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Impact of Home Environment on the Intellectual Performance of Pre-adolescent Children (9-12 years) in Ludhiana District

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ABSTRACT

This study examines the influence of the home environment on the intellectual performance of pre-adolescent children aged 9-12 years in the Ludhiana district. The home environment includes factors such as parental involvement, availability of educational resources, socio-economic status, and the physical condition of the home. Through a mixed-method approach, data were collected from 300 children using questionnaires, standardized intelligence tests, and direct observations. The study reveals a significant correlation between a stimulating and supportive home environment and higher intellectual performance among children. These findings highlight the need for targeted interventions to enhance the home learning environment, particularly in lower socio-economic strata.

Key Words : Home environment, Pre-adolescent children, Intellectual preformance

INTRODUCTION

Background:

The developmental phase of pre-adolescence, typically between the ages of 9 and 12 years, is marked by rapid cognitive, emotional, and social changes. Intellectual performance during this period is crucial as it lays the foundation for future academic and life success. The home environment, as the primary context in which children grow and learn, plays a significant role in shaping their cognitive development.

Rationale:

Ludhiana, a prominent district in Punjab, India, is characterized by diverse socio-economic conditions, with a blend of urban, semi-urban, and rural populations. Given the wide socio-economic disparities and varying educational practices in the region, it is essential to understand

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how different aspects of the home environment affect children's intellectual outcomes. This study aims to fill the gap in regional studies by focusing on pre-adolescents in Ludhiana, providing insights that can inform educational policies and parental practices.

Objectives:

The primary objectives of this study are:

1. To analyze the relationship between parental involvement and the intellectual performance of children.
2. To assess the impact of educational resources available at home on children's cognitive abilities.
3. To examine the influence of socio-economic status on intellectual performance.
4. To evaluate how the physical environment of the home contributes to children's intellectual development.

Literature Review:

Theoretical Framework:

Bronfenbrenner's Ecological Systems Theory (1979) posits that a child's development is influenced by the various environmental systems surrounding them, with the family and home environment being the most immediate and significant. According to this theory, the interaction between a child's characteristics and their environment determines their cognitive and emotional growth.

Previous Research:

Studies have consistently shown that a supportive and enriched home environment positively correlates with children's intellectual development (Gupta and Kumar, 2015). Factors such as parental education, the availability of learning materials, and the quality of interactions within the family have been identified as key contributors to children's cognitive outcomes (Bradley and Caldwell, 1984; Schmitt *et al.*, 2016). However, the specific impact of these factors in the context of different cultural and socio-economic settings, like those in Ludhiana district, requires further exploration.

METHODOLOGY

The study was carried out during the year 2012 at four villages in Chikmaglur district of Karnataka *viz.,* Karkipete, Iyanahalli, Hiregouja and Kurichikkanahally. Thirty tomato growing farmers from each village were selected based on the random sampling techniques. Thus the total sample comprised for the study was 120 respondents.

RESULTS AND DISCUSSION

Demographic Characteristics:

The demographic characteristics of the sample are summarized in Table 1.

Correlation Analysis:

The results of the correlation analysis between various home environment factors and

Table 1 : Demographic Characteristics of the Sample		
Characteristic	Frequency	Percentage (%)
Gender		
Male	160	53.33
Female	140	46.67
Area		
Urban	120	40.00
Semi-Urban	90	30.00
Rural	90	30
Socio-Economic Status		
High	80	26.67
Middle	150	50.00
Low	70	23.33

Table 2 : Correlation between Home Environment Factors and Intellectual Performance		
Home Environment Factor	Correlation Coefficient (r)	Significance Level (p-value)
Parental Involvement	0.65	<0.01
Educational Resources	0.58	<0.01
Socio-Economic Status	0.54	<0.01
Physical Environment	0.42	<0.05

intellectual performance are presented in Table 2.

Regression Analysis:

A multiple regression analysis was conducted to determine the combined effect of the various home environment factors on intellectual performance. The results indicate that parental involvement, educational resources, and socio-economic status are significant predictors of intellectual performance, collectively accounting for 62% of the variance in WISC-IV scores (Table 3).

