

**COST OF REARING INFANTS FROM 7 TO 15 MONTHS
(A FOLLOW UP STUDY)**

BY

BHUVANESWARI S. R.



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I. INTRODUCTION

Infancy is the period from birth to about two years of life. It is a time of extraordinary swift growth and achievement in all areas of development (Alkind, 1978). The first two years of life are formative years when the foundations for child's future development is laid. The family influence is paramount during this period, as the rearing or upbringing of the child in the first two or three years is entirely confined to the family members, and the child internalises whatever he perceives around him (Khan, 1979).

Children are like flowers that bloom and fade for want of care and need satisfaction (Nakhoda, 1967). They are on the threshold of the blossom of the flower. If the basic needs/facilities of the life are denied, the buds will not blossom as we wish, but they will wither. Every child needs the love, security and care of a good home. The child's parents are his background, protecting him and satisfying his essential needs (Agarwal, 1975).

Alkind (1978) points out that effective parenting is critical during infancy for the healthy growth and development of the child. Hatfield *et al* (1967) report that parents who

recognize and respond to their children's needs, who communicate acceptance and who are available for interaction foster stronger identification than the parents who are inaccessible and insensitive.

Devadas and Jaye (1984) remark that the family is the first moulder of the child. It is the agency which gives the child a stable relationship, through which he grows and thrives, gets his material needs fulfilled. Skidmore (1979) explains that the family provides for the bearing and upbringing of children. Rearing of children seems to succeed best when there are parents who are personally interested in the upbringing of children. The home provides the best ground for fulfilling the child's economic needs, by taking care of the child's physical development, providing facilities for food, clothing, comfort and play for the child (Shamsuddin, 1984).

Children are the wealth of the family and the nation, a concentrated effort has to be made to improve their living conditions and their general upbringing (Anandhan, 1981). As reported by Rajendran (1979) the needs of children are many; but our resources are limited. Our strategy should be to maximise the benefits from the available resources. The National Children's Board (1979) proposes that investments, whether in terms of money

spent or effort made in programmes for the welfare of the children are necessarily of long term gestation, to foster and support the growth and development.

The International Union of Family Organisation (1966) stresses the need for action research in the field of child care and child rearing, to improve the share from the national budget to support the welfare programmes which are directed to or will benefit a majority of child population. Studies predicting the cost of child rearing are negligible specially in the context of Indian culture. Research in this area is an urgent need since this might help in forecasting the finance required at various centres of alternate child care support systems to rear and maintain a child; catering to his basic as well as secondary needs.

A study conducted in Coimbatore by Behan and Jaya (1985) on 'Cost of rearing infants from birth to six months' with 112 samples (from the three income level) recommended that monetary expenditure incurred by the parents for bringing up of child needs to be studied longitudinally. This present study is a follow up study in order to predict the expenditure incurred for bringing up infants (from seven to fifteen months) at three income levels and to assess the differences in the cost of rearing in

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relation to certain variables such as sex, ordinal position, income, education, occupation of parents and type of family.

Operational Definition of the Terms used in this Study:

Infancy, in this study refers to the period from birth to about fifteen months of life.

Cost of rearing infants included the financial cost incurred on food, clothing, cosmetics, medicare, furnitures and furnishings, ornaments, care taking, play materials, special ceremonies and savings.

II. REVIEW OF LITERATURE

The related literature pertaining to this study on 'Cost of Rearing Infants' from seven to fifteen months is reviewed under the following heads.

- A. Needs of Infants
- B. Child Rearing
- and C. Cost of Rearing Infants

A. Needs of Infants

Children have certain needs that must be met irrespective of culture and wealth if they are to survive and develop. The more adequately their needs are met, the greater will be their success (Mabron, 1978). According to Sadhana Garg(1983) the requirements of children are food, clothing, bedding, immunisation, play equipment and toilet accessories.

Mussen (1979) states that needs are the permanent trends of human nature which underlie human behaviour from birth to death, under all circumstances and in all kinds of societies. Since the infant is vulnerable and helpless, he is unable to cope with his needs, he is a member of the household or an institution which forms his universe. As remarked by Manician(1984) the child's first need is truly the need for life, of socio economic and cultural development, health, peace and to be away

from the risks of pollution, poverty, ignorance, disease and war. Rao(1983) points out that it is during this period that one witnesses a high incidence of wastage from mortality and morbidity due to many socio-environmental factors.

Need appears to be the basic drive force generating behaviour. Fein (1978) explains the needs of the infants with special reference to (a) a safe, healthful environment (b) nutritious food and opportunities to learn to eat balanced meals (c) play and learning materials that facilitate the development and coordination of sensory-motor processes and unlimited opportunities to act upon these materials (d) periodic health check and immunization against common infections towards developmental progress. In Tata' (1980) views one of the primary duties of the parents is to dress their infant thus helping him to promote his personality and to ensure a feeling of security in him.

Shamsuddin (1984) asserts that home is the eternal school of life which provides facilities for food, clothing comfort and play for the child. The infants' parents are his background, protecting him and satisfying his essential needs (Agarwal, 1975).

B. Child Rearing

Ambron (1978) describes that children have certain needs, irrespective of culture. The more adequately the needs are met, the greater will be the measure of maturity their personality will attain. The process of meeting their needs is known as child rearing.

Bhogle (1983) defines child rearing "as the ways and means adopted by the parents in bringing up their children to make them useful members of the society". Ramamurthy and Bharathi (1979) opine that the word child rearing generally refers to all interactions between parents and their children. The interactions include parents' expressions of attitudes, values, interests, and beliefs as well as their care taking and upbringing patterns. These interactions affect the child's behaviour, whether intended to be so or not and influence his potentialities for future action.

Qapta (1966) points out that bearing children is a natural phenomenon but rearing them in a manner so as to make them useful, healthy and mentally sound citizens is something which requires serious consideration on the part of those who are concerned with the welfare of the society. Brisbane (1969) stresses that child rearing practices aim to help the child to become an independent, responsible, well adjusted person to develop character and to play a worthy role as men and women in the society.

Sinha (1980) denotes that child rearing includes much more than providing a child food, shelter, and clothing which are the basis for growth. Bogg(1955) explains that the goal of child rearing is to develop in the child the capacity for adjusting to the traditional roles and cultural groups to which the child's family belong.

Modhok (1975) studied child rearing practices among rural women of New Delhi and found that there was no significant difference in child rearing practices among the mothers belonging to different castes and families with different socio economic status. On the contrary, the study of child rearing practices in rural families conducted by Malina Devi (1968) in the village of Thondamuthur at two income levels revealed significant differences in child rearing practices at different income levels.

The study conducted by Muthayya (1972) on child rearing at different socio economic conditions in Hyderabad brought to light the fact that early weaning might require spending money for the food. Majority of the respondents (nearly sixty percent) from low income groups weaned their infants at three years. On the other hand the study conducted by Burman (1961) on cost of infant feeding revealed that the cost incurred on supplementary foods were reduced by the home-made, low cost weaning foods.

The respondents from the poor socio-economic strata in his study at Arabian Sea reported that they started early weaning procedures even the period of sixth month of their infants. Sinha (1980) concludes that children are not born human but are born with the capacity to become human and they can only become human by proper upbringing and training in the society.

C. Cost of Child Rearing

Mc Quire (1964) explains that the financial cost of rearing includes the consumption of the child in terms of food, health, clothing and recreational services and also the indirect cost which is in terms of suffering worries and time. According to Leibenstein (1975) the perceived cost incurred by the parents for rearing the child includes the expenditure on essentials like food, clothing, health, housing and recreation.

It was observed by Elder (1963) that the Family is likely to have fewer financial resources at the time of birth of the first child than at later phases of family life. Every bit of equipment that is required for child care must be obtained for the first time for the first child. If this equipment is purchased, it represents a new source of expense that may be burdensome to the young family. The cost such as food, clothing, medicine increases the young families' expenses.

Gillis (1974) reports that the financial cost of large families are met by most people either through prolonged restriction on spending or by engaging the skills of the older siblings in order to bring additional resources to the family pool. Bowerman (1963) opines that there is no doubt that it costs less to provide for a family of three than to provide for any large group. Bossard et al (1964) point out that the small families secure the greater economic advantages, the equipment and physical provisions in and around their home for rearing of children.

Clousen (1966) remarks that the cost of upbringing the first child may be more because the parents feel more anxious about their first child than they do about later children. This finding has been proved by the report of Rayappa (1980) which also points out that the cost incurred on the first child is estimated to be twice as expensive as the second child, the birth order being an important factor in the estimation of the cost incurred on rearing the child. The study conducted by Behan and Jaya (1985) shows a different trend and reveals that there was no significant difference in the total expenses incurred for rearing infants from birth to six months in relation to the ordinal position of the infant.

Pennock's review (1970) indicates that the cost rearing a child till 18th birth day in United States, for an urban family with two children in North-Central region was \$25,560; (Rs.3,10,500/=) for a farm family in South, it was \$24,350; (Rs.3,04,375/=) and for farm family North Central region the amount was \$23,070, (Rs.2,88,375/=).

The Indian Institute of Public Opinion (1964) reviews that, on an average, the expenditure incurred by parents on their children in urban families was Rs.6521/= and was Rs.4833/= in rural families. Of this expenditure, nearly 70 per cent was incurred on food.

