development comes as a part of his general interest in the family group and the part each member plays. He begins to note the similarities and differences. There is nothing more natural than that he should want to know why. Some of the questions children below five years of age generally ask and the desirable answers are given below.

1. *Where does a Baby Come From?*

By the age of three or four, a child may begin to wonder where he came from. This may be a growing awareness of himself and an interest in hearing how he fits into the family. Or he may suspect, or be puzzled by the fact that another baby is on the way. Or the idea might have just occurred to him and he needs an answer.

The adult can answer that a baby grows inside the mother's body in a special place planned just for that purpose. If he is still inrerested, it can be added that the special place is called the womb or uterus and that while the baby is there, a cord from the mother's body gives nourishment to him until

he has grown big enough to come out and live in the outside world. Meanwhile the mother's body keeps him warm and protected.

2. *How does the Baby Come Out?*

The baby comes out of a special opening in the mother's body. This serves as a passage into the world for the baby from the place where he has been growing. This passage is called the vagina.

3. *Does It Hurt to Have a Baby?*

Yes. It does when the baby comes out of the small hole. But after the baby is born, the mother is so glad to have him that she forgets all the pain she had felt.

Points to be Remembered in the Sex Education of Pre-school Children

a. Be a good listener.
b. Use simple words.
c. Be frank and honest.
d. Be consistent.
e. Be yourself. Do not pretend you are enormously wise. Never give false information.

Sex Education at School Age

School year is the age at which the child's world widens gradually. He comes into contact with other socializing agents such as teachers, other adults and friends. Radio, television, movies and books also help to broaden his horizon. His knowledge about the world is ever on the increase and he wants to know more. The answers given to his questions at this stage, added to what has been gained earlier, will be his basic preparation for the time when sex begins to concern him more personally. It will be easier for both the child and the parent if he is comfortable and familiar with the facts of life. Some of the questions children ask at this stage and the desirable answers are as follows

1 Question : Why do I have a 'belly button'?
Answer : This is where the umbilica cord, a tube, attached you to your mother when you were in her womb.
2 Ouestion : How does the baby breathe inside the mother?
Answer : He gets air (oxygen) from the mother's blood, which reaches him through the umblical cord.
3 Question : Does it hurt when the umblical cord is cut?
Answer : There is no feeling when it is cut, since it has already been separated from the mother.

At this stage the lessons in nature study offer a valuable medium for the study of sex and reproduction. The ideas of maleness and femaleness, sexual cells, fertilization, embryological development and the protection of the growing embryo, may all well be based on the reproduction of plants. Nature study provides the opportunity for casual reference in appropriate language to the mating of frogs, the courtship of birds, the parental care of restings, the suckings of lambs and so on. In all this, development of attitudes is as important as the acquisition of knowledge. Given the right feeling of mutual trust between teacher and child, there will be no need at this stage for formal lessons on human reproduction.

Sexual questions are less frequent at this stage and the child may even object strongly to hearing about sex. Their physical drives find satisfaction in various games and hobbies.

When sex information is wisely given by parents, a child trusts and there is less likelihood of unwholesome sex experiments. A certain amount of sex play seems to be a normal part of growing up. If it is too much, let the child be given friendly but firm advice. In

infancy children know only to receive affection. In the early years of childhood, they learn to take and give affection. In pre-adolescence, their giving is expanded. Affection and regard for another person are bases of subsequent sexual relations. During pre-adolescence, the child should be informed carefully about sexual matters, so that his emotional relations with the opposite sex, which will soon begin to blossom are honest and free from fear and anxiety. Parents can help by:

a) Considering the child as a whole person and not be reluctant to mention the facts of life.
b) Telling the child facts about his/her own bodily functions as future father and mother. If the child reacts uneasily drop the subject until another time. When the child discovers that his parents can talk freely, he becomes less fearful of his own couriosity and can air out his thoughts. Frankness facilitates talking about sex, and
c) Not letting books and gossip alone be the child's first and only guide about sex.

Sex Education at Adolescence

Adolescence is the stage when sex education is more vital than at any other time, because the young adolescents seek the rich range of emotions that will give meaning and expression to the new adult sensations of their bodies. Secondary sexual characters develop and often the suddennes of their onset upsets the adolescents, unless they have been adequately informed of and prepared for the changes. Girls usually get frightened or shocked at the onset of menstruation. It is the mother's duty to explain the role of menstruation in an acceptable way to the girl, so that she can see her future as a wife and mother. Ignorance about the heterosexual relationships may lead to the development of ambivalent attitudes which may lead either to frigidity in future marital relationships or over-attraction to sex and its undesirable consequences.

During the sensitive period of adolescence, parents should avoid teasing and joking about their children's friends. Such steps may turn them away from the constructive, normal and human effort they are making towards understanding heterosexual relation. They may also create difficulty in their starting future relationships. Adequacy of the sex education a boy or girl has had earlier would help to lessen or remove worry or anxiety they feel about sex. Therefore through well-planned sex education, every teenager should be told about the male and female sexual structure. The broader a youngster's knowledge of sex, the less likely he is to behave loosely and foolishly and the more likely he is to learn how to live with this element.

On par with the changing times, the attitudes of adolescents towards sex are also undergoing changes. In their study of the sexual aspirations and attitudes of 180 girls from Coimbatore Nalina Devi and Sumitra (1972) found that the girls, in general, desired physical characteristics like attractiveness, beauty and glossy hair and behaviour traits like courage, independence, firmness, helpfulness, humour and physical aggressiveness in their life partners. A large proportion of the girls had a favourable attitude towards mixing with boys and accepting help from them. They preferred known rather than unknown boys. Adolescent girls in co-education school seemed to have more positive attitudes towards mixing with boys, accepting help from them and talking to them without embarrassment in acquiring information regarding puberty than the adolescent girls from exclusively girls' schools.

At this stage, peer group exerts greater influence in their day-to-day life. Other sources of sex role concepts are the teachers, other adults, mass media and literature. Wrong type of sex role identification is one reason for the heavy rate of drop out from the colleges.

(Smart and Smart, 1971). Sex education at this stage could be imparted through various subjects such as home science, biology, physiology, botany, sociology, zoology, psychology and the like. At the stage parents can help by:

1 making it easy and pleasant when a girl matures sexually to enter the social world,
2 realizing that customs among young people change from one generation to next, and
3 allowing freedom from the restrictions of conservative traditions.

Schwarz (1967) advises that sex education should begin as soon as the sex awareness develops in children. It is the awareness expressed through the words used, facts related and even actions. It is here that guidance in sex education becomes vital. The child's attitude towards sex will depend largely on the source from which he gets his information. The child needs well-planned and carefully guided sex education before he can gather some information or misinformation, and develop specific attitudes. Such education should be of two types: constructive and preventive. Constructive education should build up healthy attitudes about sex and marriage, while preventive education should teach the child what to avoid in his sexual relationships, which may lead to promiscuity without frightening him. Today, more and more children are getting sex information from books and the cinema. If the child's curiosity about sex is not satisfied at home, he will seek it elsewhere—from suggestive pictures in comics, books, magazines, stories and jokes (Hurlock, 1974). Sumitra's (1972) study done with 180 adolescent girls alone in Coimbatore indicated the following sources of information on sex for the adolescents.

Sources	*Percentage*
Books	63
Friends	55
Cinema	50
Magazines	37
Mother	33
Sister	25
Radio	16
Grandmother	8
Sisters-in-law	4
Father	4
Relative	2
Brother	1

The mother and father were not major sources of information like books, friends and cinema. The parents must freely give adequate sex information in time. They should also help children to augment it through friends, teachers and counsellors.

Methods of Imparting Sex Education

In the primary stages information about sex could be given through nature study classes while teaching fertilization, embryo development, protection of the growing embryo and the like. After this stage, the already imparted education could be enlarged through biology and physiology classes (Singhbi, 1972).

In the family, sex education begins when the child becomes curious about reproduction in nature, that is, when young puppies arrive, eggs hatch, etc. This curiosity should be used to impart knowledge about sex and make his interest healthy. At this stage, the question and answer type method is most suitable. When the child attains school age, he could be given simple, illustrated books on human physiology with special reference to male and female organs of reproduction and the process of reproduction itself. The knowledge he gets at home can be supplemented by the sex education programme at school.

During adolescent stage, effort must be directed towards helping the young person develop a favourable attitude towards the onset of puberty and the changes accompanying it. General discussions, books, magazines and film shows can be used appropriately for the

purpose. Much information can be gained also from the peer group. Whatever be the method used, audio-visual aids should be emphasized to make the teaching practical.

When children learn about sex from their parents, they are spared of many rude shocks later. There is every possibility that life will be clean and wholesome for them. They will make use of this learning positively in marriage as part of a divine plan for the two hearts to come together in a deep, sacred union. They will have respect for their own sex and reverence for the other sex. They start life with an enormous advantage over their companions who are handicapped by ignorance and distorted conceptions, because of the silence of their parents. The obligation of explaining sex to their children rests upon parents. It is the duty of the parents to educate their children on sex in a plain, simple and straight-forward language without sentimentalizing it.

The intimacy of the relations at home affords parents ideal opportunities for sex instructions as a natural component of all the education given in the family. The child trusts his parents and turns instinctively to them for the meaning of various endowments received from them. This obligation of unfolding the meaning of the most important secret of life is the highest privilege of parenthood carrying out the divine mandate of transmitting the precious legacy of human life participating with God in the sublime act of procreation itself.

If parents neglect this duty, they rob their children of an essential part of their birthright. Furthermore, they will be exposing them to much bewilderment, confusion and misconceptions which may damage their personalities and end in emotional frustrations. The psychic scars that result will plague their lives permanently. Parents should cultivate and adopt a 'matter of fact' attitude when they explain to their children about the private parts of the body and their functions. If they stumble, stammer or show any other sign of embarrassment while discussing the facts of life, children are bound to regard their curiosity as something undesirable.

Role of the School

Children grow up and enter school with all its promise of enlarging their comprehension and communication. School becomes the appropriate venue to take over sex education, which must be developed as an integral part of the entire educational programme. Sex education at all stages of school life must not be treated as a special or isolated bit of the curriculum to be taught at a given time and then considered as finished. On the other hand, the specially trained teachers should make a detailed study of the content of the curriculum and the methods of teaching it. Sex education, like health, nutrition and character education should permeate the whole school life, and not be confined to one course or one teacher. If children learn to share toilet and washing facilities and play together, there is unlikely to be any excessive curiosity about the about the body of the other sex.

Taking into consideration the developmental characteristics and stages of children, a plan, contents and sources for sex education in the school curriculum are described in table 7 (pp. 182-83).

Children can be helped to build up constructive and whole some feelings about sex in the following ways.

1. *Regard Sex as a Natural Item of Conversation*

Make sex and reproduction an easy natural topic of conversation in the private family circle from the time children are babies. Talking about these everyday happenings casually, as they arise, helps to teach the facts of life easily.

2. *Answer Directly and Naturally*

The child's questions about sex should be used

as an opportunity to make him feel comfortable and well informed about sex. Make him feel at ease while asking questions on sex by answering his questions in exactly the same simple, frank manner that all his other questions are answered. If the adults evade, act embarrassed or become irritable the child soon learns that something is wrong about sex. On the other hand, if his sex questions are answered more elaborately than other simple questions, the child will learn that there is something different and extraordinary about sex. Therefore the answers to the questions must be in the language and attitude that are used everyday for all questions. Children will indicate how many details one should tell them, depending on their interests and abilities to comprehend. When they ask a question, parents must centre their attention on them so that they will feel welcome to go on talking about the subject as lons as they wish to.

3. *Teach Positive Attitudes towards all Aspects of Reproduction*

It is important for boys and girls to cultivate positive feelings about the reproductive processes. A wife whose husband has grown up feeling that menstruation is pollution and disgusting has a hard time, feeling ill at ease during menstruation. Breast feeding is difficult, if the father feels sullen and resentful about it. When the mother gets sick during menstruation or becomes a semi-invalid during pregnancy, even a toddler learns there is something odd going on. A mother who talks of the agonies of child birth does not help a little girl look forward to child birth or any activities that might lead to it. Nor does she make her son feel comfortable about exposing his future wife to the experience.

Even before the age of toilet training, there are opportunities for the child to learn some basic feelings about sex. Some mothers, in their desire to keep their babies clean, change their diapers and wash their genitals more frequently than is necessary for health. Thereby the baby may learn from his mother to extend an unusual amount of attention on that part of his body.

The mother is the main source of sex education. A child growing up with a mother who easily accepts her physical female role and does not try to hide the natural workings of her body is exposed to positive experiences. When the mother talks to her child about them casually, there is happiness in her voice.

4. *Show the Child Affection*

Show the child what real affection is, so that he can learn how to give affection to others. For instance, Raju's parents saw that he get enough food, sleep and exercise, but let days go by without giving him a smile or a word of praise. His interests, enthusiasm and griefs were simply discounted as silly, childish motions. As Raju grew up he naturally did not think of sex as a warm, human relationship between two people who were interested in each other's feelings and desires, because he had never seen this sort of relationship in his parents. Sex to him finally meant just a mechanical release of sexual tension and a way of enhancing his vanity.

5. *Keep Marriage Happy*

Keep marriage contented and happy so that your child will grow up with an example of happy married love. A child who has felt constant bitterness between his parents has a hard time believing that sexual companionship can be a fine constructive experience.

6. *Help Children Feel Sex Difference Normal*

Help the child feel that the differences between the bodies of boys and girls are perfectly natural. Little children are sometimes frightened when they suddenly see the difference.

7. *Teach the Child to Enjoy Physical Expression of Affection*

Teach the child to enjoy physical signs of affection. Men and women who have learned in infancy, what it is like to be kissed and

Table 7. Suggested Plan, Contents and Sources for Sex Education

Stage	*Development characteristics*		*Educators*	*Knowledge*	*Habits*	*Attitudes*
	Physiological	*Psychological*				
Early childhood	Bodily growth is rapid. Children have control of bladder and bowel movements. Acquire facility in walking and running leading to greater extension of the known world and to increased self-confidence.	Change in sexual interest from oral to phallic in nature. Enjoyment of muscular activity. Becoming more aware of self as an individual. Strong imitative tendency. Developing memory. Great development in verbal comprehension. Developing interest in one's own and others' bodies, leading to many questions about sex organs, birth, etc. Beginning of logical understanding.	Mother father, preschool teacher, siblings and playmates.	Name of parts of body of both sexes. Elements of understanding of bodily functions.	Control and regularity of bladder, and bowel movements. Sleeping alone. Practise simple health rules	Bowel and bladder movements are not considered dirty. Sex organs are not forbidden territory. Arrival of new baby is a family event for which all prepare. Affection and consideration for others. Willingness to share and to cooperate in activities.
Late childhood	Bodily growth slows. Great bodily energy often expressed in tendency for exploration.	Sexual interest largely homosexual. Willing to accept friendly criticism from others. Great curiosity about all things.	Parents teachers, siblings and friends,	Knowledge of existence of males and females among domestic animals. Knowledge and understanding of functions of living organisms.	Exercise of self-restraint. Taking a little share in domestic duties. Intelligent observation of nature.	Satisfaction in belonging to one's own sex. Pleasure in vigorous and creative activities.
Pre-adolescence	Increasing control and co-ordination of motor functions facilitating greater physical adventurousness.	Great interest in 'how things work' leading to a renewal at a higher level of questions about birth, sex, etc. Tendency to form small groups.	Parents, teachers, siblings, friends, cinema, TV and literature	Significance of health habits. Deepening of knowledge of nature. Gradual acquisition of greater knowledge of bodily functions.	Continues earlier habits. Regards sex as a normal part of life, and not as something exceptional.	Pleasurable anticipation of forthcoming changes of adolescence. Continuation of earlier attitudes. Wonder at life's manifestations.

Stage	Development characteristics		Educators	Knowledge	Habits	Attitudes
	Physiological	Psychological				
Adolescence	Period of rapid general bodily growth, making great demands on the individual. Onset of endocrine changes of adolescence, with the development of sex characteristics.	Development of sense of self-importance and self-reliance. Arousal of sexual emotions at first largely homosexual and later hetero-sexual. Embarrassment at the development of secondary sexual characteristics.	parents, teachers, siblings, friends, doctor, nurse, youth leaders, cinema, TV, and literature	Consolidation and systematization of knowledge already acquired. Understanding of the influence of endocrine secretions on body and emotions. Understanding of true facts about seminal emission and menstruation. Details of hygiene of menstruation.	Continues earlier habits. Practise of vigorous and creative sports and hobbies. Co-operation with other members of family and of other social groups. Helping in domestic duties (boys and girls). Increased care and solicitude for younger children and for parents.	Considerate attitude towards people of other sex. Pride in the fact of gradually becoming adult. Menstruation and seminal emission are considered perfectly normal. General enthusiasm for sports and hobbies. Regarding sex as a great creative force for good.
Late Adolescence		Very changeable interests. Tendency to moodiness. Tendency to hero worship. Seeking advice of older persons who are understanding. Tendency to transfer from unisexual 'group' to mixed sets.		Simple ideas about the value of family life. Understanding what types of relationships are desirable between boys and girls. Social and moral implications of marriages. Need for small family norm.	Discrimination in selection of friends and heroes. Discrimination in selection of reading material, films, etc. Self-expression and sublimation through physical recreation, music, drama, etc. Acceptance of increase of responsibilities along with increased privileges. Self-discipline and self-criticism.	Regarding adolescence as a period of great opportunity in attaining full maturity. Disgust over cowardice, hypocricy, injustice, etc. High ideals and ambitions in various aspects of life.

cuddled often find it easier to give and take adult forms of physical affection. The young child who has known quiet rocking on his mother's lap is learning how affection for a loved one can be expressed through such physical contact.

Role of Community in Sex Education

The community has a responsibility to provide sex education for its members. Different community centres could be organized for this purpose where sex could be taught in a simple socially approved manner. The educators must be well informed in the subjects.

Today's children have more opportunities to know about sex and the related matters than their counterparts of the past. Parents are also becoming more tolerant in their attitudes towards sex education. The number of magazines, pictures and films advertising sex matters have increased manifold. Sex education has gained a place in the school curriculum. However, parents still find it difficult to preach children about sex. Homes and schools must assist young people to adjust to their sex role.

Thus sex education:

1 aims at helping the growth of positive feelings among children about sex,
2 imparts to children the truth that one needs love to nourish love,
3 ensures that feelings which interfere with sex and love do not pile up inside the minds of youth,
4 helps love to grow soundly, without denying anger.
, helps in feelings coming out honestly or what they are, and
6 aims at developing one's fullest capacity for love.

