

# HOME ENVIRONMENT OF LEARNING DISABLED AND NON-LEARNING DISABLED CHILDREN

**Dr.A. Kusuma**

Home Science, Sri Padmavati Mahila Visvavidyalayam,  
(Women's University) Tirupati-517502, Chittoor (Dt), A.P.

## ABSTRACT

The present research is focused on the identification of learning disabled children through teacher's and parent's observation, academic records and identification tests. Fifty identified learning disabled and fifty non-learning disabled children were administered the Misra's (1986) Home Environment Inventory to assess their home environment. The results were analyzed according to their age groups and gender.

Learning disability is recognized as a diverse, heterogeneous disorder that can affect different aspects of an individual's life such as academic success, motor or perceptual functioning and social adaptation.

Learning disabled individuals are found across all ages, socio economic levels and races, and their problems range from mild to severe. An incidence of learning disabilities in primary school children is around 10 to 15 percent in India.

Children with learning disabilities do not normally acquire the basic skills of reading, writing and arithmetic from regular classroom instruction as these children have average or above average intelligence (Chadha, 2001).

Since 1980s the broad definition of Learning disabilities formulated by the US National Joint Committee on Learning Disabilities (NJCLD, 1994) with representation from all concerned disciplines has been widely used. It reads as follows:

Learning disability is a generic term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction and may occur across the life span. Problems in self regulatory behaviours, social perception and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example:

sensory impairment, mental retardation, social and emotional disturbance) or with extrinsic influences such as cultural difference, insufficient or inappropriate instruction. They are not the direct result of these conditions or influences (Wong, 1996).

The causative factors of learning disabilities in children can be classified as organic and biological, genetic and environmental.

Children with learning disabilities have difficulties in all areas of learning and development. There are four different types of specific learning disabilities. They are:

1. Reading disability (Dyslexia).
2. Writing disability (Dysgraphia)
3. Spelling disability (Dysorthographia)
4. Arithmetic disability (Dyscalculia)

The psychological and behavioural characteristics of children with learning disabilities stated by Clements (1996) are as follows:

Specific learning disabilities, delayed spoken language development, poor spatial orientation, inadequate time concepts, difficulty in judging relationships, direction related confusion, poor general motor coordination, poor manual dexterity, social imperception, inattention, hyperactivity, perceptual disorders, memory disorders, emotional liability, impulsivity and equivocal neurological signs.

Not all learning disabled children display all these characteristics.

The review of researches indicates that the learning disabled children shows severe discrepancy between achievement and intellectual abilities. This may be the result of

- \*a visual, hearing or motor handicaps,
- \*mental retardation,
- \*Memotional disturbance or
- \*environmental, cultural or economic disadvantage.

Home environment and parental behaviour can influence children's intellectual skills and academic achievement. Home environment is a measure of the quality and quantity of social, emotional and cognitive support that has been available to the child within the home (Misra, 1986). Sagar and Kaplan (1972) pointed out, by its nature, the family is the social, biological unit that exerts the greatest influence on the development and perpetuation of the individual's behaviour.

The term 'Home Environment' as such or as a synonym at parental child rearing behaviours has been used by many researchers working in different fields. According to Johnson and Medinnus (1969) the psychological atmosphere of a home may fall into any of the four quadrants, each of which represents one of the four general combinations: acceptance-autonomy, acceptance-control, rejection-autonomy and rejection-control.

Home environment is a complex factor in which children are born and acquire potentials as modified by experiences common to culture. Studying home environment of learning disabled children and to compare them with non-learning disabled children will help to suggest suitable measures to enhance their academic success and mould their personalities effectively. Thus the present study is an attempt in this direction.

## Objectives

- To identify the learning disabled children.
- To assess the home environment of learning disabled and non-learning disabled children.
- To study the effect of home environment of learning disabled and non-learning disabled children according to their age groups and gender.