The results of the study conducted by Baham and Jaya(1985) showed a significant difference between the families of three income levels in the expenditure pattern of items such as food, clothing, cosmetics, medicine, furniture, ornaments, servants, recreation and ceremonies for rearing the infants from birth to six months. There was also a significant difference in the saving patterns of the low and high income groups. The total cost of rearing a female infant was Rs.1336/= while it was Rs.741/= for the male infant. The total cost incurred for the first child was higher than the second and third borns.

The same study reflects, significant difference when the costs were compared with the educational and occupational status of the parents. The illiterates incurred Rs.160/= for child rearing while the graduates incurred Rs.1813/=. The professional fathers spent the highest for their infants (Rs.3671/=); while the daily wage earners incurred comparatively minimum for rearing their infants (Rs.111/=).

The survey conducted by Narain (1985) in Japan estimated the total cost of rearing, where the basic costs of bringing up one child accounted Rs.6,12,000/=. The total expenditure on food amounted to three lakhs while it was Rs.78,500/= for clothing, Rs.49,000/= for medical treatment and the rest for cosmetics.

A study conducted by Mythili and Geervani (1980) on the supplementary food introduced between six to eleven months by Tamilians of different income levels, settled in Hyderabad shows that milk, fruits, and fruit juices, rice, dhal and commercial infant products were the foods introduced. There was no significant difference in the selection of weaning foods among different income groups. This was attributed to the educational level of the mothers. Hence, education seems to play a greater role than income. The study conducted by FAO(1977) on the total daily cost of artificial infant feeding was US \$ 0.50 (Rs.0.63/=)

a day or US \$ 390 (Rs.4875/=) for the entire two year period. The daily cost of the extra food for a lactating mother was US 0.14 (Rs. ~~175~~¹⁷⁵/=). The daily additional cost of foods for artificial feeding over breast feeding was US \$ 0.39 (Rs.4.88/=).

Expenditure on the child begins with the introduction of supplementary foods. If the child can be given a part of adult food, additional expense may be negligible. But supplementation usually begins with milk, biscuits, and snacks and all these need to be bought. This was observed in another study conducted by Gaervani (1980), on the cost of infant feeding and care in low, middle and high income groups. The cost ranged from Rs.1.26/= to 4.91/= per day. Costs were assessed on the basis of the cost of artificial milk, milk bottles, nipples, the cost of additional foods consumed by the mother to promote breast feeding, the cost of medicines, consultation and transport and the cost of time spent on feeding. The study revealed that the cost of feeding decreased at the first stage of weaning in low income groups, whereas in middle and high income groups, it increased. It was clearly seen that breast feeding and non-milk supplements were the least expensive methods of feeding; medical expenses were also the least in this case. In the low income groups, preparation of any food, especially for the child, added to the families' expenditure.

The Taxes Community Demonstrative Project (1975) conducted the cost study and produced that the money spent by the state has a compounding effect on total resources devoted to day-care. On an average for each dollar expended on child-care services, \$3.08 (Rs.38.50/=) of non-state resources was generated, and the income of families, whose children received day care through the projects rose about 32% over a nine month period. For every dollar of state money expended, family income rose by \$1.86 (Rs.23.25/=) the actual state cost for day-care services appeared to be 17%.

To sum up, it could be said that there is a great need to develop more empirical evidence in the area of cost incurred for rearing the children through more systematic studies.

III. METHODOLOGY

The methodology of the study on 'Cost of rearing infants from seven to fifteen months' is discussed under the following headings:

- A. Selection of the area
- B. Selection of the sample
- C. Collection of the data
- and D. Analysis of the data

A. Selection of the Area

Beham (1985) did a study on cost of rearing infants from birth to six months. Since this is a follow up study of Beham(1985), a senior student to the investigator at Sri Avinashilingam Home Science College, Coimbatore, the areas selected to study the 'Cost of rearing infants from birth to six months', for the earlier investigation, continued for this study also. It included Muthumariamman Koil Street, Kamarajapuram, Sivananda Colony, Saibaba Colony and Ramalingam Colony in the city of Coimbatore.

B. Selection of the Sample

With the help of the former investigator who initiated the longitudinal study, the houses of the same infants were located for the follow up study. Fifty infants from each of

the three income groups (proposed by Mukerjee, 1983) making a total of hundred and fifty were drawn for the study. The infants selected had completed six months of age by February 1985, (starting period of this study) and were chosen in order to have data on cost of rearing them from seven to fifteen months. By December thus the selected infants had completed their fifteen months thus providing a period of nine months for recording the expenditure incurred for rearing them.

The willingness of the former families to continue recording of the cost on expenses were confirmed. The parents were explained about the longitudinal nature of the study and the type of help they were expected to offer. Eliciting definite reassurance from the concerned members they were included for the study. The investigator through her visits to the families could achieve the cooperation from all those selected for the former study.

C. Collection of Data

The record book evolved by the investigator (Appendix A) was distributed for maintenance and necessary information. The sample of the record schedule (Appendix A) mainly consisted of columns to elicit the following information.

1. Family background of the selected infants,
2. Infant feeding
3. Expenditure incurred on food, clothing, cosmetics, medicare, furnitures and furnishings, ornaments, caretakers, play materials special ceremonies and savings.

The mothers of the infants were visited once a month. They were requested to kindly cooperate with the investigator making entries in the record continuously all the expenses incurred with regard to their infants. Some visits enabled the investigator to check whether the entries for that particular month had already been done or not, and to follow it up.

D. Analysis of the Data

The data on the 'Cost of rearing infants from seven to fifteen months on various items like food, clothing, cosmetics, medicare, furniture and furnishings, ornaments, care takers, play materials, special ceremonies and savings were analysed statistically to find out the relationship between:

1. Cost of rearing in relation to sex
 2. Ordinal position of the infants and expenditure incurred
 3. Type of families and cost involved in bringing up children,
 4. Income levels of families and expenditure on rearing infants.
- and
5. Educational and occupational status of the parents and expenditure incurred on rearing their infants.

The data was treated statistically with the help of 't' test to find out the differences in the cost incurred to rear the child variable wise.

IV. RESULTS AND DISCUSSION

The results pertaining to the exploratory study on "Cost of rearing infants from 7 to 15 months" are presented under the following heads.

- A. Family Background of the Selected Infants
- B. Total Cost of Rearing Infants
- C. Expenses Incurred on Various Items for Infants at three Income Levels
- D. Supplementary Findings

A. Family Background of the Selected Infants
The family background of the selected infants are presented in two parts. Table I pictures details regarding the type and size of the family, sex and ordinal position of the children at three income levels.

TABLE I

BACKGROUND OF THE SELECTED INFANTS

S.No.	Details	Percentage			Total (N=150)
		LIG (N=50)	MIG (N=50)	HIG (N=50)	
1.	Type of family				
	a) Joint	10	20	20	16.
	b) Nuclear	90	80	80	83.
2.	Size of the family				
	a) Small (1-4 members)	68	76	70	71.
	b) Medium (4-8 members)	28	24	28	26.
	c) Large (more than 9 members)	4	--	2	2.
3.	Sex of the child				
	a) Male	32	52	50	44.
	b) Female	68	48	50	55.
4.	Ordinal position of the child				
	a) 1st born	18	52	60	43.
	b) 2nd born	60	36	30	42.
	c) 3rd born	20	12	10	14.
	d) 4th born	--	--	--	--
	e) 5th born	2	--	--	0.

LIG - Low Income Group (up to Rs.600/= per month)

MIG - Middle Income Group (Rs.601/= to Rs.1500/= per month)

HIG - High Income group (Rs.1501/= and above per month)

The following paragraphs explain the family background of the selected infants.

a) Type of Family

More than eighty per cent of the infants were from nuclear families. The number of nuclear families were five times greater than the joint families. Seventy one per cent of the families were having members less than four.

b) Sex of the Infants

There was an equal distribution of male and female children in the high income families; while the middle income group had more male children than female ones and vice versa in the low income group.

c) Ordinal Position of the Infants

Sixty per cent of the first born children fell in the high income group; a similar number of the selected infants in the low income were second born. On the whole, only fourteen percent of the families had the infants who were third born.

Table II shows the details of the educational and occupational status of the parents of the selected infants.