The teacher, parents and the community have a tremendous responsibility to prepare children for normal sex adjustment. Children should be encouraged to grow up in natural friendliness and love. Necessary cautions can be introduced quietly where and when necessary. The best form of 'sex education' is education in normal, healthy, warm, affectionate and assured personal relations between parents in the home.

References

English, H.B., *Dynamics of Child Development*. New York: Holt, Rinehart and Winston, 1961.

Gopal Rao, D., *Population Education*. New Delhi: Sterling Publishers Ltd., 1974.

Kendler, H.H., Kendler, T.S., *Basic Psychology*. New York: Appleton Century Crofts, 1971.

Muthiah, J.I. 'Sex and modern youth', *Child Care*, III, 1964.

Pollard, M.B., Geoghegan, B., *The Growing Child in Contemporary Society*. Milwakee: The Bruce Publishing Co., 1969.

Roy, Prodipto, Kivlin, Joseph, *Health, Innovation and Family Planning*. Hyderabad: National Institute of Community Development, 1968.

Schwarz, D., *The Psychology of Sex*. London: Penguin Books Ltd., 1967.

Singhbi, N.K. 'The problems prevention', *Social Welfare*, XIX, 3, 1972.

Srinivasa Rao, R., *Handbook on Population Education*. Tirupati: Sri Venkateswara University, 1973.

Sumitra B., 'Knowledge and attitudes towards sex of selected adolescent girls,' *The Indian Journal of Home Science*. VI, 2, 1972.

Usha Modak., '*Sex education*', *The Indian Family in the Change and Challenge*. New Delhi: Sterling Publishers, 1972.

CHAPTER 15

Population Education

India ranks second in population in the world, the first being China. But in land area India occupies the seventh place. With only 2.4 per cent of the world's land area, India is supporting 15 per cent of world's total population. Currently India's population is almost equal to that of the population of USA, USSR and Japan put together. About 55,000 babies are born every day in India. Each year there are approximately 21 million births and eigh million deaths. Consequently, 13 million people (more than the population of Australia) are added each year to the population. This population explosion impedes and nullifies the progress achieved in other fields such as food production and industrialization. Therefore poverty becomes chronic with the ever dwindling resources with increasing number of persons to feed, house and care for.

Among the various efforts made to control population growth, population education and family planning programmes are crucial. Population education is a new concept in the educational system of the country. It is designed to impress upon the students in schools and colleges, the consequences of uncontrolled population growth, the benefits of small family norm; the dynamics of economics, sociology and statistics of population growth, its distribution and relation to the levels of living. Population education carried out through the formal and non-formal educational channels will help to prepare young people for their future family roles (Park, 1971). Population education as an educational process, aims at bringing about a revision of attitudes towards family size. It is not education for family planning or birth control. It is education for better living. Population education thus aims to make the younger generation aware of the problems and consequences of population explosion and of the concept of small family norms (Thiagarajan, 1973). Population education should consist of the 'what' and 'why' of family planning and not the 'how' of family planning and hence contraception and sex education will not find a place in population education.

Population education covers boys and girls in schools and colleges and out of schools and colleges. Family planning education is confined to married couples with three children. The programme of family planning education consists of knowledge, attitude and action, while population education consists of only knowledge and awareness of family planning. Thus population education is a means to an end and not an end in itself and family planning education is both a means as well as an end (Subramaniam, 1973).

The Need for Population Education

Population education concerns children

directly, because irrespective of age, each child belongs to a family and is a member of it. He needs proper orientation to play his part effectively. The family interests belong to a community, society and a country.

At the secondary school stage, and at the collegiate level, students need to know a few things with regard to family planning, about the availability of family planning clinics and services. They should have this knowledge in order that they would be able to help the illiterate people who will actively need the knowledge for their own lives, but who are not in a position to get the knowledge by their own efforts (Panandikar, 1969).

About 50 per cent of India's population are below 18 years of age. This age group should not be allowed to enter the reproductive stage without proper orientation to the population problem. Secondly, the marriage age is the lowest in India as compared to the position in many other countries. Hence some understanding about the population problems and planned parenthood should be an integral part of the secondary school curriculum.

The Indian educational system, based on a principle of democracy, has the obligation to keep the future citizen knowledgeable, with respect to the possible danger and prospects of life. Population explosion is one of the hazards of future life. The welfare, health and full development of every citizen is the moral responsibility of the state. It is the fundamental human right for every man to live and pursue happiness for himself and his family. Hence there is need for a complete and correct understanding of why, wherefore and how to control one's family size for improving and sustaining the desirable standards of living.

Stuart (1964) stated, 'The major problems confronting the world today could be summarized as 'bombs, babies and bulldozers''. The Pearson Commission in 1969 observed 'no other phenomenon casts a darker shadow over the prospects for development than the staggering growth of population'. Development of any kind becomes impossible when its resources becomes increasingly scarce in relation to the size of population and its consumption requirements.

Rapid growth of population causes upsets in all development efforts. It hampers economic growth and dries up the resources; it makes it necessary to provide for a large population rather than for a higher level of living. It contributes to imbalances in rural, urban and regional planning because the population distribution is generally in relation to age structure with large numbers of young dependents in relation to the productive capacity that becomes less and less contributing to the continued frustration and poverty of the people. The money allotted for improving the standard of education is eaten by the increase in number instead of raising the standards. The nation has to struggle hard even to maintain the existing standards. Too many educated youngsters, all of whom cannot be accommodated for employment, emerge. This automatically leads to student unrest, triggered off by their insecurity and frustration over their hopeless future. Other antisocial elements join the destruction, knowing the basic cause for their behaviour.

Family planning is a must for improving the quality of family and child health by decreasing the number of children requiring continuous individual care and attention in feeding, shelter, clothing, supervision and education. Only then money will be available for the family to raise its standard of living.

Objectives of Population Education

The objectives of population education may be stated thus:

1. To develop an understanding of some basic demographic concepts and processes.
2. To develop an understanding about the crisis of over-population as an outcome of the falling death rates and an appreciation

that the advances in science and medicine have achieved greater control on death.

3 To develop an understanding of the influence of population characteristics on the various aspects of human life—social, economic, cultural and political.

4 To develop an appreciation of the relationship between the standard of living of a family and its size in terms of the attainment of a high levels of health, education, housing, diet and other amenities of life.

5 To develop an understanding of the biological factors and phenomenon of reproduction which are responsible for the continuation of the species.

6 To develop an understanding of the fact that there are ways to plan parenthood, to regulate family size and consequently check population growth.

7 To develop an appreciation of the small family size as a proper and desirable norm.

8 To develop an awareness of population policies and programmes of the country.

Contents of Population Education

The criteria for selecting the contents of population education are determined by its objectives. On the basis of the overall objectives of population education, the following areas and topics not exclusive to particular disciplines are suggested.

1 The history of population growth—world in general, India in particular—causes, trends and implications.

2 An introduction to demography with particular reference to India: Components of population growth (including fertility, mortality and migration), population distribution and its composition (including age, sex, social, economic and ethnic characteristics).

3 Effect of rapid population growth on economic, social, cultural and political aspects of national development.

4 Effects of rapid population growth on individual and family life—standards of living.

5 Effects of rapid population growth on the physical environment—food, natural resources, and quality of life.

6 An elementary knowledge of the physiology of reproduction wherever feasible.

7 The population policies and programmes of the world in general and India in particular.

Population Education at Various Levels

The content and methods of population education vary at each stage of education—elementary, secondary and collegiate level.

Primary Stage

The only concern for children at this stage is their family. Therefore it is desirable to introduce the subject of population education through family life education. What makes for a happy family, how sharing of everything happens in a family, the give and take, the responsibilities, rights and duties and how every one can help to make the home happy, beautiful and so on. If there are too many children in the family, then each will only get a small share of everything.

Secondary School Stage

A large number of children drop out of the school by the age of 13. Therefore, they should be taught something of population education before that age. Middle and high school pupils can be helped to realize how the well-being of the family depends upon its limited size. Examples of how in a large family in the poor income sector there is not adequate food, clothing and shelter should be given. Beginning with the knowlege of their own family size and its effects, pupils can see that

in a nation (which in turn is constituted by families) where the population becomes excessive, the citizen is deprived of several good things of life which are necessary for his well-being.

COLLEGIATE LEVEL

College students can go deeper into the relationship between excessive population and the quality of life. They can study the problems in economic, social, industrial and agricultural sectors, the difficulties encountered in development in these fields, how unemployment results in a large scale because of large population. Supported by adequate data, the college students should be helped to discuss these problems. At this stage, the national and state policy with regard to family planning services could be introduced.

An integrated approach, logically linking population education at all these levels should be adopted so, that the education at one stage is a natural follow-up of the preceding stage. Each programme must be inter-related complementing each other.

References

Agarwala, S.N. *India's Population Problem.* New Delhi; Tata McGraw-Hill Publishing Co. 1973.

Mehta, T.S., Saxena, R.C., Mukherjee, S. *Readings in Population Education.* Delhi: National Council of Educational Research and Training, 1969.

Mishra, V.S. 'Population problem and the youth'. *Centre Calling.* Vol. XIII, No. 9, 1978.

Panandikar, S. 'The need for population education,' *Seminar on Popular Education for the Younger Generation.* Bombay: FPIA, 1969.

Park, J.E. *Text Book of Preventive and Social Medicine.* Jabalpur: Banarsidas Bhout Publisher, 1971.
Pearson Commission (1969) in Thiagarajan K.

Planning Commission. 'Population education', *Yojana* Vol. XXIII, No. 5, 1979.

Rajani, R.S. 'Socio-psychological implications in population education', *Experiments in Education.* Vol. VIII, No. 1, 1980.

Singh, H. 'Family size and education correlates in India, *Population Review.* Vol. XX, No. 2, 1976.

Stuart, M. *The Population Crisis and the Use of World Resources.* The Hague: Dr. W. Junk Publishers, 1964.

Subramaniam, C., 'Extending medical services', *Swasth Hind,* XVI, 5, 1972.

Thiagarajan, K., 'Family planning and population education programme', *Social Welfare,* XX, No. 4, 1973.

Venkata, Rao, B.V. 'Strategy for population education', *University News.* Vol. XXII, No. 20, 1979.

Visveswaran, H. 'Population Education—concepts and aims', *Experiments in Education,* Vol. VII, No. 6, 1979.

CHAPTER 16

Marriage

Marriage is considered as a secred contract in most religions. In the Indian tradition and philosophy, marriage is a holy act confirmed by all the ceremonies and rituals accompanying it. It is also believed to be an irrevocable bond between the man and the woman who enter the secred alliance. It has been sanctified in several cultures as a spiritual and functional relationship between a man and a woman leading to the birth of children and building a family.

The Hindu ideal of marriage is essentially a fellowship between a man and a woman who seek to live together in creative partnership for the pursuit of great objects of life—Dharma, Karma and Mukthi. Two personalities merge into one in ideals, purposes, attitudes, possibilities, habits, friendship, aversions and property. Love becomes the base for the emotions which bind the two personalities. Love stimulates, facilitates and reinforces each other in progressive integration. Thus marriage is the union of soul and body so closely and so firmly established that one expects that it will last as long as life lasts. As such the functional relationship goes beyond all physical limitations.

Marriage is a creative undertaking. As in all creative endeavours, there needs to be a constant effort towards perfection. No man and woman can inspire or supplement each other perfectly. Therefore, in marriage, they try to eliminate progrssively, the thwartings and increase the points of mutual and joint attainments. However, if the husband and wife continue to thwart each other in physical functioning, spiritual aspiration or even in trivial tastes and wishes, if they hamper, coerce, defraud or enslave each another, then their marriage enters a crisis.

In the Western culture, marriage is a personal matter concerned with marrying the other person and getting on with the business of love making, home making and living together. Folsom (1943) sociologically conceived marriage as a contract freely entered into by legally competent persons. Such a legal contract seeks to guarantee the following:

1 To the State

a) Economic and social responsibility for the family especially for children;
b) Physical and mental competency of those who are likely to become parents;
c) Voluntary assumption of obligations involved in marriage state; and
d) Legitimacy of sexual intercourse.

2 To the Individual

a) Economic support of wife and children, and
b) Reasonable performance of duties by husband and wife.

However, law can never guarantee love, respect, the quality of relationships and adjustments in marital relations. These must be

evolved and achieved by the involved persons themselves.

Sociologically, marriage also involves the assumption of a new status, that is, a change of positional relationships. In the course of the rapid change from the joint to the nuclear families, the change will mean significant modification of the financial, legal, social and emotional relationships with parents through the young couple establisbing their home independently. This in turn can mean transformation of the status in the community from that of a son or daughter in the parental family to that of adults.

Religiously conceived marriage is a sacrament. All religions sanctify marriage, which is an outward or visible sign of the act, which has an inner and spiritual significance for the participants. The inner state or condition the sacrament attests is compatibility. This state exists when the two personalities united by marriage demonstrate the capacity to adjust to each other and to the new situation, namely family life. Thus, compatibility implies that the two personalities stimulate, facilitate and reinforce each other and that they function together in progressive integration. Relationship in marriage is thus an achievement of an integration of personalities, a situation of reciprocal responses in which each personality secures complete adjustment to the make up of the other. This brings completeness to marriage relationship.

Since marriage makes demands upon the whole personality, it is an all-inclusive relationship. Again, marriage is a purposive relationship in that the union seeks to fulfil specific ojectives. It is an intimate and permanent relationship because it involves personality to the core. One takes with him/her into marriage the basic habits and personality which had been developed over a period of years. The unique feature of marriage is that it is a relationship of continuous achievements, because personalities grow and develop in interaction with each other in constantly changing situations. Marriage is a dynamic process, with children making their contribution to the evergrowing relationship (Ballard, 1936).

The marriage ceremony marks the initiation of a new home. Marriage is thus the starting point for founding the institution of the family. It builds on the customs and laws by which families are established in culture. Through marriage, society gives its approval to sexual relations and makes the birth of children legitimate. Thus marriage is the means by which humanity transmits its heredity (Landis, 1954).

Happiness in life is made up of minute fractions, the little mercies and charities of a smile, a kind look, a heartfelt compliment and the countless small, pleasant acts, thoughts and genial feelings one will have to give and take in these aspects in marriage.

Purposes of Marriage

The purposes of marriage are to

a) Make sexual intercourse legitimate restraining it within bounds, consistent with the perpetuation of the species.
b) Complete the development of personality, utilizing every resource which individuals possess.
c) Experience the joy of setting up new homes, and of sex, the birth and rearing of children, the discovery of new friends, the establishment of new relationships to each other and to the community.
d) Fulfil the desire for security in the establishment of rapport between husband and wife, accumulation of property, education of children and provision for old age.
e) Gratify the desire for recognition of the individual's status in the family and for personal achievemcnt.
f) Have romance, wealth or position, assurance of care in old age, escape from unpleasant home conditions, love of children, perpetuation of family name and

the norms and expectations of society.

These purposes and their motivations are important determinants of what one expects from marriage and the quality of the relationships that follows. When motivations to marry are the result of immature personality patterns, they invariably lead to difficulties.

Married life is meant to be the happiest, fullest, purest and richest part of one's existence, bringing much joy to the partners. However, a happy marriage cannot be 'presented' readymade. It needs to be accomplished. Harmony cannot be forced, but must result through matual understanding and gentle actions through the course of life. Both the partners must determine to make a success of their marriage and to conquer every impediment that lies in the way. They must be flexible to make the necessary adaptations.

Happiness in marriage can be achieved through (romantic) love, pursuit of common interests, physical fitness, mental sanity, rational thought, mutual respect and economic stability. Love is the progenitor of affections of a higher order, namely, conjugal and parental love. A permanent union can be established only on the basis of common objectives, ideals and interests. Only when the personalities concerned have common ideals, points of view, standards, aspirations and friendships will marriage relationship be smooth. Conflict over any of these points is hazardous.

Physical or mental incompetence of a partner may impose a heavy burden upon the other. When such incompetence is passed on to the offspring, the child will be unjustly handicapped when he has a right to be born well. Personality defects and inadequacies should be considered rationally before the marriage is celebrated, because personality peculiarities are likely to be emphasized rather than eliminated in the subsequent interactions. The emotion of love alone cannot guarantee permanent marriage relationship for one cannot love long those whom he/she cannot respect or esteem. Love may be kind, generous and forgiving, but it withers when respect is absent. Respect may endure after love is gone, but love cannot survive the absence or loss of self-esteem. Therefore respect with love is essential for success in marriage relationship. The man must be competent in earning an adequate income, and the woman must be competent as a home maker and efficient manager of the family budget.

Adjustmental Problems in Marriage

Adjustmental problems in marriage arise at three levels.

a) Environmental, wherein the pressure of outward circumstances are hostile to the harmony and happiness of husband and wife.
b) Relational, where in the couple fail for various reasons to achieve or maintain good adjustments to each other, and
c) Personal, wherein deficiencies in one or both of the individual partners render them incapable of meeting the demands of married life.

ENVIRONMENTAL FACTORS

The environmental factors which strain marriage are those which make the family come into conflict with the community to which it belongs. These factors change constantly. They are not the same for all societies and for all times. For example, in a patriarchal society, the wife may rebel against the domination of her husband. In a matriarchal society, the husband may be in revolt against the domination of his wife. In a prosperous society, excessive wealth may make husband and wife so pleasure-loving and superficial that they fail to reach the full depth of the combradeship with each other. Different communities produce their own specific environmental problems. In the slum areas, there may be a high incidence of drunkeness, smoking and gambling on the part of men and women,

who thus forego constructive forms of recreaction. In some communities, the couples may live beyond their income in their vain attampt to keep up with the same social standards of their affluent neighbours. The effects of such social and economic factors upon married iife are considerable. Poverty, housing and inlaws become convenient scapegoats for the failures of men and women to face the adjustments of married life.

A sound marriage can withstand these environmental pressures and withstand the strains without cracking. Hardships need not necessarily destroy good relations between husband and wife. On the other hand, it can be a cementing and deepening influence. The epic Ramayana, the classical stories of Savithri—Satyavan, and Harischandra-Chandramathi are ample testimonies for disasters strengthening the marriage bonds.

B. Relational Factors

These problems arise in the relationship between husband and wife, at the sexual, personal and parental levels. In an overwhelming majority of marriages which are in trouble there is some degree of sexual maladjustment. This is, in some cases, the root cause of the crisis. Sex is the physical foundation of the marriage relationship leading to its ultimate spiritual culmination. In the first place, sexual union makes marriage unique and different from all other human relationships and gives it a specially exclusive and intimate quality. In the second place no normal marriage can in practice become satisfactory or stable at other levels until a reasonable degree of sexual harmony has been achieved. Therefore, any attempt to create a good relationship at the emotional, mental or spiritual level will fail when there is underlying sexual frustration.

