

TO STUDY THE PARENT-CHILD (FATHER-CHILD AND MOTHER-CHILD) RELATIONSHIP OF DYSCALCULIC ELEMENTARY SCHOOL STUDENTS OF SHIMLA DISTRICT

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Abstract: *The study compares the Parent-Child (father-child and mother-child) relationship of dyscalculic elementary school students in relation to their gender. Null hypothesis were framed in regard to the objective. Investigator administered Parent-child relationship scale developed by the investigator herself, to the sample of 120 dyscalculic school students of 8th grade drawn from randomly selected schools of Shimla district. For the comparison of students on Parent-child relationship critical ratio was computed. Significant difference occurs between dyscalculic elementary school boys and girls on loving and protecting dimension of father-child and mother-child relationship respectively, as boys are significantly more loved by their fathers as compared to the girls dyscalculic elementary school students whereas girls are significantly more protected by their mothers in comparison to dyscalculic elementary school boys.*

Key Words: *Dyscalculia, Parent- Child Relationship, Elementary School Students.*

1. INTRODUCTION

The term Dyscalculia is derived from the Greek root 'dys' (difficulty) and Latin 'calculia' from the root word calculus- a small stone or pebble used for calculation. Dyscalculia is a specific learning difficulty that has also been referred to as 'number blindness', in much the same way as dyslexia was once described as 'word blindness'. Dyscalculia has been defined by Rubinsten and Tannock (2010) as a specific and severe deficit in the ability to process numerical information that cannot be ascribed to sensory difficulties, low IQ or inadequate education, and that result in a failure to develop fluent numerical computation skills. One of the first studies reporting a case of calculation deficits in the absence of any aphasia was reported by Lewandosky and Stadelman (1908) who observed a patient with posterior hemisphere lesion resulting in an isolated impairment of written and mental calculation (ascited in Ardila & Rosselli, 2002, p.180). Furthermore, in that they examined the calculation deficits in its component parts, rather than viewing as a unitary construct.

Parent-Child Relationship

A child has emotional needs of affection, love, warmth, protection, acceptance, security, recognition from parents. Mothers' love and warm behaviour provide protection for the child, consequently he/she learns behaviour patterns, which will bring parental approval and in turn, he/she gets parental love. Children deprived of affection suffer delay in physical development and other aspects of development. Parental quarrels and unfair comparison add to the feelings of insecurity of a child. He/she needs recognition for his achievements. This does not mean that the achievements have to be great. For instance, just passing in school examination is rewarded in the family and gives the child self-confidence. In any other family, a child may be punished even if he/she scores good marks, because he/she has not come up to his/her parents expectation, and hence becomes frustrated. Difference between one family and another comes to be viewed as a major source of variation from individual to individual in the aspects of personality and social-psychological development of children.

Relation of parents with child is very influential factor, not only in his achievement in academics but it also affects the personality development. Bowlby (1957) reported that in the absence of warm parental love, children face considerable problems of adjustment which may be manifested in terms of dependence, lack of initiative and responsibility. Brown (1967) found the family relationships characterized by warmth; mutual respect and affection are associated with the development of good psychological adjustment in children. Thompson (1969) also pointed that those children who share a wholesome relationship with their parents tend to be well adjusted and successful in life. Saran (1970) in a study found that parental affiliation, expressed love and even fear not intense and not occupied by feelings of not being loved by parents are essential factor in the satisfactory social adjustment of the child. Walter and Stinnett (1971) concluded that parental acceptance, warmth and support were positively related to favorable emotional, social and intellectual development of the children. On the other hand, extreme strictness without acceptance, warmth and love tended to be negatively related to the child's positive self- concept, emotional and social development. Kumar and Mehta (1983) showed that the socially deprived children tend to be aggressive, socially

withdrawn, depressive and emotionally unstable whereas Shek and Lee (2005) suggested that parental acceptance is related with children’s psychological adjustment. Agarwal and Mishra (2005) found that reflection, demand, symbolic reward and object reward of parents affect the self-confidence of students significantly.