TABLE II
PARENTS' BACKGROUND

S.No.	Details	Percentage			Total (N=150)
		LIG (N=50)	MIG (N=50)	HIG (N=50)	
5.	Father's Educational Status				
	a) Illiterates	10	-	-	3.3
	b) Fifth standard	30	-	-	10.0
	c) Eighth standard	48	2	-	16.6
	d) Tenth standard	8	40	4	17.4
	e) Plus two level	4	18	-	26.0
	f) Degree level	-	40	38	7.3
	g) Professional level	-	-	58	19.3
6.	Mother's Educational Status				
	a) Illiterates	30	-	-	10
	b) Fifth standard	42	-	-	14
	c) 8th standard	28	30	-	19.3
	d) Tenth standard	--	42	10	17.3
	e) Plus two level	--	16	18	11.3
	f) Degree level	--	12	12	28.0
	g) Professional level	--	-	-	-
7.	Mother's Occupational Status				
	a) Non workers	94	82	64	80
	b) Wage earners	6	--	-	2
	c) Teachers	-	12	18	10
	d) Engineers	-	--	2	0.6
	e) Clerical workers	-	4	12	5.3
	f) Doctors	-	2	4	2
8.	Father's Occupational Status				
	a) Wage earners	38	-	-	12.6
	b) Business	34	38	8	26.6
	c) Teachers	--	10	10	6.6
	d) Engineers	20	22	58	33.4
	e) Clerical workers	8	30	20	19.3
	f) Doctors	-	-	4	1.3

d) educational level of the Fathers

Ten per cent of the fathers from low income group were illiterates. Fifty eight per cent of the fathers from high income group and thirty eight per cent of the fathers from middle income groups had professional education. Forty per cent of the fathers from middle and high income group had education upto college level. The fathers in the high income group seem to be better in their educational qualification.

e) Educational Level of the Mothers

One third of the mothers from low income families were illiterates. Irrespective of the income groups, none were professionally educated. In the high income group, seventy two per cent of them were educated upto college level.

f) Occupational status of the Mothers

More than three fourth of the mothers(80%) of the selected sample were homemakers. The mothers employed in various kinds of occupations numbered twenty per cent.

g. Occupational level of the Fathers

Fifty eight per cent of the fathers were engineers in high income groups. Thirty eight per cent of the fathers from low income families were wage earners and most of the fathers(38%) from middle income groups were doing business.

B. Total Cost of Rearing Infants

The total cost of rearing infants was summed up in terms of sex, ordinal position of the child, income and type of family, educational and occupational status of fathers and mothers. It included the cost incurred on food, clothing, cosmetics, medicines, furnitures (play-pan, perambulator, cot, cradle etc.) (and furnishings (mattress, bed spreads, etc.), ornaments, caretakers, play materials and special ceremonies (birth day celebrations, ear boring etc.).

1. Cost of Rearing Infants - Sex Wise

The extent to which the amount incurred for rearing infants varies is indicated in Table III along with the statistical appraisals.

TABLE III

COST OF REARING INFANTS-SEXWISE

Particulars	Average amount spent in rupees per child			
	Female (N=83)	Male (N=67)		
Food	759	790		
Clothing	179	189		
Cosmetics	101	89		
Medicare	255	284		
Furnitures and Furnishings	86	101		
Ornaments	548	200		
Caretakers	66	83		
Play materials	75	86		
Special ceremonies	173	259		
Total	2242	2081		
Mean	249	231		
SD	229	210		
Female Vs	MD	Ss	Table 't' Calculated	'P'
Male	18	104	2.921	0.2 Ns.

NS = Not significant

Excepting the expenses on items such as cosmetics and ornaments, the cost incurred for the male infants was higher on food, clothing, medicare, furniture and furnishings, care takers, play materials and special ceremonies. Though the total cost was higher for the female infants (Figure 4) the difference was insignificant statistically.

It is interesting to note that the expenditure on special ceremonies were higher for the male children. Perhaps this is due to the preferences of the parents to spend more for male infants on special rituals especially in the high income groups. The findings of the study by Behan and Jaya (1985) substantiate the findings of the present study.

2. Cost of Rearing Infants in relation to Ordinal Position

Table IV features the total cost of rearing an infant in terms of ordinal position.

TOTAL COST OF REARING INFANTS-SEXWISE

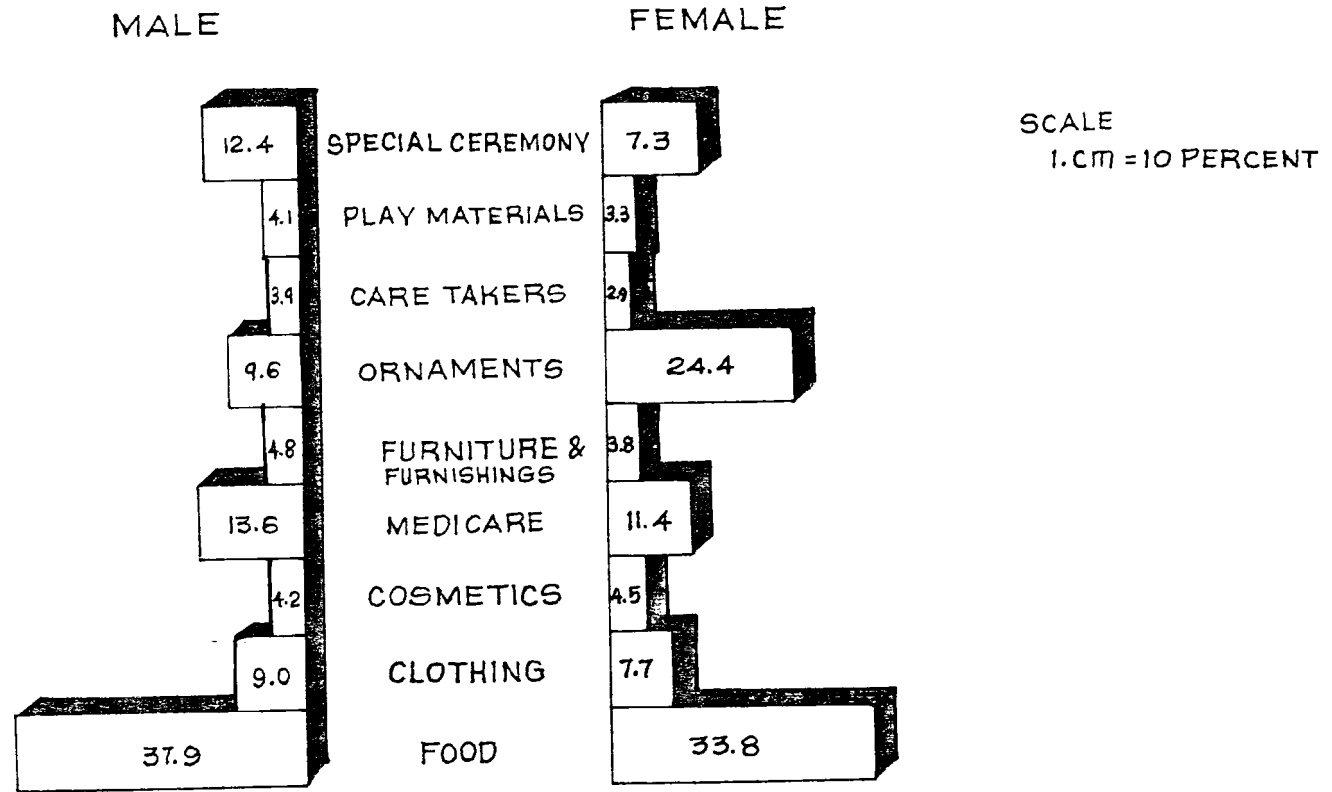


Figure. 1

TABLE IV

COST OF REARING INFANTS IN RELATION TO ORDINAL POSITION

Particulars	Average amount spent in rupees for child			
	I Born	II Born	III Born	
Food	2579	2229	1900	
Clothing	743	490	338	
Cosmetics	297	276	258	
Medicare	996	747	590	
Furnitures and Furnishings	402	263	180	
Ornaments	960	174	4	
Caretakers	340	180	150	
Play materials	290	203	136	
Special ceremonies	725	430	260	
Total	7332	4992	3816	
Mean	814.6	554.6	424	
SD	676.5	617.5	543.8	
Particulars	MD	SE	Table 't'	Calculated 't'
First born Vs Second born	260	306	2.921	0.8 Ns.
First born Vs Third born	390	290.8	2.921	1.3 Ns.
Second born Vs Third born	130	275.6	2.921	0.47 Ns.

Ns = Not significant.

No significant difference in the 't' values were observed when the total expenses were related to the ordinal position of the infants. This feature of the present study is contrary to the predictions of Clousen (1966) that the cost of upbringing the first born may be more because the parents feel more anxious about their first child than do about later children. But the present finding highlights that the ordinal position of the infants does not directly influence the cost incurred and this is supported by the results of previous investigation (Behan and Jaya, 1985).

3. Cost of Rearing Infants in relation to Type of Family

The findings of the study with reference to the expenses incurred on various items in the joint and nuclear families have been documented in the Table V.

TABLE V

COST OF REARING INFANTS IN RELATION TO TYPE OF FAMILY

Particulars	Average amount spent in rupees for child			
	Joint family (N=25)	Percentage	Nuclear family (N=125)	Percentage
Food	621	61.3	891	32.5
Clothing	112	11.0	218	7.9
Cosmetics	64	6.3	120	4.3
Medicare	92	9.0	293	10.6
Furniture and Furnishings	18	1.7	301	10.9
Ornaments	6	0.5	314	11.4
Caretakars	8	0.7	178	6.4
Play materials	14	1.3	153	5.5
Special ceremonies	78	7.6	271	7.8
Total	1013	100	2739	100
Mean	112.5		304	
SD	183.6		218.0	
Particulars	MD	SSd	Table 't'	Calculated 't'
Joint Vs Nuclear Family	172.4	95	2.120	2.1* 2.1*

* Significant at 5% level.