The sexual needs of the husband and wife are different. To the man sex is a direct, urgent urge. If he is thwarted sexually he will be angry, hurt and resentful. Deep indignation and hatred against his wife may drive away the affection and tenderness which previously reigned in his heart. If the frustration continues, he will be compelled to find some alternative outlet in masturbation, or extra-marital sex relations, or even seek an unconnected outlet like gambling or drink when he represses his thwarted feelings. To the wife, sex is essentially linked up with her need to be admired, loved and cherished.

There may be total failure or partial failure in achieving satisfaction in the sexual union. Total failure may be traced either to the wife or to the husband but whosoever may be responsible, when there is total failure, the marriage cannot be consummated. In the wife, the trouble may be resistant hymen of the virgin. If this appears to be the trouble, the wife should see a gynaecologist who can solve the trouble easily. If there is malformation of the vagina the gynaecologist will diagnose and treat it adequately. This will help to avoid misery, frustration and distress. Sometimes the wife may be too afraid or ashamed or stiff due to frigidity (sexual irresponsiveness) and may dislike sexual union. This condition can be treated by a psychologist. In the husband, total failure may be due to premature ejaculation and impotence. The cause of impotence is generally fear. An emotional state of anxiety has become entangled for the man concerned, with the rise of sexual desire.

In dealing with sex problems, it is important not to separate them from the personal elements in the marriage relationship. There is a close and continuous interaction between the two. If love, trust and mutual respect diminish between husband and wife, the functioning of their sex life begins to be affected. If the personal relationship deteriorates the sex relationship may break down altogether. Sexual maladjustment is just as often the symptom of deeper trouble in the marriage as it is the root cause of the disharmony.

PERSONAL ADJUSTMENTS

The personal relationship between husband and wife is conditioned by compatability and mutual adaptation. In practice, these cannot be distinguished. Compatibility is the degree to which the two personalities share a natural affinity, the extent to which they gear into each others temperaments. Mutual adaptation is the process by which they grow in loving relation to each other and develop new affinities to compensate for those lacking in their relationships.

Personality is not a fixed and unalterable structure. It is capable of changes, particularly in the first half of life. Therefore, two people whose personality patterns clash, for example, an introvert wife and an extrovert husband can achieve sufficient adjustments to make their marriage happy.

When men and women have freedom in choice or acceptance of their marriage partners, it can be assumed that their marriages start favourably. In contrast those who marry too young, while their judgement is very immature and the neurotic types whose sense of values is distorted, experience serious incompatibility.

Good personal adjustments in marriage are complicated by the fact that the couple must achieve some degree of success at two different levels (i) They must be good partners, and (ii) they must be good lovers. Partnership in marriage is like any other task of human coperation except that it demands more of these concerned. Failure in the partnership of marriage is essentially a failure to share. The trouble is caused either by egoism on the part of one or both partners, or through carelessness and irresponsibility in the management of their affairs. Problems of this kind usually arise in the areas of money, work, responsibility, confidence and trust. Jointly handling the financial resources is the acid test for the capacity of two partners to share. This is more difficult when the cost of living is going up and the responsibilities of the home and children are increasing. After marriage partners have less to spend on themselves than they had before. This can create resentment and discontent. Any apparent injustice/neglect/indifference can start a series of quarrels. In such instances, it will do the partners much good to work out a budget for the future allocation of their finances, so that they may avoid falling into trouble.

Many married people handle their money matters in a haphazard and un-cooperative way. The husband often refuses to disclose to his wife how much he is earning. Sometimes she has private resources of her own, but insists on keeping them apart and living entirely on her husband's income. Some may buy sarees and jewels without the husband's knowledge and have debts. The very principle of sharing is violated by this kind of dealings and trouble results frequently.

In the area of work or responsibility, several problems may crop up. The wife may take up a job to augment the family income and feel that her husband should help more in the home. There may be no agreement about the distribution of household responsibilities; consequently each will be blaming the other as having an unfair amount of freedom and recreation, while he or she carries a big load. Having an agreed plan defining their duties and obligations and abiding by them will help to avoid problems of this type.

Problems in the area of confidence and trust are more serious. Marriage is too close and intimate a partnership that it is seriously affected by dishonesty, disloyalty and infidelity on the part of husband or wife. Many problems have their starting point when the couple lie to, distrust and suspect each other. When once such an operation has begun, the life of the whole family becomes a vast network of conspiracy and intrigue. Out of distrust grows suspicion. Out of suspicion comes resentment.

Out of resentment develops conflict. Married couples who cannot trust one another cease to respect each other, breaking human relationships.

The beginning of most infidelity can be traced to an act of unfaithfulness at the end of a long process of secret discontent. If this had been honestly acknowledged to husband or wife at an early stage, the problems could have been faced and cleared up. Infidelity is generally nurtured and sustained by duplicity and deception. Home life degenerates to a deplorable level when members of families regard each other with mutual suspicion and distrust. Clearing up these situations is a delicate task. The wounds caused by continued deception on the part of the other partner do not heal easily or quickly.

Mutual sharing is the key to all problems affecting the attitude of the couple towards their inlaws, relatives, friends and neighbours. The husband who is hostile to his wife's family, but expects her to be friendly to his relatives is not playing fair. The wife who wants to keep up with all her old friends, but expects her husband to drop his, is making an unreasonable demand. Real partnership is based on justice and loyal co-operation. In their feelings towards each other, husband and wife are affected by all kinds of subtle infiuences which can easily turn desire into disgust and love into hate. When affection between husband and wife has been destroyed or becomes cold and dead, the attempt to restore it will be the hardest task. But marriage counselling by careful probing among the dying ashes can find a spark which can be fanned into flame of love, patience and perseverence can work wonders.

The restoration of love takes different courses for the husband and wife. For men, the renewal of the spark comes with the renewal of sexual union. In the woman, emotional response to husband would be restored by kindness and understanding on his part.

When there is some failure in mutual response, it is important for each partner to discuss clearly what is lacking. Frequently this is not thought out. There just a vague feeling of disappointment and growing indifference. If the cause can be nailed down, something can be done about it. All that is needed may be a change in the attitude of the marriage partner. Sometimes the most trifling habits produce the most acute irritation. when this is understood the whole matter seems trivial and the irritated partner feels ashamed, and the gulf does not deepen.

A great majority of the problems of mutual response result from failure to fulfil the appropriate masculine or feminine role. Men often complain that their wives are cold and wives complain that their husbands lack consideration. Women love to feel that they are understood, their thoughts divined and their needs anticipated.

Many marriage problems are finally problems of personality disorder on the part of husband or wife. Cure of the individual trouble can mend the frayed marriage relationships. Psychological disturbances such as the mother and father fixations, in which the husband or wife is emotionally tied to the parent of the opposite sex, and cannot break free and make an adult adjustment to the mate also frequently appear in marriage. Irrational jealousy which is a sign of underlying insecurity is another common problem.

The ways in which these problems are met will depend upon the basic quality of the marriage itself. A sound marriage will successfully weather these storms, while one which has always been shaky and inwardly insecure may collapse.

Parenthood Adjustment in Marriage

Normally, parenthood brings fulfilment and completion to marriage. Nevertheless, it

fundamentally changes the whole character of the marriage relationship. In that process it may precipitate serious problems. The partners must face the fact as soon as they marry. They must prepare for the possibility of parenthood. They should discuss their attitudes to parenthood before marriage and arrive at a common agreement. Procreation should be mutual and deliberate. This means that the coming child will be eagerly anticipated, loved and cherished by both parents from the very beginning.

There is a great deal of controversy as to whether it is better to start a baby soon after marriage or to allow a period for mutual adjustment first. There are sound arguments for both sides, and the young couple must make their own decision. They must settle the matter in advance if the wife has to continue to work for some time. On the other hand, if parenthood is long delayed, there may be disturbing consequences to the young wife and to the marriage. The couple may come to accept the standard of living they have forged through their joint income, and find they cannot afford the baby they intended to have in a year or so. The wife may resent this and suffer from frustrated maternal desires. This will lead to restlessness and irritability.

The coming of the first child brings its own crop of readjustments. For the wife, it is normally a time of blissful fulfilment. But for the husband it may be that pregnancy diminishes the attractiveness of his young wife, and she may be moody and indifferent at this time. Social life and recreation are severely curtailed; the wife's pre-occupation with her baby may give the young father a feeling that his place in her affections has been taken up by this rival and he may even become jealous of his own child; the wife may reproach him for his apparent indifference and bitter quarrels may result.

Another crop of troubles may arise when the couple has as many children as they had planned to rear. The possibility of a further pregnancy will become a matter of serious anxiety to the wife. In some cases, despite every precaution, if a further pregnancy results, the wife is in despair. She may even be tempted to procure an illegal abortion with all its dangerous consequences.

Marriage problems arise when all the children are girls, when the wife is sick because of frequent pregnancies and also over the rearing and training of the children. Differences of opinion arise about the way in which the children are disciplined, about their education and their religious training. These may become acute, so that the upbringing of the children becomes a pitched battle instead of a co-operative enterprise. When this happens, it is almost certain that there is acute tension somewhere in the marriage relationship itself, of which the disagreements about the children are only a symptom. Thus many problems in child management arise from marital disharmony.

Another cause of trouble is the lack of children. Childlessness may bring to husbands and wives and especially to wives, a deep sense of frustration which disturbs the harmony of marriage. There is an emptiness and incompleteness about the childless marriage which easily precipitates disharmony.

Factors related to marital failure as summarised by Lentz and Synder (1962) are: Divorce and separation are indicative of marital failure, but it is incorrect to assume that these are the only criteria of marital failure. There are marriages which even though not broken by divorce or separation are constantly ridden by conflict and unhappiness and as such should be regarded as being unsuccessful. Some of the personality characteristics associated with martial failure are :

1 An unhappy temperament which is indicated by the tendency of an individual to be pessimistic rather than optimistic.
2 Neurotic behaviours which are indicated by the tendency of an individual to be touchy, grouchy, lonesome, easily hurt

and bothered by useless thoughts.

3 Dominating and domineering traits which are indicated in the tendency of an individual to have to get his own way even to the extent of completely disregarding the feelings of others.

4 A critical and inconsiderate attitude towards others which is indicated by the tendency of an individual to find fault with, and disapprove of, the behaviours of others, without regard for their feelings.

5 Lack of self-confidence (particularly on the part of the husband) which is indicated by the tendency of the individual to doubt his own ability and judgement, and

6 Extreme self-sufficiency which is indicated by the tendency of the individual to face trouble alone and to avoid asking others for advice (Winch, 1968).

Sexual factors which lead to failure in marriage include :

1 The wife's desire to be with the opposite sex.

2 Wife having a traumatic sexual experience during adolescence.

3 Wife's sexual intercourse before marriage, and

4 Marrying because of pregnancy.

Some other motivations which might disturb the marital union are now described.

1. Escape from an Unhappy Home

Those who are unable to get along with their parents or siblings feel unfairly treated, perhaps misunderstood. These persons look for a relationship which may remove them from their unhappiness. Their predominant motivation for marriage is escapism.

2. Escape from Feelings of Loneliness

Some persons with personality difficulties hope that in some way, life will become more comfortable, if they marry. They believe that a change in the environment through marriage will make life more enjoyable and meaningful. But marriage is not a solution for their problems.

3. Marriage for the Purpose of Living Through Others

Some persons feel hopeless about finding meaning to life through their own potentials and abilities. Marriage for these people means opportunity to live through the accomplishments of the marital partner.

4. Marriage for Marital Possessions and Wealth

Some people marry for material wealth and possessions. They have no possibility of finding a good love relationship.

5. Marriage on the Rebound

People who had an unsatisfactory love relationship, and are subject to feelings of unworthiness, become quite tense. After losing a relationship, self-attacks of unworthiness become a motivating factor to prove themselves. Such people proceed with hostility to find a marriage partner and then face a period of disillusionment inevitably. Such disillusionment brings bitterness and resentment not only towards oneself but also towards the marital partner upon whom may fall gross blame for the unhappy relationship. Where there is positive motivation for marriage, the motivation to marry does not arise from the attractiveness of what these individuals are moving towards namely the marriage itself.

What are the criteria for defining a successful marriage ? A successful marriage is one in which:

1 Both husband and wife are happy and satisfied with their marriage.

2 There is a quality of permanance to the relationship.

3 There is good adjustment (including sexual adjustment)
4 The attitudes and acts of the husband and wife are in agreement on the major issues in the family.
5 There is integration, which means that the personalities of the husband and wife interact in such a way as to complement each other for the mutual satisfaction and achievement of common objectives (Burgess and Locke, 1960).
6 The ever-freshness of the love.
7 The joy of sharing and identification.
8 The social expectations are fulfilled.
9 There is companionship.
10 The personality of both husband and wife is allowed to develop fully.

Analyses of the background of successful marriages point out the presence of specific factors within the following six broad areas: personality characteristics, cultural background, social participation, economic status and sexual factors.

Personality Characteristics

Some of the personality characteristics associated with marital success are:

1 A willingness to assume responsibility.
2 An ability to make decisions with a minimum of difficulty.
3 An ability to overcome feelings of anger on onself.
4 A sense of humour.
5 An ability to demonstrate affection.

Cultural Background

Likenesses in cultural background, as exemplified by similar nationality, ethnicity, race and socio-economic status are related to success in marriage, while dissimilarity with respect to these areas, particularly if sufficiently great, is associated with failure in marriage. Furthermore, the following characteristics of couples tend to be associated with successful marriage.

1 Faith in God, possessing a pattern of temple or church attendance.
2 Possessing similar levels of education. The higher the educational level, the greater the tendency for successful marriage.
3 Similarity in age. The best adjustment occurs in cases where the husband is a little older than the wife, and the wife is at least 20 years old at marriage (Kirkpatrick and Cotton, 1968).
4 With no previous marriages or love affairs.
5 Being brought up in the rural areas.
6 Regarding their childhood and the marriage of their parents as having been happy.
7 With strong positive feeling for their parents.
8 Had received firm but moderate discipline as children.
9 Had parental approval of their marriage.
10 No pattern of divorce among their relatives.

Social Participation

With respect to social participation, the following factors for both partners appear to be important.

1 Membership of organized social groups.
2 Being engaged in outside activities together and sharing common interests.
3 Being in agreement on the persons who are to be regarded as friends, each having several friends sharing them.

Economic Status

Similarity with respect to socio-economic status is related to successful marriage. When differences between the partners do exist, cases in which the husband is from the higher socio-economic background have a greater chance for success than cases in which the wife's socio-economic background is higher. Other economic factors which have been found to be related to successful marriage are as follows.

1 Occupations characterized by a high degree of social control.
2 A moderate rather than high or low income at marriage.
3 Gainful employment for husband and wife prior to marriage.
4 A steady work record.
5 Savings before marriage.
6 Agreement on, and efficiency in, spending income.

Sexual Factors

The couples with successful sexual relationship are found to be those who

1 had received sex information from parents in a straightforward but tactful and non-embarassing manner;
2 where not shy about sex matters;
3 did not fear pregnancy;
4 desired children; and
5 did not have extramarital sexual relations.

The specific motives for successful marriage are: companionship, emotional reassurance, emotional interdependence, freedom of communication and activity and physical sexual strivings. The marriage relationship becomes the framework within which mutual understanding, empathy, respect and personal acceptance emerge.

The Need for Marriage Counselling

Marriage counselling services have made some inroad in India, only recently, although counselling has been a natural part of the life of the family. In olden times people in trouble used to go to their parents, teachers, 'gurus', relatives or trusted friends for comfort and enlightenment in their despair. But today young people struggle to maintain happy homes with a sturdy sense of independence. The gulf between the generations is great and youth feel the older people are incapable of understanding their peculiar difficulties, and that solutions which could have been satisfactory in times past, would be inapplicable to the current situations.

Every effort must be made to enable young men and women meet life with more adequate resources. This is a matter of education and counselling. The family must exercise its function as a training ground for personality adjustments. The school must educate the emotions as well as the intellect. As the task of living is more difficult and demanding than it has been in the past, the young people should be given the kind of training which will enable them to live successfully in competitive, impersonal world in which they live.

References

Agarwala, S.N., *India's Population Problems*, Tata Mc Graw-Hill Publishing Co., Ltd., Delhi.

Baber, R.E., *Marriage and the Family*, New York: Mc Graw-Hill Book Co., 1953.

Ballord, L.V., *Social Institutions*. New York: Appleton Century Crofts, 1936,

Burgess, E.W., Locke, *The Family*. New York: American Book Co., 1953.

Chand, G., *Population in Perspective*. Orient Longman Ltd., New Jersey, 1972.

Chatterjee, B., Singh, N., *A Guide to Voluntary Action in Family Planning*, New Delhi: New India Press, 1972.

Folsom., *The Family and Democratic Society*. New York: John Wiley and Sons, 1943.

Hornell, Ellahax, 'Unsuccessful marriages—Why?', *The World To-morrow*, X, 1927.

Kephart, M., *The Family, Society and the Individual*, Boston: Houghton Mifflin Co., 1977.

Landis, P.H., *Your Marriage and Family Living*. New York: McGraw-Hill Book Co., 1954.

Lantz, H.R., Snyder, E.C., *Marriage*. New York: Department of Sociology; 1962.

Mace, D., *Marriage Counselling*, London: J.A. Churchill Ltd., 1948.

Mohan, D., 'Pre-marriage counselling', in *The Indian Family in the Change and Challenge of the Seventies*, New Delhi: Sterling Publishers Pvt. Ltd., 1972.

Sebald, H., *Adolescence—A Social Psychological Analysis*. London: The MacMillan Company, 1970.

Semmens, J.P., Krantz, K.E., *The Adolescent Experience*. London: Prentice Hall Inc., 1977.

Singh, H A., 'Pre-marital counselling', in *The Indian Family in the Change and Challenge of the Seventies*, New Delhi: Sterling Publishers Pvt. Ltd., 1972.

Sur, A.K., *Sex and Marriage in India*. Delhi: Allied Publishers Ltd., 1973.

Thompson, W.S., Lewis, D.T., *Population Problems*. Delhi: Tata McGraw-Hill Publishing Co., 1976.

Winch, McGinnis, *Selected Studies in Marriage and the Family*, New York: Holt, Rinehart and Winston, 1968.