## Method

Learning disabled children were identified based on teacher's and parent's observation, academic records and identification tests such as Oral Reading Achievement Test (ORAT), Writing Ability Test (WAT), Arithmetic Achievement Test (AAT), Memory Test (MT), Reading Comprehension Test (RCT), Spelling Dictation Test (SDT) developed by the investigator. These are teacher made tests based on the curriculum of respective grades. Salvia and Hughes (1990) stated that teacher made tests are advantageous in that they are developed from the curriculum and can be used flexibly to meet teacher's specific needs. Colour Progressive Matrices (CPM) developed by Raven (1976) was used to assess the intelligence level.

Fifty (25 boys, 25 girls) learning disabled and 50 (25 boys, 25 girls) non-learning disabled children of 9-11 years were selected randomly from six primary schools of Tirupati rural and urban Mandals, Chittoor (Dt), A.P. Detailed personal information of the subjects was collected by an interview schedule prepared by the investigator.

Home Environment Inventory by Misra (1986) was used to assess the home environment. The test booklet consists of two parts A and B. In part A 66 items related to perceived psycho-social environment are used to give a total picture of home environment. The items represent 10 factors namely permissiveness (A), Control (B), Conformity (C), Rejection (D), Reward (E), Punishment (F), Protectiveness (G), Nurturance (H), Deprivation of privileges (I) and Cognitive stimulation (J). Part B deals with physical aspects of home environment taking into consideration the material facilities available, opportunity to explore them and how well they are actually utilized by the child. This consists of 36 items, 12 each in three categories-availability (a), opportunity (b) and utilization (c). Both part A and B gives a comprehensive behavioral, structural and experiential components of home environment.

After data collection, scoring was done as per the instructions given in manual and scoring key. The statistical techniques such as percentages, mean, S.D., z<sub>0</sub>-test / t<sub>0</sub> - test were used to analyse the data.

## Results

Of the total 100 children, 50 (25 boys, 25 girls) are learning disabled and 50 (25 boys, 25 girls) are non-learning disabled children. Among them 14 boys (28%) and 14 girls (28%) are of 9-10 years, 11 boys (22%) and 11 girls (22%) are in the age group of 10-11 years respectively. Thirty six percent of learning disabled are first born, each of the middle born and last born constituted 32 percent. A majority of percentage (44%) of non-learning disabled children are middle born followed by 32 percent first born and 24 percent last born.

A higher percentage (70%) parents of learning disabled children are working as daily labourers, only 30 percent as government employees and 60 percent of parents of non-learning disabled children are government employees. Around 80 percent parents of learning disabled children fall under low income families and the remaining 20 percent are from middle income group. Whereas 65 percent families of non learning disabled children are middle income families and the rest 35 percent are of low income.

Learning disabilities in children such as reading, writing, arithmetic and spelling difficulties were identified and they were categorized into three levels – mild, average

and severe based on the severity of the learning disability.

**Table 1 Levels of Learning Disabilities in Children**

| Age (Years) | Sex   | Learning disabilities in Children |      |                |      |              |      |
|-------------|-------|-----------------------------------|------|----------------|------|--------------|------|
|             |       | Mild 30-40%                       |      | Average 20-30% |      | Severe < 20% |      |
| 9-10        | Boys  | 3                                 | 21.5 | 5              | 35.5 | 6            | 43   |
|             | Girls | 4                                 | 28.5 | 3              | 21.5 | 7            | 50   |
| 10-11       | Boys  | 2                                 | 18   | 3              | 27.5 | 6            | 54.5 |
|             | Girls | 1                                 | 9    | 7              | 63.5 | 3            | 27.5 |

It is interesting to note from the table-1 that higher percentage of boys and girls of 9-10 years and 10-11 years age are seen with average and severe learning disabilities. Particularly boys of 10-11 years age showed more severe learning disabilities than girls.

Algozzine and James (1992) reported that writing, arithmetic disabilities were found to be more and reading disability to be less among girls when compared with boys.