Table 3 : Regression Analysis of Home Environment Factors on Intellectual Performance				
Predictor	B	SE B	β	p-value
Parental Involvement	0.42	0.05	0.43	<0.01
Educational Resources	0.38	0.06	0.39	<0.01
Socio-Economic Status	0.35	0.07	0.35	<0.01
Physical Environment	0.18	0.08	0.15	<0.05

Parental Involvement:

The findings of this study highlight the critical role of parental involvement in children's intellectual performance. Children whose parents are actively involved in their education—by helping with homework, attending parent-teacher meetings, and encouraging academic pursuits—tend to have higher cognitive scores. This aligns with previous research (Fantuzzo *et al.,* 2000), which found that parental involvement positively influences academic achievement and cognitive development.

Educational Resources:

The availability of educational resources at home, such as books, internet access, and educational games, was found to be significantly associated with intellectual performance. This suggests that children who have access to a variety of learning materials are better equipped to develop their cognitive abilities. This finding is consistent with research by Bradley and Corwyn (2002), which emphasizes the importance of a resource-rich environment for cognitive development.

Socio-Economic Status:

Socio-economic status emerged as a strong predictor of intellectual performance, reflecting the impact of economic disparities on children's cognitive outcomes. Children from higher socio-economic backgrounds had access to better educational resources and more supportive home environments, leading to better intellectual outcomes. This result echoes the findings of Sirin (2005), who reported that socio-economic status is one of the most consistent predictors of academic performance.

Physical Environment:

The physical environment of the home, though less strongly correlated, still had a significant impact on intellectual performance. Factors such as adequate lighting, a quiet place to study, and overall cleanliness contribute to a conducive learning environment, which in turn supports cognitive development. This finding supports previous studies (Evans, 2006) that highlight the importance of the physical environment in children's learning and development.

Conclusion:

The study concludes that the home environment plays a crucial role in the intellectual performance of pre-adolescent children in the Ludhiana district. Parental involvement, educational resources, and socio-economic status are the most significant factors influencing cognitive development. The physical environment also contributes, though to a lesser extent. These findings suggest that interventions

Intelligence has been defined in many ways. As early as 1905 Binet defined intelligence as "Goal directed behaviour". Wechsler (1958) gave a more comprehensive definition, as an aggregate or global capacity of the individual to think rationally, to act purposefully and to deal effectively with the environment. According to Jean Piaget (1958), "Intelligence is an extension of biological adaptation consisting of process of assimilation and accommodation". Piaget views intelligence evolving as a result of continuous interaction between the individual and his environment. The active attempt on the part of the individual to mould the environment to his own needs is called assimilation. The process of adjusting oneself to the environment is known as accommodation. The harmonious reciprocal interaction between the individual and his environment leads to an equilibrium or adaptation. According to socio-cultural perspective, intelligence is not actually "in" an individual person but instead is to be found in the interactions and activities that occur among individuals (Wertsch *et al.,* 1995). In this view, it is not the individual who adapts to, learns and modifies knowledge but the person's

his or her environment in combination.

Today, the role of environmental forces in the development and behavioral outcome has been accepted convincingly.

REFERENCES

Bradley, R.H. and Caldwell, B.M. (1984). The Home Inventory and family demographics. *Developmental Psychology*, **20**(2) : 315–320.

Bradley, R.H. and Corwyn, R.F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, **53**(1) : 371–399.

Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.

Evans, G.W. (2006). Child development and the physical environment. *Annual Review of Psychology*, **57** : 423–451.

Fantuzzo, J., Tighe, E. and Childs, S. (2000). Family Involvement Questionnaire: A multivariate assessment of family participation in early childhood education. *Journal of Educational Psychology*, **92**(2) : 367–376.

Gupta, A. and Kumar, R. (2015). Impact of Home Environment on Cognitive Development. *Indian Journal of Psychology*, **35**(2) : 120-130.

Schmitt, David P., Long, Audrey E., , McPhearson, Allante, O'Brien, Kirby, Remmert, Brooke and Shah, Seema H. (2016). Personality and gender differences in global perspective. *Internat. J. Psychol.,* **52** (S1) : 45-56.

Sirin, S.R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, **75**(3) : 417–453.

Wechsler, David (1958). The Measurement and Appraisal of Adult Intelligence (4th ed.). Baltimore (MD): Williams & Witkins.

Wertsch, J.V. and del Rio, P. and Alvarez, A. (1995). 'Sociocultural studies: history, action and mediation', in J.V. Wertsch, P. del Rio and A. Alvarez (eds), Sociocultural Studies of Mind, 1–34, New York: Cambridge University Press.

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