Dyscalculic elementary school students are simply ignored or punished in the class room and labeled as stupid or morons. In homes also they have to face indifferent and rejected behavior of the parents. Their problems and emotions are suppressed by the parents due to unawareness about dyscalculia. Further, the variables like self-confidence, adjustment and parent-child relationship also play an important role in the development of a child. Keeping in view the above assumptions regarding the effectiveness of self-confidence, adjustment and parent-child relationship, the present problem has been selected for investigation.

2. OBJECTIVES OF THE STUDY:

To study the differences in parent-child relationship (father-child and mother-child) of dyscalculic elementary school students in relation to gender on the following dimensions:

- (i) Protecting
- (ii) Indifferent
- (iii) Loving
- (iv) Rejecting
- (v) Rewarding and ;
- (vi) Punishment

Hypotheses of the study

There will be no significant differences in parent-child relationship (father-child and mother-child) of dyscalculic elementary school students in relation to gender on the following dimensions:

- (i) Protecting
- (ii) Indifferent
- (iii) Loving
- (iv) Rejecting
- (v) Rewarding and
- (vi) Punishment

3. METHOD AND PROCEDURE:

Sample

A sample of 120 Dyscalculic Students of 8th grade was drawn from randomly selected schools of Shimla District.

Tools Used

In the present study Parent-Child Relationship Scale, developed by Investigator herself (2017) was used. Three point scale was developed containing 6 dimensions of parent child relationship. Each dimension contains 10 items. The scale was administered on dyscalculic girls and boys of 8th grade of randomly selected schools of Shimla District of H.P.

SCORING

The scale has to be scored separately for each parent. Thus, every respondent will obtain six scores for “father form” and six for “mother form” on the six dimensions of the scale. Each dimension yields a score found by summing the score of the ratings on each item of the dimensions. The total score for each dimension varies from 10 to 30 and for the total scale from 60 to 180.

4. ANALYSIS OF DATA:

Father –Child Relationship of Dyscalculic Elementary School Students in Relation to Gender

In order to study the differences in father-child relationship between dyscalculic elementary school boys and girls, ‘Critical Ratios’ (CR) on six dimensions of father-child relationship were computed which are given in Table – 1:

TABLE-1
Means, Standard Deviations and Critical Ratios on Six Dimensions of Father-Child Relationship between Dyscalculic Elementary School Boys and Girls

Sr.No.	Dimensions	Gender				CR
		Boys N=60		Girls N=60		
1.	Protecting	M1	25.87	M2	26.38	0.82
		□1	3.59	□2	3.30	
2.	Indifferent	M1	21.17	M2	20.58	0.70

