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STUDY OF IMPACT OF ECOLOGICAL ENVIRONMENT ON LEARNING DISABILITY AMONG CHILDREN

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ABSTRACT

Learning disabilities in education of children with special needs may have a variety of meanings and labels depending on experience, perspective, and information about the child in question, family background and socio-economic status. The present investigation was conducted to assess the learning disability among children. Haryana state was selected purposively while Fatehabad district was also selected purposively. From Fatehabad district Bhattu Block was selected randomly, city area was purposively taken for urban sample while villages Kirdhan, Dhand, Banawali, Shankpur Daroli and Bhattu village was randomly selected. A sample of 60 children, 30 from rural and 30 from urban, schools was taken. Micro system independent variables were considered in the study. Learning disability among children was taken as dependent variable. In the process of assessment of learning disability, Binet intelligence Scale by Kulshershtha (1971) was used. A questionnaire was developed and used to gather the data for human ecological factors of respondents. The findings portrayed that most of the respondents belonged to nuclear and small sized families. Parents of most of the respondents were educated upto high school. The neighbourhood status of the most of the respondents was middle class and their relationship with their neighbours was not good. Most of the parents adopted permissive disciplining technique for their children. The variables of human ecological environment exerted an influence on the learning disability among children. Although several factors did not come out to be associated with learning disability among children, but, as the human ecological system work as interconnected networks so all the factors can be said to be directly and indirectly associated with all components of learning disability among children.

KEYWORDS: *Learning Disability, Parents, Neighbourhood Mathematics, Creativity*

INTRODUCTION

The term 'learning disability' is used to describe a specific group of children, adolescents and adults who have problems in leaning in the academic side. These problems are generally in the areas of reading, writing, spellings and mathematics". Parents and teachers usually discover the problem when the child fails to cope with school work (Nakara, 1997).

Learning disabilities, in education of children with special needs may have a variety of meanings and labels depending on experience, perspective, and information about the child in question, family background and socio-economic status. This enigma remains as children exhibiting learning disabilities may manifest a wide variety of social and educational problems. Children who have difficulties in school are neglected and ignored in the current school system.

When the problem becomes so acute as to interfere with the learning process and affects the child performance in reading, writing, arithmetic and other areas, it is called a learning disability. There are many types of learning disability and there is a great deal of variation with in individuals. Symptoms and behaviours vary a great deal and this further complicates this issue. A child can be excellent in mathematics and yet may do very poorly in reading and writing. Another child may find it very difficult to write sentences in English, but have good verbal skills. Even within subject areas, there may be a great deal of variation. Johnson and Myklebust (1967) suggest that one or two years below the level of achievement has been the most common criterion for evaluating the discrepancy. At the same time, they warn that when the discrepancy occurs at the age of three or four, it is more serious than when it occurs at sixteen years of age.

Environmental factors are conditions in the home, community and school that adversely affect the child's normal development socially, psychologically, and academically. These include traumatic experiences, family pressures, instructional inadequacies, and lack of school experiences. Although these conditions affect academic progress, a child is not considered learning disabled unless the environmental conditions have contributed to deficits in attention, memory and other psychological process.

Although many students are able to learn to study on their own, this is not true for those with learning disabilities. Yet students with learning disabilities rarely receive instructions in how to study. Most teachers who work with students with learning disabilities quickly realise that the students have little idea of what to study or how to study. To be successful in school, these children must be aware of their difficulties, what they must study, develop a plan for using their time effectively and apply a number of study strategies. A major goal of teachers of children with learning disabilities is to assist these students to become independent learners. Teaching the learning disabled to use study strategies effectively is an important step in transforming dependent learners into independent learners. There are differences in study strategies between successful students and students with learning disabilities.

MATERIALS AND METHODS

Fatehabad district of Haryana state was selected purposively; city area of the selected district was taken randomly to have urban respondents. From the selected city area schools were selected purposively. To have rural sample, villages Kirdhan, Dhand, Banawali, Shankpur Darali and Bhattu village from the selected block Bhattu was taken randomly. The sample of 60 children, 30 from rural and 30 from urban area, was selected.

