

Designing and Constructing Frocks for Early Grade School Girls

By

MEDAPALLI. PRASANNA KUMARI

A THESIS SUBMITTED TO THE AVINASHILINGAM INSTITUTE FOR
HOME SCIENCE AND HIGHER EDUCATION FOR WOMEN
(DEEMED UNIVERSITY) COIMBATORE-43

IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE IN TEXTILES AND CLOTHING

APRIL 1998

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APRIL 1998

Certified as Bonafide Research Work

Chinshna Bai

**Signature of the
Head of the
Department**

Susanna

**Signature of the
Guide**

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Introduction

I INTRODUCTION

Dress and its numerous synonyms - clothes, garments, apparels and attires refers to the covering used for the human body. The varieties of dress worn by human beings are so numerous that it is not possible to deal with all of them, declares the Encyclopaedia Britannica (1989).

In olden days man used leaves to cover their body, later clothes came into existence. Clothes are important in determining the impression a person makes, on others. Clothing is attractive, and functional clothing is not only just a passive cover for the skin for protection, but also it interacts with and modifies the heat regulating function of the skin. So, clothing can be considered as a quasi-physiological system.

From ancient days India has been famous for her beautiful fabrics. The art of her gold brocades and filmy muslins "comely as the curtains of Solomon" is older than the Puranas. The Puranas tell us that spinning and weaving were important handicrafts and that vedic Indians were fond of suvasas or beautiful garments.

Now-a-days people give more importance to attractive appearance than protection or comfort through clothing. The clothes one chooses and the way they are worn influence personal appearance.

Clothing affects personality development and it relates to personal satisfaction, group identification and conduct. The right clothes can free the child from fear of ridicule, homeliness and bring a feeling of poise and adequacy. A good appearance tends to boost the child's moral and gives a feeling of security, inner strength, charm and poise.

An average person however feels the need of clothing solely in term of physical or utilitarian ones such as the protection against weather and insect bites. Our values and life values are reflected more vividly in the clothing one wears. Clothing is symbolic of social, psychological importance to the individual. Thus clothing serves expressive as well as serviceable function, protecting the individual psychologically as well as physically.

Hurlock (1988) defines childhood as a foundation age of the life, since the basic attitude and behaviour patterns, the way the child feels and acts are developed during this stage. Gupta-et-al., (1989) describes that clothing as an extremely important part of child's world, they may recall great joy and pride in receiving and wearing attractive garments. A well fitted comfortable garment in harmonious color to the skin worn by a child, its appearance and attractiveness affect the child's personality, emotional stability and contribute to a feeling of well being. Hence,

one should take care in selecting good material, colour, texture and design which on the other hand lays the foundation for good habits and personality development.

The school child's self appraisal is largely based on the appraisal given by parents, sibilings, teachers and peers. Psychologists say that ugly dresses, have caused more complexes than have prettier sisters or scolding mothers. This is especially true for the child of the grade school age (6-9 years). Since these years are crucial in laying the foundation for a healthy personality Zanden and Knopf (1978) points out that these years are a critical period in human development because they crystallize behavioural tendencies that are maintained through young adulthood.

As the child reaches school age, there is an increase in his group activities and will need a wide variety of clothing. Besides attending to school, children play hard and attend more occasions for which they have to dress up. They will need to add new things to dress up. However, it is not practical to keep buying new clothes for children because they out grow their dresses soon. Hence there is need to create variety in outfits to adapt one outfit to suit different occasions.

All girls especailly upto ten years need a roomy garment with large arm holes and curved underarms to permit raising the hands above the head without pulling out the

seams or distorting the fabric. Fullness of cut means comfort to the wearer and also makes for longer life of the garment. A garment should be easy to slip on, should stay in place, should restrain any movements, should fit smoothly and should not be irritating.

Cambridge International Dictionary of English (1995) describes frock as a short coat with a skirt which reaches the knees. Other synonyms of frocks are gown or dress worn by a girl or woman, loose outer garment, a coarse outer garment with large sleeves. It is a comfortable garment where the grade school girls feel free not only in casual times but even in occasions.

Hence, the investigator felt the need to create variety in frocks. The specific objectives of the study are:-

1. To standardise body measurements for the early grade school girls;
2. To collect information regarding clothing for early grade school girls (through interviewing mothers possessing early grade school girls);
3. Sketching grade school girls frocks designs with reference to current fashion;
4. Constructing the best eight fashionable frocks for the grade school girls; and
5. Evaluating the constructed frocks for design, color, texture, ease, comfort and constructional aspects.

Review of Literature

II REVIEW OF LITERATURE

The literature pertaining to the study can be reviewed under the following headings:-

- A. Importance of clothing
- B. Grade school girls
- C. Wardrobe for grade school girls
- D. Concept of fashion
- E. Pattern making
- F. Dress designing
- G. Importance of sewing

A. Importance of clothing

Man's basic needs are food, clothing and shelter. Ashwini (1985) expresses that clothing is important as they extend the charm and personality of an individual. Bakshi (1988) says that clothing is one of the fundamental needs of human beings. To the caveman dress was a protection from the vagaries of weather. Clothes tend to expand and extend the personality. Carter and Crabtree (1988) are of the opinion that we wear clothes for many reasons, to make us feel comfortable, and look attractive and to protect us from climatic changes. Clothes were initially mere protection than any other single tract in general appearances and comfort express Baliga (1990) and Ukponman (1990). Clothes provide

warmth and protection are essential for hygiene and comfort, satisfy conventional standard of modesty, taste and fashion, and thus enable people to conform to the dictates of tradition and social environment . Purdy (1987) remarks that body covering perform certain social functions such as style, taste, status, personality background and occupation. Lyle and Brinkley (1984) states that the primary reason for wearing clothes is protection, the second reason is self-adornment, in addition clothing has been used to show status, sex, self expression and cultural difference.

Clothes do not necessarily make the person but they go a long way towards building up a feeling of confidence and well being says Ray and Dutta (1985). Clothing is important as a means towards acceptance by the group. Although it is not true that "clothes make the man", yet clothes are important in determining the impression a person makes on others and giving him a feeling of security opines Glisson (1961). According to Subramaniam (1987) the necessity to wear garments is mainly to maintain self-respect. Man, from earliest times has worn clothes to overcome his inferiority complex and to achieve conviction of superiority to the rest of all creatures on earth opines Kaur (1988). Dantiyagi (1974) opines that clothing is the fundamental factor in character building.

Rouse (1989) opines that the wearing of clothes interms of practical function, morality or aesthetic qualities and to make ourselves look attractive. Williams (1980) states that clothes gaining recognition. According to Erwin and Kinchen (1969) clothes reflect the person's self concept, which is believed to be an important controlling force in behaviour. Hurlock (1976) says that the best dressed are friendlier, more vivacious, more talkative, they have a more active social life, they are more popular and more likely to be selected as leaders. Girhalakshmi (1991) reports, that a well dressed man make a good impression on others.

Today it is understood that suitable clothes help to make childhood a happy time. They contribute to child's developing character and increase in self-confidence. Pooler and Muller (1986) opines that clothing is a form of non-verbal communication. Singh and Sindhu (1985) are of the opinion that the dress transmits the first message because it is seen before the voice is heard and is therefore more crucial in forming the first impression. Anthropologists, sociologists, psychologists, health specialists and others have contributed to the understanding of the importance of clothing.

B. Grade school girls

According to Pikunas (1976) the span of childhood covers three maturational levels, early childhood, middle childhood and late childhood. Hurlock (1989) says that the beginning of late childhood is marked by the child's entrance into first grade. Hence this age is known as the grade school age. And he says that this age is a milestone in every child's life, therefore it is responsible for many of the changes that take place in attitudes, values and behaviour. Surikanthi (1989) points out that the child has a high energy level and engages in a lot of physical activities. Travers (1977) points out that between the years of six to ten, child's horizons have widened and he now encounters a wide variety of people, tasks and events. Piaget (1951) describes the childhood as a process of coming out of enclosures and having new risks and meeting new and exciting challenges.

Elking and Weiner (1972) remarks that the school plays an enormous role in his intellectual and social development. According to Newman (1978); Tate and Glission (1961) by the age of six, physical growth which has been proceeding at a remarkably fast pace has begun to decelerate. Kuppuswamy (1976) stresses that the child's self-concept as well as his estimate of personal worth and his place in society are strongly influenced by the attitude of his peers. The growth curve settles down to a steady rate through most of this period says Watson and Lindgreen (1973).

1. Physical growth and development

Surikanthi (1989) opines that by six years of age, a child is approximately two-third as tall as he will be as an adult. The average annual gain is about one or two inches in height and three to five pounds in weight. Kasterbaum (1979) says that the head body ratio now approaches that of the adult. Tate and Glisson (1961) remark that the slight changes in build which occur during this period results largely from the lengthening of the child's arms and legs.

2. Social and Emotional Development

White and White (1980) state that after the age of six, a child lives in not one but at least three somewhat different social groups - family, school and peer groups. Saini-et-al., (1989) feel that the way a child is clothed for school plays a part in determining how well he or she will adjust to the new environment. Surikanthi (1989) point out that the child has a strong desire to be an accepted member of the gang. They crave for companionship of others and their approval of their dress, speech and behaviour.

C. Wardrobe for a early grade school girls:

Planning the wardrobe for the early grade school child is important and should receive much thought, care must be taken too large a portion of the income will be used needlessly for this aged child, Thompson (1949). Gupta et-al (1989) say that the wardrobe of the early grade school child

must be chosen with much care as that of any family member. Rathbone and Tarpley (1959) say that the amount of clothes, a child should wear is determined by the climatic conditions, the temperature of the house and activity of the child.

Tate and Glisson (1961) say that buying garments too large with the idea that the child will grow into them is false economy and effect both his physical comfort and personal appearance. Pandit (1967) and Thompson (1949) suggest that the early grade school age may be characterized as one of rapid and uneven growth. Therefore it is the important factor in wardrobe planning.

Erane (1952) suggests that when one is shopping for clothing for younger child functional design as well as sturdiness of fabric, construction and price must be kept in mind. Opening will be so constructed that the child can easily put on and take off the garment himself.

Gupta et-al (1989) state that social status of the parents will determine the quality as well as quantity of child's clothing also depend on the occasions and activities of the child. According to Hurlock (1989) grade schooler's wardrobe can contain play clothes, clothing for extra protection specially for cool days, for rainy days, sleep wear and for formal wear.

Thompson (1949) states that children are so quickly out grown during that period, the biggest factor in planning is to select a few garments that will serve for all occasions and purposes.

D. Concept of Fashion

Fashion is a luxury, a trivial and frivolous bit of fun says Rouse (1989). Rathbone and Tarpley (1959) defines fashion as a popular or accepted style or mode of expression. If a style is popular at the present times, it is a fashion express Erwin and Kinchen (1970). Oerke (1957) feels that the history of fashion is also the history of man. It results from the thinking of each generation. Chamber and Moulton (1961) state that the firm high fashion describes the latest and often the most extreme styles worn by fashion leader and promoted by high fashion publications.

Luster (1983) admires that fashion was probably the results of the human desire to imitate social superior. Bane (1958) describes fashion as four components namely design, fabric, color and color combination details. Fashion is not a dictator rather the individual is the dictator and should use fashion to her own advantage. Leppman and Erskin (1974) are of the opinion that fashion must be acknowledged as projecting an image of a life style, it mirror the political, economic and social events of any given period. Singhal (1992) states that fashion is a purely subjective

concept of belief, a philosophy, a way of self expression, an indication of personal psyche a reflection of current life styles. Fashion cannot be ignored for dress making but it can seldom be used as a guide for attractive clothes for everyone views Gupta-et-al (1988). Bane (1973) found that the fashion cycle is merely the rise culmination and decline in popular acceptance of any style.