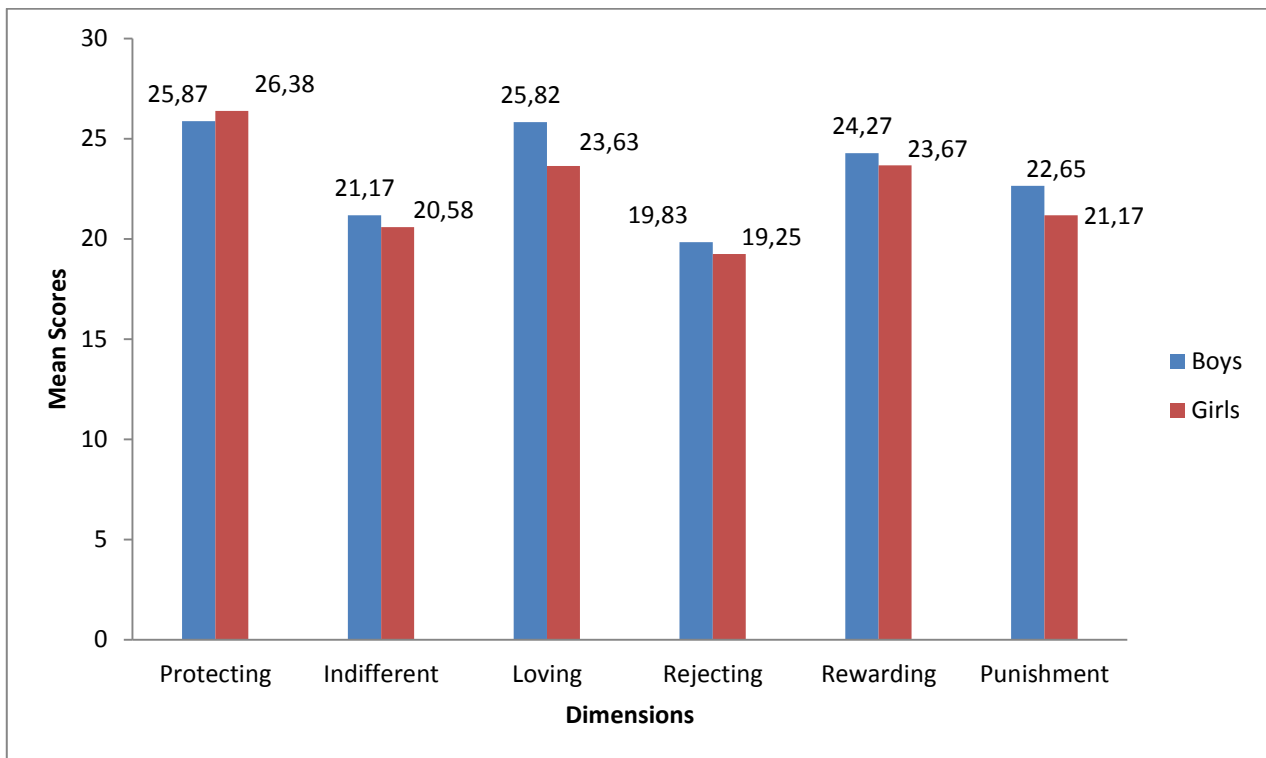
		□1	4.31	□2	4.82	
3.	Loving	M1	25.82	M2	23.63	2.77*
		□1	3.89	□2	4.76	
4.	Rejecting	M1	19.83	M2	19.25	0.73
		□1	4.52	□2	4.21	
5.	Rewarding	M1	24.27	M2	23.67	0.63
		□1	4.98	□2	5.47	
6.	Punishment	M1	22.65	M2	21.17	1.76
		□1	4.10	□2	5.07	

*significant at 0.01 level of significance for df 118 (Table value = 2.62)

Table 1 depicts that the ‘Critical Ratios’ (CR) for comparing dyscalculic elementary school boys and girls on protecting, indifferent, rejecting, rewarding and punishment dimensions of father-child relationship came out to be 0.82, 0.70, 0.73, 0.63 and 1.76 respectively. These values are not significant at 0.05 level of significance for 118 df. Therefore, the hypothesis (subparts i, ii, iv, v, vi), was accepted. It indicates that there is no significant difference between dyscalculic elementary school boys and girls with regard to protecting, indifferent, rejecting, rewarding and punishment dimensions of father-child relationship.

Figure 1 shows the comparison of the mean scores of dyscalculic elementary school boys and girls on six dimensions of father-child relationship as below:

Figure 1
Mean Scores of Dyscalculic Elementary School Boys and Girls on Six Dimensions of Father-Child Relationship



Although there is statistically no significant difference between dyscalculic elementary school boys and girls on the above mentioned five dimensions of father-child relationship, the mean scores for boys (25.87) and girls (26.38) on protecting dimension of father-child relationship is indicative of the fact that girls are more protected by their fathers as compared to boys. The trend of means for boys on indifferent, rejecting, rewarding and punishment (21.17, 19.83, 24.27 and 22.65) dimensions of father-child relationship are higher to that of girls (20.58, 19.25, 23.67 and 21.17), respectively. Hence, it can be said that fathers are more indifferent, rejecting, rewarding and punishing to the boys as compared to girls.

Further, Table 4.11 reflects that for comparing dyscalculic elementary school boys and girls on loving dimension of father –child relationship, the ‘Critical Ratio’ (CR) has come out to be 2.77 which is significant at 0.01

level of confidence for 118 df. It means that there is a significant difference between dyscalculic elementary school boys and girls on loving dimension of father-child relationship.