Nuclear families appear to be satisfying the needs of children on a wholesome mannerⁿ spending higher amounts on food, clothing, cosmetics, medicare, furniture, ornaments, play materials and special ceremonies than the joint families. The calculated values indicate significant difference (5% level) between in two types of families with respect to their expenditure pattern.

4. Cost of Rearing Infants in relation to Income Levels and Age of Infants

Table VI points out the total cost incurred in relation to the income levels and total cost incurred for infants from birth to six months and from seven to fifteen months. The cost of rearing infants from birth to six months have been drawn from the findings of the previous investigators (Behan and Jaya, 1985).

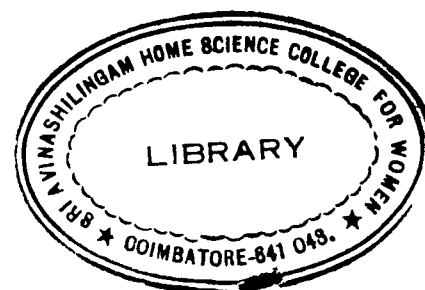
TABLE VI

COST OF REARING INFANTS IN RELATION TO THE INCOME LEVELS

Particulars	AVERAGE AMOUNT SPENT IN RUPEES PER CHILD					
	LIG		MIG		HIG	
	0-6	7-15	In Months 0-6	7-15	0-6	7-15
Food	9	157	75	809	178	1358
Clothing	69	62	231	216	392	333
Cosmetics	36	48	78	95	133	140
Medicare	30	60	97	264	199	469
Furnitures and Furnishings	4	01	72	66	195	222
Ornaments	1	18	246	198	517	407
Carotakers	4	-	32	10	170	242
Play materials	24	20	50	62	128	166
Special ceremonies	2	26	420	202	1167	481
Total	179	392	1301	1922	3079	3818
Mean	20	43	144	214	341	424
SD	21	45	121	225	316	350

Particulars	MD	SS	Table 't'	Calculated 't'
1. Low income group 0-6 months Vs 7-15 months	23	16.6	2.921	1.3 NS
2. Middle income group 0-6 months Vs 7-15 months	70	85.6	2.921	0.8 NS
3. High income group 0-6 months Vs 7-15 months	83	153	2.921	0.5 NS
4. 0-6 months LIG Vs MIG	124	41	2.921	3.0 **
5. 0-6 months LIG Vs MIG	321	106	2.921	3.0 **
6. 0-6 months MIG Vs MIG	197	113	1.7	1.7 *
7. 7-15 months LIG Vs MIG	171	76	2.120	2.3 *
8. 7-15 months LIG Vs MIG	378	118	2.921	3.2 *
9. 7-15 months MIG Vs MIG	210	137	2.921	1.5 NS

** Significant at 1% level
 * Significant at 5% level
 • Significant at 10% level
 NS Not significant.



A review of money spent on different aspects reveal a general trend of more money being spent by the high income groups, thereby indicating the definite influence of socio economic status on the expenditure pattern. It is also apparent from the results that the cost incurred increased as the age of the infants increased. The computed values of 't' showed a significant difference in the expenses met with between the income groups.

5. Cost of Rearing Infants in relation to Educational Status of the Mothers

The average expenses incurred for rearing the infants during the period of seven to fifteen months as related to the educational status of the mothers is depicted in Table VII.

TABLE VII

COST OF REARING INFANTS IN RELATION TO EDUCATIONAL STATUS OF THE MOTHERS

Particulars	Average amount spent in rupees per child			
	Illiterates	Higher Secondary level	College level	
Food	132	436	1285	
Clothing	54	263	306	
Cosmetics	44	114	124	
Medicine	54	382	430	
Furnitures and Furnishings	1	115	190	
Ornaments	15	265	365	
Caretakers	0	90	199	
Play materials	15	96	145	
Special Ceremonies	20	288	665	
Mean	37	227.6	412	
SD	38	122	347	
Particulars	MD	SE	Table 't'	Calculated 't'
Illiteracy Vs Higher Secondary level	190.6	42.8	2.921	4.4 **
Illiteracy Vs College level	375	117	2.921	3.2 **
Higher Secondary level Vs College level	185	123	2.921	1.5 **

** Significant at 1% level
Ns - Not significant

More money had been spent by the literate mothers. Perhaps this group felt that the needs of their infants required to be fulfilled at their best. There appears to be significant difference in the cost incurred between illiterate mothers and those who had completed Higher Secondary education and between illiterates and graduates.

6. Cost of Rearing Infants in relation to Educational Status of the Fathers

The average amount spent on various items related to the educational status of the fathers is reported in Table VIII.

TABLE VIII

COST OF REARING INFANTS IN RELATION TO EDUCATIONAL STATUS OF THE FATHERS

Particulars	Average amount spent in rupees per child			
	Illiterates	Higher Secondary level	College level	Professional level
Food	137	655	1050	1510
Clothing	55	190	186	383
Cosmetics	36	89	112	152
Furnitures and Furnishings	1	58	144	245
Medicine	49	86	291	475
Ornaments	0	130	282	424
Caretakers	0	16	110	258
Play materials	40	55	123	176
Special ceremonies	0	153	264	480
Mean	35	159	285	455
SD	41	182	279	390
Particulars	MD	SE	Table 't'	Calculated 't'
Illiteracy Vs Higher Secondary level	124	62	2.1	2.1 Ns
Illiteracy Vs College level	250	94.5	2.1	2.1 *
Illiteracy Vs Professional level	420	131.5	2.9	3.1 **
Higher Secondary level Vs College level	126	111.7	2.1	1.1 Ns
Higher Secondary Vs Professional level	296	144	2.1	2.0 Ns
College Vs Professional	170	160	2.1	1.06 Ns
* Significant at 1% level				
** Significant at 5% level				
Ns Not Significant				

Table VIII reveal a declining trend of less money being spent by the illiterate fathers. Judging from the 't' values no significant difference was observed among the literate groups, there was significant difference between the illiterates and the graduates and illiterates and professionals in the total expenses incurred for their infants.

7. Cost of Rearing Infants in relation to Occupational Status of the Mothers.

Table IX represents the^e total amount spent for infants according to the occupational status of the mothers.

TABLE IX

**COST OF REARING INFANTS IN RELATION TO OCCUPATIONAL STATUS
OF THE MOTHERS**

Particulars	Average amount spent in rupees per child				
	Wage earners	Non workers	Teachers	Clerks	Doctors
Food	140	681	1116	1201	1231
Clothing	51	176	268	292	318
Cosmetics	39	81	110	139	133
Medicine	52	227	369	381	403
Furnitures and Furnishings	01	75	143	161	201
Caratekers	0	64	141	184	223
Ornaments	13	172	317	324	365
Play materials	16	61	112	131	153
Special ceremonies	17	193	353	389	458
Mean	36	192	325	355	387
SD	41	182	296	313	316
Particulars	MD	SE	Table 't'	Calculated't'	
Wage earners Vs Non workers	156	62.5	2.5	2.5 *	
Wage earners Vs Teachers	289	100.2	2.5	2.8 *	
Wage earners Vs Clerks	319	105	2.9	3.0 **	
Wage earners Vs Doctors	351	106	2.9	2.9 **	
Non workers Vs Teachers	133	116.5	2.5	1.1 Ns	
Non workers Vs Clerks	163	121.4	2.5	1.3 Ns	
Non workers Vs Doctors	195	122	2.5	1.5 Ns	
Teachers Vs Clerks	30	144.4	2.5	0.2 Ns	
Teachers Vs Doctors	62	145.2	2.5	0.4 Ns	
Clerks Vs Doctors	32	149.1	2.5	0.2 Ns	

* Significant at 2% level

** Significant at 1% level

Ns Not Significant

Those working as doctors had spent more money for the needs of their infants. Daily wage earners differed significantly from the other occupationalists thus showing the existence of genuine socio-economic factor.

8. Cost of Rearing Infants in relation to Occupational Status of the Fathers

The total expenses incurred in relation to the occupational status of the fathers is in Table X along with the details of the test of significance.

TABLE X

**COST OF REARING INFANTS IN RELATION TO OCCUPATIONAL STATUS
OF THE FATHERS**

Particulars	AVERAGE AMOUNT SPENT IN RUPEES PER CHILD				
	Wage earners	Clerical workers	Business	Engineers	Doctors
Food	143	958	968	1150	1361
Clothing	51	128	135	280	331
Cosmetics	39	55	62	120	141
Medicine	50	183	192	359	470
Furnitures and Furnishings	01	82	85	143	225
Ornaments	12	154	165	295	402
Carretakers	0	92	98	132	245
Play materials	13	65	72	110	168
Special ceremonies	19	185	192	340	485
Mean	36	211	218	325	425
SD	41	267	269	306	351
Particulars	MD	SE	Table 'F'	Calculated 't'	
1. Wage earners Vs Clerical workers	175	90	2.120	1.9	NS
2. Wage earners Vs Business	182	91	2.120	2	NS
3. Wage earners Vs Engineers	289	103	2.583	2.8	*
4. Wage earners Vs Doctors	389	118	2.921	3.2	**
5. Clerical Vs Business workers	7	127	2.120	0.05	NS
6. Clerical workers Vs Doctors	214	147	2.120	1.4	NS
7. Clerical workers Vs Engineers	114	136	2.120	0.8	NS
8. Business Vs engineers	107	136	2.120	0.7	NS
9. Business Vs Doctors	207	49	2.921	4.1	**
10. Engineers Vs Doctors	100	156	2.120	0.6	NS

** Significant at 1% level
* Significant at 2% level
NS Not Significant

It is but natural that the highly placed professional group of fathers invested more money on their children than the non-professionals such as wage earners and members involved in petty business.