E. Pattern Making

Balakumar (1988) defines paper patterns, as patterns drawn using body measurements on paper to enhance cutting the fabric. Singh (1985) defines pattern drawn from three or four sizes on a single paper with different lines. Barta Carson (1975) suggests that paper patterns play an important role in the creation of garments and the first step towards excellent fit in clothes in a pattern that fits properly. According to Hayden (1976) pattern making is a highly developed art which is designed and proportioned to fit several figure types. Kopp et-al (1992) say that pattern making offers the designer short cuts in executing basic parts of a garment within a design whether the design is original copied or man produced Capes (1992) remarks that the whole idea of pattern designing is to express oneself in color and texture according to the taste of the artist. The proper sizing in any garment could only be achieved through excellent guide lines and patterns, suggested Iowa Home Economics Association (1963).

According to Matthews (1991), pattern can be prepared by one of the three methods, drafting, draping fabric on a dress form and by flat pattern designing. Hollen (1971) says that in drafting, success depend on the pattern makers ability to take accurate measurements. Erwin and Kinchen (1970) state that drafting is a system of drawing pattern with mechanical precision based on body measurements. The production of well fitting garments depends upon the good pattern says Erwin (1979).

Hollen (1971) and Erwin and Kinchen (1970) remark that draping where pliable cloth is used, the pattern maker, must be able to establish good pattern outlines and also refrain from fitting the cloth too tightly to the dress form.

Flat pattern designing based on the manipulation of a plain foundation pattern in simple, economical and practical, states Erwin and Kinchen (1970) and Hollen (1971). Hollen (1971) included that flat pattern designing begins with a basic pattern which may also be called a block, master or a foundation.

F. Dress designing

Stone and Sample (1985) defines a design as a specific version of a style. A design is a unique version of a style express Paola and Carol (1980). Robinson and Robinson (1962) recommended that both dress designing and dress making are essential living arts that is to say they depend on the hand and eye that work together; the alive sense of fashion,

taste and color and the instinct for the controlled movement of cloth on the human body which can make a dress or a suit into a work of art. Chambers and Moulton (1961) describes good design in dress, as more than the proper use of line and color, it is the combination and integration of many factors - color, line, texture, workmanship, fit, form, shape, materials, proportion, balance and scale.

Design is anything in which man has put his mind and his talents to alter or reorganise natural materials and forms says Cox and Warm (1951). Designing a dress is an art by itself points out Kumar (1962). Designing a dress is an adventure. It is a great thrill when confident about one's ability points Oerke (1957). Dress can be a satisfying means of expressing the self express Latzke and Hosteller (1968). Gupta-et-al, (1989) is of the opinion that while designing a dress, one has to understand the figure and personality of the wearer also. A well designed garment has beauty and appropriateness which makes it right for the wearer and for the occasion says Jacob (1996).

G. Importance of sewing

Farmer and Gotwals (1982) points out that the desire for creativity and self reliance is evident in every segment of our society. Indian women take pride in manufacturing handicrafts and garments as a way of utilizing their leisure time purposefully (New Cloth Market, 1992). Shoben (1988) points out that sewing can be a relaxation, fun and it is easy to learn, a well dressed women can have more

clothes by making them herself. Bhalla (1988) says dress making is a means to an end and not an end by itself. Developing dresses gives expression to a person's style, his behaviour and attitude. Making clothes at home can be a relaxing pastime and can also help to save money (Indian Silk, 1988).

Preparing a dress is a stimulating experience which will cause oneself to feel very proud of having produced something not only wearable but turning an ugly figure to look for better than original remarks Hedge (1983). Gotwal (1982) opines that the desire for creativity and self reliance is evident in every segment of our society.

Doongaji (1986) opines that any finished garment is judged by its appearance on the wearer and a properly sewn garment thus seems to belong to the person who wears it and fits snugly to the body. Hosteller (1978) says that properly fitted, well sewn and comfortable clothes promote a more attractive appearance and disposition.

Singer Company (1959) states that sewing garment at home is possible to provide at a cost that will not only be in keeping with homemakers purse but it will give satisfaction and pleasure to the wearer. In the present age, when the stitching charges have gone up so high, the mothers are becoming more inclined to stitch garments, especially for their children (Apparel, 1988).

Experimental Procedure

III EXPERIMENTAL PROCEDURE

The experimental procedure for the study consists of the following steps:

- A. Finding out mothers preference in the choice of early grade school girls frocks
 - B. Standardisation of body measurements
 - C. Designing frocks for the early grade school girls
-
- A. Finding out mothers preference in the choice of early grade school girls frocks

A survey is a process of collecting data from the existing population with no particular control over factors that may affect the population characteristics of interest in the study says Gupta (1991). Hence, the investigator conducted a survey to find out the opinion of mothers regarding their early grade school girls frocks. The data was systematically collected which included the following steps.

1. Selection of the sample
2. Selection of the method
3. Framing of the interview schedule
4. Conducting the survey
5. Consolidation and analysis of data

1. Selection of the sample

According to Kothari (1994), the process of obtaining information about an entire population by

examining only part of it. Puri (1984) explains the sample investigation methods as one, in which some members of population are selected and studied intensively. Purposive sampling according to Shukla and Gulshan (1971) is one in which the investigator deliberately chooses particular items from the universe as typical representatives of the universe. It gives better information about a particular aspect of the universe.

In the vital matters of the child's overall development, mothers assume the central role, says Bilski (1973). Since mothers are the key persons who play a vital role in the upbringing and development of their children, hundred mothers were selected as the samples by the investigator. They were then approached in Gudivada, Andhra Pradesh to collect the required information from the mothers.

2. Selection of the method

Kothari (1987) describes interview method of collecting data as one which involves presentation of oral-verbal responses. Best and Kahn (1989) expresses that with a skilful interviewer, the interview is often superior to other data gathering devices. Gupta (1991) defines interview as a face to face contact with the persons from whom the information is obtained. Hence, the investigator selected interview method for collecting information from the mothers of the early grade school girls.

3. Framing the Interview Schedule:

Cohen and Menion (1989) view that success of any data collection largely depend on the proper drafting of the questions pertaining to the survey. Gosh (1984) states that a schedule is a list of questions, which helps to collect data or requisite information. In this method, the investigator himself presents the question to the individuals whose responses are needed.

Therefore the investigator referred to magazines and journals and collected the needed information regarding the materials, color, texture, design and trimmings and decorations used for frocks. Based upon this an interview schedule was framed and the mothers opinion regarding early grade school girls frocks was found. The framed interview schedule is given in Appendix I.

4. Conducting the survey:

According to Kothari (1978), conducting the interview is very important. This will proceed on correct lines and at the right time will yield dependable data. Rangaswamy (1976) points out that the quality of interview, depends upon proper study design, design of the schedule and he also adds that it is a skill which can be improved considerably by training and experience.

The investigator visited the houses of the selected hundred families and personally conducted the interview with the homemaker at their convenience and thus the information was collected systematically.

5. Consolidation and analysis of data

After the data has been collected, it is essential to put the unorganised information in a systematic manner in order to obtain the desired results and scientific interpretation says Sadhu and Singh (1983). Sharma (1985) remarks that analysis of the data is the most skilled task of all stages of the research. Agarwal (1975) opines that analysis as an important step in the problem solving as it helps to resolve the gross total into all its element. Hence, the investigator has done consolidation and analysed the collected data. The findings are presented and discussed under the chapter Results and Discussion.

B. Standardisation of Body Measurements

The standardisation of the body measurements consists of the following steps.

1. Selection of samples
2. Taking body measurements
3. Grouping
4. Standardisation

HOW TO TAKE BODY MEASUREMENTS

(FRONT)

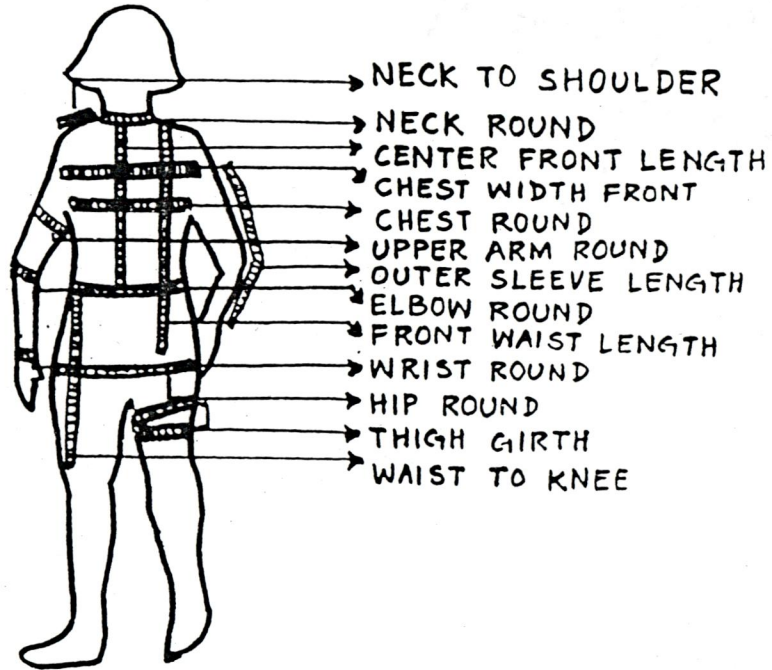


Figure - (i)

(SIDE)

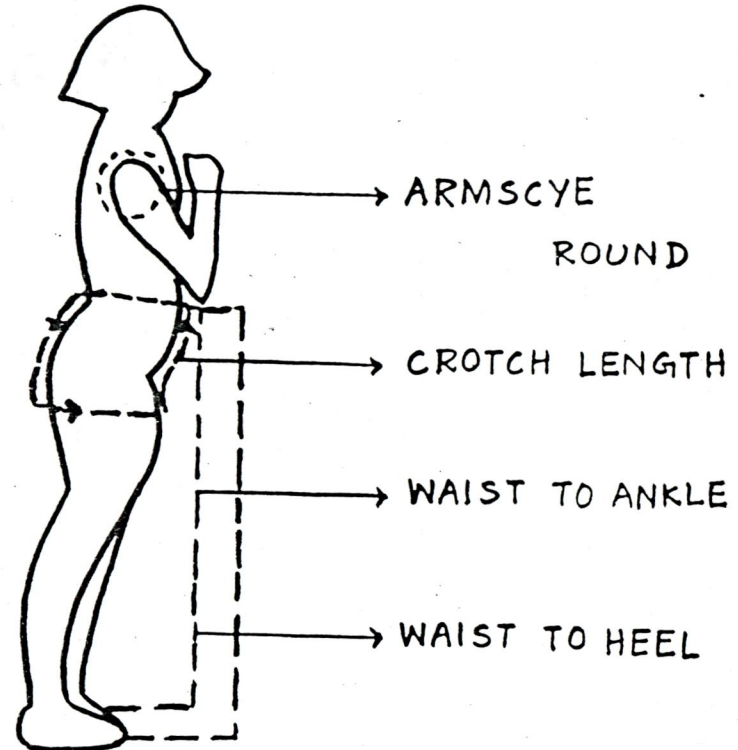


Figure - (ii)

HOW TO TAKE BODY MEASUREMENTS

(BACK)

