

Study the Effect of Family size on Physical Development of Preschool Children of Garhwal

Chaitali Thakur

Research Scholar,
Deptt. of Home Science,
Pauri Campus,
Garhwal University,
Garhwal

Rekha Nethani

Professor,
Deptt. of Home Science,
Pauri Campus,
Garhwal University,
Garhwal

Abstract

"The family is profoundly important to the developmental, emotional and cognitive growth of a child," says Tamara Gold, a New York psychotherapist and parenting coach. "A child will learn about relationships, manners, self-esteem, worth and loyalty, all by watching and participating in family."

Human development is a fascinating process from the moment of conception growth and development are initiated. While indisputably the foetal growth is the most critical period in the life of a human being, early postnatal life too assumes tremendous importance due to the critical development that take place during the early years. The human being acquires all psychomotor skills, most of the socio-emotional skills, much of the language ability and most importantly, 90 per cent of the brain development during the first eight years of life. Millions of synapses leading to brain connectivity take place in the early years, enabling the individual to function at increasingly complex levels, as age increases. While hereditary inputs are critically important to realize the innate potential a conducive environment is equally necessary. Hence, the concern for early development and the environment it takes place in. The hills constitute relatively inaccessible areas and not many studies on growth and development of children are available.

The rearing of children is more and more puzzling for parents in the twentieth century because we have lost a lot of our old-fashioned convictions about what kind of morals, ambitions and characters we want them to have. We have even lost our convictions about the purpose of human existence. Instead we have come to depend on psychological concepts. They have been helpful in solving many of the smaller problems but they are of little use in answering the major questions.

Keeping in mind the above facts the researcher has attempted to study the Effect of family size in development of preschool children in Garhwal region.

Keywords: Psychomotor Skills, Rearing, Convictions, Cognitive Growth.

Introduction

A child first learns about right and wrong in the family. Modern parents face many challenges in teaching values, says Dr. Michael Osit, author "Generation Text: Raising Well-Adjusted Kids in an Age of Instant Everything" Parents teach about values first by living those values. Children learn much more from what you do than what you say. Parents can also teach about values by sharing family stories, setting boundaries and serving others.

"Family life is where the child spends most of his or her learning time," says Jennifer Little, an Oregon-based psychologist and teacher who works with learning-challenged students. "School counts, but home is more lasting over the years. It is where the closest relationships build and allow us to express ourselves (for good or ill). The most important support parents can give their children is consistent structure to the daily routines of life. That structure and consistency gives the child security."

"Families play an enormously important role in kids' social and emotional development," says Smith Luedtke. "In addition to being your child's first teacher, as a parent, you are also his personal coping consultant." Nurturing family relationships lay the foundation for all other relationships. Through these experiences, children learn to trust others and seek out friendship and comfort. These early lessons pave the way for satisfying personal relationships later.

The size of a family has a significant effect on the interrelationships among its members and can play a major role in the formation of a child's personality.

Children of large families have a greater opportunity to learn cooperation at an early age than children of smaller families as they must learn to get along with siblings. They also take on more responsibility, both for themselves and often for younger brothers and sisters. In addition, children in large families must cope with the emotional crises of sibling rivalry, from which they may learn important lessons that will aid them later in life. This factor, however, may also be a disadvantage; either the older child who was "dethroned" from a privileged position or the younger child who is in the eldest child's shadow may suffer feelings of inferiority. Children in large families tend to adopt specific roles in order to attain a measure of uniqueness and thus gain parental attention.

Children in small families receive a greater amount of individual attention and tend to be comfortable around adults at an early age. They may also be overprotected, however, which can result in dependence, lack of initiative, and fear of risk, and the increased parental attention may also take the form of excessive scrutiny and pressure to live up to other people's expectations. Researchers have found that only children are often loners and have the lowest need for affiliation. They tend to have high IQs and are successful academically. However, only children have also been found to have more psychological problems than children from larger families.

Objectives

1. Study the effect of joint families on physical development of preschool children of Garhwal.
2. To study the effect of nuclear family on physical development of preschool children.

Methodology

1. A survey schedule for gathering the information about the family size was developed.
2. To assess the physical growth of the sample anthropometric data (height, weight) was collected using standard equipments

Result and Discussion

In order to find out influence of family size on physical development of preschool children. There are so many factors which affect the physical development of preschool children but the family size also effect so much the development of children not only physical but mental and psychological also. There are several factors that influence the physical development of preschool children. They are broadly discussed under following categories.

1. Common basic constraints
2. Technological constraints
3. Organizational and Administrative constraints
4. Social constraints

Common Basic Constraints

Type of family (Nuclear family or Joint family) size and number of people n siblings in the family and type of families use live in surroundings come under this category.

Technological Constraints

Number of members in the family, financial condition of family, education and occupation of family and parental behaviour toward child and nutritional value of mother are come under this category.