**Table 2 Mean, Standard Deviation of HEI Scores of Learning Disabled and Non-Learning Disabled Children and Z<sub>0</sub>-values.**

| Factors HEI | Learning disabled children (n=50) |      | Non-learning disabled children (n=50) |      | Z <sub>0</sub> | P  |
|-------------|-----------------------------------|------|---------------------------------------|------|----------------|----|
|             | Mean                              | S.D. | Mean                                  | S.D. |                |    |
| Part-A      |                                   |      |                                       |      |                |    |
| A           | 10.54                             | 7.58 | 13.08                                 | 2.90 | 2.21           | *  |
| B           | 3.68                              | 1.56 | 3.9                                   | 1.55 | 0.70           | NS |
| C           | 15.24                             | 0.92 | 18.1                                  | 4.93 | 4.30           | *  |
| D           | 13.5                              | 2.40 | 11.8                                  | 7.68 | 1.49           | NS |
| E           | 10.56                             | 7.14 | 10.48                                 | 2.20 | 0.07           | NS |
| F           | 16.18                             | 4.58 | 16.22                                 | 3.18 | 0.05           | NS |
| G           | 13.7                              | 4.26 | 13.92                                 | 8.49 | 0.16           | NS |
| H           | 10.86                             | 3.98 | 9.7                                   | 2.70 | 1.70           | NS |
| I           | 14.68                             | 3.24 | 15.76                                 | 2.76 | 1.79           | NS |
| J           | 12.5                              | 3.95 | 12.36                                 | 2.77 | 0.20           | NS |
| Part-B      |                                   |      |                                       |      |                |    |
| a           | 9.18                              | 1.36 | 8.32                                  | 2.10 | 2.14           | *  |
| b           | 5.32                              | 4.91 | 5.48                                  | 2.46 | 0.20           | NS |
| c           | 5.5                               | 4.48 | 5.58                                  | 1.80 | 0.12           | NS |

\* Significant at 5% level

NS Not Significant

Z<sub>t</sub> 1.96

From the clear examination of the table-2 the Home environment factors like part A-A, C and Part B-a showed significant difference (at 5% level of significance) between learning disabled and non-learning disabled children. The above factors indicate low mean values (A=10.54; C=15.24) and high mean values (a=9.18) in learning disabled group than the non-learning disabled group which reveals low in A (Permissiveness), C (Conformity) and high in a (availability) in the learning disabled children.

Watson (1957) revealed that children from permissive families tend to have greater spontaneity, originality and creativity, initiative and independence, better socialization and less inner hostility. As learning disabled children showed less permissiveness, the chances of possessing these characteristics may be low.

**Table 3 Mean, Standard Deviation of HEI Scores of Learning Disabled and Non-Learning Disabled Children of 9-10 years and t<sub>0</sub>-values**

| Factors HEI | Learning disabled children 9-10 years (n=28) |      | Non-learning disabled children 9-10 years (n=28) |      | t <sub>0</sub> | P  |
|-------------|--|------|--|------|----------------|----|
|             | Mean   | S.D. | Mean   | S.D. |                |    |
| Part-A      |  |      |  |      |                |    |
| A           | 12.84  | 2.38 | 13.52  | 2.79 | 0.94           | NS |
| B           | 4.24   | 1.05 | 3.8  | 1.81 | 1.1            | NS |
| C           | 17.44  | 6.28 | 18.4   | 5.14 | 0.58           | NS |
| D           | 14.6   | 5.29 | 11.52  | 4.27 | 2.24           | *  |
| E           | 15.88  | 6.64 | 10.2   | 4.21 | 3.57           | *  |
| F           | 16.08  | 3.54 | 15.52  | 4.81 | 0.47           | NS |
| G           | 14.04  | 2.33 | 9.2  | 6.04 | 3.87           | *  |
| H           | 11.32  | 3.80 | 10.02  | 0.54 | 1.64           | NS |
| I           | 15.40  | 1.85 | 15.02  | 2.63 | 0.60           | NS |
| J           | 13.4   | 3.16 | 12.16  | 8.90 | 0.67           | NS |
| Part-B      |  |      |  |      |                |    |
| a           | 8.4  | 1.51 | 7.96   | 3.37 | 0.61           | NS |
| b           | 4.84   | 2.53 | 5.28   | 2.67 | 0.60           | NS |
| c           | 5.6  | 0.52 | 5.72   | 2.33 | 0.26           | NS |