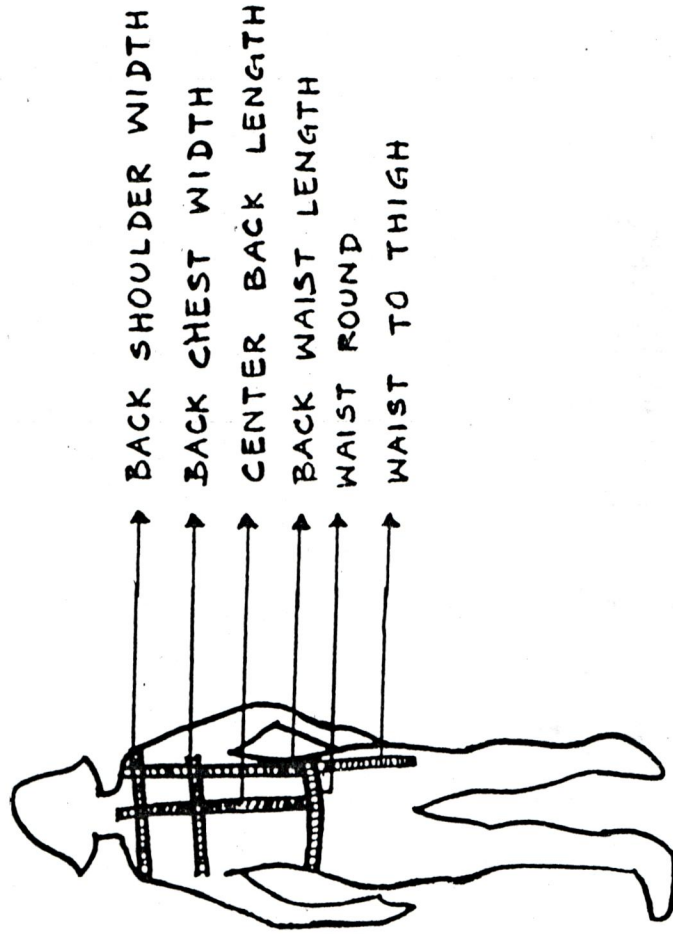


Figure - (iii)

1. Selection of samples:

The success of the study depends on the careful selection of the sample says Sharma (1985). Saini et al (1983) defines that, a sample is most generally defined as a subset from a larger population. Purposive type of sampling is the technique in which a desired number of sample units are deliberately selected depending upon the object of the enquiry so that only the important items representing the true characteristics of the population are included in the sample. Hence, two hundred and fifty girls between the age six to eight were selected by the investigator from Sri Avinashilingam Primary School, Saradalaya and Ramalingam Primary School, Coimbatore.

2. Taking body measurements:

Body measurements play an important role in the good fitting of the garment. Measurements were taken over the proper foundation garment while the person was standing erect. The measurements were taken comfortably without pulling the tape too tightly or too loosely but keeping it firmly by placing two fingers in between the tape and the body. The vertical measurements were taken first then the round measurements were taken in proper order following certain sequence and recorded very carefully as pointed out by Gupta-et-al (1989). Matthews (1989); Doongaji and Deshpande (1988) and Teenage International (1985).

The required measurements for the frocks were taken as explained below.

- Chest measurement was taken around the body at the fullest part of the chest. Tape was passed just under the arms and straight across the back.
- Waist measurement was taken around the natural waist line by keeping the tape parallel to the floor.
- Hip circumference was measured around the widest part of the hip about seven inches below the normal waist line.
- Shoulder width was taken from the end of one shoulder blade to another shoulder blade.
- Neck circumference was measured around the base of the throat.
- Front waist length was measured from a high point on shoulder to the waist line, perpendicular to the floor.
- Back waist length was measured from the top of the most prominent bone at the base of the neck to the natural waist line.
- Arm scye depth was measured from shoulder end to the same point passing through the armpit.
- Arm circumferences were measured below and above the elbow around the arm in the raised position.
- Sleeve length was taken from the shoulder end to the desired length below the elbow.
- Wrist circumference was taken around the wrist joint.

- Skirt length was measured from the waist line to the desired length at centre front.

The above mentioned body measurements are illustrated in the figures I, II, III.

3. Grouping

According to Dick (1975) similar measurements must be grouped together. Lewis (1984) opines that accurate body measurements are important and if taken properly, time is saved in the overall construction of the garment. Kinchen (1970) says that bust measurement is the key to determine pattern size of dresses.

Considering the above factors the chest measurements were grouped together into four groups by the investigator and these have been presented under the chapter, Results and Discussions.

4. Standardisation:

Mary Bell (1980) views that chest measurements are the basis for the grouping and standardising of other body measurements. The Indian Standards Institution (1983) defines standardisation in a broader sense as a means to find a mean result which would suit a particular purpose. According to Mee and Purdy (1987) standardisation is important, for it is base for any dress designer. The standardised values should be so selected that they can be used for the expression of

other items also from the same group says Singh (1985). From the maximum and minimum values of each group the average value was calculated and taken as the standard value. Based on the above fact the investigator standardised the body measurements. The standardised measurements are given in Table XI.

C. Designing Frocks for the Early Grade School Girls

The steps followed in order to design frocks for the early grade school girls are given below as follows.

1. Selection of the basic garment
2. Pattern making for the basic garment
3. Preparation of the fabric
4. Marking and cutting of the material
5. Construction of the muslin pattern
6. Evaluation of the muslin pattern
7. Developing instructional sheet for the basic garment
8. Selection of design
9. Construction of the garment
10. Evaluation of the garment

1. Selection of the basic garment:

From the survey conducted, it was found that summer frock, A-line frock and plain frock were preferred by the mothers for casual wear and, frilled and flared frock for formal wear. Hence the investigator selected plain frock as the basic garment for the study.

2. Pattern making for the basic garment:

Alexander (1977) states that, in order to understand the principles of fitting, standardised body measurements have to be followed to develop patterns, since patterns assist one to have good looking and well fitting garments. Pattern designing is the drawing of a pattern on a flat surface to individual or standard measurements by drafting says Fundamentals of Dress Making (1943). Bala Kumar (1988) defines paper patterns as patterns drawn using body measurements on paper to enhance cutting the fabric.

The investigator developed new instructions for the selected garments by modifying and eliminating some of the instructions given by Matthews (1990), Zarapkar () and Hedge (1983) using the developed instructions and standardised body measurements the basic frock pattern was drafted.

3. Preparation of fabric:

Lyle and Brinkley (1983) suggests that fabrics will give more satisfactory service if prepared carefully before starting to sew. Campbell (1986) emphasis that most materials need some preparation before they are ready for the placing of the patterns on the material and cutting. Doongaji and Deshpande (1986) says that the fabric must be grain perfect. The perfectness of the grain of the materials was checked and the fabric ends were stretched for straightening and all the creases were removed by pressing.

4. Marking and cutting the material:

The manner in which a garment is cut in relation to the grain lines of the fabric affects its durability, handle and fit of the garment says Matthew (1985). As suggested by Lyle and Brinkley (1983) and Pegg (1980) the pattern was placed on the straight grain of the material, pins were placed within the seam allowance and at right angles to the cut edge of the material. Marking was done by removing a few pins and placing dress makers carbon between the material and the paper pattern. The pins were then pinned in position and the tracing wheel was moved along the pattern outline and care was taken to mark all the pattern details on the wrong side of the fabric.

Cutting the material is one of the initial and important phase in garment construction . As explained by Bakshi (1958), Mathews (1985), Doongaji and Deshpande (1986) Sara and Lynch (1952), the fabric was laid flat on a large table. Using sheers, long slashes were cut carefully and accurately along the cutting line of the patterns, cutting the notches out into the margin. While cutting, care was taken so as not to *slip* the fabric from the table and the fabric was held firmly onto the table with the left hand. Pattern details were marked on the cut pieces and kept aside.

5. Construction of the muslin pattern:

Fisher (1973) views that fitting is one of the most important key to success in dress making and can make a



MUSLIN PATTERN
PLATE-I

complete outfit. A well fitted dress always looks as it belongs to the person who is wearing it says Hiles (1972). Aleaxander (1977) states that no doubt clothing is very important, but fit is also a major problem. Matthew (1989), Bane (1974) emphasis that in order to eliminate hazards in construction and fitting it is necessary to construct a muslin pattern of the entire garment. Lewis (1984) says that regardless of what type of muslin garment is made all pieces must be cut and sewn on grain and areas like centre front and back button and button hole markings etc must be marked. A muslin garment sets us practice new techniques in advance views Bane (1974).

So keeping all this in mind, the investigator constructed the muslin garments based upon the developed instructions for frock. The constructed muslin garment was shown in Plate - I.

6. Evaluation of the muslin pattern:

The constructed muslin garment was tried on twenty five girls and the fitness was evaluated. A proforma was given to twenty five teachers and mothers to evaluate the correct fit and comfort of the garment. The proforma used for evaluation was given in Appendix III.

7. Developing instructional sheet for the basic garment:

Successful dress making begins with a basic pattern as nearly right as possible states Lewin and Kinchen (1970). The evaluation of the muslin patterns proved to be

correct fitting for the garment. Length of the bodiceblock required some modification in the basic frock pattern. The required alterations were made and the muslin pattern was tried again on the selected twenty five girls. As the garment fitted perfectly, new instructions were prepared for the basic garment. The prepared instruction is given in the Appendix IV.

8. Selection of design:

Mc Jimsey (1973) quotes that design in clothing becomes an important property that helps out the stage in everyday life. The relation of a design or pattern in clothes and designs in fabrics depends upon the individuals personal expression says Doongaji and Deshpande (1986). According to Goldworthy (1980) good taste is the application of the principles of design to the problems in life where appearance as well as utility is a consideration. Lappman and Erkin (1974) says that one should observe ready-to-wear garments and fashion magazines for recent trends in style and fashion details regarding fabrics, color and designs. Rouse (1989) says that most women get to know about new fashions and designs by looking at shops and also by reading magazines.

Therefore, the investigator viewed a number of fashion magazines, ready made garments and visited shops to develop new designs for the early grade school girls. The investigator designed 25 patterns for formal wear and 25

CASUAL WEAR FROCKS



CW₁



CW₂



CW₃



CW₄

- The neckline, seamline and hemline was finished. Fabric buttons and applique was attached to enrich the look of the garment.

b. Frock CW₂:

- The bodice front and back and sleeve paper patterns used for muslin pattern was placed on green checked handloom cotton material and was cut.
- Two pieces of 60 cms width and 55 cms length were cut. This was joined.
- The bodice pattern of the frock was stitched like that of the muslin frock pattern. The skirt pattern was attached to the bodice pattern after introducing box pleats.

c. Frock CW₃:

- The front bodice muslin pattern was cut across at 20 cms length for the yoke pattern.
- The muslin sleeve pattern was increased by 20 cms length.
- 20 cms length of fabric was cut and tucks were introduced at 2 cms distance. This was horizontally stitched to give scalloped effect. The yoke pattern was placed on this scalloped material and cut.
- The front skirt pattern was attached to the yoke with gathers.

- The back bodice pattern and skirt paper pattern was combine to give a single seam. This was placed on the fabric and cut and was joined to the front pattern.
- Sleeves were attached.
- Hemline and neckline were finished. The frock was decorated with wooden buttons and beads.

d. Frock cw4:

- The same paper pattern used for construction of cw1 was taken.
- The centre front seam line of the right bodice pattern was increased by five cms.
- This frock was stitched like frock cw1.
- The edges of sleeve line, neckline and centre front were finished with the dark pink piping.
- For decoration dark pink frills were attached at the hemline and around the necklike.
- Pink fabric buttons were sewed at the centre front.

Fasteners were attached to all the casual wear frocks. They were neatly ironed and placed aside for evaluation.

Plates II, III, IV and V show the casual wear frocks CW1, CW2, CW3, CW4 respectively.

Construction of formal wear frocks

a. Frock FW1

- The muslin paper pattern was placed on a royal blue plain silk fabric and lining material. This was marked and cut neatly.
- This was stitched like the muslin frock introducing bell sleeve with gathers.
- Frills were attached at the hemline and around the neckline.
- White colour beads were attached for decoration.

b. Frock FW2:

- Twenty cms length of fabric was cut on orange satin material. Box pleat was introduced at the centre and three pin tucks on either side. The bodice front pattern was placed and cut.
- The front, back bodice pattern and sleeve pattern were stitched like FW1. Gathers were introduced at skirt pattern.
- Double layer of frills using black netted material was introduced at the hemline and sleeve line.
- Four cms width belt was introduced at the waist line.
- Black fabric buttons were attached at the centre front.

c. Frock FW3:

- Two inverted box pleats were introduced at the centre of thirty cms light cream colour blended crepe fabric.
- The bodice front pattern was placed on this and cut.