CHAPTER 17

The Family

The family is the oldest of the human institutions. Living in a family has been one of the basic needs of man throughout the ages. Thousands and thousands of years ago our vagrant forefathers moved from place to place in search of food and land, grouped themselves into several small units and paved the way for the emergence of families. The evolution of the modern family from the immigrant hunters is a fascinating aspect of human civilization. Today wherever man lives, there is the family. The functions and practices may vary according to different family systems, societies and nationalities. However, regardless of the variations and circumstances of life in different countries and parts of the world and the means man has adopted to satisfy his needs, there is an essential unity in man's craving to live in the unique group, called the family.

With its prehistoric origins, this basic institution has withstood the ravages of time. Today, it occupies an important place in every society. The forms and functions of the family differ from society to society. It gives shelter and security to its members, and meets their basic necessities. It is a refuge for them from the storms of life.

A scientific analysis of the family as a human institution shows great difference in the specificity, completeness and reliability of the available information in different cultures. The background of the family needs to be viewed within this limitation.

Definition of Family

Mac Iver (1953) defines the family as a group characterized by a relationship sufficiently precise and enduring to provide for the procreation and upbringing of children. Baber (1953) interprets 'family' to cover several types of groupings.

1 The traditional gronp of married father, mother and their children.
2 One parent and children if the other parent is dead, deserted, separated or divorced.
3 Married childless couple.
4 Unmarried couple with or without children who have lived together long enough to be considered as husband and wife by common law.
5 A man with several wives with or without children or a woman with several husbands with or without children.
6 A group of related persons living together as a household.

Burgess and Locke (1953) attribute the following characteristics to the family.

1 The bond between husband and wife is that of marriage and the relationship between parents and children is generally that of blood but sometimes of adoption.
2 The members of the family live together under one roof and constitute a single

household, or if they live apart, consider the household to be their home.

3 The family is a unity of interacting and intercommunicating persons enacting the social roles of husband and wife, mother and father, son and daughter or brother and sister. The roles are defined by the community but in each family they are powerfully reinforced by sentiments and customs partly traditional and partly emotional arising out of experience.

4 The family maintains a common culture, derived mainly from the general culture, but possessing some distinctive features in a complex society. Differential patterns may be brought to the marriage by the husband and wife or be acquired after Marriage through the different experiences of husband and wife and their children. marriage is a union of two persons each with a history. The family is the merging of cultural patterns transmitted from the two sides of the family which in interaction with outside cultural influences creates the distinctive cultural patterns of every new family.

The Family as a Basic Institution

The family, as a basic institution, has certain essential functions to perform, and certain contributions to make to the society for its well-being and survival. The structure of the family group, the values embodied in family living and the way children are reared are all vital to the society, since the family constitutes the society.

The family is the first moulder of the child. He gets his form and personality from the family. By the time he gets into the society, he has a set pattern for meeting life situations, although his personality develops continuously.

The chief characteristics of the family as a basic institution are:

1 The family experiences are continuous and persistent.
2 The family is the major agent for transmitting culture.
3 Family conditioning has a special emotional quality.
4 The family has a status.
5 Family is an area of interacting personalities.
6 The family passes on ideas and ideals.
7 Every family has heirlooms.

The Family Experiences are Continuous and Persistent

The family exerts a continuous influence upon the child. Although the teacher and the school exert more influence during the school years, the influence of family is considerable. The effects of the gang spirit are also short-lived. The family is the only agency which gives the child a stable relationship, through which he grows and thrives. Real security is found only in the family.

The Family is the Major Agent for Transmitting Culture

The culture of the society is transmitted to the child by the family. The taboos, customs, beliefs, precepts, folkways and commandments of his group are passed on to him by the adult members of the family, who have already absorbed them. Children generally reflect their parents' culture.

Family Conditioning has a Special Emotional Quality

The family environment profoundly influences character formation in the child. His behaviour in other agencies such as school or office is inhibited by various social restraints. The family environment is the most conducive for his free expression. Most of his psychological and physical needs are satisfied in the family.

The emotional tones in the family condition his childhood attitudes.

The Family has a Status

Each child, as he enters into this world gets his identification only from his family, in association with its past history and present status. Members of the family are always bound together in a complex unity, built upon their sentimental interdependence. Each family member is important to another and identifies with one another. Any distinction to any family member raises the status of the whole family. Thus the family has its own independent status.

Family is an Arena of Interacting Personalities

The family provides the stage to develop and utiliez the child's abilities. It establishes the first setting in which the child performs. It offers an approving audience. Both parents and children provide love, which is an outcome of the closeness of family living. The family is the place where the individual gets a warm welcome at all stages of his life, is comforted and soothed during difficult periods by the love, warmth and affection of the members.

The Family Passes on Ideas and Ideals

Society controls the behaviour of individuals through the families. Each families has its own ideas and ideals. Although ideas, which shape behaviour, may be common for all the families, the ideals are not. The ideals are handed down in each family by the previous generations, taking a changed form in each subsequent generation. What was considered as the ideal form of management in grandfather's time may not be considered ideal in the modern family.

Every Family has Heirlooms

As institutions preserve their coveted certificates, trophies and awards, each family has its own heirlooms—grandfather's photograph, old invitation cards, worn-out sarees used by the great-grandmother, some antique jewelry, utensil and so on. Each family takes pride in preserving these heirlooms, however worn out they may be. Families today are directly related to all the families of the past by these traditions and customs that are as much a part of their real heritage.

Types of Families

Two different factors appear significant in determining the pattern of organization of the family. One is the way in which descent was recognized—whether on the male of female side that is, patrilineal or matrilineal. Secondly, according to the place of residence—near the husband's or wife's parents—patrilocal or matrilocal. Where members of the extended family live together according to the matrilineal descent, it is called, maternal family and by patrilineal descent, the paternal family.

The Maternal Family

Among the preliterate people of 1500 years ago the unit was a kinship group called the 'sib' or 'gens'. In some preliterate communities, the family was composed of the old matron, her sons, her daughters and the children of her daughters. Her sons continued to live with their mothers even after marriage and were only visitors in the homes of their wives, who also dwelt with their own mothers. The control of the children, therefore, was in the hands of their uncles, namely, the brothers of their mothers and not their fathers.

Paternal Family

In the paternal family system of the preliterate people the family was organized according to the paternal descent, with the girls going to live with their husbands upon marriage in the dwellings of their fathers and mothers, married

brothers, their wives and children. The children were controlled by the relatives of husband and wife, with the presence of two grand parents, unmarried brothers or sisters of the parents on other relatives.

Large Patriarchal Family

The large patriarchal family has been handed over from the ancient society. The patriarch exercises absolute power over the members of the family.

The Small Patriarhcal Family

The small patriarchal family has its origin in the medieval period, composed of husband and wife generally with the presence of one or two grandparents, one or more unmarried brothers or sisters of the parents or other relatives. The dominance of the male as head of the family, whether father or grandfather, over the other members is unquestioned.

Modern Democratic Family

The modern democratic family is a product of the economic and social trends accompanying and following industrial revolution, which had led to the breakdown of the small patriarchal families. The modern family allows freedom to its members in their choices in several areas. After marriage the young people have more freedom from their parents. The husband and wife have equal rights in running the family in which the children participate freely according to their abilities and age level.

Families are also classified according to the marriage regulations and forms. The two general orders of marriage regulations are (1) endogamous rules, which prescribe that an individual must choose a mate within a certain group of which he is a member, and (2) exogamous rules, which establish that a man must marry outside the group to which he belongs. Endogamous type of marriage is very much in prevalance today specially in South India, where it is a common practice for a girl to marry her own maternal uncle, or his son or paternal aunt's son. This custom is in vogue mainly to preserve familiarities and property. Exogamous type of marriages are more prevalent in the other parts of India and in almost all other countries.

Families could also be classified according to the combinations of sexes in marriage. There are four such combination possible. (1) Marriage of one man to one woman, known as 'monogamy', which is practised in all developed modern societies, where monogamy has the sanction of public opinion and law. (2) Marriage of one man to a number of women called 'poligamy'. This type appears to be common in the higher status groups of the primitive cultures, particularly when private property increases, and as the man gains increased power in the family. Even where it is socially approved and has the highest status, polygamy has never been universal. Today's women who are more independent will not tolerate sharing the husband. Nevertheless, polygamy is still widely prevalent among the Muslims all over the world and also amidst some tribes. This type of marriage leads to 'patriarchal' type of families. (3) Polyandry is a form of union in which a woman has more than one husband at a time, or in which brothers share a wife or have wives in common. In such cases the family houses belongs to the eldest brother; the garden, crops, cattle and sheep are owned by him and the wife and the children. At present, in India some of the tribes still favour polyandry to any other type of marriage. They worship the Pandvas and Dhroupathi, as their deities (Kapadia, 1972). Polyandry has led to the evolution of the 'matriarchal' types of families. (4) Marital relationship between plural women to plural men is referred to as 'group marriages'. It can also be said as the marriage of a group of husbands to a group of wives. This 'group marriage' is exceedingly rare. In India,

it is practised by the Todas in the Nilgiris in the south. In the practice of polyandry, strong values are developed in relation to the sharing of a wife and to the inappropriateness of sexual rivalry among males. In addition, the number of available women gets reduced by the practice of female infanticide. With the British discouraging infanticide, the number of females in the community increased and instead of resulting in pair marriages, group marriages with a group of brothers taking several women in common.

Structurally there have been two systems of families. A family in the past continues in the present also—namely, the joint family and a family which does not live in a joint family, namely, the nuclear family.

The Characteristics of the Joint Family

The joint family is peculiar to almost all Indian communities. Literature show that as far back as records can be found, the joint family system always existed in India. For the needed manpower to till the fields, the joint family was the answer, in which all menfolk worked together for the common welfare of the family. The joint family is one of the main units which formed the core of the traditional Hindu society. Life in India still centres around the village. Families continue to live on small holdings of land.

Karve (1953) defines the joint family 'as a group of people who generally (1) live under one roof, (2) eat food cooked at one hearth, (3) hold property in common, (4) participate in common family worship and are related to each other as some particular type of kindred'. Agarwala (1955) points out that the joint family has the characteristics of authority. Desai (1956) says that the income is also common along with property, and mutual rights and obligations are important in the joint family.

In Karnataka, Andhra Pradesh, Tamil Nadu and among certain important castes of the Malabar part of Kerala the predominant form of family organization is the patrilineal and patrilocal joint family.

Members Live under One Roof

The traditional large joint family household is composed of a number of joint family households or separate family units living under one roof, some times called the 'great house'. Each family unit might have one or two rooms for its personal use, but the whole family shares common facilities. When the large house becomes overcrowded, a son and his family, or two brothers with their families set up another house, mostly near their former household.

Members Eat Food Cooked at One Hearth

The wife of the head of the house or the eldest woman supervises the work of the other women in a common kitchen. Men and women do not eat together. The typical pattern is for women to serve the men of the household first and later have their meals. Conversation is carried on while the women are serving the meals. Thus meal times play much the same socializing function in the joint family as they do in the modern family.

Members Hold Property in Common

The traditional joint family is both a producing and consumption unit, for not only is family property held in common, but there is also a common purse into which all members put their earnings and from which money is taken for the expenses of the earners and non-earners alike.

The head or senior male member of the traditional joint family usually manages the family's finances. He has the over-all control of the economy of the household. The sons may help to look after the lands and estates if they are extensive, otherwise one son, generally the eldest, may be the manager while the other

sons earn additional incomes in other occupations. Sometimes the eldest son who takes over the management of the property, on his father's death, will be assisted by his mother. The property of the joint family is passed down in a strictly prescribed way from the father to the sons. Only occassionally daughters share in this inheritance, although they would inherit property owned by the mother. The inheritors receive their share of the property during the life time of their fathers or mothers in terms of their family responsibility, or after the death of the father and of the mother. If the brothers opt for partition, they may divide the property among themselves in equal shares. But they have no power over it while the parents live.

Members Participate in Common Family Worship

Religion is an integral part of life in India. All important family events and festivals are deeply steeped in religious rituals and ceremonies. Daily family worship is always a part of the family routine. Each family has its own Gods, in whose name the family is bound together. Family ceremonial rites are performed when all the members of the family gather together and the eldest, the 'Karta' performs the sacred rites. Family *Shradda* rite is also performed by him only. But he has no power to do those rites for his maternal side. Consequently the relations between a man and his father's father are more personal than those with his mother's side.

Functions of the Joint Family

The joint family is family centred, characterized by intimacy and mutuality of interest.

Due to its nature the joint family carries out welfare functions. There is always some one to help look after the indigent ones, often the old women, familiar with most of the crises of life, will give advice as well as practical aid to the needy. The joint family also serves as a recreational agency.

In the joint family there is always some excitement or other, something interesting happening all the time; the marriage of a girl or a boy or a ceremony for the birth of a new baby, the puberty rites of a young girl, a fast, a feast and sometimes a death. The joint family always has guests coming and going. The brothers of the brides come to invite them to their mother's homes, the daughters of the house are brought home for a family feast or wedding. There is always bustle and expecation, laughter and quarrels, discussions and plans. Life may be complicated, sometimes bitter but never dull. Children have a good time in the joint family.

The joint family is a miniature world. Standing apart, mothers are inextricably bound up in a never-ending ceremonial of exchanges and gift giving to all the other joint families with whom they have connections. Affection and dependence are adjusted among many relatives so intensively that the loss of even an important member such as a parent is less critical for the group or individual member, than in the nuclear family system which is small and isolated. In reality the joint family is a revolving system which provides a full complement of young and adult people at all times to carry out the various functions and interact with each other.

Each part of the family has to perform a complex of detailed duties. Its fights, attitudes, sentiments and expectations, determine its portion, which must be balanced carefully if the unit is to function effectively. The stable character of the joint family implies that its roles are clearly defined. It also means that there is little initiative or independence for its individual members. Thus the traditional joint family, with its caste membership and village base provides the individual members a secure

environment. In such a family he not only survives but also fulfils his religious and recreational needs. However, for those who are influenced by the changing conditions of modern life and desire to exert their own initiative and independence, the joint family is no longer a boon.

Strains in the Joint family

The joint family system, although in existence from the ancient times has continually faced internal and external crises, due to personality clashes. In the joint family, there is abundant scope for the clash of wills. The traditional mother-in law, daughter-inlaw conflict and many other strains occur when the women of the household are largely confined to each other's company and have little outlet for their emotions. Sometimes the very size of the joint family makes it difficult for members to live together peacefully.

The women of the joint family often bear the larger share of family strains. They may have a cruel mother-in-law, a husband who is unfaithful or takes a second wife, or they may become widows or their children may die. In such joint families, children are unhappy although the relationship between parents and children is cordial. A joint family may be very frustrating for an independent individualistic child, particularly if he or she has been influenced by modern ideas. Jealousy may arise when children feel that sisters or brothers are preferred or get better treatment. But the joint family system is changing fast.

It is undergoing drastic major changes through the impact of modern times. In fact, it is disintegrating rapidly giving way to the nuclear families. Industrialization and mechanisation have speeded the disintegration of kinship. Nuclear families are emerging in large numbers while maintaining their relationship with their traditional joint family system through visits to native villages occasionally and festivals.

Natural calamities such as famines, floods, epidemics, wars and invasions have made people not to depend on agriculture alone, but to disperse themselves among various occupations. This has resulted in the breaking of the closely knit community of the village and its joint families.

The growth of the joint family into too large dimensions through the course of time has made it unmanageable. This has resulted in the custom of dividing the family property equally among all the sons of the family, splitting up of land into too small units, barely enough for a single man and his family. Therefore the individual member has been forced to seek for additional financial resources through occupations outside.

Independence of the country is another factor for the disintegration of the joint family. Imbued with the spirit of patriotism, the young minds were prompted to break the traditional barriers and family ties and set foot in a new world. The ties once broken could not be mended later, and further urbanization has widened the gap.

The heavy cost of weddings and religious festivals, costly dowries and increased pressure to spend money on the higher education of children have tended to make the middle and upper class families leave their joint families and seek new opportunities in the cities to supplement their incomes. As educational facilities and job opportunities are greater in the cities and as the young have more freedom and privacy in the city nuclear families, city life with its smaller families has been preferred to the rural with its joint family. The income tax laws and the new 'estate duty' have further disrupted the joint family.

Yet in spite of all these factors, the family bonds and ties are still strong and the affectional relationship between the members still abounding so that the joint family is still able to hold its place to a lesser degree in the society,

along with the modern democratic family or the nuclear family.

The Nuclear Family

A typical nuclear family consists of a married man and woman with their offsprings although in individual cases one or more additional persons may reside with them (Murdock, 1968). The nuclear family is prevalent throughout the world mainly in the urban settings.

In the nuclear family, the man and his wife are alone. Having grown up in two different families they try to merge themselves and their backgrounds into a new unit that would satisfy the needs of both and help the personalities for a permanant relationship.

Children in the nuclear family receive their primary training in group living through their parents in the family setting. Remaining dependent upon the parents during childhood they form intense emotional family bonds. Their parents serve as guides, educators and models to them.

The nuclear family is the smallest social unit responsible for the preservation of the value systems. The functions of the nuclear family are to see that each new member is socialized, accepts the value system, and the nuclear family supplies conformity (Bell and Vogel, 1968).

The relationship of the nuclear family with the society at large is woven around the subsystems—economy, polity, community and value system as shown in the chart.

In order to participate in and realize fully the benefits of the interchanges shown in the figure, the activities which must be performed within the nuclear family are task performance, family leadership, integration and solidarity. Task performance is carrying out the family tasks in and outside the family. In this task each member of the family has a role to perform. For example, the father is the bread winner of the family. The mother is the nurse for the child.

Nuclear family and its relationship with the functional subsystems of society

	Wages	
	Labour	
	Goods	Economy
	Family assets	
	Leadership	
	Loyalty	
Nuclear family	Decisions	Polity
	Compliance	
	Support and security	
	Group participation	
	Identity	
	Adherence	
	Specification of standards	
Nuclear family	Acceptance of standards	Value System
	Approval	
	Conformity	

Depending upon the type of family the family decisions must be taken. Generally, the mother influences the decisions about the future of a grown-up daughter, the types of friends she should have and other socializing patterns.

As for integration and solidarity, for the group to maintain close relationship between members over a long period of time, requires some commitment. Fulfilment of expectations eventually leads to faithfulness and solidarity.

The expectations of all the family member together constitute a system of values for providing goals and giving directions to family activities. The value system of a family is governed partly by family's place in the society and partly by its relationship to other social systems.

Functions of the Family

The functions of the family have been classified by Bell and Vogel (1968) and Ogburn (1968) as : (1) biological, (2) economic, (3) protective, 4. educational, 5. socialising, 6. recreational, and 7. affectional.