From the table-3 it is clearly seen that the part A-D, E and G Home environment factors showed significant difference between learning disabled and non-learning disabled children of 9-10 years. The above factors indicate high mean values (D=14.6; E=15.88; G=14.04) in learning disabled group than non-learning disabled group which reveals high in D (Rejection), E (Reward) and G (Protectiveness) in the learning disabled children.

Similar to the above result i.e., high in D (Rejection) in the learning disabled children of 9-10 years, Werner and Smith (1979) also found that the mothers of learning disabled children are careless, erratic, indifferent and worrisome.

The learning disabled children of 9-10 years showed high in G (Protectiveness), is supported by Kaslow (1979) that commonly the mothers of learning disabled children are extremely close to or over involved with the child. According to Chezan and Haing (1982) parental attitudes like rejection, over protection and inconsistent discipline are likely to result in problem behaviour in the child.

**Table 4 Mean, Standard Deviation of HEI Scores of Learning Disabled and Non-Learning Disabled Children of 10-11 years and t<sub>0</sub>-values.**

| Factors HEI | Learning disabled children 10-11 years (n=22) |      | Non-learning disabled children 10-11 years (n=22) |      | t <sub>0</sub> | P  |
|-------------|---|------|---|------|----------------|----|
|             | Mean  | S.D. | Mean  | S.D. |                |    |
| Part-A      |   |      |   |      |                |    |
| A           | 10.88   | 6.89 | 12.36   | 4.04 | 0.9            | NS |
| B           | 3.82  | 0.67 | 4.04  | 0.87 | 0.95           | NS |
| C           | 13.04   | 6.26 | 17.68   | 3.76 | 3.1            | *  |
| D           | 11.84   | 7.20 | 11.2  | 4.17 | 0.37           | NS |
| E           | 11.24   | 6.32 | 10.84   | 7.78 | 0.19           | NS |
| F           | 14.52   | 7.03 | 15.4  | 5.74 | 0.47           | NS |
| G           | 13.36   | 5.72 | 10.6  | 4.00 | 1.93           | NS |
| H           | 8.88  | 5.40 | 9.76  | 2.60 | 0.72           | NS |
| I           | 12.6  | 7.90 | 15.06   | 4.11 | 1.36           | NS |
| J           | 11.36   | 5.76 | 12.00   | 0.61 | 0.55           | NS |
| Part-B      |   |      |   |      |                |    |
| a           | 8.96  | 3.61 | 8.08  | 2.70 | 0.95           | NS |
| b           | 4.8   | 3.48 | 5.68  | 1.80 | 1.1            | NS |
| c           | 5.2   | 3.41 | 5.44  | 1.6  | 0.3            | NS |

From the examination of the table-4 it is interesting to note that the part A-C Home environment factor revealed significant difference between learning disabled and non-learning disabled children of 10-11 years. The above factor indicates low mean value (C=13.04) in leaning disabled group than non-learning disabled group which reveals less C (Conformity).

The contradictory finding was found by Humpries and Bauman (1980) that mothers of learning disabled children were significantly more controlling and authoritarian than non-learning disabled children.