FORMAL WEAR FROCKS



FW₁



FW₂



FW₃



FW₄

PLATE - III

33a

- The back bodice pattern was also cut on the cream material using the muslin back bodice pattern.
- Using the sleeve pattern CW3, the sleeve was cut on the cream material.
- For the front yoke pattern a "U" was shaped around the neckline.
- This pattern was placed on mustard yellow blended material and was cut. This was joined at the shoulder line of the bodice block and armseye of the front bodice pattern.
- The skirt pattern was joined to the bodice pattern at the waist line introducing inverted box pleats.
- A cream colour belt was introduced at the waist line.
- White colour collar lace was attached at the neckline.
- The neckline and sleeve hemline was finished by yellow mustard material.

d. Frock FW4.

- Using the front and back bodice paper pattern shawl collar was prepared.
- The neckline of the front bodice pattern was shaped 'V' to suit the shawl collar.
- The front and back bodice pattern were cut on light brown double shaded blended fabric.
- Ten by ten cms pocket pattern, pocket flap pattern, shawl collar pattern and sleeve pattern of the frock CW3 was placed on a cream colour geometrical design blended fabric and cut.

- Front and back bodice pattern were joined shawl collar and sleeves were attached.
- The skirt muslin pattern was flared and kept on the brown fabric and was cut.
- Pockets were attached on the front skirt pattern.
- The front and back skirt patterns were joined and attached to the bodice pattern.
- Sleeve and skirt hemline were finished.

Fasteners were attached to the frocks FW1, FW2, FW3 and FW4.

The garments were neatly ironed. Plates VI, VII, VIII and IX show the frocks FW1, FW2, FW3 and FW4 respectively.

10. Evaluation of the garments:

The constructed garments were tried on twenty five early grade school girls and the fitness, general appearance, self help features, comfort, choice of material and color combination aspects were evaluated.

A proforma was given to twenty five mothers and twenty five teachers each for evaluation of the constructed frocks. The proforma used for the evaluation of the constructed garments is given in Appendix VI . The collected data is consolidated and presented in the chapter, Results and Discussion.

Results and Discussion

IV RESULTS AND DISCUSSION

The results and discussions of the study are presented below under the following major headings.

- A. Mothers Preference for Early Grade School Girls Frocks
- B. Standardisation of Body Measurements
- C. Evaluation of the Muslin Pattern
- D. Evaluation of the Designed Garment

- A. Mothers Preference for Early Grade School Girls Frocks

TABLE I

FROCKS PREFERRED FOR EARLY GRADE SCHOOL GIRLS
FOR CASUAL WEAR AND FORMAL WEAR

(in percentage)			
S.No.	Type of frock	Casual wear	Formal wear
1.	Plain frock	80	50
2.	Summer frock	98	3
3.	A-line frock	98	3
4.	Frilled frock	3	98
5.	Flared frock	3	97
6.	Umbrella frock	35	65
7.	Pleated frock	73	22

Table I and Figure IV clearly indicates that 98 per cent of the mothers preferred both summer frock and A-line frock for casual wear. Plain frock and pleated frock

KEY :

- Plain Frock
- ▨ A-Line Frock
- ▩ Summer Frock
- ▧ Flared Frock
- ▩ Pleated Frock
- ▨ Umbrella Frock
- ▧ Frilled Frock
- ▩ Umbrella Frock

FROCKS PREFERRED FOR EARLY GRADE SCHOOL GIRLS FOR CASUAL WEAR AND FORMAL WEAR

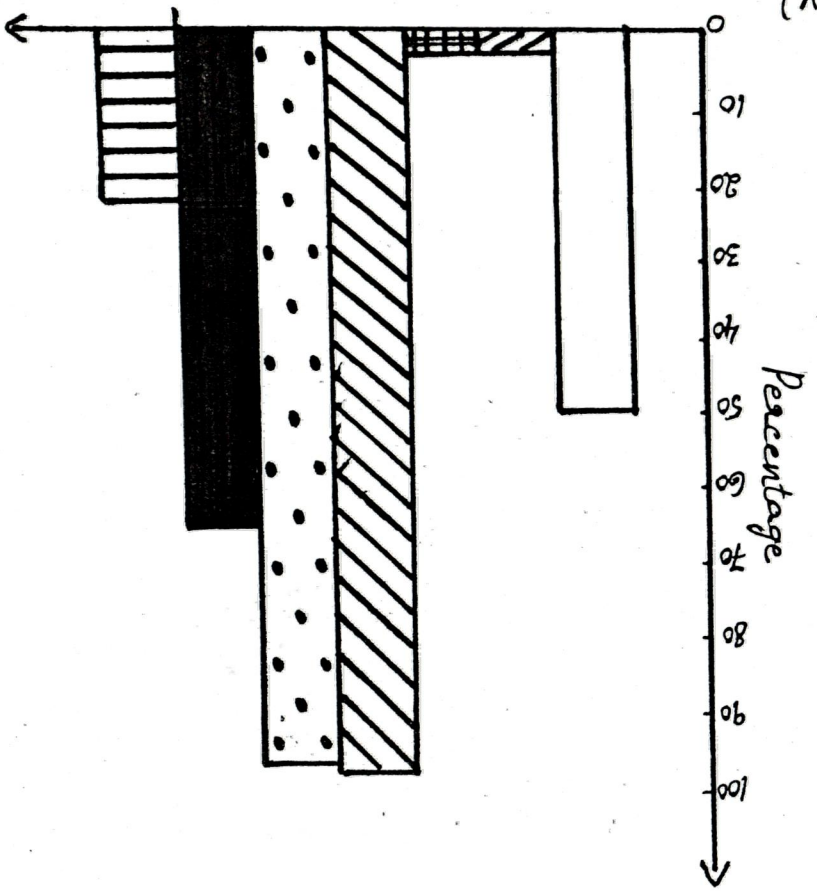
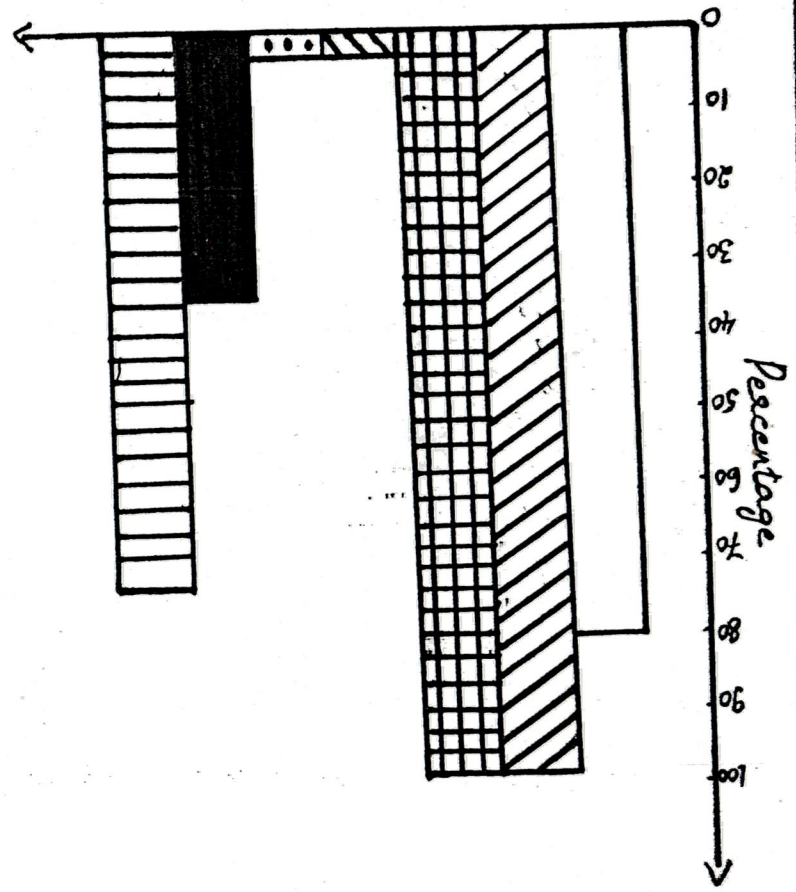


Figure - (iv)

Scale
Y axis 1cm = 10 units

were preferred by 80 and 73 per cent of the mothers respectively. For formal wear, frilled frock and flared frock were preferred by 98 and 97 per cent of the mothers whereas umbrella frock and plain frock were preferred by 65 and 50 per cent of the mothers respectively.

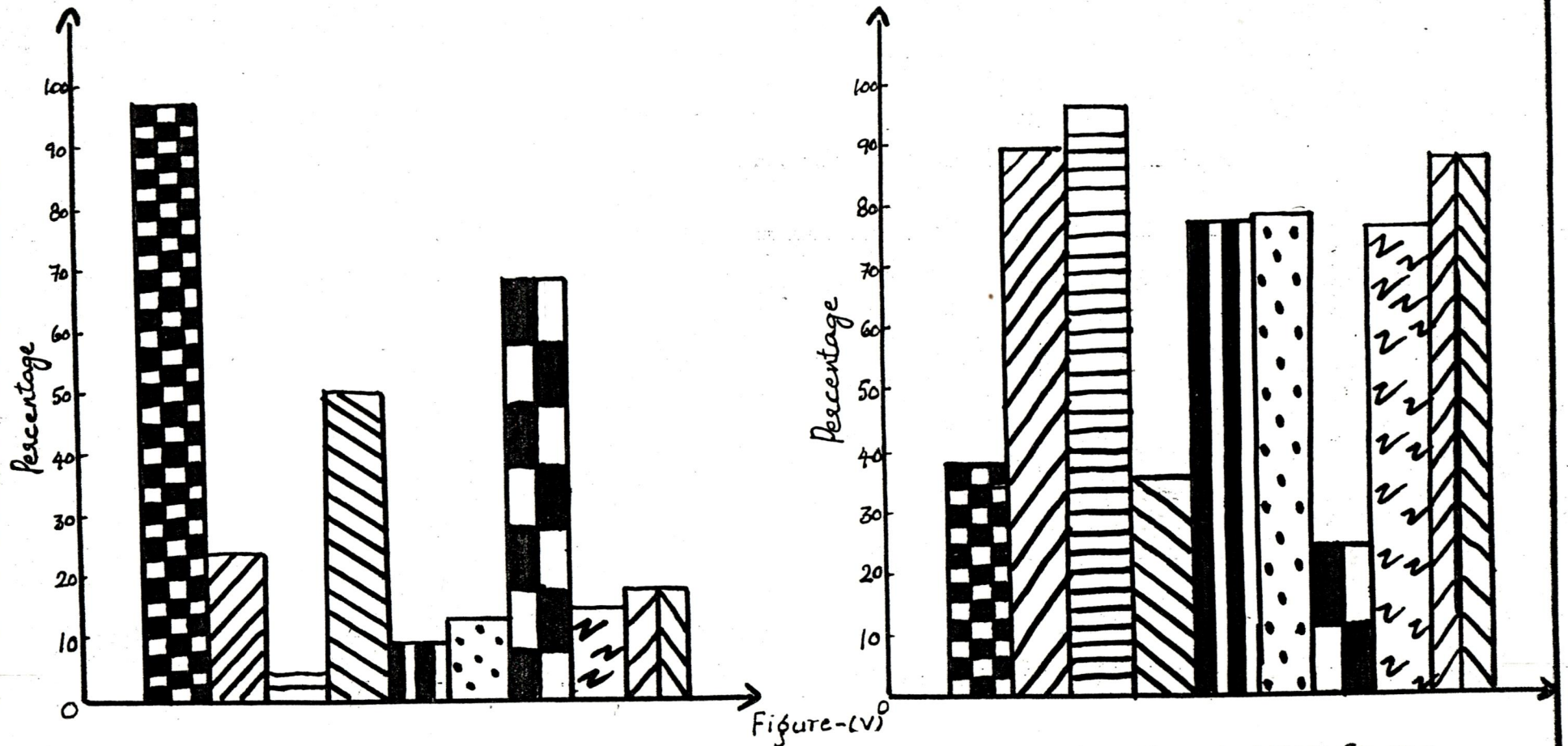
Hence it can be concluded that the summer frock and A-line frock are best preferred for casual wear and frilled and flared frocks are preferred for formal wear by mothers for their grade school girls.