1. Biological Function

The biological function of 'reproduction' is considered to be the most important of all functions. The family is the chief production unit not only of goods but also of children. Children are indispensable for the perpetuation of the race. Accoding to Hindu scriptures, childless couples were believed to go in to the hell called 'Puth'. Shradh for the dead, which is important for uniting the departed soul with God, can be performed only by sons. Therefore those without children adopt their relatives' children.

The child-bearing function of the family is important not only from the religious point of view, but also for other considerations. For example, it is the son's duty to assume the family responsibilities from his father when he comes of age. Children are necessary for love. Children bring kind and affectionate relationships into the family. They bind the parents together by their affection and attachment.

Economic Function

The family has been the chief producer and consumer of goods. In modern times, this economic function has been largely taken over by factories and numerous labour-saving devices. The family has now become the chief consumer. As economic conditions fluctuate and periods of inflation appear, the kinds and amounts of purchases made by the family also change. The members are encouraged to earn to keep pace with the soaring prices. Saving is done in many forms. Saving and avoiding debts help keep children and the families financially independent. Education of the children is an economic asset.

Protective Function

Caring for and potecting the children, the sick, old and infirm is an important function of the family. In the former days, the family also had to protect itself against the enemy. The church, the temple or the mosque served as the centre for social intercourse and recreation. Religions, by their rights and ceremonies make permanent the individual marriage and family relations. Thus rite and ceremony become means of furthering family life and promoting marital accord. On the other hand, if the marriage partners are from diverse religions, the same religion which originally helped to strengthen family relationship may ultimately weaken them. All religions describe the privileges, duties and responsibilities of husband and wife to each other, to their children and to society in general.

The relationship between the family and the other social institutions in the community is also closely related with the religious functions of the family. The activities of the religious institutions are directly supplemented by the family and the traditional religious attitudes are inculcated through the early training of the family. Religious functions and ceremonies in the family and participation in

common prayer help to solidify the relationship between the different family members in the midst of the stresses and strains of life.

Educational Function

The home and family are the first institutions from where the child starts his education. When the child begins going to the nursery school around the age of 2½ years, his formal schooling commences. Most of his learnings are through the process of maturation. The influence of family as an educational agency never stops. The home teaches social and ethical values to the child. The family trains and prepares the child for his future roles.

Socializing Function

Socialization is the process through which the individual becomes a person. The process of socialisation begins when the baby starts recognizing the faces around him and their voices. He begins to smile during the fourth or fifth month. Smile is his first social response and he slowly begins to make noises and finally speaks. This sequence of events is greatly influenced by the extent to which his family backs him up. Parents teach him how to move in the society, which comprises in the child's world mainly the immediate relatives and neighbours. He learns to give respect to elders and be friendly with playmates. He respects property rights. He learns that certain types of behaviour such as attacking his age mates unnecessarily or behaving rudely in the presence of guests, meets with disapproval in his community, while good manners bring him praise. Thus in the process of socialization the individual learns culturally approved habits, ideas and attitudes. He is taught the rights and duties of his position and is thus fitted into the social group. Through socialization, the family assures the child of conformity to the culture. The family accomplishes the socializing function in many ways. It transmits to each generation what has been learned and used before. It passes on ideas and ideals that control individuals.

Recreational Function

Relaxation and recreation after a day's hard and diverse labour open several avenues for the members to share their experiences. The mother, after spending a hectic day in the home may prefer to go to the temple in the evening. On the other hand, the father, after being out all day, may like a restful evening at home. The children may not prefer to go to the same place as the parents. Thus interests of different members vary and a programme should be so chalked out to cater to the needs of all family, picnics and outings giving opportunities for all the family members to be together. They will also serve to release the tensions built up in their day-to-day life amidst stresses and strains. The recreational function of the family embraces both the young and old in the family.

Affectional Function

The affectional function of the family covers a number of complex and important relationships, which are necessary for men, women and children to develop as normal socially adjusted human beings. From the complete dependency of infancy to the independence of adult life, the affectional element is omnipresent in one form or other. In this capacity, the family provides its members close and intimate responses which are necessary for cultivating individual personalities along desirable lines. The bonds of love between husband, the wife and children form the basics for the very existence of the family. The affectional relationship also extends to limits outside the family structure. When the family fails to show affection, its members try to get it from the outside relationships. However, the love and affection a child receives within his own family and which he feels towards his parents and siblings, can never be

substituted or replaced by any outside agency. If a child doubts his parents' feelings towards him he may become emotionally disturbed. A person who has not developed a sense of trust through the loving family ties may continue to feel unwanted throughout his life. He may find it difficult to adjust with his marital partner also.

Roles of Different Members in the Family

Each member in the family, the father, mother and children have different functions to perform and roles to assume. The roles do not follow a set pattern nor can they be brought under hard and fast rules and regulations. Every family varies from another family in every aspect. Nevertheless, society assigns certain basic functions to all the fathers, mothers and children.

The Women in the Family

The roles women assume in the family are those of wife, leader, administrator manager of family income and last but not least mother.

Wife

A woman's status in the family is that of a partner with her husband. Woman devotes her time, labour and thought; to this role for the welfare of the members of the family she sacrifices her personal pleasures and ambitions. Her energies and capacities are exercised for monitoring the activities of the family.

In the administration of the household and in motherhood woman makes an unparalleled contribution to family life complementing the contribution of the man. While man contributes to the material aspects of familial organization, woman contributes primarily to the content, quality and spirit of the institution. For the unity of the interacting personalities man provides the temple; woman provides the ceremonies and the atmosphere.

Wife is man's helpmate, partner and comrade. She creates the immediate situation in which the various members of the family interact with each other. She sets standards, relieves tensions, maintains peace and order in the household, to which the man devotes his economic capacities. She is his companion in the love life that deepens and enriches the personalitie of both. She challenges men to high endeavour and worthy achievements; she stands by him in all the crises which their common life experiences and she shares with him successes and attainments. She is the personality to whom, he turns for love, sympathy understanding, comfort and recognition.

Administrator and Leader of the Household

A well-ordered household is essential to normal family life. Disorderly procedures at home disintegrate the adult personalities. The woman in the family assumes this function. She is chief executive of an enterprise, calling for organization of effort, assignment of duties, direction of servants or services and purchase of equipment and materials. Preparation and serving of meals, selection and care of clothing, laundering, furnishing and maintenance of the house, maintaining furniture in good condition—all these are production processes scarcely divergent from those of the business enterprise. In the great majority of homes, all these processes are carried out completely by the woman or under her direction.

As administrator of the household, it is also the woman's responsibility to organize the social life of the family. In this capacity she arranges and executes appropriate social functions. She also acts as a director of recreation. She plans recreation which meets the needs of the various members of the family group—the young and old.

Manager of Family Income

While the man in the family is the chief economic agent, the woman manages the family income. It is her responsibility to see that the

maximum return is secured for the expenditure of the income that is available. She must decide what needs shall be met first; and judge what amounts shall be spent on necessities, comforts and luxuries. When she thus apportions the income among the various members of the family she acts as an economic agent in an economic process, namely, distribution of income.

To play this role effectively when the income is limited, she requires special training. It is more difficult to spend judiciously than it is to earn. The woman in the family also contributes to the family income through her own earnings within or outside the home. Even the woman who confines herself to the roles of motherhood and homemaking, makes positive contributions to the family income by the work she herself performs in the home. This has great economic value. The woman contributes materially to the family treasury in the economies she institutes in the administration of the household. These result in savings and constitute an actual addition to future income as well as safeguard against current contingencies.

The Mother

The whole burden of child bearing is laid upon the woman in the family. Nature has prepared her physiologically for this biological role. Nevertheless, she plays it alone. Man can only stand by reverently while the creation of new life proceeds. He can assist with tender care and constant consideration, but further participation is impossible for him. Upon the woman also falls the greater part of the task of rearing the child. The absence of the father from the home during many hours of the day leaves the mother largely unaided. She is primarily responsible for the child's habits of self-control, orderliness, industry, thrift and honesty. Her contacts with the child during the most plastic period of his development sets up his behaviour patterns. In this the father's influence will be more potent in later years, but the fundamental fixations are made under the mother's influence. She is thus the chief disciplinarian.

The mother also gives the child informal education which constitutes the subjective transmission of the social heritage. It is from his mother that the child learns the laws of the race, the manners of men, moral codes and ideals.

The mother, because of her intimate and sustained contact with the child, is also favourably placed to discover his traits and special attitudes. She gives the attention needed for the development of exceptional abilities. She discovers and nurtures his special traits, aptitudes and attitudes which give distinction to his personality.

The mother is the family health officer. She is concerned with the physical well being of every member of her group, the helpless infant, the sickly child, the adolescent youth and the senescent parent. She organises the home and its activities so that each member of the family has proper food, adequate sleep and sufficient recreation. She also gives special attention to those who temporarily or permanently present health problems.

The mother creates the home environment, with the father sharing this role with her. It is chiefly her talent which makes the home a place of quite, comfortable and appropriate setting for the children to the companionships it shelters. She cultivates taste in interior design and arrangement, so that the home becomes an inviting, restful and cheerful place.

The mother is the central personality of the home and the family circle. All the members turn to her for sympathy, understanding and recongnition. Several fond memories and the cherished traditions, associated with the 'home' centre around the mother. As motherhood arouses the most sacred and refined emotions in human experience, it has been given the highest recognition in the emotional life of the family.

Thus woman performs the roles of wife, partner, organizer, administrator, director, recreator, disburser, economist, mother, disciplin-

arian, teacher, health officer, artist and queen in the family. All these make the woman's role a career of the first order. No other role requires more varied talent or greater skill; no other involves completely the whole personality.

Influence of the Father

The father discharges an important role in maintaining the stability of the family and in supporting the functions of the mother. He has a significant influence on the psychological development of children. His influence becomes increasingly important as children grow older, reaching a peak during puberty and adolescent stages.

Thus the father's personality and attitude toward child rearing influences the role he plays in the family. If the father is a mild, non-aggressive person, who lets the mother hold the responsibility, his masculine influence may have indirect effect on children. If the father goes to the other extreme and is a tyrant whose decisions have more weight than those of the mother, he will exert a frightening stifling effect on his children. In a normal family the father presents to children patterns of emotional response and social action associated with aggressiveness, leadership and objectivity.

The father is a major influence on the sex typing of boys. The personal contacts that the child makes with members of his immediate environment influence the patterning of his personality. Boys need male identification figures for the development of masculine personality and to derive an understanding of how men should behave. Through this process of identification a boy becomes masculine in his interests, habits, motives and dress and develops the characteristics which will enable him to assume the functions of a normal male adult. Not only does the father set a pattern by which the boy may structure his own masculinity but also he helps the child conform to the demands of reality, serve to broaden his interests and stimulate the development of qualities of leadership, discipline, authority, and self-direction which are conducive to the emancipation of the boy from home in due course.

The father is important in the sex typing of girls too. The girl needs early contact with her father in order to gain an understanding of how men behave and how she should behave towards them. This helps to clarify her own femininity in relation to masculine modes of activity. If girls lack contacts with desirable masculine patterns of conduct during childhood, they may have difficulty in forming normal attachments with men in later life. The father provides the girl the masculine protection and security and also acts as an agent through which the child makes the transition from the normal, homesexual stage of development to a secure and wholesome adjustment to the masculine sex.

'Father' means different things to children at different stages of development. The young child sees him as a big, strong person who can do anything and who represents power, strength and security. To the growing boy, father becomes a model and an omniscient person who can answer all his questions. For the adolescents father has an even more important function to perform. The teenage boys have a great need for a man to look up to. If the father is a person who can be admired and if he has a secure relation with his son, the boy gets better prepared to accept the responsibilities of manhood. The maleness of his father's interests helps the boy to build interests that will make him acceptable to his peers.

Teenage girls are building an image of the man they would like to marry. They need to measure the boys they meet against an ideal marriage partner. For that purpose they depend greatly on the father or a father figure to provide a standard.

Where father-child relationships are unpleasant or unsatisfactory, the ill effects on the children become evident early in their lives. Studies of children in such homes show that

they lack in rivalry toward other children, have passive personalities and exert little influence over other children. Unsatisfactory father-child relations have been found to be associated with delinquency.

Fathers are rather sweeter on their daughters than on the sons. But boys try to identify themselves more with their fathers and imitate his characteristics. They look to their fathers for guidance. Adolescence is the stage when the boys are neither children nor adults. Their budding youth looks for a model to their father or big brothers. Both father- and mother-child relationship, with a grain of understanding is a must during adolescence for the better future of both the parents and the child.

Children in the Family

Human beings are not complete without children. Their happiness can never be full. The character development of the child is influenced by the environment of the family. The child in the home helps his parents to lead a natural life, understanding the world at large. He enlarges their capacities for love.

The position of the younger children in the family is one of dependence. They get all the care, affection and attention from parents and immediate relatives. The only children in a family would lead a siblingless life, missing the competitions, rivalry and the companionship it offers. The only child can use only his parents as models. So he may appear more mature for his age than children in a large family.

The Family is the Most Important of all the Institutions

The basic institutions in society are the family, government, school, religious centres, banks and other economic agencies. Of all these, the family has remained the most basic.

Human needs bring about creative changes and the needs themselves are changing from time to time. When the individual members change naturally the family has to respond. Therefore, the customs of the family have been changing from ancient times. The rapidity of the changes which took place in the 18th and 19th centuries surpassed all the changes of the previous centuries. The modern nuclear family is completely different from the joint families of the past.

The spurt of mechanical inventions has initiated a series of changes in family living. Mechanization has ushered in mass production of goods. The individual is now able to produce more. Hence the per capita income has gone up sizably. As a result, his purchasing capacity has multiplied and hence there is constant demand for more products. Many new industries have sprung up and there is stiff competition between them, each one trying to catch the market by introducting new 'types' with superior qualities. The consumer, in turn has more choices to select his goods. For example, even in the villages most families possess a transister radio. All these have led to a general increase in the standard of living of the people.

Mechanization has effected a shift in labour from manpower to machines. This has brought about far-reaching changes such as availability of a variety of new fertilizers leading to greater improvements innovations.

Transportation and commercial occupations have become highly specialized. Mobility has increased as the direct consequence of the growth in transporation. Social and geographic mobility have reached a climax. The 20th century has presented greater variety of occupations than ever before.

Industrialization has transferred labour not only from the rural to the urban areas, and from a few occupations to many, but also from the home to the factory, store and office. Women have been forced to come out of their homes to take up some gainful employment

outside the home.

The impact of steam and electrical inventions on human functioning is tremendous. The electric motor, the telephone and the incandescent lamp have been especially influential in reducing household labour and marketing efforts. Electricity has activated every phase of modern living.

The increased transportation facilities have saved much of people's time not only inland, but also national and intercontinental air travel. Business and marketing conditions have improved. All these have shrunk the size of the world. Radio, television newspapers, telecommunication and satellites have made it possible to pass on communications swiftly. The major effects are thus a general diffusion and levelling of culture and centralization of the sources of entertainment and information.

Two fields of biological discovery have been significant:

> the field of medicine, and heredity and reproduction.

Medical discoveries and inventions have revolutionised medical practices and led to development in hospitals, clinics, health activities including sanitary inspection, laboratory services and quarantine. Better health care facilities have increased the life span of an average Indian. Diseases dreaded so long and considered incurable can now be treated effectively. Family planning has been accepted. It has taken new dimensions, with the availability of more modern and scientific methods.

One of the important new developments is research on human sex life and its relation to heredity. New knowledge concerning social psychology, personality development and the interaction of personalities in small groups can help in making marriages satisfactory for a larger proportion of people.

Scientific inventions have altered ways of living with their effects upon value systems. Increased divorce is due to changed idealogy and moral values. Learning has been made much easier because of the introduction of new educational methods.

Among the basic institutions, the family has value for the individual and for the society, that can not be gained in any other way. The unique power of the home stems from the fact that it receives and houses the new human being first before any other institution can have a chance to make an impression upon him. It continues to remain the chief environment for the individual throughout life. Therefore the design for living improved by the home becomes inextricably the part of the individual's personality.

The family is responsible for the survival of the young. It is a place where an individual learns to live with himself and with others. The common understanding among the members of the family that each member has his own place in the affection of the other, that each member is different, but that each member shares in all that the family has to offer, helps to eliminate jealousy and makes for cooperative living. The family offers opportunities and experiences that make it possible for individuals to grow into persons capable of taking their places in the community, nation and the world. The family offers love, security, sympathetic understanding and cultural heritage from generation to generation.

References

Agarwala, B.R., 'In a mobile commercial community', in Symposium: Caste and Joint Family', *Sociological Bulletin*, Vol. IV, No. 2, Sept. 1955.

Baber, R.E., *Marriage and the Family*. London: Mc Graw-Hill Book Co., 1953.

Burgess, E., Locke, H.J., *The Family*. New York: American Book Co., 1953.

Bell, W.N., Vogel, F.E., *A Modern Introduction to the Family*. New York : The Free Press, 1968.

Desai, I.P., 'The joint-family in India—An analysis'. *Sociological Bulletin*, vol. V, No. 2, Sept. 1956.

Duvall, M.E., *Marriage and Family Development*. New York : J.P. Lippincott Co., 1977.

Hoeflin, M.R., *Essentials of Family Living*. London : John Wiley & Sons., 1960.

Karve, I., 'Kinship organisation in India', in *Deccan College Monograph Series*. Deccan College and Postgraduate and Research Institute, No. 11, 1653.

Kapadia, K.M., *Marriage and Family in India*. Calcutta: Oxford University Press, 1972.

Keithmalirlee, *Marriage and Family Today*. New York : Random House, 1977.

Kephart, M.W., *The Family, Society and the Individual*. Boston : Houghton Mifflin Co., 1977.

Mac Iver, R.M., *Society—A Textbook of Sociology*. New York: Farrar and Rinehart, Inc., 1937.

Murdock, G.P., 'The universality of the nucelear family in Bell, N.W., Vogel, E.F., *A Modern Introduction to the Family*. London: Macmillan Book Co., 1968.

Ogburn, W F., 'The changing functions of the family', in Robert, F.W., Goodman, L.W. *Selected Studies in Marriage and the Family*. New York: Holt, Rinehart and Winston, Inc., 1968.

Sur, A,K., *Sex and Marriage in India*. Bombay : Allied Publishers, 1973.

Wells, J.G., *Current Issues in Marriage and the Family*. New York : Macmillan Publishing Co., 1975.

Winch, F.R., *The Modern Family*, New York : Holt, Rinehart and Winston Inc., 1971.