**Table 5 Mean, Standard Deviation of HEI Scores of Learning Disabled and Non-Learning Disabled Boys and t<sub>0</sub>-values.**

| Factors HEI | Leaning disabled boys (n=25) |      | Non-learning disabled boys (n=25) |      | t <sub>0</sub> | P  |
|-------------|------------------------------|------|-----------------------------------|------|----------------|----|
|             | Mean                         | S.D. | Mean                              | S.D. |                |    |
| Part-A      |                              |      |                                   |      |                |    |
| A           | 11.48                        | 2.38 | 13.24                             | 3.58 | 2.02           | *  |
| B           | 3.84                         | 1.7  | 3.92                              | 1.78 | 0.16           | NS |
| C           | 15.44                        | 2.26 | 18.12                             | 6.36 | 1.45           | NS |
| D           | 14.28                        | 1.12 | 11.88                             | 7.48 | 1.55           | NS |
| E           | 11.52                        | 1.83 | 10.52                             | 2.02 | 1.81           | NS |
| F           | 16.84                        | 5.4  | 15.92                             | 3.74 | 0.68           | NS |
| G           | 15.28                        | 3.83 | 14.6                              | 8.95 | 0.34           | NS |
| H           | 11.6                         | 4.5  | 9.68                              | 1.81 | 1.95           | NS |
| I           | 14.32                        | 4.99 | 15.88                             | 2.80 | 1.14           | NS |
| J           | 11.16                        | 4.40 | 12.4                              | 2.41 | 12.1           | NS |
| Part-B      |                              |      |                                   |      |                |    |
| a           | 9.4                          | 2.13 | 13.6                              | 1.24 | 7.4            | *  |
| b           | 5.48                         | 6.93 | 5.44                              | 2.98 | 0.02           | NS |
| c           | 5.96                         | 3.08 | 5.24                              | 1.09 | 1.09           | NS |

From the table – 5 it is evident that the Home environment factors like part A-A and Part B-a showed significant difference between learning disabled and non-leaning disabled boys. The above factors indicate low mean values (A=11.48; a=9.4) in learning disabled boys than non-learning disabled boys which reveals low in A (Permissiveness) and a (availability) in the learning disabled boys. This may be due to poverty, cultural values, lack of resources, illiteracy etc.

Goldman and Barchlay (1974) found that the mothers of learning disabled children are less encouraging and supportive than mothers of learning abled children.

**Table 6 Mean, Standard Deviation of HEI Scores of Learning Disabled and Non-Learning Disabled Girls and t<sub>0</sub>-values**

| Factors HEI | Learning disabled girls (n=25) |      | Non-learning disabled girls (n=25) |      | t <sub>0</sub> | P  |
|-------------|--------------------------------|------|------------------------------------|------|----------------|----|
|             | Mean                           | S.D. | Mean                               | S.D. |                |    |
| Part-A      |                                |      |                                    |      |                |    |
| A           | 9.6                            | 7.56 | 12.92                              | 2.59 | 2.03           | *  |
| B           | 3.52                           | 1.26 | 3.88                               | 1.29 | 1.00           | NS |
| C           | 15.04                          | 2.6  | 18.08                              | 2.82 | 3.89           | *  |
| D           | 12.72                          | 2.7  | 11.72                              | 3.06 | 1.20           | NS |
| E           | 13.6                           | 3.3  | 10.44                              | 2.36 | 3.85           | *  |
| F           | 15.52                          | 3.37 | 16.52                              | 2.46 | 1.78           | NS |
| G           | 12.12                          | 4.10 | 13.24                              | 5.34 | 0.8            | NS |
| H           | 10.12                          | 3.19 | 9.72                               | 3.36 | 0.42           | NS |
| I           | 15.04                          | 1.89 | 15.05                              | 2.72 | 1.49           | NS |
| J           | 13.84                          | 2.89 | 12.32                              | 3.08 | 1.76           | NS |
| Part-B      |                                |      |                                    |      |                |    |
| a           | 8.64                           | 2.46 | 8.4                                | 1.41 | 0.42           | NS |
| b           | 5.16                           | 0.41 | 5.08                               | 2.42 | 0.16           | NS |
| c           | 4.84                           | 1.90 | 5.92                               | 2.34 | 1.7            | NS |

From the examination of table-6, it is found that the part A-A, C and E Home environment factors revealed significant difference between learning disabled and non-learning disabled girls. The above factors indicate low mean values (A=9.6; C=15.04) and high mean value (E=13.6) in learning disabled girls than non-learning disabled girls. It reveals low in A (Permissiveness), C (Conformity) and high in E (Reward) in the learning disabled girls.