TABLE II
TYPE OF MATERIAL PREFERRED FOR CASUAL WEAR
AND FORMAL WEAR FROCKS

(in percentage)			
S.No.	Type of material	Casual wear	Formal wear
1.	Cotton	97	39
2.	Polyester	24	89
3.	Silk	4	96
4.	Wool	50	35
5.	Rayon	9	77
6.	Nylon	13	78
7.	Khadi	68	24
8.	Flannel	14	76
9.	Blended material	18	87



It is understood from Table II and Figure V that cotton, khadi and wool materials were preferred by 97, 68 and 50 per cent of the mothers for casual wear. Silk material was

SCALE
Yaxis 1cm = 10units







TYPE OF MATERIAL PREFERRED FOR CASUAL WEAR AND FORMAL WEAR FROCKS

KEY:

-  COTTON
-  POLYESTER

-  SILK
-  WOOL
-  RAYON

-  NYLON
-  KHADI

-  FLANNEL
-  BLENDED MATERIAL

preferred by 96 per cent of the mothers for formal wear. Polyester, blended material, nylon, rayon and flannel fabrics were preferred by 89, 87, 78, 77 and 76 per cent of the mothers respectively.

Hence it can be concluded that cotton and khadi material were best preferred for casual wear and silk, polyester and blended fabrics were preferred for formal wear for grade school girls.

TABLE III

TEXTURE PREFERRED FOR CASUAL WEAR AND FORMAL WEAR FROCKS
(in percentage)

S.No.	Texture preferred	Casual wear	Formal wear
1.	Fine	78	96
2.	Medium	78	43
3.	Rough/coarse	15	23

As indicated in Table III and Figure VI, 78 per cent of the mothers prefer both fine and medium texture for casual wear frock. As respect to formal wear 96 per cent and 43 per cent mothers prefer fine and medium texture respectively.

Thus it can be concluded that fine and medium texture fabrics are preferred for grade school girls frocks.

SCALE
Y axis 1cm = 10 units

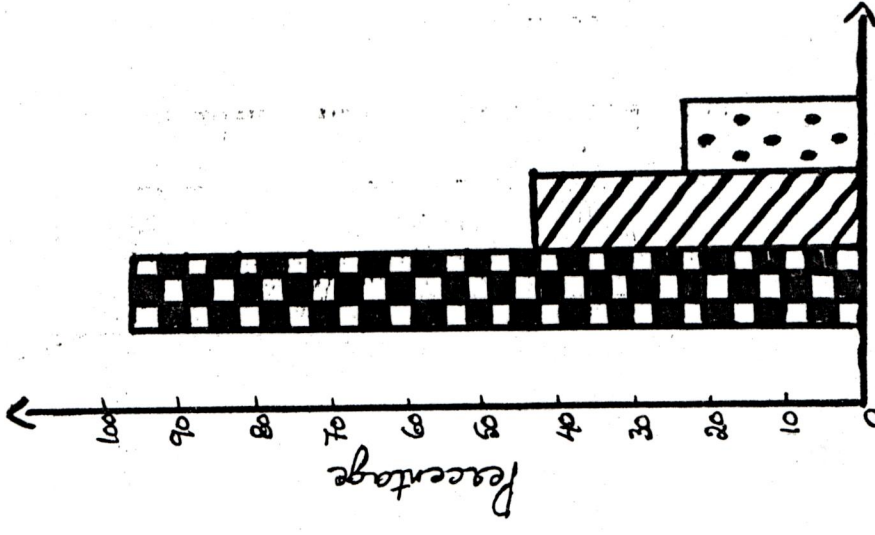
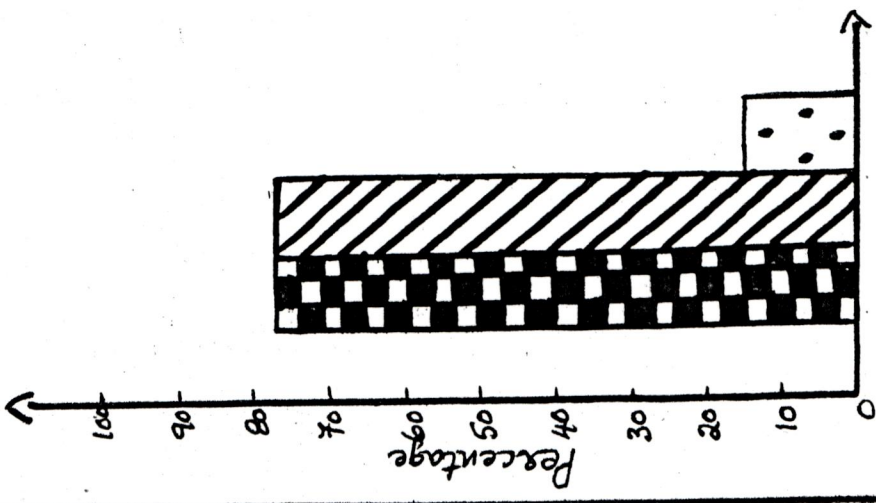


Figure - (VI)
TEXTURE PREFERRED FOR CASUAL WEAR AND FORMAL WEAR FROCKS






KEY:
 FINE
 MEDIUM
 ROUGH/COARSE

TABLE IV
COLOUR PREFERRED FOR CASUAL WEAR AND FORMAL WEAR FROCKS

S.No.	Colours preferred	(in percentage)			
		Casual wear		Formal wear	
		Light	Dark	Light	Dark
1.	Red	98	35	40	48
2.	Yellow	36	14	68	78
3.	Blue	54	32	43	49
4.	Green	68	27	36	54
5.	Violet	96	37	35	98
6.	Orange	40	12	68	91

Table IV shows that 98, 96 and 68 per cent of the mothers prefer light red, light violet, and light green colour for the early grade school girls casual wear frocks. Dark violet, Dark orange, Dark yellow was preferred by 98, 91 and 78 per cent of the mothers for formal wear frocks.

Hence it can be concluded that light red, light violet and light green colours were preferred for casual wear and dark violet, dark orange, dark yellow colours for formal wear frocks.

Scale
Yaxis 1cm = 10 units

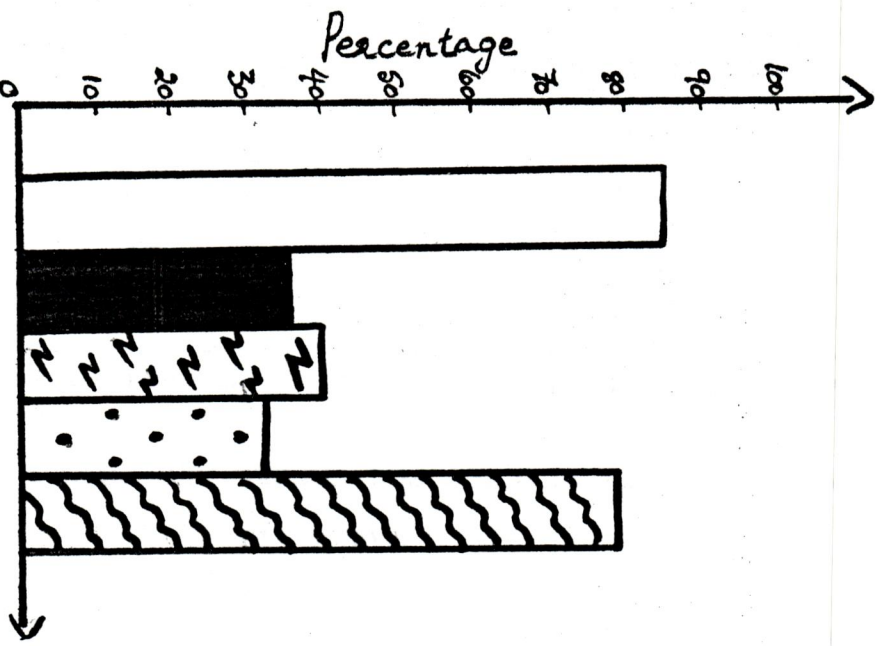
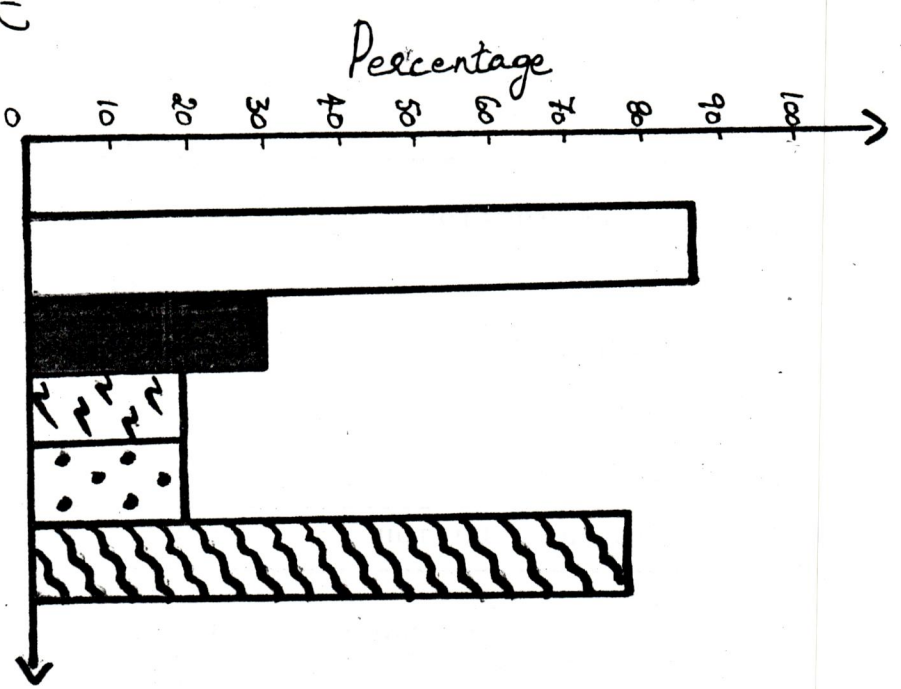


Figure - (VII)

COLOR COMBINATION PREFERRED FOR CASUAL WEAR AND FORMAL WEAR FROCKS



KEY:

