Study the Effect of Socio- Economic Status on Physical Development of Preschool Children of Garhwal

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Abstract

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 conductive 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 socio-economic status on physical development of preschool children of Garhwal.

Keywords:
1. **Foetal Growth-** The growth and maturation of the fetus in utero
2. **Intellectual-** Relating to your ability to think and understand things, especially complicated ideas.

Introduction

Child is the father of man as the old saying goes as a healthy children in society insure overall growth of a nation, health does not only mean proper physical growth of an individual but a overall holistic well being, from social to mental to cognitive to intellectual to emotional aspects of a person life the tendency however is to focus only on the concrete physical development and aspects when we try to insure the well being of individual another factor that is generally not taken into consideration is the interconnectivity of the various segments of a person life in insuring a balanced growth of an individual in other words the impact of macro and micro environmental factors on the growth and development of a person is generally ignore as a result one is unable to obtain the desired benefits from exercises undertaken to insure the development of persons the efforts stop at making a person life disease free as a result most individuals are unable to achieve their full genetic potential, and though these people appeared to be in good health condition they are intellectually, socially and perhaps emotionally backward such a state occurs because most people are unaware of even the meaning of cognitive development yet alone its significance and impact on the overall health of individual.

The tragedy of a nation is that we have a work force that is not able to contribute optimally to the progress of the country because they have not achieve optimal developmental standards over the years our country has been able to raise the life expectancy of the people but nothing but more has been achieved even today 42% of our children are malnourished and all our human development indicator dismal if the challenge of building a nation of healthy citizen is to be taken up sincerely

all aspect of an individual development will have to be taken up in an integrated fashion therefore a long with efforts towards building a physical healthy nation importance to the cognitive development of our young population will have to be taken up seriously review of literature in the area of child development reveals that sufficient research has not been done in this area in our country, specially in remote and difficult areas.

Himalayas the sentential of our nation are also its life line all the important glaciers and rivers spring from it needless to say the indigenous population of the region hols a special place, being a part of the macro environment a healthy and robust people are therefore necessary for retaining the ecological balance at this mountain range that sustains the whole nation however due focus has not been given to the people, specially to the finer aspects of their well being.

Given this scenario it was felt necessary to conduct this research in order to establish the status of cognitive development of the children of the study area and identify the factors that many impact this aspect of development it is hope that this study will be useful to the developmental workers researcher academics policy make government and non-government individuals working for the growth of the region.

At the same time this piece of pioneering research will open up further avenues for study in the area of child development at the regional, national and international level.

Objectives

1. To study the physical development of preschool children of Garhwal.
2. To study the effect of socio-economic status on physical development of pre school children.

Methodology

1. A survey schedule for gathering the socio economic information 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 socio economic factors on physical development of preschool children. There are so many factors which effect the physical development of pre school children but the socio economic status 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. 1Common basic constraints
2. Technological constraints
3. Organizational and Administrative constraints
4. Social constraints

Common Basic Constraints

Like environmental conditions and basic facilities like bus stop, school, hospital etc are some of the important constraints which come under this category.

Technological Constraints

Education of parents, nutritional status of mother financial condition of family ordinal position of child and type of family (nuclear family or joint family) are some technical constraints for physical development of children.

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

Some time the rural social milieu poses many barriers in effective dissemination of information. The orthodox behaviour of rural people. Beside this, illiteracy and self-centred attitude of the rural people also affect the development of children.

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/m^2.

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:

$$BMI = \left[\frac{\text{Weight (kg)}}{\text{Height (m)}^2}\right] \quad OR \quad \left[\frac{\text{Weight (lbs)}}{\text{Height(in) 2x703}}\right]$$

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 4.4.1 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 34 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 pre school 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

Analysing the data researcher found that parental education, child rearing practices, mother health, family back ground and other environmental factors affect the cognitive and physical development of pre-school children the comparison of data shows that pre-school children of urban area of hills and plains have good developmental conditions which help them to develop in better way in compare to children of rural area where as pre-school children of rural area of hills have most challenging conditions because of limited resources in hilly areas.

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 Uttrakhand 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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