From the mean scores as given in Table 4.11 and Figure 4.9, the mean score for the dyscalculic elementary school boys on loving dimension of father-child relationship (25.82) is significantly higher to that of girls (23.63). It means fathers shower significantly more love to dyscalculic elementary school boys in comparison to girls.

From the above analysis, it may be interpreted that:

- Statistically no significant differences occur between dyscalculic elementary school boys and girls on protecting, indifferent, rejecting, rewarding and punishment dimensions of father-child relationship.
- Dyscalculic elementary school girls are more protected by their fathers in comparison to dyscalculic elementary school boys.
- Fathers are more indifferent, rejecting, rewarding and punishing to dyscalculic elementary school boys in comparison to girls.
- There exists a significant difference between dyscalculic elementary school boys and girls on loving dimension of father-child relationship.
- Dyscalculic elementary school boys are significantly more loved by their fathers as compared to dyscalculic elementary school girls.

Mother –Child Relationship of Dyscalculic Elementary School Students in Relation to Gender

In order to study the differences in mother-child relationship between dyscalculic elementary school boys and girls, means, standard deviations and

Critical Ratios (CR) on six dimensions of mother-child relationship were computed which are given in Table 2

Table 2
Means, Standard Deviations and Critical Ratios on Six Dimensions of Mother- Child Relationship between Dyscalculic Elementary School Boys and Girls

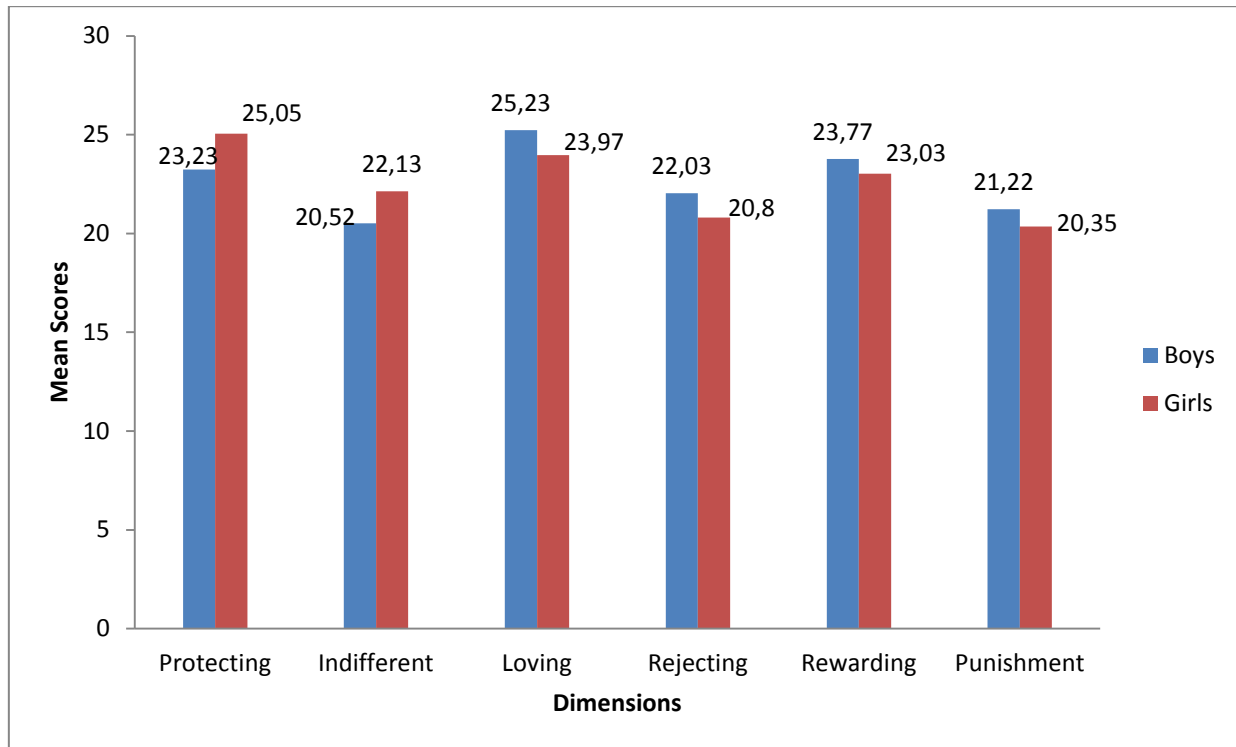
Sr.No.	Dimensions	Gender				CR
		Boys N=60		Girls N=60		
1.	Protecting	M1 □1	23.23 5.45	M2 □2	25.05 4.53	2.00*
2.	Indifferent	M1 □1	20.52 3.77	M2 □2	22.13 5.45	1.88
3.	Loving	M1 □1	25.23 3.77	M2 □2	23.97 4.71	1.64
4.	Rejecting	M1 □1	22.03 4.85	M2 □2	20.80 6.14	1.23
5.	Rewarding	M1 □1	23.77 4.82	M2 □2	23.03 4.77	0.84
6.	Punishment	M1 □1	21.22 4.58	M2 □2	20.35 5.08	0.99