CHAPTER 18

Crisis in the Family

Each family is unique in its style of living. While some characteristics of the family are fundamental some keep on changing through different phases. But when the changes are sudden, causing disorganization and disruption in the structure of the family and its functions, there is a 'crisis'.

Change brings with it the inevitable necessity for making adjustments. Many changes begin with small situations which may appear trifling in the earlier days; but become crises, because of their persistance and upsetting influence on the emotional stability of the individual who has to meet the problem. A crisis is something unusual (Waller and Hill, 1956), something that makes one strive for a different and unusual solution of the problem. Any rupturing of family relationships which forces reorganization of the family pattern not only constitutes a family crisis, but is also a threat to family unity.

Families are vulnerable to disorganization through loss of children as well as loss of parents. Children may cease to be members of the family by growing up, by alienation or by education on a different class level, by migration, marriage or death. Family disorganization also includes all situations in which one mate parts from the other. Bereavement and divorce are crises assuming an increasingly important role. Quasi-broken homes involve families in which the relationships have been disrupted or badly impaired although the legal marriage status persists 'until death'.

Crisis means different things to difierent people. In low-income families, living within and even beyond income, may cause financial crises that may be absent in the middle class family, which has reserves upon which it can draw. Conversely, the low-income family, with little to lose in the way of prestige or status and little opportunity to claim upward, may be able to react more favourably to endangered reputation than can the 'respectability-focussed' middle class family. Again, one family may have a 'tight' organization, with a firm adherence to certain patterns of action in all family situations, whereas another may be groping its way towards an adaptable family structure. Each will differ in vulunerability to crises and the adjustments each will make will also be different.

Foster (1957) classifies family crises into two types.

1. Loss of economic support, death, severe and prolonged illness and the like.
2. Crisis which involve social stigma like celibacy and major social calamities like war, economic inflation and depression.

In the first classification, there are two subtypes, namely usual and expected crisis and crisis arising from family conflict situations.

Usual and Expected Crisis

Problems arise daily in all families. They vary in time and degree, from family to family. As they are usual they are also 'expected'. Among these, some are beyond the control of the family members for example war, deaths, accidents, illness, unemployment or under-employment. Each crisis involves corresponding changes in the family. When one member falls sick, the role assigned to him is taken up by others, with the consequent general sharing of responsibilities. If the sick person is an earning member, economic stress has also to be borne by making alternative arrangements.

Crisis arising from Family Conflict Situations

This type involves the crisis arising out of the conflicts within the family. Emancipation from the over-protection or dependence upon families, feeling of being unwanted and rejected by the parents and conflicts with the relatives and between brothers and sisters, unwanted child in the family, illegal abortion or rejection after birth, extra-marital affairs, divorce and husband or wife nagging, irritating and complaining are some few examples of this category.

Crisis which Involve Social Stigma

Family and the society are interdependent and interrelated. Society has the upper hand in determining social status. Hence any mishappening in the loss of respectability in the society becomes a crisis to the concerned family. Included in this category are the alcoholics, jobless, those who neglect their job, physical and mental deterioration, delinquency, pre-marital relationships, pregnancy of unmarried daughter, and presence of mentally deficient or physically handicapped children in the family.

Another type of classification presented by Waller and Hill (1956) include the following three systems.

1 By source: whether extra family or intra-family.
2 Effects upon the family configuration which combine dismemberment and demoralization and
3 Type of event impinging on the family.

Source of Trouble

Crises differ in their sources. Some originate within the family (intra-familial) and others outside (extra-familial). Crises which arise as a result of economic depression or other calamities which are beyond the control of the individual family are extra-familial. Problems arising out of interpersonal relationships within the family are intra-familial. The first affects a number of families at the same time, while the latter, the members of a particular family.

Combinations of Dismemberment and Demoralization

This classification involves the combination of loss of family member (dismemberment) or addition of an unprepared member (accession) and loss of morale and family unity (demoralization) or all three. Most crises involve demoralization, since the family's role patterns are sharply disturbed. Dismemberment creates a situation in which the departed one's roles must be reallocated and a period of confusion experienced while the members of the family learn their new roles. Given below is the classification of crises involving the combination of dismemberment and demoralization.

Types of Disrupting Events

Family crises which threaten to disrupt the family can be grouped as (a) a sudden change of status (b) conflict among family members in the conception, and (c) loss of family members by departure, desertion, divorce or death.

Dismemberment	*Accession*	*Demoralization*	*Demoralization Plus Dismemberment or Accession*
Loss of child	Stepmother	Infidelity,	Illegitimacy
Loss of spouse	Stepfather	Disgrace, Loss	Run away situations
Orphanhood	Addition	of reputation	Desertion
Hospitalization	Adoption		Divorce
War Separation			Imprisonment
			suicide or Homicide

A sudden upturn in economic and social status may constitute a crisis quite as disruptive as that of economic loss or social disgrace. Many of the difficulties which build up into crisis involve differences in conception of their respective roles by the family members. Dismemberment involves a threat to the family organization—to its form and structure.

Crisis-proneness in Families

Three variables help to determine whether a given event becomes a crisis for any given family:

1 The hardships of the situation or event itself.
2 The resources of the family: its role structure, flexibility and previous history with crisis.
3 The definition the family makes of the event, that is, whether family members treat the event as if it were or were not a threat to their status, goals and objectives.
4 Stamina or endurance of the family.

It is not what the event is, but rather what happens as a result of the event. For example an economic depression is not a 'cause' of family crisis, although it may have brought about the loss of job and a sharp decrease in the family's income; it is only a precipitating factor. There must be something else present, which, interacting with the precipitating event, produces the crisis in a given family (Waller and Hill, 1956). The equation runs as follows:

A (the event)—interacting with B (the family's crisis meeting resources)—interacting with C (the definition the family makes of the crisis)—produces X (Crisis).

The same crisis precipitating event affects different families in different ways depending upon the hardships accompanying it. For example, a sudden spiralling in prices affects all low or middle income families. But some families which have more than one earning member are not affected so painfully as some other families where there is only one or no earning member at all. It also depends upon the number of dependent members, their age and the expenses they incur. If there is a college going boy, his educational expenses are to be met. If there is a girl of marriageable age, some arrangements will have to be made to meet marriage expenses.

Crisis-meeting Resources

Crisis-meeting resources in the family refers to the 'B' factor in the equation, which by their presence or absence, keep the family from crisis or push it into crisis. There are two resources—family integration and family adaptability. By the first is meant the bonds of coherence and unity running through family life, in which common interests, affection and a sense of economic independence are most prominent. Adaptability refers to the family's capacity to meet obstacles and effect adjustments as a family.

A crisis-proof family must have agreement in its role, structure, subordination of personality, ambitions to have family goals towards which the family moves collectively and satisfactions within the family. Having these, the family is 'adequately' organized. If not it is 'inadequately organized'.

Koos and Fulcomer (1948) identify the following as contributing to family crises.

1 Conflicting interpersonal relationships
2 Conflicting family roles
3 Cultural divergencies between husband and wife
4 Conflict in aspirations
5 Class membership pressures
6 Economic pressures.

They depict the interrelation of all these factors in a polygon of interesting forces.

Causes of Family Crisis

For example, a girl from modern Christian culture, with independent views on women's liberation marries a gentleman from an orthodox Hindu family. There is deep clift between the outlooks of both and when the bond of love and affection binding them together loosens, their dissatisfaction arising out of conflicting ideals increases. Eventually, inadequate interpersonal relationships, class membership pressures, economic and other stresses result and take the form of a crisis and cause disorganization of the family.

Any crisis is a blow to the family. All members are affected collectively. First there is disbelief of the event, and then of the members. This is followed by intense reactions which are expressions of sorrow, anger or anguish. There is tension everywhere. Members are downcast and their interpersonal relationships are strained. They play their roles without enthusiasm. But when the lowest point of disorganization is reached, things begin to improve. Members learn to accept the inevitable and take up new responsibilities through the trial and error method. They arrive at routines by thoughtful planning and sacrificing and make agreements for the future. The general pattern of adjustment to crisis is in the direction: Crisis—disorganization—recovery—reorganization.

Crises have short-and long-term effects upon the family. Previous experience in the handling of a similar type of crisis increases the family's ability to adjust to the new one. Had they been successful with the previous method, they try to adopt the same method of adjustment again and again, and if they had faced defeat, it would have led to demoralization and more sensitivity to future exposures.

Family adaptability, family integration, affectional relations among family members, good marital adjustments between husband and wife, companionable parent-child relationships, family counsel type of control in decision making, participation of wife in activities outside the home and previous successful experience with crisis are all important factors in enabling families to adjust to crisis.

BEREAVEMENT

Bereavement is the dismemberment in the family resulting from the death of a member. The loss is permanent. Even though the deceased person's role may soon be taken up by somebody else, the personal loss of the member to the family remains for ever.

A beravement may be the loss of mate, parent, child, sibling or other close relatives or associates. Its effect varies with the age of the bereaved, his emotional involvement with the family, the manner of death, the relationships of the bereaved, and the degree of emancipation of the bereaved person.

The mode of giving vent to bereavement varies from culture to culture. For example, the Christians and Muslims mourn silently, while the Hindus show their grief explicitly by crying.

The first reaction on hearing the news of the death of a bereaved one is a general numbness. The mind refuses to record the loss even after seeing the dead body. Following this numbness, comes the inability to face reality. The mind of the bereaved refuses to record the loss. The affected one starts having his doubts about the pronouncement of the death. There lurks in his mind the thought that the doctor may be wrong in confirming the death. He tries to check whether the deceased is breathing. When he becomes absolutely sure, which is made mostly by the reaction of his kith and kin, his emotions burst out and he becomes uncontrollable. His sorrow increases as the relatives gather and he refuses to let the body be taken away. Just at that moment of sorrow, it seems impossible to think of a life without the deceased. It takes several days, sometimes months and years to get used to the dismemberment. The painful state is felt whenever the bereaved hears things about the deceased.

Bereavement is also a social crisis. It is considered to be a great shame if one does not attend the funeral of someone he knows. Even previous enmity is forgotten in bereavement. The bereaved needs all the consolation and help others can offer him. He reaches out for their help. General supervision about the funeral and taking care of the children are done by the neighbours and relatives, till things return to normalcy.

The degree of loss felt by the bereaved varies from individual to individual. If the deceased is the head of the family and earning member, his loss is felt by all the family members intensely, especially if there is no other member who can take up his role. The bereavement is more for a young man's death than for one who dies at ripe old age.

Bereavement inevitably affects the family configuration. There is a break in the family. There is a void. Much personal adjustment and readjustments are needed to fill the emptiness. In the case of the death of the wife, the husband needs to take up the responsibility of caring for the children and other household work. He has to play the double role of father and mother, although, nobody except the mother can discharge the mother's role. Children do not readily accept the father or any other relative as their mother, and become difficult to handle.

Remarriage often follows the death of wife and then arises the problem of the stepmother. Even if the stepmother is kind hearted, and showers real affection upon her stepchildren, she is not viewed in a favourable light because of the social stigma attached to stepmother-child relationship. When the stepmother also bears a child, the problem becomes all the more complicated. The father may try to be over-protective of the children of the previous marriage and defend them, or back his new wife, which may result in hostility and antagonism on the part of children.

The plight of a widow is worse, particularly if her husband dies young and she is left with small children to be brought up, without money. In older times child widows were common, since girls were married off at the age of five or six years and lost their husbands even befere reaching their puberty. They spent the rest of their lives either with their in-laws or with their parents. Very strict regulations were imposed upon them such as eating only once a day, foregoing the night meal, doing all the household work and attending religious discourses. If any one happened to see them first early in the morning, it was considered a bad omen. Widow remarriage was unthinkable.

Now these conditions have improved tremendously. Widows come forward to get educated and become selfreliant. Several remarry and receive state awards for such marriages. Widows and children of widows receive special concessions for education and employment.

When bereavement and mourning become chronic in a family the bereaved become psychologically affected. In such circumstances they need special care and attention. The near

and dear ones take it as their prime duty to console such bereaved constructively.

DIVORCE

Divorce is merely the undoing of a marriage, a process of unmarrying people who have been married. It is an official recognition that their marriage is a failure and therefore has more cause for being terminated rather than continuing (Baber, 1963). However, though divorce indicates the failure of a particular marriage, its absence does not indicate success. In the Indian society, divorce is looked down upon as unrespectable. Hence couples try to stick on together for the sake of keeping up their social status and also for the children, even though there is no harmony in family living. As a result of this and also because of the strong family ties, divorces are less frequent in the Indian society but rapidly increasing. Some major causes of divorce are as follows. 1. Feeble mindedness, dementia praecox; 2. poverty, economic pinch and economical disparity between the husband and wife; 3. neglect of the wife by the husband or vice versa; 4. drinking, nagging; 5. improper sex mating, physical incompatibility; 6. adultery, infidelity, bigamy; 7. troublesome relatives or in-laws; 8. lack of identification with religion or disparity in religious faiths; 9. personality problems; 10. conflicting ambitions, values and needs of the couple; 11. extreme cruelty; 12. desertion; and 13. conviction for crime.

Effects of divorce

The effects of divorce vary from family to family. Both personal and general losses are involved. The loss of former love object affects the whole life situation. Each party blames the other and there is general yearning, frustration and a sense of emptiness. But for some, divorce is eagarly awaited in the hope that it will pave way for a newer type of life. For them divorce is an escape from one situation to another.

Sometimes even after divorce, one partner continues to love the other. The divorcees become self-centered and try to find solace by pouring out their hearts to their friends. Some immerse themselves in work to ease tension and divert their mind. Gradually the wound might heal and reorganization start. New love objects are chosen and new philosophy of life emerges therefrom. In the West remarriages are common among the divorced. In India, men have the privileges to set up a new life, while the women are expected to lead a solitary life supporting themselves. But this situation is fast changing and women have started to assert their right to remarry.

Children are the worst affected by divorce. There is too often a pulling and hauling at the child from both sides. Divorce laws differ from country to country and from state to state in the same country. In some, children are given away to the father and in most, to the mother. Usually the younger children are left to the custody of the mother. In either case, the children are torn between both and their loyalty is divided. The older children who for some years have lived with both the parents, find it difficult to forego one or the other parent. If the child has been asked to live with the father and mother alternatively, his condition is worse. Most probably he is used as an informant in both the camps and does not find any attachment in either place. The stigma attached to the words 'stepmother' and 'stepfather' undermines their ability to accept and adjust with the new father or mother. His social status in his play group is at stake and his whole attitude towards marriage may become cynical and warped. His inner turmoil becomes too much for him and this may lead to juvenile delinquency, sex crime and other adolescent crimes.

While children are affected severely by divorce, childlessness itself acts as a reason for a divorce. But if the couple are really and truly bound by the bond of love and affection, the question of divorce is not likely to arise under any circumstance.

DESERTION

Desertion is the willful leaving of one mate from another. It is one of the most common reasons for broken homes. In the case of desertion the whereabouts of the deserting person is not known. The deserters are generally the men. Women desert rarely, especially if they have children.

The deserter may set up a new family somewhere else and may feel guilty to return home after many years. Occasionally desertion is associated with some crime or an act of shame, caused by the deserter.

ALCOHOLISM

Alcoholism can by itself become a critical situation in a family. Alcohol is consumed for the pleasurable effects it gives. But unfortunately its toxic effects impair health. As with any other substance some people are more sensitive to the toxic effects than others. Some can consume tremendous amounts and get away without any unpleasant effect. Others cannot tolerate even small amounts. Anyone who takes atleast one drink every day is a chronic alocoholic.

When alcohol gets into the circulation it reaches every cell of the body and affects it in one way or another. But certain cells are more sensitive than others. The brain is relatively more sensitive to alcohol as can be seen from the behaviour of people who drink for a long period of time and drink large quantities. They tend to have a brassy voice. The liver is another area where the cells are injured. The brain cells are also damaged quickly by alcohol.

Alcohol can produce the syndrome called alcoholic cardiomyopathy. As a result of this syndrome, heart becomes enlarged and fails to pump properly. The patient becomes short of breath, the liver becomes enlarged and the neck veins become distended. Some of these irregularities are rather serious and can become fatal. These irregularities are particularly common where there is malnutrition associated with improper eating and alcohol intake. When an alcoholic drinks, he not only injures himself but also his family, his children, his associates and those with whom he works and interacts. The dangers of alcohol must receive much more attention and publicity. The best way to handle alcoholism is through education and through influencing the behaviour of adults and parents.

A majority of these crises and problems are not under the control of the family. They must be endured with patience. Thoughtful planning, maturity and ability to adjust to new circumstances will help. It is not a task to be accomplished by a single individual. The whole family needs to be reset, as a co-operative endeavour with the motto 'united we stand, and divided we fall'.

References

Baber, R.F., *Marriage and the Family*. London: Macmillan Co., 1957.

Burgess, E.W., *The Family*. New York: American Book Co., 1960.

Duvall, E.M., *Marriage and Family Development*. New York: J.B. Lippincott Co., 1977.

Foster, R.G., *Marriage and Family Relntionship*. New York: The Macmillan Co., 1957.

Koos, E.L., Fulcomer, D., Families in crisis, in Duvall, E.M., Hill, R., *Dynamics of Family Interaction*. National Conference on *Family Life*. Mimeographed Report, 1948.

Melirlle, K., *Marriage and Family Today*. New York: Random House, 1977.

Ross, A.D., *The Hindu Family in its Urban Setting*. New Delhi: Oxford University Press, 1961

Sinha, P.M., Gangrade, K.D., *Inter-Generational Conflicts in India*. Bombay: Nachiketa Publications Ltd., 1971.

Sussman, B.M., *Source Book in Marriage and the Family*. Boston: Houghton Mfflin Co., 1963.

Waller, W., Hill, R., *The Family*. New York: Dryden Press, 1956.

CHAPTER 19

Old Age

Every human being passes through various stages in his life time—birth, infancy, childhood, adolescence, adulthood and old age. This biological transition through different stages has cultural and human overtones. Age definition and differentiation carry significance to the society and the individual. For the society, they function as indicators for the allocation of various status and roles. For the individual, age serves as an important base for self-perception and role performance. In the Indian home, elderly people are regarded as symbols of the divine and given utmost respect. They are considered as the repositories of wisdom, carriers of traditions and transmitters of experience and ideas of group living (Bhatia, 1964). The aged have a definite place in the community. By virtue of their age, they perform certain traditional functions in relation to the other individuals and groups. However, this role is undergoing a metamorphosis because of modernization due to scientific and technological advancement.