- Monochromatic
- Analogous
- ▣ Complementary
- ▢ Tried
- ▤ Neutral Combination

SCALE
Y axis 1cm = 10 units

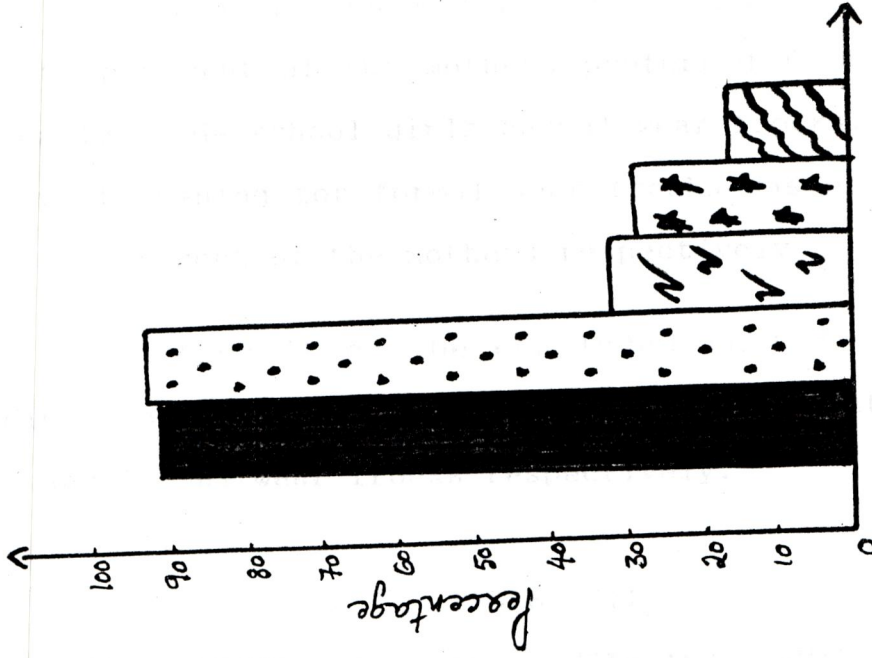
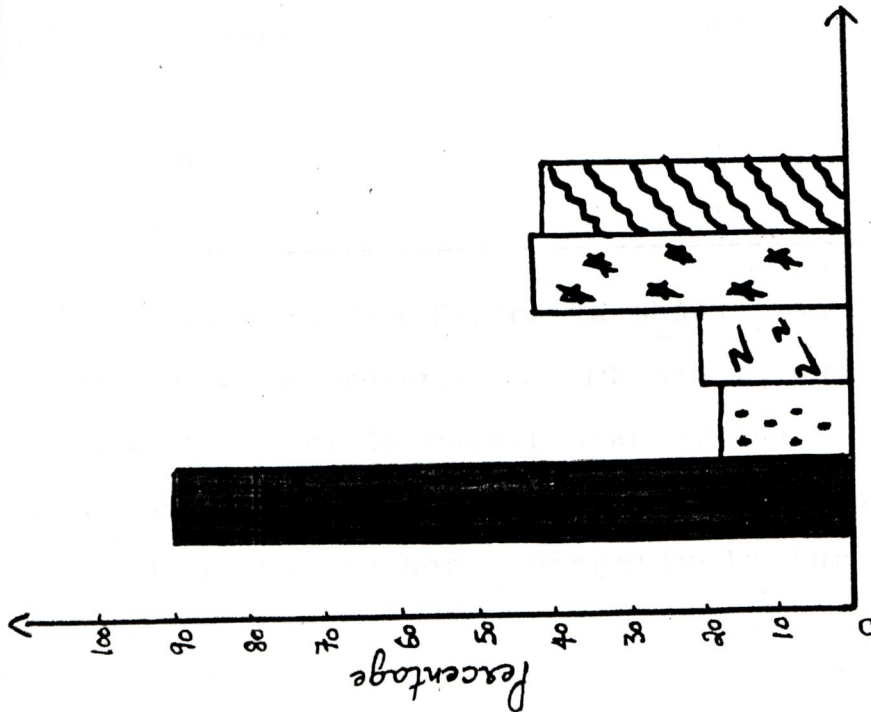


Figure - (viii)

PREFERENCE OF PLECKET FOR CASUAL WEAR AND FORMAL WEAR FROCKS



KEY:

FRONT OPENING

SHOULDER OPENING

WITHOUT OPENING

BACK OPENING

SIDE OPENING

SCALE

Y axis 1cm = 10 Units

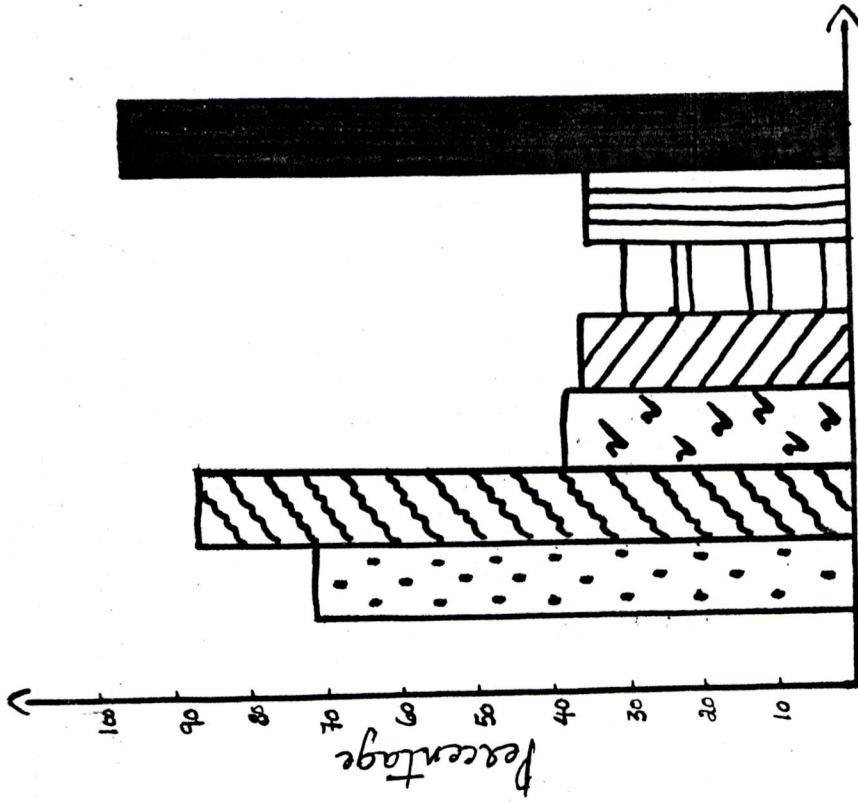
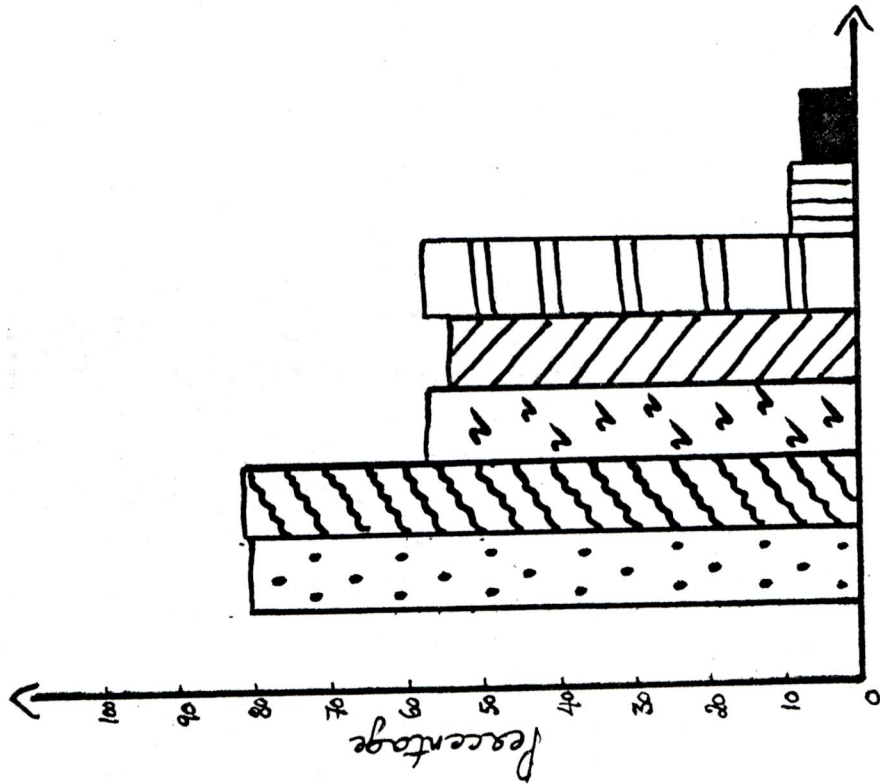


Figure - (IX)



FASTENERS PREFERRED FOR CASUAL WEAR AND FORMAL WEAR FROCKS

KEY :

- PRESS BUTTONS
- HOOK AND EYE
- ZIPPER

- PLASTIC BUTTONS
- METAL BUTTONS
- BUCKLE

- BIAS CORD
- ZIPPER

From the table we can conclude that press buttons, hook and eye fasteners were preferred for casual wear frocks whereas zipper was preferred for formal wear frocks.

TABLE VIII

TRIMMING AND DECORATIONS PREFERRED FOR CASUAL WEAR AND FORMAL WEAR FROCKS

(in Percentage)

S.No.	Trimming and decorations	Casual wear	Formal wear
1.	Applique	66	14
2.	Beed work	74	93
3.	Belt	54	42
4.	Binding	57	45
5.	Bows	60	22
6.	Collars	72	60
7.	Cord	40	58
8.	Cut work	23	50
9.	Fancy buttons	56	52
10.	Flowers made of cloth	59	52
11.	Frills	73	93
12.	Gathers	33	40
13.	Lace	72	16
14.	Mirror work	14	19
15.	Patch work	14	37
16.	Piping	61	37
17.	Pleats	57	72
18.	Pearls	10	76
19.	Pockets	47	80
20.	Satin ribbon	45	14
21.	Smocking	11	16

Table VIII clearly indicates that beed work, frills, collars, lace, applique, piping and pleats were preferred by 74, 73, 72, 66, 61 and 57 per cent of the mothers for casual wear frocks whereas beedwork, frills, pockets, pearls, pleats and collars were preferred by 93, 93, 80, 76, 72 and 60 per cent of the mothers respectively for formal wear frocks.

Hence it can be concluded that collar, applique, piping, pleats were preferred for casual wear whereas beed work, frills, pockets, pearls, pleats and collars were preferred for formal wear frocks.

B. Standardisation of Body Measurements

The standardisation of body measurements are discussed under the following side headings.

1. Grouping chest measurements
2. Classification of body measurements

1. Grouping chest measurements

The chest measurements values which ranged from 50 cms to 70 cms were divided into four groups each having a class interval of five cms.

TABLE IX
CHEST MEASUREMENT GROUPS

S.No.	Groups	Range (in centimeter)
1.	A	51 - 55
2.	B	56 - 60
3.	C	61 - 65
4.	D	66 - 70

From the above table it is clear that the chest measurement ranging from 51-55, 56-60, 61-65, 66-70. They are grouped in four groups A, B, C and D respectively.

2. Classification of body measurements of Early Grade School girls

TABLE X
CLASSIFICATION OF BODY MEASUREMENTS OF EARLY GRADE SCHOOL GIRLS

Body measurements	Range (in centimeters)	Number of early grade school girls
Chest circumference	51 - 55	116
	56 - 60	106
	61 - 65	26
	66 - 70	2
Waist circumference	46 - 50	49
	51 - 55	131
	56 - 60	64
	61 - 65	3
	66 - 70	3
Hip circumference	56 - 60	76
	61 - 65	105
	66 - 70	45
	71 - 75	18
	76 - 80	6

Body measurements	Range (in centimeters)	Number of early grade school girls
Front waist length	16 - 20	47
	21 - 25	4
	26 - 30	181
	31 - 35	18
Back waist length	16 - 20	45
	21 - 25	27
	26 - 30	175
	31 - 35	3
Shoulder width	6 - 10	79
	11 - 15	171
Shoulder to shoulder	21 - 25	9
	26 - 30	42
	31 - 35	176
	36 - 40	23
Neck round	21 - 25	127
	26 - 30	123
Arm scye circumference	16 - 20	8
	21 - 25	87
	26 - 30	148
	31 - 35	7
Upper arm circumference	16 - 20	214
	21 - 25	36
Lower arm circumference	16 - 20	246
	21 - 25	4
Elbow circumference	16 - 20	193
	21 - 25	57
Wrist circumference	11 - 15	108
	16 - 20	142
Short sleeve length	16 - 20	150
	21 - 25	100
3/4 sleeve length	21 - 25	24
	26 - 30	144
	31 - 35	77
	36 - 40	3
	41 - 45	2

Body measurements	Range (in centimeters)	Number of early grade school girls
Full sleeve length	31 - 35	16
	36 - 40	121
	41 - 45	107
	46 - 50	3
	51 - 55	3
Skirt length	41 - 45	89
	46 - 50	105
	51 - 55	43
	56 - 60	13
Waist to hip	16 - 20	244
	21 - 25	6
Waist to knee	31 - 35	54
	36 - 40	129
	41 - 45	48
	46 - 50	19
Waist to thigh	16 - 20	99
	21 - 25	108
	26 - 30	43

The above table shows the required body measurement and the number of samples have the respective body measurement.