9. Proportion of Money Spent in relation to Total Expenditure Incurred for Rearing Infants

Table XI brings out the proportion of the expenditure on each item in relation to the total expenditure incurred for rearing the infants.

TABLE XI
PROPORTION OF MONEY SPENT IN RELATION TO THE TOTAL EXPENDITURE
INCURRED FOR REARING INFANTS

Particulars	LIG		MIG		HIG	
	Amount spent in rupees	percentage	Amount spent in rupees	percentage	Amount spent in rupees	percentage
Food	157	40	809	42	1358	36
Clothing	62	16	216	12	333	8.7
Cosmetics	48	12	95	4.9	140	3.6
Medicare	60	15	264	13.7	469	12.2
Furniture and Furnishings	01	-	66	3.4	222	5.8
Ornament	18	4.5	198	10.3	407	10.6
Caretakers	-	-	10	0.5	242	6.3
Play materials	20	5	62	3.0	966	4.3
Special ceremonies	26	6.6	202	10.5	481	12.5
Mean	43		213		424	
SD	45		225		350	
Particulars	MD	SE	Table 't'	Calculated 't'		
LIG Vs MIG	170	76	2.120	2.2 **		
LIG Vs HIG	381	118.3	2.921	3.2 **		
MIG Vs HIG	211	139.5	2.120	1.5 **		

* Significant at 5% level
 ** Significant at 1% level
 NS Not Significant

Regardless of the income, highest proportion of the total expenditure was on food.(Figure 2). Low income group spent greater proportion of money on clothing, medicare, cosmetics next to food, while the least amount was spent on furniture (Figure 3). It is interesting to note the

EXPENDITURE ON FOODS IN RELATION TO TOTAL COST OF REARING INFANTS AT THREE INCOME LEVELS

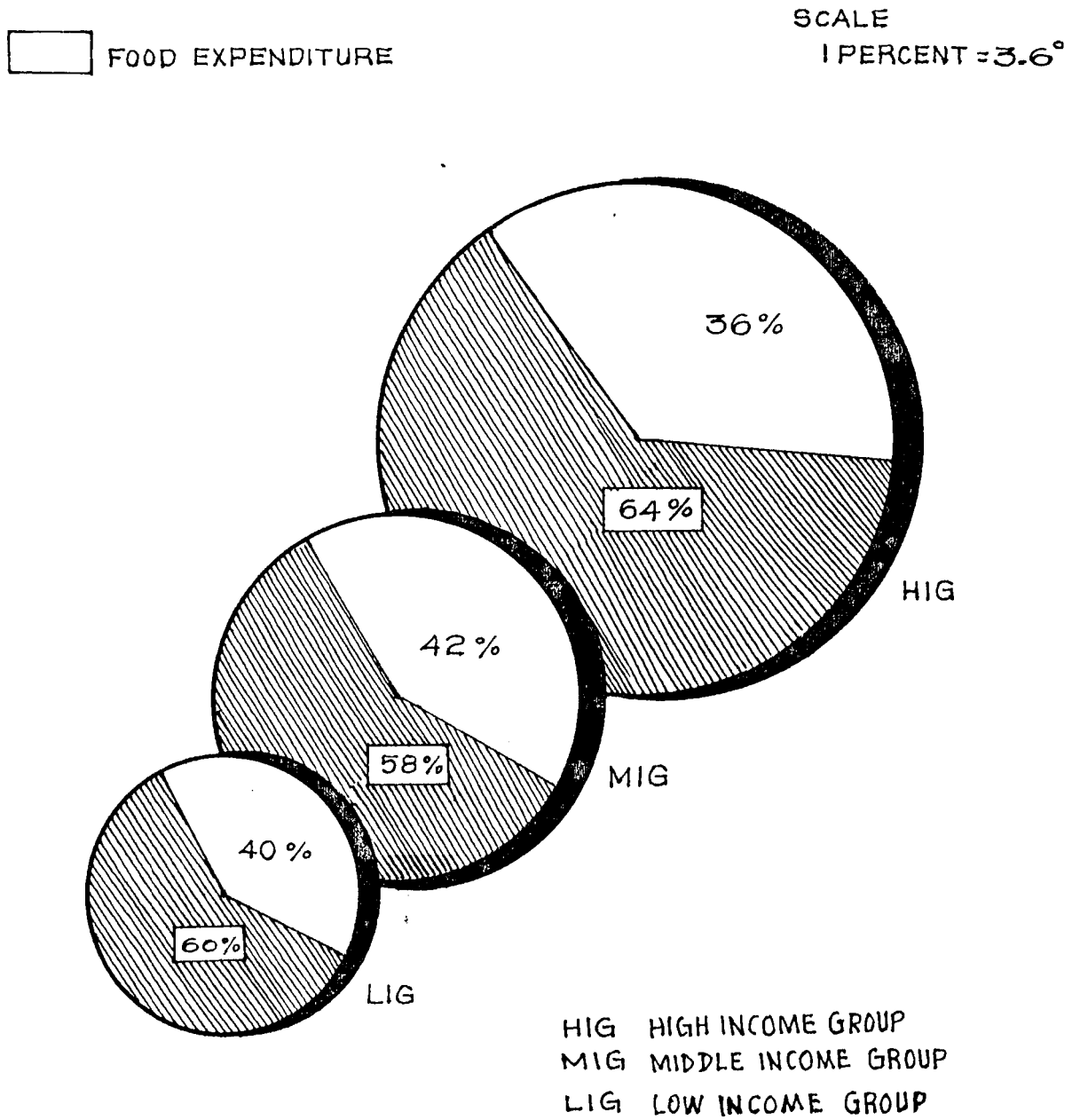


Figure. 2

MONEY SPENT ON EACH ITEM IN RELATION TO TOTAL EXPENDITURE INCURRED FOR REARING INFANTS FROM 7 TO 15 MONTHS (IN PERCENTAGE)

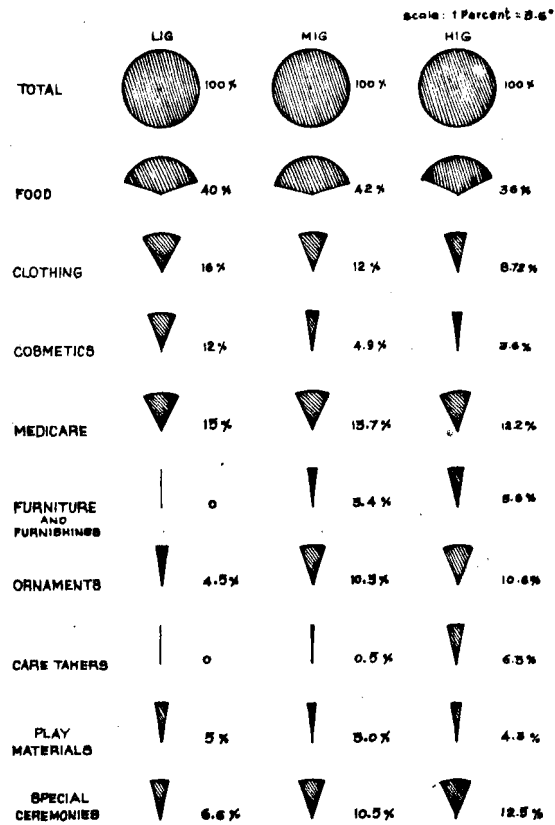


FIGURE 3

pattern of expenditure between middle and high income group. The former had spent more on medicare next to food while the latter had spent more on special ceremonies. The high income group spent considerable amount on care takers while the middle income group had spent the least and the low income group had not allocated any amount for that category.

C. Expenditure Incurred on Various Items in relation to Income Levels.

The expenditure incurred on items such as food, clothing, cosmetics, medicare, furniture and furnishings, ornaments, caretakers, play materials and special ceremonies are documented in the following tables along with statistical analysis.

1. Expenditure Incurred on Foods

The expenditure on food include milk, cereals, tinned foods, fruits, vegetables, eggs, etc. The money spent during the period of 7-15 months is depicted in Table XII.