Today there are more than 200 million people in the world above the age of 60 years, including 24 millions in India alone (Chandra, 1970). Ageing starts from 55 years onwards (Soodan, 1973). Old age is usually the period between retirement and death. Chronological age is a poor criterion for marking old age. There are such marked differences between individuals in the age at which they actually begin to age. Due to better living conditions and medical facilities life span has increased and ageing does not start till the mid-sixties or early seventies, but the traditional dividing line is still in use. For some, old age is one of the longest periods in the life span, while for others, it is one of the shortest.

With the increased span of life in India, a person over 65 years of age may be considered as aged. According to the population figures supplied by the Planning Commission, there are 6.3 million persons in the age group 65 to 69 and 7.7 million persons in the age range 70 years and above. Due to the increased longevity, the retirement age in India has been raised from 55 to 58 in several sectors. In the Scandinavian and other Western countries, the retirement age is 70 (Chowdhry, 1966).

Gerontology and *Geriatrics* are two areas of science related to the old. Gerontology is the science and study of ageing. It is concerned with all aspects of ageing, with all forms of life, not human alone but even inanimate things. Geriatrics is that area of medical practice concerned with the physiology and pathology of those in later maturity, and of the elderly. It deals with the health of the aged and their medical care.

Problems of ageing make their appearance generally after the age of 65 years. Among the 14 million persons in India today in this age group, how many are infirm is not known. Unlike in several developed countries—socialistic or otherwise, there is no old age security

in India except for the meagre old age pensions in some states. The welfare of the aged and the infirm is the responsibility of the family. Some voluntary welfare organizations, particularly the Christian ones provide care and treatment services to the aged and the infirm. Mother Theresa, the Nobel Laureate, has done great service in this regard by establishing houses for the destitutes and dying. The contributions made by the pioneering efforts of the Cheshire Homes of the Central Social Welfare Board and some state governments who have a system of giving grants to institutions and agencies working for the welfare of the aged are laudable. In U.S.A., Canada, U.K., Scandinavia and others, the service for the aged and the infirm is the state's responsibility. Although voluntary agencies, particularly those belonging to certain churches, provide institutional services and recreational activities, the responsibility of financing these services lies with the Government. Sri Lanka is one of the most progressive countries, where government has taken the full responsibility of providing service to the aged in the country.

Characteristics of old age

The characteristics of old age are:

1 Loss of general attractiveness and status because of loss of productivity in the matter of work and money. Feeling 'useless' may be the source of frustration.
2 Deterioration of sense faculties
3 Loneliness
4 Ill health
5 Financial worries
6 Decline in mental functioning which leads to think and learn slowly, to forget quickly, to be confused, to have repetitive speech, to wander in attention and get fatigued quickly.
7 Decline in companionship, withdrawal from social contacts and loss of interest in personal life and family responsibility.
8 Feelings of insecurity, selfishness, demanding attention and unwillingness to do his share of work.
9 Cautious, conservative and religious
10 Feelings of inadequacy, rejection, self-pity, apathy, negativism, rigidity and regressive tendencies.

Social Problems in Old Age

Due to the increase in life expectancy, which is the direct result of the better health care, the number of the aged in the society is on the increase. Not only is the number of old people is becoming greater, but the proportion of the aged in the total population is also becoming steadily greater. The life expectancy for males is less than the life expectancy of the females. Hence there are more old women and widows than old men in the population. After the spouse's death men remarry somebody several years younger than them, and as a result more widows are left. But in the Indian society, an old woman seldom remarries.

Some of the important social effects of an increase in the old age group are:

1 Additional burden on the young who support the old.
2 Fall in standards of living due to the increase in the non-productive persons.
3 Greater conservatism because the old whose number is increasing are resistant to changes.
4 Disturbance in sex ratio
5 Subjection of a large portion of the population to idleness with the resulting feelings of inadequacy and uselessness which sometimes lead to mental and behavioural disorders, necessitating more medical attention.

Economic Status

As the younger generation in India consider it

their duty and privilege to support their parents, the increased burden of the old is not felt much. As the population becomes more urban and secular, adult sons and daughters become more reluctant to support their parents. If the parent has retired, his retirement income may be low. Therefore, a relatively large number of families with aged people as heads of the family are dependent on the eldest son or the other earning members for assistance.

The retirement pension given to the old in India is meagre. Therefore finance is the foremost of economic problems in old age (Desai and Nair, 1970). Whatever income they get on their retirement is exhausted within two or three years on daughter's marriage, son's education or acquiring some property. The economic burden is felt more keenly in the urban rathar than the rural areas where a majority of the old are independent agriculturists (Sundarakumari, 1972). But with the development of new farming methods, they feel left out and their usefulness to the job is affected. Migration from rural to urban areas his also disturbed and lowered greatly the economic status of the old.

Old age is the period when the individual enjoys the fruits of his labour organizing leisure time activities. The old have all the time in the world to enjoy life and look back on life. They have the prestige that comes from past achievements. So long they have supported their families and now they expect loyalty and gratitude from them.

Social Roles

In the Indian culture the old woman takes up the role of the 'kind grannie' who virtually brings up the young. She also supervises the household chores. The old man's guidance is sought from time to time in all the matters—social, economical, political and religious. Sundara Kumari (1972) studied 150 men of above 55 years of age and found that the aged expected youngsters to consult them mainly on finance, education and marriage. Times are however changing this enviable position enjoyed by the old in the family. But they are still considered as assets and not as burdens. Society has prescribed them suitable social roles such as consultants and leaders for social functions. Old men always enjoy greater privilege, compared to old women.

Adjustments in Old Age

Adjustment in old age are difficult because of the limited capacity of the old, their diminishing energy and declining mental abilities. There are two aspects to psychological adjustments: the outer and the inner. The outer aspect is evaluated by external observers in terms of the individual's capacity to function appropriately and efficiently. The inner consists of the degree to which the individual achieves a relatively integrated satisfaction of the various psychological needs and experiences a pleasurable sense of well-being, contentment and relative freedom from unpleasant tensions and anxieties. The degree of success depends upon the individual's adaptability. The world will not adapt itself to the elderly. only the elderly will have to adapt themselves to the world.

If the role assigned to an individual in the society has been well-defined, then adjustments becomes easier. In olden days, the part of the elderly in the society was clear cut. They were considered as the reservoirs of wisdom. They had the authoritarian role of the 'boss' in the traditional joint family. Though they are still given due respect, their role has not been defined well. Caught in the midstream of conservatism and changing trends, their position today is ambiguous.

Personal Attitudes

The individual's achievement depends upon his personal attitude towards the problem faced. The attitude of the individual is coloured by his past experiences. If he had been able to cope well with other roles ascribed to him in the past, he is less likely to experience difficulties in settling down to the aged life. But those who had bitter experiences in the past are likely to be more maladjusted. Some old people are optimistic about the approach of the old age or the 'closing period' of life. They are quick to adapt to the changing life. Lack of preparation for the oncoming stage also makes adaptability difficult. The man who has made proper financial and other arrangements for the rest of his life, looks forward to this period of rest and leisure, more happily than others who feel insecure and inadequate and dread the onset of ageing and the problems it is likely to bring.

The foundations for a happy old age should be laid in early life itself. If children are taught to help and respect the aged, they will be shown the same attitude by their own children. When the foundations are poor, the waning physical and mental resources of the individual render the old person less capable of making adjustments to changes in his life.

Health conditions affect adjustments in old age. Those who are healthy have the zeal and courage to face life defiantly, while the less healthy become dependent on others. Not only the actual health condition, but also the attitude exert a tremendous influence.

The type of place of living and interpersonal relationships with others have a marked influence on the adjustment process. The type of environment where there is love and affection and respect for the old, is more conducive to successful old age than others. The modern flats confine the old and narrow down their already dwindling interests. Similarly, institutionalized aged are less happy than the ones living with families. Adjustment is closely associated with the living arrangements resulting from choice rather than necessity.

Old age is a period of physical 'decline'. The physical condition depends partly upon hereditary constitution, temperament, the manner of living and environmental factors. Vicissititudes of living, faulty diet, malnutrition, infectious intoxications, gluttony, inadequate rest, emotional stresses, overwork, endocrine disorders and environmental conditions like heat and cold are some of the common secondary causes of physical decline.

Face is the index of not only the mind but also of age. Due to the loss of teeth or wearing down of the teeth, the jaw becomes smaller and the skin sags. The cheeks become pendulous with wrinkles and bags and the eyelids become baggy with upper lids overhanging the lower. The eyes seem dull and lustreless and they often have a watery look, due to the poor functioning of the tear glands. The nose is elongated and, as the lower part of the face is shortened by the changes made in the jaw, the nose appears larger than it actually is. Loss of dentures affect speech and some even appear to lisp.

The skin becomes rough and taut and loses its elasticity. Wrinkles are formed and the veins show out prominently through the skin. Perspiration is less profuse. Holes and other skin blemishes appear as the age advances. The hair becomes thin and grey. Nails become thick and tough. Shoulders stoop and are either overweight or underweight. Tremors of the hands, forearms, head and lower jaw are common.

Bones harden in old age, become brittle and are subject to fractures and breaks, which are increasingly slow in healing as age progresses. Changes in the nervous system have a marked influence on the brain. Atrophy is particularly marked in the spleen, liver and soft organs. The ratio of heart weight to body weight decreases gradually. The softness and

pliability of the valves change gradually because of an increase in the fibrous tissue from deposits of cholesterol and calcium, and the aged are more prone to heart diseases than others.

Due to the weakening regulatory mechanism, body temperature is affected. Therefore the old persons feel the change in climate more profoundly than others. They experience difficulty in going to sleep and suffer from digestive troubles, even if the diet is slightty altered. Malnutrition is a great hazard to the aged. Due to dental problem they are not able to chew or swallow well. The old are more accident-prone because of their slow reaction to danger, which in turn, is the direct effect of the malfunctioning of the sense organs and declining mental abilities. Strength and work capacity decrease.

Eyes and ears are also affected greatly. Changes in the nerve centre in the brain and retina affect vision and sensivity to colour is also lost gradually. Most old people suffer from far sightedness because of the diminishing capacity of the eye lens. Loss of hearing is greater for males than for females.

As age increases, the sexual potency decreases along with a waning of secondary sex characters. Women experience menopause generally at the age of 45-50 years accompanied by nervousness, headaches, giddiness, emotional instability, irritability and insomnia.

A decrease in motor capacities, in terms of strength, skill, speed of reaction, time and ability to master new skills occurs with advancing age. The movements of the aged are less coordinated. They get fatigued easily. New skills are not learnt easily and there is lack of motivation.

The elderly must adjust themselves psychologically before they can make the needed adjustments in the patterns of their behaviour. With ageing there is slowing down of memory and other mental abilities. There is a slipping of memory in old age. Forgetfulness is one of the popular criteria of old age. Old people forget the immediate present, the names of grandchildren and others who have come into their lives recently and seem to remember the past very well. They find it difficult to learn and remember new names, figures or facts. The rate of mental decline is dependent to a large extent on the physical condition of the individual. Lack of environmental stimulation leaves its mark on the rate of mental decline. Studies on the aged show that those who continue to work have more normal brain functioning and do better on intelligence tests than others. General intelligence and independent creative thinking are usually affected in old age. Old people relive their past youth and childhood and tend to confuse the past with the immediate present. As this forgetfulness and mixing of the past and present increases, senility sets in. At this stage, they live in a world of their own. The declining mental ability makes them dependent. They no longer have trust in their own ability or judgements. At the same time they feel left out, when the youngsters do not pay attention to their suggestions and advice.

Loss of spouse is an oppressing psychological problem common to all the old. Adjustment to death of a spouse is difficult for men and women in old age because at this time all adjustments are increasingly difficult to make. Futhermore, as old age is a period of contracting interests, especially social interests, being left alone cannot be compensated for by the development of new interests as readily as it would have been during the younger ages. In India men are much older than women when they marry. Hence there are more widows than widowers in the old age population. Since marriage is still considered a sacred union, widowhood results in a loss of status, and every woman wants to be able to enjoy the status of the 'ripe Sumangali' till her death. Widows cannot participate in some rituals and ceremonies because they are considered ill omens. More-

over, widows become economically dependent on their sons, unless they have some property of their own. Even then they are expected to live with their sons.

As to the Indian widower, he loses the service of his doting wife and feels lonely and left out. No doubt he can reside with his sons, but having been used to being looked after by his wife, his increased dependence on others may cause frustrations and irritations. Very few elderly people anticipate the problem of widowhood and make plans for it. Therefore when it happens, they are seldom prepared to meet it and adjust to the problem of loneliness that it brings. When the spouse dies, the other loses the company he/she has had for several years.

Older people increasingly suffer social losses with age. Their social life is narrowed by loss of work associates, death of relatives, friends and spouse and poor health which restricts their participation in social activities. The home becomes the centre of their social life which gets confined to the interpersonal relationships with the family members.

Retirement usually results in loss of status so far enjoyed in the social circle and also income. To most it is a orude awakening. Most men are unprepared for retirement. They rarely get a chance to save for their old age. Most of their income has been spent on education of sons and marriage of daughters. They gets a certain amount as provident fund, pension and other such benefits after retirement, which are also spent on some major expenses like marriages. Apart from this they get a meagre amount as pension. So with retirement the family economic balance is upset. If the eldest son has finished his education by then and is earning, he accept to bear the 'yoke'. Nowadays girls also increasingly accept this family responsibility. The retired therefore start searching for reemployment which is difficult because unemployment is acute.

Taking up a new job is also affected by the familiar attitudes. According to a survey conducted on the aged in Lucknow in 1973, it has been found that the upper class Hindus do not like to come down from their previous level to take up new jobs as compared with the low caste Hindus. Moreover, it has also been revealed that the retirement income among all castes is spent within 3 to 5 years on marriage, acquiring new property, education, family maintenance and business (Soodan, 1973). People start identifying the retired in terms of 'what he was' instead of 'what he is'. In the family also he is reverted from the state of 'chief bread winner' to a 'mere dependent'. Moreover, limited contact with outside world makes it difficult for them to understand and move with the younger generation. Some of the recreational activities indulged in by the aged are reading newspapers and books, attending religious discourses and chatting with their age mates in clubs and other forums.

Acceptance of the old in the modern family depends on their age, health, personality, adaptability, their demands and their willingness to accept the new generation and to allow the other members of the family to lead their own lives without interference. The reactions of the other members of the family too have a profound influence upon the interrelationships. Nevertheless grandparents provide an additional source of affection and enrichment of experience. They feel younger through their close contacts with children. Problems of baby sitting and helping with child care are also reduced when the grandparents live with their children.

Changing Social System

Today the traditional joint family system has given way to the modern nuclear family system where the aged find less and less place. They are being increasingly isotated and left out. They are unable to cope up with the speed of the modern world. In the villages also they

are not wanted with newer farming practices and migration. Young men are increasingly hesistant to take up the burden of their parents in these hard days of inflation. But still most of the aged prefer to live with their children during the last phase of life when they need their warm affection and close relationships. Quite a few settle down in their native villages where they are seen not only as 'they are today' but also as 'they were yesterday'. By and large the Hindu grandparents still feel as an integral part of family life (Ross, 1961). Generally the older persons are looked after well by their children and grandchildren. Therefore, the need for setting up institutions for the old is not yet as acute as in the West. But there are some problems which need immediate attention. The older people will be a problem in the near future. Welfare services must be provided to the senior citizens by institutions as in the West. Families must be strengthened by avoiding the ill-effects of urbanization and industrialization and by providing supportive services to the family.

Although a joint family looks after its older members, there may be cases of dependence without sufficient means. Such persons and those who wish to have a life independent of their families in the company of their own agemates, need institutional services and clubs or day centers. This need in India is all the greater because the system has lost its ground due to the social changes. The average expectancy of life is also increasing with reduction in infant mortality, public health programmes, better medical facilities, improved sanitation and due to the progress made by better nutrition and medical science. The problems arising out of longevity of life are now gathering new dimensions. The modern socio-economic system makes old age a serious social problem. With new values in new setting, unqualified adjustment on the part of the old is necessary. They must be given education in democratic way of living. Planned and purposeful activities which will constructively engage older persons according to their capacities must be organized.

The feeble, the infirm, the incurable, the physically and mentally handicapped and those aged who are suffering from chronic illness need special services either in their own homes or at infirmaries.

The needs of the aged are: environmental, occupational, economic, health and leisure. The following five different types of provisions would help the older and infirm persons.

1 Day care centres or older person's clubs for those who live with their families;
2 Institutions for unattached, dependent and friendless persons;
3 Infirmaries for incurable and the chronically ill;
4 Employment opportunities to enable the able aged to have economic security; and
5 Financial assistance or pensions to those aged and infirm who can live in their families but do not have sufficient means to maintain themselves.

Old age is a period of physical and social loss, loss of children, spouse, friends, job, property and physical appearance. One of the major problems in old age is how to keep oneself actively and constructively engaged for the personal and social good. Being gregarious, man wants to belong to a group even in old age, in order to express himself and to have a sense of belonging. He needs a group of friends with whom he can share common interests and spend his spare time. In the United States of America, UK, Canada and other developed countries, welfare agencies have started non-institutional services for older people. They are known as 'Golden Age Centres', 'Day Care Centres' 'Recreation Centres' or 'Hobby Clubs' for senior citizens.

Through planned activity, education, and recreation, the day centre programme creates an environment and community conducive to the old people's physical and mental health. It prevents premature physical deterioration which is usually the result of inertia in older persons.

In the day care centre, a person spends his spare time constructively avoiding conflicts in the family which arise from an idle mind. These centres provide useful service to unhappy, lonely and defeated oldsters, help them make new friends and make day time hours happier and engaging.

The requirements for organizing a Day Care Centre for the aged are :

1 A small building in the community with sufficient space for afternoon rest, library, reading room, crafts and hobbies, indoor games and open space for outdoor games and meetings. The building should be situated in healthy and open surroundings and be easily approached by the members.
2 Equipment for crafts, material for hobbies, literary works, popular magazines and newspapers, radio, simple furniture, easy chairs, benches, mats, clock and arrangements for serving light refreshments.
3 A worker with warm understanding of the problems of older persons, interest in their welfare, knowledge of group work techniques and leadership abilities.
4 Group of volunteers interested in serving old people and having understanding of their problem. They could help the aged in : (a) writing letters for them, (b) reading books to them, (c) having friendly chats, (d) planning recreational activities, and (e) collecting books and magazines for them.

Through various activities the programme of a Day Care Centre should provide opportunity to the older people to :

1 meet people and make new friends,
2 occupy their leisure time constructively and to overcome loneliness,
3 keep themselves physically and mentally active,
4 be independent, useful and self-sufficient and
5 accept responsibility, get a feeling of belonging and being wanted.