To standardise the body measurements the modal value was calculated using the formula $M_o = L + \frac{\Delta_1}{\Delta_1 + \Delta_2} \times i$

where L is the lower limit of the modal class, Δ_1 is the difference between the frequency of the modal class, Δ_2 is the difference between the frequency of the modal class and the frequency of the post modal class and i is the class interval of the modal class. The standardised body measurements are presented in Table XI.

TABLE XI

STANDARDISED BODY MEASUREMENTS OF EARLY GRADE SCHOOL GIRLS

S.No.	Body measurements	Standardised body measurements (in cms)
1.	Chest circumference	60
2.	Waist circumference	53
3.	Hip circumference	61
4.	Front waist length	28
5.	Back waist length	28
6.	Shoulder width	12
7.	Neck round	32
8.	Arm scye round	24
9.	Upper arm circumference	27
10.	Lower arm circumference	17
11.	Elbow round	18
12.	Wrist round	18
13.	Short sleeve length	19
14.	3/4 sleeve length	28
15.	Full sleeve length	39
16.	Skirt length	46
17.	Waist to hip	18
18.	Waist to knee	37
19.	Waist to thigh	20

Each of the standardised body measurements are found to be in the range where maximum number of candidates

Summary and Conclusion

V SUMMARY AND CONCLUSION

Dress and its numerous synonyms clothes, garments, apparels and attires refers to the covering used for the human body. In olden days man used leaves to cover their body, later clothes came into existence. Clothes are important in determining the impression a person makes on others. Clothing serves expressive as well as serviceable function, protecting the individual psychologically as well as physically.

From ancient days India has been famous for her beautiful fabrics. The art of her gold brocades and filmy muslins "comely as the curtains of Solomon" is older than the Puranas. The puranas tell us that spinning and weaving were important handicrafts and that vedic Indians were fond of suvasas or beautiful garments. Now-a-days people give more importance to attractive appearance than protection or comfort through clothing.

Childhood is the foundation age of the life, since the basic attitudes and behaviour patterns, the way the child feels and acts are developed during this stage. Clothing is an extremely important part of child's world, they may recall great joy and pride in receiving and wearing attractive garments. Hence, one should take care in selecting good material, colour, texture and design which on the other hand

lays the foundation for good habits and personality development.

All girls especially upto ten years need a roomy garment with large arm hole and curved under arms. A garment should be easy to slip on, should stay in place, should restrain any movements, should fit smoothly and should not be irritating. Frock is a short coat with a skirt which reaches the knees. It is a comfortable garment where the grade school girls feel free not only in casual times but even in occasions. Hence, the investigator had planned to conduct a study on "Designing and Constructing frocks for early grade school girls" specific objectives of this study are:

- To standardise body measurements for the early grade school girls,
- To collect information regarding clothing for early grade school girls (through interviewing mothers possessing early grade school girls),
- Sketching grade school girls frock designs with reference to current fashion,
- Constructing the best eight fashionable frocks for the grade school girls, and
- Evaluating the constructed frocks for design, colour, texture, ease, comfort and constructional aspects.

Experimental procedure:

The experimental procedure for the study consists of the following steps.

A. Finding out mothers preference in the choice of early grade school girls frocks.

A survey was conducted to find out the details about early grade school girls frocks from 100 mothers dwelling in Gudivada.

B. Standardisation of body measurements

Two hundred and fifty girls between the age of six to eight were selected from Sri Avinashilingam Primary School, Saradalaya and Ramalingam Primary School, Coimbatore. Their body measurements were taken and recorded systematically.

C. Designing frocks for the early grade school girls

By viewing various magazines and journals 50 designs were drawn, 25 for casual wear and 25 for formal wear.

These designs were ranked in order of preferences by early grade school girls mothers. The best four designs in each category were selected for the study. The selected designs were named as CW₁, CW₂, CW₃, CW₄, FW₁, FW₂, FW₃, and FW₄.

Reviewing the instructions framed by Zarakar () and Matthews (1991), Doongaji and Deshpande (1988) the investigator prepared a new set of instructions for the frock basic pattern. The pattern was cut and stitched following the principles of marking, cutting and sewing. The constructed muslin frock was tried on twenty five early grade school girls with standard body measurements. From the evaluation of the muslin pattern it was clear that the arm scye depth and length of front bodice pattern should be increased. Hence, the investigator altered the muslin pattern and prepared a new set of instructions. The material, colour, accessories and other necessary items required for the construction of frocks CW₁, CW₂, CW₃, CW₄, FW₁, FW₂, FW₃, FW₄ were all chosen according to the findings obtained from the survey as per the mothers preferences.

The designed frocks were constructed making suitable alterations in the frock muslin paper pattern. The constructed frocks were then tried on an early grade school girls with standardized body measurements and the fit, colour combination, general appearance and all other aspects were evaluated by twenty five mothers and twenty five teachers.

Findings of the study:

- Summer frocks and A-line frocks were best preferred for casual wear whereas frilled and flared frocks were preferred for formal wear.

- Cotton and khadi material were preferred for casual wear. Silk, polyester and blended fabrics were preferred for formal wear.
- Both fine and medium textures were preferred for early grade school girls frocks.
- Light red, light violet and light green was preferred for casual wear frocks whereas dark violet, dark orange, dark yellow, dark red was preferred for formal wear frocks.
- Monochromatic and neutral combinations were most preferred for casual wear and formal wear frocks.
- Front and back opening plackets were best preferred plackets for casual and formal wear frocks.
- Press buttons, hook and eye fasteners were preferred for casual wear whereas zipper was preferred for formal wear frocks.
- Beed work, frills, collars, lace, applique, piping and pleats were preferred for casual wear frocks. Beed work, frills, pockets, pearls, pleats and collars were preferred for formal wear frocks.
- The standardised body measurements of the early grade school girls fell into the group B category which was equal to 56-60 cms. All other body measurements were standardised based upon these measurements.
- The evaluation of the muslin pattern, showed that the arm scye depth and front waist length required alterations.

The design features incorporated in the designed early grade school girls frock patterns are as follows.

- Frock CW₁ was constructed out of a plain light violet material along with scalloped collar, which was incorporated around the neck.
- Frock CW₂ had a green checked material for the entire garment.
- Frock CW₃ was constructed out of khadi material both for the yoke and skirt part.
- Frock CW₄ was made out of light pink and dark pink material for piping and fabric buttons.
- Frock FW₁ had a royal blue silk fabric used for the entire garment with frills at the bodice and the hemline.
- Frock FW₂ was constructed out of satin orange material along with black netted material used for frills and belt.
- Frock FW₃ had mustard yellow blended material used for entire garment with light cream creped material.
- Frock FW₄ was constructed out of light brown double shaded blended fabric with cream colour geometrical design blended fabric.

Trimming and decorations such as beed work, frills, collars, lace, applique, piping and pleats, were introduced in order to give a better finish to the designed garments. Fasteners such as hook and eye, press buttons and

zippers were incorporated in order to facilitate easy removal of the constructed frocks by the early grade school girls.

Based upon the study, it could be concluded that clothing an important aspect in child's life should be comfortable and should not be irritating. Clothing serves expressive as well as serviceable function protecting the individual psychologically as well as physically. Through this study, it was felt by both the mothers and teachers of early grade school girls that the child feels better in suitable clothing.

RECOMMENDATIONS:

1. It is recommended that using the same body measurements various other garments can also be constructed which suit the early grade school girls.

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Appendices

APPENDIX I

INTERVIEW SCHEDULE TO ELICIT INFORMATION REGARDING FROCKS
FROM MOTHERS OF EARLY GRADE SCHOOL GIRLS

1. Mother's name :
2. Occupation :
3. Address :
4. Child' name : Age: Class:
5. Who selects clothing for the child
a) Mother b) Father c) Both d) Any other
6. Tick the source of information regarding frocks

Television
Radio
Newspaper
Magazines
Fashion shows
Movies
Models
Displays
Exhibitions
Peer group
Neighbour
Any other

7. What type of frocks do you prefer for your child?

Frocks Casual wear Formal wear

Plain frock
Summer frock
A-line frock
Frilled frock

Frocks Casual wear Formal wear

Flared frock

Umbrella frock

Pleated frock

Any other

8. Mention the type of material you prefer for your child's frock:

Frocks Casual wear Formal wear

Cotton

Polyester

Silk

Wool

Rayon

Nylon

Khadi

Flannel

Blended
material

Any other

9. Indicate the type of texture you prefer for your child's dress

Texture	Casual wear	Formal wear
Fine		
Medium		
Rough/coarse		
Any other		

10. Indicate the colours you prefer for your child's frocks:

Colours	Casual wear	Formal wear
Red	Light	
	Dark	
Violet	Light	
	Dark	
Blue	Light	
	Dark	
Green	Light	
	Dark	
Yellow	Light	
	Dark	
Orange	Light	
	Dark	
Any other		

11. Mention the colour combination preferred by you for your child's dress:

Colours	Casual wear	Formal wear
Monochromatic		
Analogous		
Compliment		
Tried		
Neutral combination		

12. Mention the placement of placket do you prefer for your child's dress:

Type of placket	Casual wear	Formal wear
Front opening		
Back opening		
Shoulder opening		
Side opening		
Without opening		
Any other		

13. Indicate the type of fasteners do you prefer for your Child's dress:

Fasteners	Casual wear	Formal wear
Press buttons		
Hook and eye		
Plastic buttons		
Metal buttons		

APPENDIX - II

METHOD OF CALCULATING MODAL VALUE

BUST MEASUREMENT:

Class interval (in cms)	Frequency
51 - 55	116
56 - 60	106
61 - 65	26
66 - 70	2

The mode is conveniently obtained by using the

formala :
$$M_o = l + \frac{\Delta_1}{\Delta_1 + \Delta_2} \times i$$

Where l is the lower limit of the modal class, Δ_1 is the difference between the frequency of the modal class, Δ_2 is the difference between the frequency of the modal class and the frequency of the post modal class and i is the class interval of the modal class.

$$= 56 + \frac{116}{10 + 116} \times 5$$

$$= 56 + \frac{116}{126} \times 5 = 60.6$$

In the above calculation, the maximum frequency comes under 56-60 class interval.

APPENDIX - III

PROFORMA FOR THE EVALUATION OF THE MUSLIN PATTERN

S. No.	Criteria for evaluation	Good	Fair	Poor	Average score
1.	Chest ease				
2.	Shoulder line				
3.	Arm scye line				
4.	Waist length				
5.	Waist line				
6.	Sleeve length				
7.	Sleeve fit				
8.	Neck line				
9.	Garment length				
10.	General fit				

$RQ = 1/8 \text{ chest}$
 $AJ = 2.5 \text{ cms}$
 Square out from JK
 $KJ = IH$
 Join GK shape LNF
 Keep 2-2.5 cms inlays at QP

SKIRT:

$AB = \text{Skirt length} + 2 \text{ cms}$
 $AD = 1/2 \text{ chest} + 1 \text{ cms}$
 $AD = BC$
 $DE = 2.5 \text{ cms}$
 $CF = 2 \text{ cms}$

Keep 3-3.5 cms should be added for inside turnings.