Data were collected with the help of Indian adaptation of Binet Intelligence Scale by Kulshershtha (1971) for learning disability among the children. A questionnaire was developed and used for gathering information on human ecological factors. Three learning disability components of children viz., language, mathematics and creativity were studied.

RESULTS

Effects of Micro System Variables on Learning Disability

With regard to sex, it was observed that majority of the respondents were boys and they were falling in the below average category for language (70%) and mathematics (70%) where as their percentage (65%) was high in above average categories of creativity (65%) which shows that their interest was more in the art work.

Table 1 show that many of the respondents were younger in age and they were falling in below average category in language (53.3%) and mathematics (58.3%). But fortunately for creativity component 45% younger respondents were in above average category.

The data presented in Table 1 show that most of the respondents belonged to nuclear family and they were falling in below average category for language 53.3 per cent and for mathematics 48.3 per cent but creativity was high (50%).

As far as family size is concerned, most of the respondents were from small sized families, they were in below average category for two components i.e. language (51.6%) and mathematics (48.3%). But creativity of these respondents was above average (48.3%).

The Table 1 further reveals that the most of the respondents have more siblings and they were falling in below average category for language (48.3%), mathematics (48.3%) but they were above average in creativity (46.6%).

Table 1 has brought to the focus that many of the respondent's mothers were highly educated and their children were falling in below average category in language (46.6%) and mathematics (48.3%), but they were above average in creativity (45.%). The same trend was observed for father's education (58.3%).

The many of the respondents belong to high class family and they were falling in below average category in both the components i.e. language (45%) and mathematics (43.3%). The earlier trend was found for creativity (41.6%).

It is obvious from the Table 1 that earlier trend was repeated as far as area was concerned as they were falling in below average category for language (50%) and mathematics (50%) but they were above average in creativity (43.3%).

Table 1: Effect of Microsystems Variables on Learning Disability N=60

Sr. No.	Variables		Learning Disability					
			Language		Mathematics		Creativity	
			Below Average	Average	Below Average	Average	Average	Above Average
			F (%)	F (%)	F (%)	F (%)	F (%)	F (%)
1.	Sex	* Male	42(70.00)	5(8.33)	42(70.00)	5(8.33)	8(13.33)	39(65.00)
		* Female	12(20.00)	1(1.67)	13(21.67)	0(0.00)	2(3.33)	11(18.33)
2.	Age	* Younger	32(53.33)	4(6.67)	35(58.33)	1(1.67)	9(15.00)	27(45.00)
		* Older	22(36.67)	2(3.33)	20(33.33)	4(6.67)	1(1.67)	23(38.33)
3.	Type of family	* Nuclear	32(53.33)	1(1.67)	29(48.33	4(6.67)	3(5.00)	30(50.00)
		* Joint	22(36.67)	5(8.33)	26(43.33)	1(1.67)	7(11.67)	20(33.33)
4.	Family size	* Small	31(51.67)	1(1.67)	29(48.33)	3(5.00)	3(5.00)	29(48.33)
		* Medium	21(35.00)	4(6.67)	23(38.33)	2(3.33)	6(10.00)	19(31.67)
		* Large	2(3.33)	1(1.67)	3(5.00)	0(0.00)	1(1.67)	2(3.33)
5.	No. of siblings	* 1-2	25(41.67)	2(3.33)	26(43.33)	1(1.67)	5(8.33)	22(36.67)
		* 3-4	29(48.33)	4(6.67)	29(48.33)	4(6.67)	5(8.33)	2846.67)
6.	Education of mother	* Illiterate	10(16.67)	2(3.33)	12(20.00)	0(0.00)	3(5.00)	9(15.00)
		Primary to middle	16(26.67)	0(0.00)	14(23.33)	2(3.33)	2(3.33)	14(23.33)
		High school/ graduate	28(46.67)	4(6.67)	29(48.33)	3(5.00)	5(8.33)	27(45.00)
7.	Education of father	* Illiterate	7(11.67)	2(3.33)	9(15.00)	0(0.00)	2(3.33)	7(16.67)
		Primary to middle	11(18.33)	1(1.67)	10(16.67)	2(3.33)	4(6.67)	8(13.33)
		High school/ graduate	36(60.00)	3(5.00)	36(60.00)	3(5.00)	4(6.67)	38(58.33)
8.	Family income	* Low	6(10.00)	0(0.00)	6(10.00)	0(0.00)	1(1.67)	5(8.33)
		* Medium	21(35.00	5(8.33)	23(38.33)	3(5.00)	6(10.00)	20(33.33)
		* High	27(45.00)	1(1.67)	26(43.33)	2(3.33)	3(5.00)	25(41.67)