In short, a Day Care Centre programme should help the older individual to spend his time usefully and constructively in order to achieve happiness and avoid any inconvenience to the family and community.

Home for the Aged

In India the family is still taking care of its older members because of its strong ties. However the need for institutions for older people as the Homes for the Aged in Western countries, is now felt for the following reasons:

1 Inability of old persons to adjust with their families due to conflicts with the other members of the family.
2 Feeling lonely and dejected irrespective of education, income and/or family relationships.
3 Having lost touch with their families, they are no longer needed to help, either because their children have married, or the latter are trained to patterns of behaviour and family set-up which do not include their parents.
4 They do not have any family or friends.
5 The death of either the husband or wife adds to the misery of being 'lost'.
6 The environmental changes add to the sense of inability to adjust, and
7 Ill-health and being unable to care properly for oneself.

In India there are today such homes for older persons in Bombay, Poona, Dehradun, Delhi, Jamshedpur, Calcutta, Serampore, Katpadi and Coimbatore.

Old age also brings with it feebleness, chronic illness, and other physical and mental disabilities. Some oldsters constantly need medical treatment. Prolonged illness creates difficulties not only for the patient, but also for the family which is unable to provide for nursing and medical care. Therefore, there is need for separate institutions for such persons. At present the aged and the infirm are being

served in the same institutions. The problems of normal aged persons are different from the problems of the infirm and incurable, who need careful nursing. Hence there is need for infirmaries on medical lines, separate from institutions for the normal aged. An infirmacy means residential medical care to the aged suffering from chronic illness and nursing care to the incurable and the infirm, separate from custodial care which normal persons require.

The study team on social welfare set up by the Planning Commission recommended that the Government may work out minimum standards in social welfare services. The Indian Conference of Social Work appointed study groups which worked out minimum standards for child care institutions. Later, the Central Social Welfare Board brought out a brochure indicating standards for welfare services. The Union Parliament enacted orphanages and other charitable homes (supervision and control) Act in 1960. No attempt has, however, been made so far to work out minimum standards for services and institutions for the aged and infirm. The field is neglected because the problem does not seem to be so pressing for the society as other social problems.

Providing employment to older people is more important than providing doles such as old age pension, since there is no justification in history or physiology for setting an age limit to work. Employment of the older persons will not only provide necessary economic security but will also help them to keep themselves busy and alert. The aged must be helped to enjoy the following rights: (1) the right to be treated as a person, (2) the right to be treated as an adult, (3) The right to a fair chance on their merits, (4) the right to decide about their own life, (5) the right to a future, (6) the right to have fun and companionship, (7) the right to be romantic, (8) the right to help, (9) the right to professional help whenever necessary, and (10) the right to be old.

References

Birren J.E., *Handbook of the Psychology of Aging*. New York: Van Nostrand Reinhold Co., 1977.

Bhatia, H.S., 'Rural social changes and the problems of the aged', *Social Welfare*. XI, 1964.

Busse, R., *Human Psychology*. New York: McGraw-Hill Book Co., 1976.

Cavan, R.S., *Marriage and Family Living in the Modern World*. New York; Thomas and Crowell Co., 1965.

Chandra, S. 'The social challenges of old age', *Social Welfare*. 1970.

Chowdhry, P.D., *A Handbook of Social Welfare*. Delhi: Atma Ram & Sons, 1966.

Desai, K.G., Nair, R.D., *Problems of Retired People in Greater Bombay*. Bombay: Tata Institute of Social Sciences, 1970.

Dinkel in Waller W., Hill, R., *The Family*. New York: Dryden Press, 1951.

Duvall, E.M., *Marriage and Family Development*. J.B. Lippincott Co., Philadelphia: 1977.

Goodenough, L.F., Tyler, B.L., *Developmental Psychology*. New York: Appleton Century Crofts, 1959.

Heltsley, E. *The Psychology of Aging*. Englewood Cliffs: Prentice Hall Inc., 1976.

Heoffin, Ruth, M., *Essentials of Family Living*. New York: John Wiley and Sons, 1960.

Kart, J.E., *Handbook of the Psychology of Aging*. New York: Van Nostrand Reinhold Co., 1976.

Lakshman, L., 'In the evening of life'. *Social Welfare*. VIII, 1961.

Lazarsfeld, P.F., Berelson B., Gaudet, Hazel. *The People's Choice*. New York: Harcourt, Brace Jovanovich Inc., 1952.

Mose, R.H. *Aging*. New York: Van Nostrand Reinhold Co., 1976.

Rayner, E. *Human Development*. New York: McGraw-Hill book Co., 1978.

Ross, A.D., *The Hindu Family in its Urban Setting*. Delhi: Oxford University Press, 1961.

Shaars, K. *Aging and Social Sciences*. New York: Van Nostrand Reinhold Co., 1976.

Soodan, K.S., 'Economic status of the aged', *Social Welfare*. XX, No. 6, Sept. 1973.

Sundarakumari, D., 'Old age problems of urban and rural communities', *The Indian Journal of Home Science*. Vol. 6, No. 2, 85-87

United Nations Report on Social welfare. XVIII, 1972.

Waller, W., Hill, R., *The Family*. New York : Dryden Press, 1956.

Watson, D. *Psychology*. New York: Harper and Row Publishers, 1978.

Subject Index

Volume I

accidents, 66
  prevention and management, 66-77
Adler's theory, 115

behaviour problem, 95
  causes, 95-100

child development
  history, 1
  relationship with other disciplines, 2-4
child study
  biography, 12
  case study, 12
  checklist, 9
  experimentation, 13
  importance, 4-6
  interview, 13-15
  observation, 10-12
  opinionnaire, 10
  psychological tests, 16-18
  questionnaire, 7-8
  rating scale, 9-10
  schedule, 9
  score card, 10
  social distance scale, 15-16

defence mechanism, 101, 104
  catharsis, 106
  compensation, 105
  conflict, 101-103
  dangers, 110
  displacement, 107
  effects of frustration and conflict, 103-104
  fantasy, 105
  unctions, 109-110
  identification, 106
  negativism, 107
  projection, 107
  rationalization, 105
  reaction formation, 106
  regression, 105
  sublimation, 106
  withdrawal, 104
democratic disciplinary technique, 81
discipline
  inculcating discipline, 81, 85
  isolation, 87
  meaning, 79
  spanking, 87
  techniques, 79-81
  withdrawal of privileges, 87
drives, 24

Freud's theory, 114

habit, 89
  advantages, 89-90
  breaking, 92
  principles, 93-94
heredity and environment, 128
  interaction, 131-136

imagination
  factors influencing, 52
  manifestations, 52
  meaning, 50
  types, 51
imaginative play
  types, 53
inherited characteristics, 129

juvenile delinquency, 121
  approach, 126
  causes, 121-126

learning, 35
  factors, 41-46
  functions, 35
  methods, 47-48
  theories, 36-41

maturation, 28
  physiological, 29
  psychological, 29
  principles of maturation, 29-32
motivation, 27
motives, 24-26
mother dominance, 123

needs
  biological, 19
  egoistic, 21-22
  psychosocial, 19-21

parental dominance, 123
permissive disciplinary techniques, 80-81
personality, 112
  determinants, 116-118
  traits, 115
play, 55
  characteristics, 61
  theories, 58-59
  types, 57-58
  values, 55-57
  variations, 63-65
play materials for different ages, 61-63

Volume II

adolescence, 147
  adolescent in peer group, 159

changes in secondary sex characteristics, 153
emotional development, 153-159
family climate, 146
need to understand, 148
parental attitudes, 172
physical development, 150
role of adolescent in the family, 167
role of parents, 171
ascendent behaviour, 76

babbling, 56
babyhood, 50
beginnings of understanding, 61
characteristics, 50
emotional behaviour, 57-60
family relationships, 63
happiness, 64
physical development, 52
physiological functions, 52
skills, 54-5
social behaviour, 60-1
speech development, 55-7
baby's first year, 32
birth process, 26
breast feeding, 28
Buhler's life stages, 89

care of the new infant, 44-9
characteristics of the new infant, 44-9
conscience, 135
crisis in the family, 215
bereavement, 119
crisis-proneness, 218
demoralization, 217
desertion, 222
dismemberment, 217
divorce, 221

day-dreaming, 137
depression, 157
development, 12
care, 17-23
factors, 13-15
haemorroid, 20
pregnancy, 16
principles, 13
pyelities, 22
Rh factor, 22
toxemia, 21
diapering, 44

family
as a basic institution, 201
definitions, 200
functions, 208-209
role of members in the family, 210-13
types, 202-205

gerontology, 224
geriatrics, 224
growth, 12
guilt, 135, 155

handedness, 140
havighurst's developmental tasks, 6-8
hostility, 157

infant mortality, 41

joint family
characteristics, 204
functions, 205
strains, 206

late childhood, 125
common diseases, 127
concepts, 131-32
developmental tasks, 125
emotional pattern, 128
family relationships, 140-142
interests, 137
misdemeanours, 136
moral attitudes and behaviour, 135
personality development, 143-44
physical growth, 126
play interests and activities, 136-137
skills, 139-140
social behaviour, 129
speech improvement, 133-135
lisping, 83

Manu Dharma Sastra
stages, 9-10
marriage, 184
adjustmental problems, 191-194
parenthood adjustment, 194-195
purposes, 190
menstruation, 152

neonatal stage, 2
nuclear family, 207

old age, 224
adjustments, 225
changing social system, 228
characteristics, 224
home for the aged, 230
personal attitudes, 226
social problems, 224

parenthood, 31
duties, 31-32
population education, 186
at various levels, 187-88
contents, 187
need, 185-86
objectives, 186
post-natal care, 28-30
prenatal development, 24-6
preschool education, 92
building essentials, 99-101
excursions, 117
home-school relations, 121
literature, 112
music, 111
need, 92-93
objectives, 93-8
other personnel, 108
preschool programme, 108-111
records and reports, 119
science and experiences, 113
teacher's responsibilities, 104-105
psycho-social development, 4-6
pubescence, 150
puberty, 150

reflexes, 37

sex cleavages, 77
sex education, 175
at adolescence, 178
at school age, 177
beginning of sex feelings, 176
imparting sex education, 179
need, 175-76
role of the school, 180-81
skills in early childhood, 85-8
slurring, 83
socialization, 74
stages in life, 1
adolescence, 2, 3
adulthood, 2, 3
childhood, 1, 3
early childhood, 1, 2, 67-89
infancy, 12, 35-42
pre-adolescence, 1-3
prenatal, 1
senescence, 2, 3
stuttering, 83

Author Index

Volume I

Adiseshirah, 10
Adler, 115
Anderson, 3

Baller and Charles, 130
Barr *et al.*, 7, 9
Best, 7, 12, 17
Binet, 1
Boaz, 2, 35
Bogardus, 15, 16
Breckenridge and Murphy, 2, 50
Breckenridge and Vincent, 95
Bunham, 52
Burks Barbara, 135

Coleman, 101, 104
Crow and Crow, 11

Dandekar, 19
Darwin, 1
Decondolle, 132
Dennis, 30
Dietrich, 66
Duckworth,

Edward, 12
Engle, 112

Fleming, 19
Freeman, 17
Freud, 113, 114
Froebel, 5

Galton, 131, 132, 134
Garrett, 50
Geldard, 102
Gesell and Ilg, 29
Gesell and Thompson, 29, 30, 33
Gestalt, 40
Glueck and Glueck, 121, 123, 126
Goddard, 132
Goode and Hatt, 7
Gopal, 10
Gopalan, 13
Gruenberg, 6

Hall, 1, 59
Hull, 39
Hurlock, 95

Itard, 132, 133

Jennings, 16
Jersild, 53
Jung, 115

Kagan and Havemann, 24
Kellog and Kellog, 32
Kendler and Kendler, 102
Kundu and Tutoo, 6

Landreth, 57
Lazarus and Sthainthel, 59

Mager, 44
Markey, 51, 52
Marshall, 53
Martin, 123
Mc Donald, 42
Mc Graw, 29, 30
Mendel Gregor, 130
Moreno and Jennings, 15
Murphy, 101

Newman, *et al.*, 34, 135

Olson, 28

Paul, 2
Pavlov, 37
Pestallozzi, 5
Preyer, 1

Ribble, 20
Rousseau, 5
Ryburn, 91

Sheldon, 114
Skinner, 39, 40
Stern, 131
Stone and Church, 28
Sukhia, *et al.*, 8, 17

Tagore, 5
Thompson, 12
Thorndike, 37, 134
Thorpe and Schmuller, 119
Travers, 121

Varma, 95

Watson, 39, 89, 136
Woefgang Kohler, 40, 41
Writ, 124

Volume II

Agarwala, 204
Ainsworth, 53 60
Alexander and Alderstein, 132
Ames, 56, 70, 73
Ames and Ilg., 86
Anderson, 158
Arthur and Kemme, 72
Atit, 74, 87

Baber, 200, 221
Banerjee and Mukherjee, 152
Bayley, 68
Bell and Darling, 39
Bell and Vogel, 207, 208
Bhatia, 223
Bhoota, 14
Bledsoe, 143
Boehm and Nass, 135
Bossard and Boll, 56, 57, 58, 64, 73, 78,
Bowlby, *et al.*, 60
Breckenridge and Vincent, 52, 57, 60, 68, 71, 77, 83, 125, 134
Brim, *et al.*, 38
Brown, 81
Buhler, 8
Burgess and Locke, 200

Casler, 60, 64
Cazden, 82
Chowdhry, 223
Church and Stone, 69,
Clifford, 42
Coff, *et al.*, 38
Cohen, 55
Crow and Crow, 148
Cruickshank and Johnson, 127, 143
CSWB, 175

Dakshayani, 93
Damayanthi and Anandam, 170
Desai, 204
Desai and Nair, 225
Deutsch, 84
Devadas, 29, 69
Devadas *et al.*, 94
Dittrichova and Lapackova, 55, 56
Droppleman and Schaefer, 142

Emmerich, 75
Erikson, 4, 6, 10
Estes, 79
Estvan, 80

Fitzgerald and Mc Kinney, 12
Folsom, 189
Foster, 126
Frank, 70
Frank and Frank, 132
Freud, 9

Gandhimathi and Jaya, 152
Garn, *et al.*, 68
Garrison, 71, 133
Geeta Devi, 84
Geller, 80
Gesell, *et al.*, 137
Gopalan, 152
Gopalan, *et al.*, 29
Grossman and Greenberg, 36

Harding, 51
Harish Chandra, 35
Harish Chandra and Chatterjee, 14
Hartley *et al.*, 137
Hass, 82
Havighurst, 6, 8, 57, 86
Heathers, 74
Hess and Torney, 143
Hurlock, 12, 63, 134, 135, 147, 179
Hymes, 75

ICMR, 19, 51, 68, 126

James, 39
Jaya and Anandam, 94
Jersild, 58, 59, 60, 72, 80, 128
Josselyn, 148

Kagan and Moss, 75
Karve, 204
Kendler and Kendler, 176
Keppel, 56
King, 131
Kirkpatrick and Cotton, 197
Koch, 76
Koos and Fulcomer, 219

Landis, 168, 190
Landreth, 58, 60, 80
Leventhal and Lipsitt, 39
Lewin *et al.*, 170
Lindzey, 42
Lipsitt, 81
Lipsitt, *et al.*, 39
Logambal and Rao, 152
Lovell and Slater, 131

Maccoby *et at.*, 73
Macfarlane *et al.*, 70
Mac Iver, 200
Madhavan, 152
Mahatma Gandhi, 92
Marshall, 84, 131
Martin, 68
Martin and Vincent, 51, 52, 55, 126
Maurer, 128
Maw and Maw, 73
Mc Carthy and Scott, 56
Mc Cord, *et al.*, 141
Mc Donald, 133
Mc Grade, 37
Mead, 64
Miller, 35
Montagu, 36, 40, 41, 154
Murdock, 207
Muthiah, 176

Nalina Devi, 88
Nalina Devi and Sumitra, 178
Natu, 152
Nichols, 142

Ogburn, 208

Padmini, 79
Palmer, 55
Panandikar, 186
Park, 185
Peck and Havighurst, 136

Peckos, 51
Phatak, 53, 54
Prescott, 122
Proteus and Johnson, 136

Radke and Yarrow, 142
Rao, 152
Rao *et al.*, 14
Remmers and Hackett, 156
Ribble, 64
Robertson, 64
Rogers, 168
Ross, 229
Russell, 80
Ryan, 55, 138

Salomy, 93
Sarada Devi, 70
Saraswathi and Jaya, 156
Schaeffer, 60
Schwarz, 179
Schwebel, 133
Sears, 71
Sears, *et al.*, 58
Shanmugam, 158
Shanti Ghosh, *et al.*, 35
Singhbi, 179
Slater, 144
Smart and Smart, 12, 14
Smith, 36
Sontag, *et al.*, 72
Speroff, 78
Spock, 36, 37, 52, 53, 59
Stolz and Stolz, 150
Stuart, 186
Subramaniam, 185
Sumitra, 179
Sundarakumari, 225

Terman, 13
Terman and Merrill, 79
Thiagarajan, 185
Thompson, 51, 52, 57, 68
Thorndike, 165

Udry, 132
UNICEF, 14
Waldrip and Bell, 42
Waller and Bell, 39
Waller and Hill, 217, 218
Watson, 74
Weiner, 78
Wolman and Barker, 133

Yarrow, 42, 59, 64
Yarrow and Cambell, 143

This textbook on Child Development is meant for students, parents and child welfare workers who wish to understand child growth and development. It covers all aspects of development from conception to old age. A true understanding of human development is dependent on an understanding of social, environmental and other factors, past and present, which condition human behaviour. These relationships are dealt with in great detail in this book.

A special feature of the book is the inclusion of important data from recent Indian research contributions and their application to the family, the community and the nation as a whole. A number of photographs illustrating various aspects of all-round development of children enhance the value of the book.

All students of Home Science, Sociology, Social Work and Paediatrics who study child development as part of their course would find this comprehensive book invaluable.

Dr Rajammal P. Devadas is currently Director and Honorary Professor of Postgraduate Studies, Shri Avinashilingam Home Science College for Women, Coimbatore and UGC National Lecturer in Home Science.

Dr N. Jaya is Professor in Child Development, Shri Avinashilingam Home Science College for Women, Coimbatore.

Rs. 40.00

Cover design by J.M.S. Rawat

MACMILLAN INDIA LIMITED
DELHI BOMBAY MADRAS PATNA
BANGALORE HYDERABAD LUCKNOW
TRIVANDRUM