TABLE XII

EXPENDITURE INCURRED ON FOODS

Amount spent over the period of 7-15 months	Number in percentage		
	LIG (N=50)	MIG (N=50)	HIG (N=50)
In Rupees			
Below 150	70	-	-
151 - 300	24	-	-
301 - 450	4	-	-
451 - 600	2	2	-
601 - 750	-	32	2
751 - 900	-	56	2
901 - 1050	-	8	6
1051 - 1200	-	-	18
1201 - 1350	-	2	28
1351 - 1500	-	-	24
1501 - 1650	-	-	12
1651 - 1800	-	-	2
Mean	113.3	782.14	1317
SD	17.22	48.78	145.22
Particulars	MD	SE	Table 't' Calculated
LIG Vs MIG	668.84	7.40	2.6
LIG Vs MIG	1203.7	21.5	2.6
MIG Vs HIG	534.8	22.0	2.6

** Significant at 1% level

Seventy per cent of the low income families spent less than Rs.150/- on foods. The mean expenditure on food for the low income families was found to be Rs.113.30 over a period of nine months (7 to 15 months of the infant's life). The mean food expenditure (N=782) for the infants in the middle income families was six and a half times greater than that of low income families. The average amount spent by the high income groups on food was found to be Rs.1317/- and the significant difference between the income groups is in line with the previous study Behan and Jaya (1985). This echoes that as the income increases, the expenses on food increases⁵.

2. Expenditure Incurred on Clothing

Clothing expenses included the clothes^e for the infants, i.e. frocks, shirts, underwears, and the seasonal garments like sweater, scarf, woolen cap, napkins including the stitching charges. The major trends in the expenditure pattern on infant's clothing for the period of nine months at three income levels are in Table XIII.

TABLE XIII
EXPENDITURE INCURRED CLOTHING

Amount spent over the period of 7-15 months	Number in percentage			
	LIG (N=50)	MIG (N=50)	HIG (N=50)	
In Rupees				
Below 100	90	18	-	
101 - 200	10	50	24	
201 - 300	-	22	36	
301 - 400	-	4	20	
401 - 500	-	4	8	
501 - 600	-	2	8	
601 - 700	-	-	4	
Mean	60	182	302	
SD	12.81	71.91	68.21	
Particulars	ND	SD	Table 't'	Calculated
LIG Vs MIG	122	10.40	2.6	11.73 **
LIG Vs HIG	242	9.9	2.6	24.41 **
MIG Vs HIG	120	14.1	2.6	8.47 **

** Significant at 1% level

Ninety per cent of the low income families spent less than hundred rupees, while there was none in that category in the high income families. Fifty per cent of the middle income families spent money on clothing requirements in the range of Rs.100-200. Fifty six per cent of the high income families spent rupees in the range of Rs.200-400 for their infants'

clothing requirements over the period of nine months. Twenty per cent of the high income group spent between Rs.400/- and 700/- for clothing. There was none in that category from the middle and high income families.

The results were subjected to analysis of significance by 't' test. The significant differences between the low and high, between the middle and high, and between the low and middle confirm the influences of income on the cost incurred on clothing for infants.

3. Expenditure Incurred on Cosmetics

Table XIV summarizes the recorded observations of money spent on items such as soap, oil, cream, powder, perfumes, shampoo, prickly heat powder, herbal hair tonics for the infants during the period of nine months.

TABLE XIV

EXPENDITURE INCURRED ON COSMETICS

Amount spent over the period of 7-15 months	Number in percentage			
	LIG (N=50)	MIG (N=50)	HIG(N=50)	
In Rupees				
Below 50	60	-	-	
51 - 100	40	92	26	
101 - 150	-	8	60	
151 - 200	-	-	14	
Mean	45	79	119	
SD	5.1	6.5	10.1	
Particulars	MD	SE	Table 't'	Calculated 't'
LIG Vs MIG	34	1.1	2.6	28.33 **
LIG Vs HIG	74	1.6	2.6	45.68 **
MIG Vs HIG	40	1.7	2.6	23.26 **

** Significant at 1% level

An overview of the Table XIV shows that most of the low income families (60%) spent in the range of Rs.1-50 over a period of seven to fifteen months of their infant's life and the remaining forty per cent of the low income families spent between Rs.50/= and Rs.100/=. Majority of the (92%) middle income families spent not less than Rs.100/= for cosmetics and the mean expenditure of the high income families was found to be Rs.119/= revealing highly significant difference between the three income groups. This result replicates the major findings of Behan and Jaya (1985).

4. Expenditure Incurred on Medicare

Expenses incurred on medicare included the cost of consulting doctors, immunization, vaccines, transport charges for visiting the doctors and purchase of certain costly medicines, tonics, syrups, drops such as ABB&C, and Vidalin etc. as is shown in Table XV.

TABLE XV
EXPENDITURE INCURRED ON MEDICARE

Amount spent over a period 7-15 months	Number in percentage		
	LIG (N=50)	MIG (N=50)	HIG (N=50)
In Rupees			
Below 100	94	14	-
101 - 200	4	36	8
201 - 300	2	24	18
301 - 400	-	16	12
401 - 500	-	6	8
501 - 600	-	-	16
601 - 700	-	-	6
701 - 800	-	-	12
801 - 900	-	-	12
901 - 1000	-	2	4
1001 - 1100	-	-	2
1101 - 1200	-	-	2
1201 - 1300	-	2	-
Mean	58	204	536
SD	30.13	48	157.6
Particulars	MD	SE	Table 't' Calculated
LIG Vs MIG	146	8.1	2.6 17.92**
LIG Vs HIG	478	22.9	2.6 20.84**
MIG Vs HIG	332	23.9	2.6 13.84**

** Significant at 1% level

While majority (94%) of the low income families spent less than Rs.100/- on medicare, most of the high income families spent more than Rs.100/- The mean sum of money spent by high

and middle income group were found to be Rs.536/- and Rs.204/- respectively, and it was lesser in low income families (Rs.58/-) over the period of seven to fifteen months of the infant's life.

More money was spent by the high income strata on items such as the ABDC drops, Vidalin drops, Milk of Magnesia, cough syrup etc. The results support the study conducted by Kulkarni (1979) indicating that the economic wealth of the parents demonstrate higher degree of influence over the monetary expenditure incurred by parents for bringing up a child. The comparison between the cost incurred on medical aspects by low, middle and high income groups showed a significant difference of 't'.

5. Expenditure Incurred on Special Furnitures and Furnishings

Table XVI refers to information pertaining to the cost of cradle, cot, perambulator, chair, tricycle, baby walker, three wheel walking aid and furnishings such as rubber sheet, blanket, bedsheet, mosquito net and bed spreads.

TABLE XVI

EXPENDITURE INCURRED ON SPECIAL FURNITURES AND FURNISHINGS

Amount spent over the period of 7-15 months	Number in percentage		
	LIG (N=50)	MIG (N=50)	HIG (N=50)
In Rupees			
Below 50	100	28	2
51 - 100	-	60	8
101 - 150	-	12	24
151 - 200	-	-	16
201 - 300	-	-	12
301 - 350	-	-	14
351 - 400	-	-	2
401 - 450	-	-	10
451 - 500	-	-	6
501 - 600	-	-	6
Mean	25	67.0	228
SD	0	10.1	64.98
Particulars	MD	SE	Table 't' Calculated %
LIG Vs MIG	42	1.4	2.6 30 **
LIG Vs MIG	203	9.2	2.6 22 **
MIG Vs HIG	161	9.3	2.6 17.31 **

** Significant at 1% level.

It is apparent from the table XVI that the low income families, due to their limited financial availability, spent negligible sum of money on special furniture and furnishings for their infants. Only twelve per cent of the middle income families were able to spend Rs.100/- Rs.150/- where as high income families being affluent

spent more money on special furnitures and furnishings. Furnitures like perambulator, baby chair, at the seventh month; walking circle and three wheel walker at the infant's tenth or eleventh month, and separate cots, blankets, rubber sheets squeezed in more money from high income families. Significant difference between the middle and high income groups emerge at one per cent level.

6. Expenditure incurred on Ornaments

The expenditure on ornaments for the selected infants is summarized in Table XVII.

TABLE XVII
EXPENDITURE INCURRED ON ORNAMENTS

Amount spent over the period of 7-15 months	Number in percentage		
	LIG (N=50)	MIG (N=50)	HIG (N=50)
In Rupees			
0	92	72	12
1 - 500	8	16	4
500 - 1000	-	4	18
1000 - 1500	-	4	38
1500 - 2000	-	2	18
2000 - 2500	-	-	-
2500 - 3000	-	2	8
3000 - 3500	-	-	2
Mean	0	158.16	1072.22
SD	0	28	168.05
Particular	MD	SS	Table 't' Calculated 't'
LIG Vs MIG	0	-	-
LIG Vs HIG	0	-	-
MIG Vs HIG	914.0	49.7	2.6 18.36**

** Significant at 1% level

An interesting fact that emerges from Table XVII is that as the income increases, the amount of money spent on ornaments increases. The high income families spent the maximum amount of money for their infants on ornaments perhaps reflecting their affluence. Thirty eight per cent had spared Rs.1000/- to Rs.1500/- on ornaments like chain, golden waist chain with small medallions, (especially during the first birthday of the infants). Two per cent of the high income families spent Rs.3500/- leading to a remarkable difference between the three income groups.

7. Expenditure Incurred on Care Takers

The data in Table XVIII represents the expenditure for the care takers which included food and clothing expenses allowances given to the servant maids/baby sitters/part time helpers arranged to look after the baby.