Table 1 Contd.,								
9.	Surrounding of residence	Under developed Developing Fully developed	15(25.00) 30(50.00) 9(15.00)	1(1.67) 3(5.00) 2(3.33)	15(25.00) 30(50.00) 10(16.67)	1(1.67) 3(5.00) 1(1.67)	1(1.67) 7(11.67) 2(3.33)	15(25.00) 26(43.33) 9(15.00)
10.	Stay of grand parents	* No * Yes	26(43.33) 28(46.67)	3(5.00) 3(5.00)	27(45.00) 28(46.67)	2(3.33) 3(5.00)	4(6.67) 6(10.00)	25(41.67) 25(41.67)
11.	Interactions of grand parents	More than 6 hours * 3-6 hours * Nil	10(16.67) 24(40.00) 20(33.33)	3(5.00) 1(1.67) 2(3.33)	12(20.00) 22(36.67) 21(35.00)	1(1.67) 3(5.00) 1(1.67)	3(5.00) 2(3.33) 5(8.33)	10(16.67) 23(38.33) 17(28.33)
12.	Relationship with peers	* Not good * Average * Good	18(30.00) 24(40.00) 12(20.00)	2(3.33) 1(1.67) 3(5.00)	19(31.67) 22(36.67) 14(23.33)	1(1.67) 3(5.00) 1(1.67)	5(8.33) 3(5.00) 2(3.33)	15(25.00) 22(36.67) 13(21.67)
13.	Relationship with teachers	* Not good * Average * Good	14(23.33) 20(33.33) 20(33.33)	0(0.00) 1(1.67) 5(8.33)	14(23.33) 18(30.00) 23(38.33)	0(0.00) 3(5.00) 2(3.33)	0(0.00) 4(6.67) 6(10.00)	14(23.33) 17(28.33 19(31.67)

The respondents whose grandparents were staying with them and had good interaction with them were falling in below average category for language (46.6%), mathematics (46.6%) and in above average category in creativity (41.6%).

Relationship with peers and teachers was also studied and it was observed that many of the respondents were falling in below average category for language (40%) and mathematics (36.6 %).

CONCLUSIONS

The present research findings highlight the developmental significance of various human ecological factors for the children. The home environment characterized by socio-economic status and parent-child relationship is the primary importance for the development of an individual. Environmental factors are conditions in the home, community and school that adversely affect the child's normal development socially, psychologically, and academically. These include traumatic experiences, family pressures, instructional inadequacies, and lack of school experience. The reading disabled children obtained lower scores on some cognitive tests (spatial reasoning, symbol processing speed). I also observed that learning disabled children are very poor in language and mathematics but they were very creative .So, their creativity should be enhanced by supporting them. The physical conditions that can inhibit a child's ability to learn include visual and learning defects, confused laterality and spatial orientation, poor body image, hyperkinesias (hyperactivity) and undernourishment. It was observed during study that these children look like normal children but they have difficulties in reading and writing. From the findings of the study it emerged that variables in the human ecological system of the children follow the principle of interdependence. The human ecological environment in relation to development process is not limited to single, immediate settings, but is extended to incorporate interconnections between such settings as well as external influences emanating from the larger systems.

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