In contrary to the above finding i.e., high in E (Reward) in the learning disabled girls, Chapman and Boersma (1974) stated that parents of learning disabled children react more negatively to their children's failures and less positively to their success.

**Implications**

\*To provide effective intervention early identification, diagnosis and assessment of learning disabilities in children is necessary.

\*To reduce the incidence of learning disabled children sophisticated and appropriate remedial measures should be provided in schools as well as in their homes.

\*To promote the sound personality of learning disabled children, proper home environment which provides acceptance, encouragement and opportunities is needed.

\*To meet the needs and to improve the academic success of learning disabled children special education and enrichment programmes along with academic tutoring would be more beneficial.

\*To develop curiosity, creativity, constructiveness and practical competence in the learning disabled children, presence of better home environment is essential.

\*To enhance the capacity and skills of learning disabled children education programmes, counseling and training to the parents on various aspects of child development are required.

**REFERENCES**

\*Algozzine, B. and James (1992). Identifying children with learning disabilities when is a discrepancy severe, Journal of School of Psychology, Vol.20(41). 299-305.

\*Chadha, A. (2001) A guide to educating children with learning disabilities, Vikas Publishing House, Pvt. Ltd., New Delhi.

ØChampman, J.W. and Boersma, F.J. (1974). Learning disabilities – locus of control and mothers attitudes, Journal of Educational Psychology, 71, 250-258.

ØChezan and Haing (1982). Development of parental attitudes research instrument, Child Development, 24 (1), 441-449.

ØClements, S. (1966). Minimal brain dysfunction in children, NINDS, No.3, Public Health Service Bulletin, Washington DC, Dept. of Health, Education and Welfare.

ØGoldman, M. and Barchlay, A. (1974). Influence of maternal attitudes on children with reading disability, Perceptual and Motor Skills, 28, 300-307.

ØHumpries, T. and Bauman, F. (1980). Maternal child learning attitudes associated with learning disabilities, Journal of Learning Disability, 13, 459-462.

ØJohnson, R.C. and Medinnus, G.H. (1969). Child psychology, behaviour and development, John Wiley and Sons, New York.

ØKaslow, F. (1979). Therapy with in the family constellation. In W. Adaman and K. adanson (Eds.), A handbook for specific learning disabilities, New York, Gardner.

ØMisra, K.S. (1986). Effect of home and school environment on scientific creativity, Sangyanalaya, Kanpur.

ØNational Joint Committee on Learning Disabilities (NJCLD, 1994), in B.Y.L Wong, Making sense of all the definition of learning disabilities. In B.Y.L. Wong, The ABC's of learning disabilities (pp.26-48) San Diego, Academic Press.

ØRaven, J.C. (1976). Coloured Progressive Matrices, Manasayan, New Delhi.

ØSagar C.J. and Kaplan, H.S. (1972). Progress in group and family therapy, New York: Brunner Mazel.

ØSalvia, J. and Hughes, C. (1990). Curriculum-based assessment: Testing what is taught, Macmillan, New York.

ØWatson, G. (1957). Some personality difference in children related to strict or permissive parental discipline.

ØWerner, E. and Smith, R. (1979). An epidemiologic perspective on some antecedents and consequences of childhood mental health problem and learning disabilities, American Academy of Psychiatry, 44, 292-306.

ØWong, B.Y.L. (1996) The ABC's of learning disabilities, San Deigo: Academic, Press.