TABLE XVIII
EXPENDITURE INCURRED ON CARETAKERS

Amount spent on caretaking over a period of 7-15 months	Number in percentage			
	LIG (N=50)	MIG (N=50)	HIG (N=50)	
In Rupees				
0	100	94	24	
↓ 1 - 150	-	2	8	
151 - 300	-	4	36	
301 - 450	-	-	10	
451 - 600	-	-	12	
601 - 750	-	-	4	
751 - 900	-	-	-	
901 - 1050	-	-	-	
1051- 1200	-	-	6	
Mean	0	0	247.34	
SD	0	0	80.75	
Particulars	MD	SE	Table 't'	Calculated 't'
LIG Vs MIG	-	-	2.6	-
LIG Vs MIG	-	-	2.6	-
MIG Vs HIG	-	-	2.6	-

Parents from high income families appointed part-time or full time servants/caretakers to look after their infants and so apportioned mean Rs.247/- while the money spent by the low and middle income groups were negligible.

8. Expenditure Incurred on Play Materials

Table XIX represents expenses on play materials that included toys, dolls and play things.

TABLE XIX
EXPENDITURE INCURRED ON PLAY MATERIALS

Amount spent on play materials over the period of 7-15 months	Number in percentage		
	LIG (N=50)	MIG (N=50)	HIG (N=50)

In Rupees			
Below 50	100	60	4
51 - 100	-	26	28
101 - 150	-	14	28
151 - 200	-	-	20
201 - 250	-	-	8
251 - 300	-	-	10
301 - 350	-	-	2
351 - 400	-	-	-

Mean	25	58	144
SD	0	12.0	38.4

Particulars	MD	SE	Table 't' Calculated 't'

LIG Vs MIG	33	1.7	2.6 11.4**
LIG Vs HIG	119.0	5.4	2.6 21.7**
MIG Vs HIG	86	5.7	2.6 15.05**

** Significant at 1% level

All the low income and sixty per cent of the middle income families spent below Rs.50/- on play materials. High income groups spent more money on play things for their infants. They reported that their children must play to learn skills. The educated parents from this group, spent money on play materials such as Leo toys, manipulative play things, dolls, constructive building sets. Perhaps this group was interested to improve the child's cognition and to provide experiences to develop finer muscular coordination of their infants. The statistical appraisals made indicated differences in the expenditure incurred between the three different income groups at one per cent level.

9. Expenditure Incurred on Special Ceremonies

Income wise summary of expenditure on special ceremonies is presented in Table XX. The expenditure on special ceremonies included birth day celebrations, earboring ceremony and visits to temples to fulfill certain vows.

TABLE XX
EXPENDITURE INCURRED ON SPECIAL CEREMONIES

Amount spent on special occasions over the period of 7-15 months	Number in percentage			
	LIG (N=50)	MIG (N=50)	HIG (N=50)	
In Rupees				
Below 250	100	92	44	
251 - 500	-	-	34	
501 - 750	-	2	6	
751 - 1000	-	-	8	
1001 - 1250	-	2	-	
1251 - 1500	-	2	-	
1501 - 1750	-	-	-	
1751 - 2000	-	2	2	
2001 - 2250	-	-	2	
2251 - 2500	-	-	4	
2501 - 2700	-	-	-	
Mean	125	135	315.22	
SD	0	71.4	98.81	
Particulars	MD	SE	Table 't'	Calculated 't'
LIG Vs MIG	10	0.8	2.6	12.5**
LIG Vs MIG	190	9.5	2.6	19.3**
MIG Vs HIG	180	12.3	2.6	14.6**

** Significant at 1% level

The data documented reflected that more than sixty per cent of the low and middle income families and forty four percent of the high income families spent Rs.250/-. Eighty per cent of the high income families had spent rupees more than 1,750/- The high income families spent more money on jewels

and for some religious customs, since they had several traditional formalities. One of the grandest ceremonies is the celebration of the child's first birthday. Remarkable difference is observed in the expenses between the three income groups at one per cent level.

10. Savings for the Male and Female Infants

Table XXI brings forth the findings on savings for the male and female infants at three income levels in the form of monthly instalments, bank savings and fixed deposits.

TABLE XXI
SAVINGS FOR THE INFANTS - SEX WISE

Amount saved over a period of 7-15 months	Number in percentage					
	LIG (N=50)		MIG (N=50)		HIG (N=50)	
	Male	Female	Male	Female	Male	Female
In Rupees						
Below 500	-	4	-	-	20	4
501 - 1000	-	-	-	-	20	14
1001 - 1500	-	-	4	2	-	-
1501 - 2000	-	-	-	2	4	6
2001 - 2500	-	-	-	-	-	4

The number of children for whom savings had been done in the low income families was very low (4%) when compared with the high income families. In the middle income group, equal number of children of both the sexes had savings not less than thousand rupees. In the high income families, more male children (44%) had savings than female children. It may be because the latter group had high aspirations to educate their children and so a stronger urge to save money right from infancy.

D. Supplementary Findings:

The supplementary findings emerging from the study such as frequency of sickness in relation to income levels, influence of income on cost of infant feeding, attainment of walking ability in relation to money spent on furniture are discussed in the following tables.

1. Frequency of sickness in Relation to Income Levels

The frequency of sickness in infants such as diarrhoea, fever and cold are shown in Table XXII.

TABLE XXII
 FREQUENCY OF SICKNESS IN RELATION TO INCOME LEVELS

Month	In percentage											
	LIG				MIG				HIG			
	No problem	Cold Fever	Diarr- hoea	No problem	Cold Fever	Diarr- hoea	No problem	Cold Fever	Diarr- hoea	No problem	Cold Fever	Diarr- hoea
7th	74	22	10	14	30	118	10	42	86	4	4	6
8th	84	4	8	2	34	20	6	40	78	8	4	10
9th	20	20	28	52	36	6	8	30	80	4	6	10
10th	-	20	28	72	6	24	20	50	-	6	42	52
11th	30	16	26	28	16	24	36	24	18	32	24	26
12th	20	6	16	58	14	42	24	20	6	34	28	32
13th	4	4	76	16	6	22	18	54	10	28	26	36
14th	78	2	8	12	62	4	16	18	80	12	-	8
15th	28	8	32	32	76	20	-	4	80	8	-	6

The occurrence of diarrhoea and fever at highest frequency around the tenth month of the infants studied indicate the probability of influence of urge to bite, taste and such (Freud, 1950) the objects that he manipulates (Piaget, 1965) and get infected.

Incidences reported about fever (13th month) was maximum among the infants belonging to low income as compared to the middle (54%) and high income groups (36%) during the study period. These incidences may be due to the inability of the low income group to maintain hygienic conditions.

2. Attainment of Walking Ability in Relation to Money Spent on Furniture

Table XXIII brings out the correlation between the month of attainment of walking and the money spent on furniture that facilitate walking.

TABLE XXIII

ATTAINMENT OF WALKING ABILITY IN RELATION TO MONEY SPENT ON FURNITURE

Month of attainment X	Money spent in rupees Y	X ²	Y ²	XY	'r'
X = 292	Y = 6834	3174	2118435	74697	+ 0.32

There was positive correlation between the month of attainment of walking ability and the amount spent on furnitures (like play-pen, tri-cycle) that facilitated walking indicating the better the opportunities for a child, the earlier the development of walking skills.

V. SUMMARY AND CONCLUSION

Rearing a child imposes certain kinds of monetary expenditures on the parents. This study is a follow-up study aiming to carve out the financial cost of rearing the infants over a period of nine months (7 to 15 months of the infant's life). The following conclusions have been drawn based on the entries made in the record by the mothers on expenses towards their infants.

1. The total cost incurred on infants sexwise revealed that the amount spent for the female infants was higher than the amount spent for male infants by Rs.161/- though statistically the difference was insignificant.
2. No remarkable differences in the expenditure pattern was observed with respect to the order of birth of the infants though the mean expenditure was comparatively higher for the first borns than that of the second and middle borns.
3. The total cost of rearing infants differed significantly between the nuclear and joint families.
4. The total expenditure met by the three income groups revealed a general trend of more money being spent by the high than the middle and low income groups and the cost increased as the age of the infants increased.

5. The literate parents incurred more money than the illiterates for bringing up the children and the difference was significant statistically.
6. The effect of employment of the mother influenced the total cost incurred for rearing infants. Likewise professional fathers (doctors and engineers) spent maximum for rearing their infants followed by parents involved in business. The wage earners significantly differed from the other occupationists incurring much less amount on rearing infants.
7. The proportion of money spent in relation to the total expenditure incurred for rearing infants among the three income groups revealed significant difference between the high and low, and between low and middle income groups.
8. Significant differences emerged in regard to the expenditure incurred on different items such as food, clothing, cosmetics, medicare, furnitures and furnishings, ornaments, caretakers, play materials and special ceremonies among the low, middle and high income groups.
9. The observations with reference to the savings pattern revealed that more money was saved for the male than for the female child.

10. There is a positive correlation between the month of attainment of walking and the money spent on special furnitures that facilitate walking.

RECOMMENDATIONS:

The recommendations emerging out of this study for further research are:

1. A comparative study of the cost incurred by the parents in rural and urban settings could be studied.
2. The assessment of cost incurred for rearing children if carried out upto preschool level might add on to fundamental knowledge on cost of child rearing.
3. Outcomes of such studies on cost of rearing normal and exceptional children might throw light on the allocation of money required for their welfare by the government.