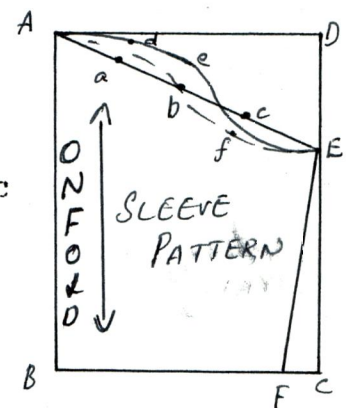
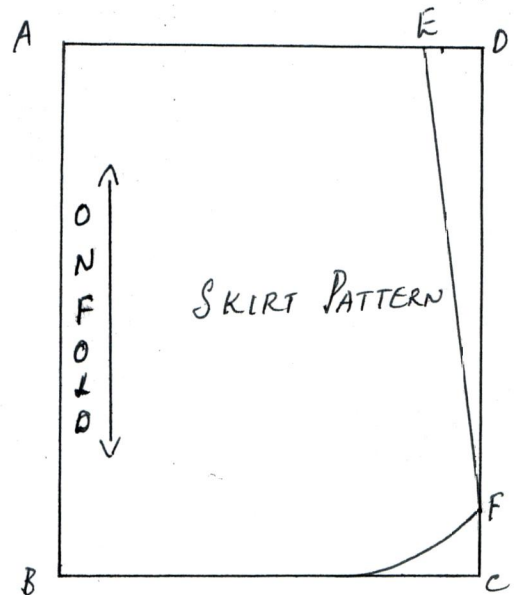
SLEEVE:

$AB = \text{Sleeve length} + 2.5 \text{ cms}$
 $BC = AD = 1/4 \text{ chest} - 1.5 \text{ cms}$
 $DE = 1/8 \text{ chest}$
 $CF = 2.5 \text{ cms}$

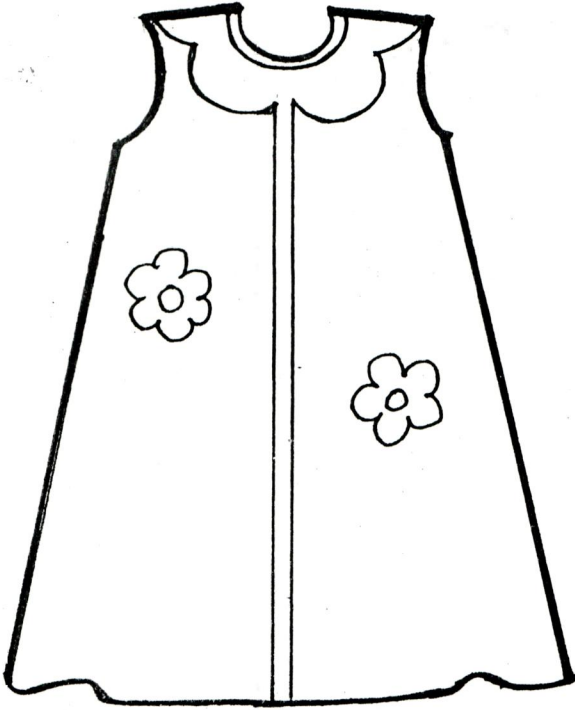
Divide AE into 4 equal parts and mark a, b, c
 $ad = 1.5 \text{ cms}, be = 1 \text{ cm}, cf = 1 \text{ cm}$

Connect AdefE for back armscye line

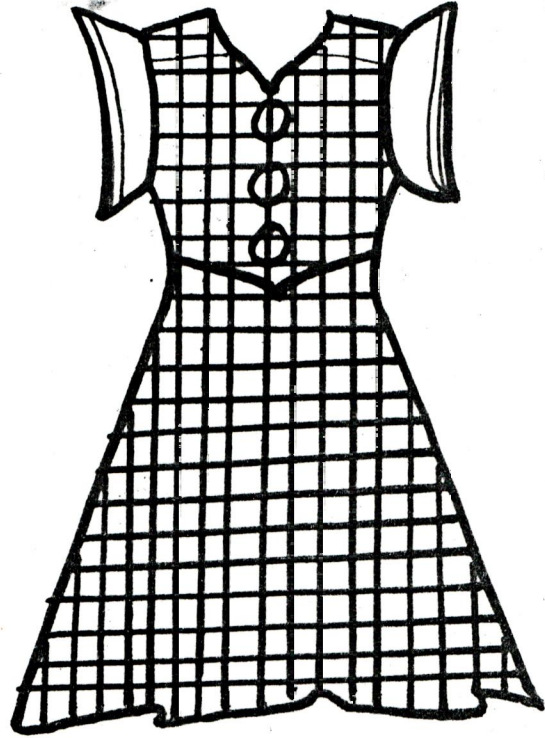
Connect AabfE for front armscye line



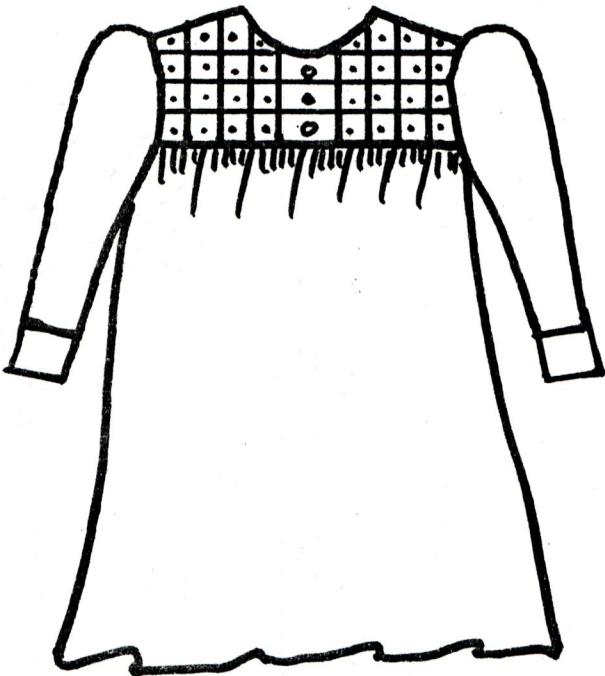
APPENDIX - V



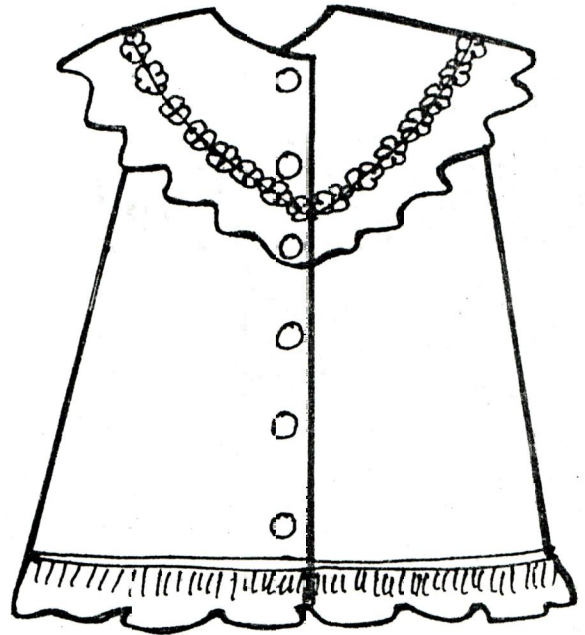
CW₁



CW₂



CW₃

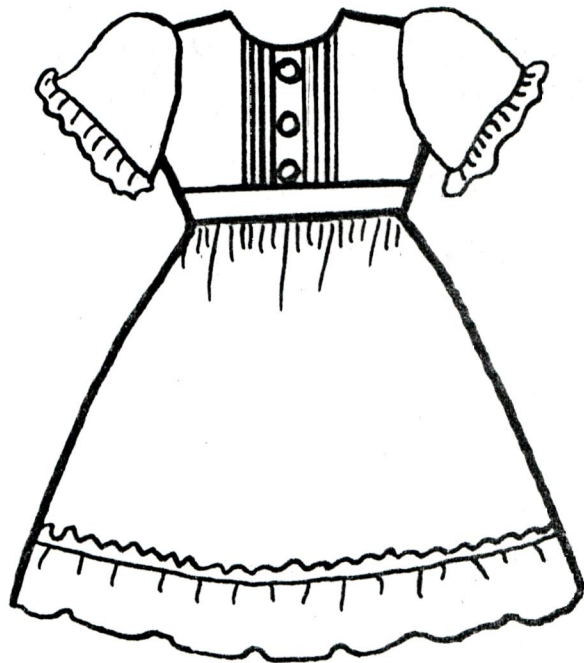


CW₄

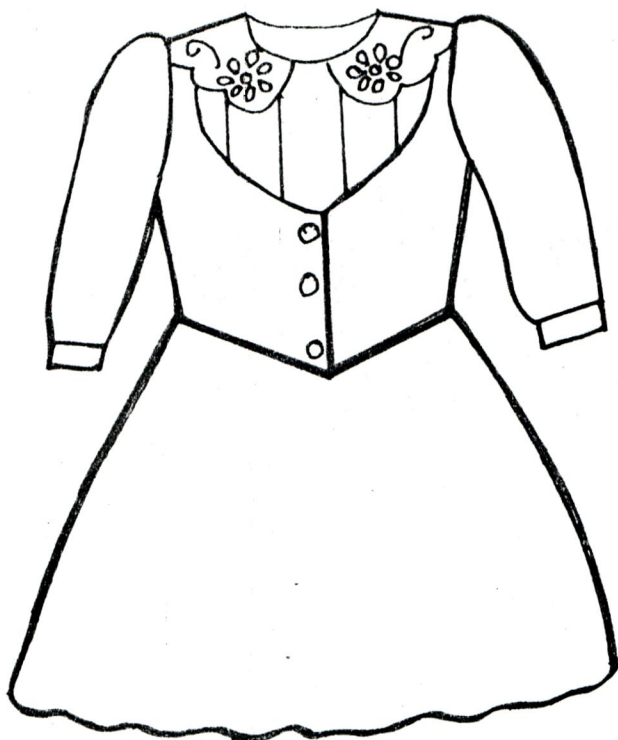
FORMAL WEAR FROCKS



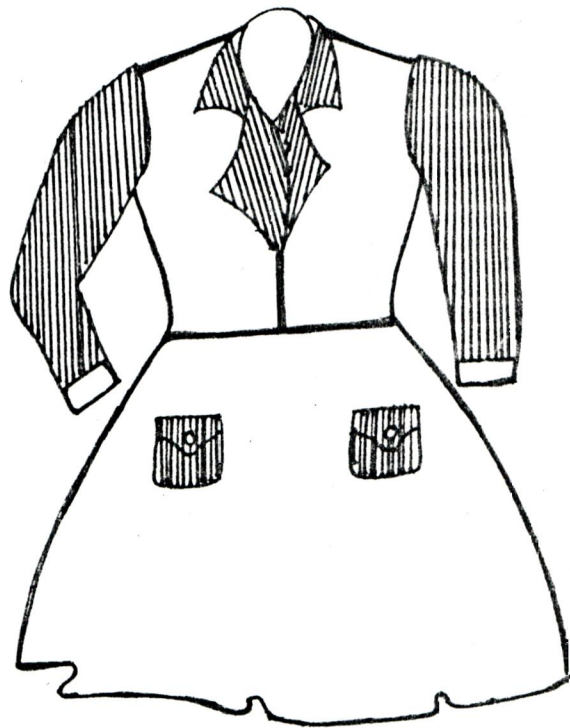
Fw₁



Fw₂



Fw₃



Fw₄

APPENDIX - VI

PROFORMA FOR THE EVALUATION OF THE CONSTRUCTED GARMENTS

S. No.	Criteria for Evaluation	Casual wear				Formal wear			
		CW1	CW2	CW3	CW4	FW1	FW2	FW3	FW4
1.	General appearance								
2.	Suitability of design to current fashion								
3.	Selection of material								
4.	Suitability of colour								
5.	Trimmings and decorations								
6.	Appropriation of embellishment used								
7.	General fit								
8.	Balance of design								

SCORE: GOOD - 5 POINTS; FAIR - 4 POINTS; POOR - 3 POINTS