Organizational and Administrative Constraints

Sometime even after launching very effective developmental schemes for the rural poor, the benefits of the programmes do not reach to its ultimate clientele. The political – bureaucratic patronage or top-down administrative system continues to govern the development works with the result the rural people have been more a passive recipient of benefits, rather than active participants in the development process.

Social Constraints

Social pressure in living in joint family or increasing the members of family due to orthodox values of having male child and ignoring the child creating gender differences due to lack of education and social pressure come under this category.

Type of house hold in the study area

House Hold	Rural Plains (%)	Urban Plains (%)	Rural Hills (%)	Urban Hills (%)
Nuclear Family	87	91	35	57
Joint Family	13	9	65	35
Extended Family	0	0	0	8
Total	100	100	100	100

Analysis of table shows us that most of people in plains (89%) are use to have nuclear family where in hills 46% people use to have nuclear family where in plains only 9% have joint family and in hills 50% people use to have joint family and 8% people of hills have extended family where there is no any such case in plains.

Comparison of this data shows us that most of families in rural area of plains (87%) and in urban area of plains (91%) are having nuclear family and only 13% in rural area of plains and 9% in urban area of plains are having joint families.

In this data situation is little different it shows that 35% people of rural area of hills and 57% people of urban area of hills use to have nuclear family and 65% people of rural area of hills and 35% people of urban area of hills have joint family and 8% in urban area of hills are having extended family.

Comparison of this data shows us that case is appear opposite hear because in rural area of plains most of people 87% use to have nuclear family where as in rural area of hills 35% people use to have nuclear family in same way in rural area of plains 13% people use to have joint family and in hills 65% use to have joint family.

Analysis of this data shows us that in urban area of plains maximum number of people (91%) use to have nuclear family where as in hills 57% use to have nuclear family in same way 9% people in urban area of plains and 35% in urban area of hills use to have joint family and in urban area of hills 8% people have extended family where there is no any such case in urban area of plains.

On the basis of this table we come to know that most of people of plains use to have nuclear family where in hills most of people use to have joint family.

**Table: Health Status of Children
Body Mass Index**

The **body mass index (BMI)**, or **Quetelet index**, is a measure for human body shape based on an individual's weight and height. It was devised between 1830 and 1850 by the Belgian polymath Adolphe Quetelet during the course of developing "social physics". Body mass index is defined as the individual's body mass divided by the square of their height. The formulae universally used in medicine produce a unit of measure of kg/m².

BMI provided a simple numeric measure of a person's *thickness* or *thinness*, allowing health professionals to discuss overweight and underweight problems more objectively with their patients. However, BMI has become controversial because many people, including physicians, have come to rely on its apparent numerical authority for medical diagnosis, but that was never the BMI's purpose; it is meant to be used as a simple means of classifying sedentary (physically inactive) individuals, or rather, populations, with an average body composition. For these individuals, the current value settings are as follows: a BMI of 18.5 to 25 may indicate optimal weight; a BMI lower than 18.5 suggests the person is underweight while a number above 25 may indicate the person is overweight; a person may have a BMI below 18.5 due to disease; a number above 30 suggests the person is obese (over 40, morbidly obese).

The BMI is calculated as follows:

$$BMI = \left[\frac{\text{Weight (kg)}}{\text{Height (m)}^2} \right] \quad \text{OR} \quad \left[\frac{\text{Weight (lbs)}}{\text{Height (in)}^2 \times 703} \right]$$

BMI Table

Category	BMI Range – kg/m ²	BMI Prime
Very severely underweight	less than 15	less than 0.60
Severely underweight	from 15.0 to 16.0	from 0.60 to 0.64
Underweight	from 16.0 to 18.5	from 0.64 to 0.74
Normal (healthy weight)	from 18.5 to 25	from 0.74 to 1.0
Overweight	from 25 to 30	from 1.0 to 1.2
Obese Class I (Moderately obese)	from 30 to 35	from 1.2 to 1.4
Obese Class II (Severely obese)	from 35 to 40	from 1.4 to 1.6
Obese Class III (Very severely obese)	over 40	over 1.6

BMI of Children of Study Area

	BMI table (Average BMI/ age)		
	2-3 yrs (No. of children)	3-4 yrs (No. of children)	4-5 yrs (No. of children)
Rural plains	14.26 (21)	18.64(25)	21.93 (29)
Urban plains	15.47(27)	22.17 (21)	21.65(27)
Rural hills	13.98 (25)	17.37 (20)	18.24(30)
Urban hills	21.85(27)	18.20(27)	25.22(21)

Conclusion

According to table we find that in comparison of normal bmi table we find that children of rural plain of 2-3 yrs are underweight where as children of urban

plains and urban hills are of healthy weight and children of rural hills are severely underweight, in same way children of 3-4 yrs of age of rural hills are underweight where as rural plains, urban plains and urban hills children of 3-4 yrs are in healthy weight and when we compare bmi of 4-5 yrs children of study area we find that children of urban hills are overweight where as other children of rural plains, urban plains and rural hills are in healthy weight.