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APPENDIX A

**RECORD GIVEN TO MAINTAIN THE COST OF REARING INFANTS FROM
7-15 MONTHS**

- 1. Name of the interviewee :
- 2. Address :
- 3. Type of family : Joint/Nuclear.
- 4. Income (Monthly) Rs.
- Any other source of income : Yes/No.
- If yes ^{Sp} specify :
- If yes : Rs.

5. Family Background:

S.No.	Name of the family Member	^{educational} Level of the Members	Relation-ship to the head of the family	Age	Sex	Occupation	Income Rs. (Monthly).

- 6. Ordinal position of the Child :
- 7. Sex of the Child :
- 8. weight of the baby at birth :

9. Did you breast feed the baby
from birth? : Yes/No.
10. Till what time : _____ months.
11. Specify the milk foods and
other foods given to the
child from 7 to 15 months :
a) Tined Foods.
b) Milk and Milk products.
c) Cereal Foods.
d) Others (Specify)
12. Does your husband or anyother person help you in
rearing Infant? : Yes/No.
If Yes, which of the following ^way does he/she help?
a. Bathing : Yes/No.
b. Taking the Child to the Doctors : Yes/No.
c. Playing with the Child : Yes/No.
d. Arranging the Child's dresses : Yes/No.
e. Helping you to prepare milk/food : Yes/No.
f. Dressing the Child : Yes/No.
g. Any other(Specify) : Yes/No.
13. Did you have any problem in : Yes/No.
rearing your infant so far?
If yes, specify the problem :
If yes, do you need a creche
for your child in your
locality. :
14. whether adapting small family
norm : Yes/No.
If yes - Specify the reason :
If no - Specify the reason :

15. Expenditure pattern :

Expenditure on Items	Age of the Infant in months										
	7th	8th	9th	10th	11th	12th	13th	14th	15th		
a. Food - Milk, other foods & special foods.											
b. Feeding equipments (Spoon, cup, etc.)											
c. If breast fed, on special foods consumed by the mother during lactation.											
d. Clothing											
e. Cosmetics											
i. Soap											
ii. Powder											
iii. Oil											
iv. Creams											
f. Medical expenses:											
i. Medicine											
ii. Doctor's Fees											
iii. Transport											
g. Special furniture (like Chair perambulator) and furnishings, (mattress, bed- spreads etc.)											
h. Ornaments: Gold, silver, etc											
i. Taking care of the child- (servants baby sitters).											
j. Play things (Toys, dolls).											
k. Special ceremonies (birthday, tearborning etc)											

16. Others:

- a. Savings :
- b. Loss of income
on account of
infant care :

APPENDIX B

STATISTICAL APPRAISALS

The 't' values were found out using the following formula.

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{\frac{n_1(s_1)^2 + n_2(s_2)^2}{n_1 + n_2 - 2}} \times (1/n_1 + 1/n_2)}$$

where,

\bar{x}_1 = Mean of the first group.

\bar{x}_2 = Mean of the second group.

n_1 = Number of samples in the first group

n_2 = Number of samples in the second group.

s_1 = Standard deviation of the first group

s_2 = Standard deviation of the second group.

MD = Mean Difference

SE = Standard Error.

FOR EXAMPLE: STATISTICAL ANALYSIS FOR EXPENSES INCURRED ON FOODS BY THREE INCOME GROUPS (TABLE XII IN TEXT)

TABLE XII

EXPENDITURE INCURRED ON FOODS

Amount spent in rupees in during 7-15 months.	Number in Percentage			
	LIG (N=50)	MIG (N=50)	HIG(N=50)	
Below 150	70	-	-	
150 - 300	24	-	-	
301 - 450	4	-	-	
451 - 600	2	2	-	
601 - 750	-	32	2	
751 - 900	-	56	2	
901 - 1050	-	8	6	
1051 - 1200	-	-	18	
1201 - 1350	-	2	28	
1351 - 1500	-	-	24	
1501 - 1650	-	-	12	
1651 - 1800	-	-	2	
Mean	113.3	782.14	1317	
SD	17.22	48.78	145.22	
Particulars	MD	SE	Table't'	Calculated't'
LIG Vs MIG	668.84	7.40	2.6	90.38 **
LIG Vs HIG	1203.7	21.5	2.6	55.87 **
MIG Vs HIG	534.8	22.0	2.6	24.22 **

** Significant at 1% level

(I) LIG Vs MIG

$$t = \frac{782.14 - 113.3}{\sqrt{\frac{50(17.22)^2 + 50(48.78)^2}{98} \times (1/50 + 1/50)}}$$

$$t = \frac{668.84}{7.40} = 90.38 **$$

(II) LIG Vs MIG

$$t = \frac{1317 - 113.3}{\sqrt{\frac{50(17.22)^2 + 50(145.22)^2}{98} \times (1/50 + 1/50)}}$$

$$t = \frac{1203.7}{21.5} = 55.87 **$$

(III) MIG Vs HIG

$$t = \frac{1317 - 782.14}{\sqrt{\frac{50(48.78)^2 + 50(145.22)^2}{98} \times (1/50 + 1/50)}}$$

$$t = \frac{534.8}{22} = 24.22 **$$

** significant at 1% level

The comparison between the income groups showed significant differences at ¹/₁₀₀ per cent level.

II. The correlation coefficient 'r' was calculated using the following formula:

$$r = \frac{SP_{XY}}{\sqrt{(SS_X + SS_Y)}}$$

$$\text{Where, } SP_{XY} = \sum XY - \frac{\sum X \cdot \sum Y}{N}$$

$$SS_X = \sum X^2 - \frac{(\sum X)^2}{N}$$

$$SS_Y = \sum Y^2 - \frac{(\sum Y)^2}{N}$$

r = Correlation coefficient

FOR EXAMPLE: STATISTICAL APPRAISAL FOR CORRELATION BETWEEN ATTAINMENT OF WALKING ABILITY IN RELATION TO MONEY SPENT ON FURNITURE (TABLE XXIII IN TEXT).

TABLE XXIII

ATTAINMENT OF WALKING ABILITY INRELATION TO MONEY SPENT TO FURNIITURE

Month of attainment of walking

Money spent on furniture in Rs.

X	Y	X ²	Y ²	XY
12	163	144	26569	1956
12	152	144	23104	1824
12	225	144	50625	2700
12	240	144	57600	2880
12	363	144	131769	4356
12	391	144	152881	4692
11	183	121	33481	2013
11	242	121	58564	2662
11	335	121	112225	3685

Month of attainment of walking	Money spent on furniture in Rs.	X^2	Y^2	XY
11	385	121	148225	4235
11	352	121	123904	3872
11	368	121	135424	4048
11	438	121	191844	4818
11	457	121	20884	5027
10	487	100	237169	4870
10	254	100	64516	2540
10	276	100	76176	2760
10	261	100	68121	2610
10	168	100	28224	1680
10	191	100	36481	1910
10	143	100	20449	1430
10	121	100	14641	1210
10	45	100	2025	450
10	30	100	900	300
10	35	100	1225	350
11	271	121	73441	2981
11	258	121	66564	2838
$\Sigma X=292$	$\Sigma Y=6834$	$\Sigma X^2 = 3174$	$\Sigma Y^2 = 2118435$	$\Sigma XY=74697$

$$\Sigma X = 292 \quad ; \quad Y = 6834,$$

$$\Sigma X^2 = 3174 \quad ; \quad \Sigma Y^2 = 2118435 \quad ; \quad \Sigma XY = 74697.$$

$$r = \frac{SP \cdot XY}{\sqrt{(SSX)(SSY)}} = \frac{\Sigma XY - \frac{\Sigma X \cdot \Sigma Y}{N}}{\sqrt{\left(\Sigma X^2 - \frac{(\Sigma X)^2}{N}\right)\left(\Sigma Y^2 - \frac{(\Sigma Y)^2}{N}\right)}}$$

$$SSX = \Sigma X^2 - \frac{(\Sigma X)^2}{N}$$

$$= \Sigma X^2 = 3174$$

$$(\Sigma X)^2 = 85264$$

$$N = 27$$

$$SSX = 3174 - \frac{85264}{27} = 17.$$

$$SSY = \Sigma Y^2 - \frac{(\Sigma Y)^2}{N}$$

$$= \Sigma Y^2 = 2118435$$

$$(\Sigma Y)^2 = 46703556$$

$$N = 27.$$

$$SSY = 2118435 - \frac{46703556}{27} = 388674.$$

$$SP \cdot XY = \Sigma XY - \frac{\Sigma X \cdot \Sigma Y}{N}$$

$$= \Sigma XY = 74697$$

$$\Sigma X = 292$$

$$\Sigma Y = 6834$$

$$N = 27$$

$$SP \ XY = 74697 - \frac{292 \times 5834}{27} = 789.$$

$$r = \frac{SP \ XY}{\sqrt{(SSX) (SSY)}}$$

$$SP \ XY = 789$$

$$SSX = 17$$

$$SSY = 388674$$

$$r = \frac{789}{\sqrt{(17) \times (388674)}} = \frac{789}{\sqrt{6607458}}$$

$$= \frac{789}{2570} = 0.31$$

There is a correlation between the month of attainment of walking ability in relation to the amount spent on furniture.