On the basis of this we concluded that children of 2-3 yrs of rural hills and plains are severely underweight where as 4-5 yrs children of urban area of hills are overweight.

Mid arm circumference (MAC) of children

Health Status	Rural Plains (%)	Urban Plains (%)	Rural Hills (%)	Urban Hills (%)
Normal MAC	46	62	32	57
Undernourished	54	38	68	43
Total	100	100	100	100

Conclusion

In rural plains 46% children are well nourished where as in urban area of plains 62% children have good health in same way 32% children in rural area of hills and 57% children in urban area of hills have good health .

Analysis of this data shows us that large number of children of urban area of plains is well nourished whereas number of children of rural area of hills is less who is well nourished.

Solutions as suggested by the functionaries for the better development of preschool children:

1. Education of mother is an important factor, basic education and nutritional knowledge of foods should give to mother.
2. Government should increase educational programs for parents.
3. Financial condition of family also influences the physical development of children.
4. Ordinal position also effects the physical development so government should motivate people to keep the family small so that they can do the upbringing of children in better way.
5. Programs for development of children should increase in rural area with the help of local people so the needy people should get proper benefits of the programs.
6. People leaving in rural area (hills/plains) should get proper advantages of funds and programs for the development of their children.
7. To improve the financial condition of parents government should increase the employment vacancies especially in rural areas or government can promote the local craft or art of rural areas so the people of rural area can improve their financial condition and able to give better life and proper development to their children.
8. Hospital, school etc basic necessary things should be nearby or approachable for people.
9. Programs for awareness regarding sex discrimination should increase so that girls child should also get all the benefits of programs run by government or non government organisation.

10. Good physical facility including computer, Internet and other communication support should be made available.
11. Proper transport, electricity etc facilities should provide in rural areas for their development so that the people and children should get proper physical development.

Conclusion

The system of a joint family has existed in India for decades now, and is perhaps unique to our country, or least its popularity is! However, this way of living is slowly depleting with modern day exposure and opportunities. So while the Indian joint family system was earlier considered the cornerstone of the Indian culture, it has been, reluctantly giving way to a new sort of familial structure—THE NUCLEAR FAMILY. In this blog we are exploring joint family and nuclear family structures, and how parents can leverage the best of both worlds in order to bring a wholesome child.

We are Family—Albeit with limitations!

We all wax eloquent about the important role that a family plays in raising a child into an individual that he/she will become tomorrow. We all know and acknowledge that families are the first and maybe the most crucial socializing unit in any person's life. But can the kind of family, i.e. joint or nuclear really make an impact on the child's learning, values and personality. Experts have reason to believe it can in fact, play a detrimental role. Both, joint and nuclear families do enjoy certain advantages but also have their limitations, therefore making it imperative for parents to adopt parenting techniques that work best with their child in both set ups and more importantly play it by the ear.

For instance, a child in a joint family is often blessed with a lot of love and affection and learns how to adjust very easily in different environments – indeed a reason for parents to be happy. However, he/she can get easily confused with the mixed messages that he/she receives on discipline from different members of the family. In such situations it is best to clarify what rules should apply as far as the child's behavior is concerned with all household elders, so they too can follow the same rules, especially in your absence. While this can be difficult to implement immediately, it is worthwhile to talk about it with the family members and set the ball rolling.

In a nuclear family, on the other hand, a parent can easily imbibe qualities such as consistency in behavior and self reliance in a child, but this family set up also comes with its own share of baggage. In an era of unprecedented time-saving devices, we are busier than ever and less connected to one another. After all with both parents working, and a child's school and extracurricular activities, where is the time to connect and imbibe the values that you wish to pass on to your child? In such a scenario a joint family can seem like a blessing! Grandparents and other senior members of the family can fill in that crucial gap and therefore reducing the special effort that parents would have to otherwise make. Therefore, a weekend with the entire family or involving the grandparents in the day-to-day child care, if both

parents are working, can do wonders in instilling the right value system and flexibility in your child.

At the end of the day, whether you live in a joint family or a nuclear one, you need to figure out where you need to involve your extended family members and where you need to deal with your child one-to-one. It would be wonderful to simply say that one family system works better for raising a wholesome child than the other. But the truth is that both family set ups can be equally rewarding or challenging, depending on how members of the family handle their relationship with the child and with each other. So which set up would you opt for, in order to raise a happy and wholesome child, a joint family or a nuclear one?

The information generated through study includes a detailed account of the physical development of the pre-school children residing in the Garhwal region. The various government agencies for whom this information will prove beneficial will be the ICMR (Indian Council of Medical Research), the ICAR (Indian Council of Agricultural Research), the Ministry of Human Resource and Development, and the Uttarakhand State, not to mention NGOs working in the area. The indirect beneficiaries will be the people of Garhwal for whom development programs are underway.

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