*significant at 0.05 level of significance for df 118(Table value= 1.98)

It is clear from Table 2 that the ‘Critical Ratio’ (CR) for comparing the difference on protecting dimension of mother-child relationship between dyscalculic elementary school boys and girls has come out to be 2.00. This value is significant at 0.05 level of significance for 118 df. Therefore, the subpart of hypothesis (i) was rejected. From this, it can be said that there is a significant difference between dyscalculic elementary school boys and girls with regard to protecting dimension of mother-child relationship.

Figure 2 shows the comparison of the mean scores of dyscalculic elementary school boys and girls on six dimensions of mother –child relationship as below:

Figure 2
Mean Scores of Dyscalculic Elementary School Boys and Girls on Mother-Child Relationship



It is evident from Table 2 and Figure 2 that mean value (25.05) on protection dimension of mother-child relationship of dyscalculic elementary school girls is significantly higher than that of dyscalculic elementary school boys (23.23). It means mothers are significantly more protective to dyscalculic elementary school girls in comparison to boys.

Table 2 reflects that, ‘Critical Ratios’ (CR) for indifferent, loving, rejecting, rewarding and punishment dimensions of mother-child relationship came out to be 1.88, 1.64, 1.23, 0.84 and 0.99 respectively. These values are not significant at 0.05 level of significance for 118 df. Hence, the hypothesis no (subparts ii, iii, iv, v, vi) was accepted. It indicates that there are no significant differences between dyscalculic elementary school boys and girls with regard to indifferent, loving, rejecting, rewarding and punishment dimensions of mother-child relationship.

Although, there is statistically no significant difference between dyscalculic elementary school boys and girls on the above mentioned five dimensions of mother-child relationship, the trend of means (Table 2 and Figure 2) shows that dyscalculic elementary school boys on loving (25.23), rejecting (22.03), rewarding (23.77) and punishment (21.22) dimensions are higher to that of dyscalculic elementary school girls (23.97, 20.80, 23.03 and 20.35), respectively. The higher mean values for dyscalculic elementary school boys in comparison to girls, indicate that mothers are more loving and rejecting towards dyscalculic elementary school boys as well as give more reward and punishment to them in comparison to girls.

Further, the mean scores for boys (20.52) and girls (22.13) on indifferent dimension of mother-child relationship indicate that mothers are more indifferent towards dyscalculic elementary school girls as compared to boys.

From this, it may be inferred:

- Dyscalculic elementary school boys and girls differ significantly from each other with regard to protecting dimension of mother-child relationship as girls are more protected by their mothers in comparison to boys.
- There are statistically no significant differences between dyscalculic elementary school boys and girls on different dimensions of mother-child relationship namely (indifferent, loving, rejecting, rewarding and punishment).
- Dyscalculic elementary school boys are more loved, rejected, rewarded and punished by their mothers in comparison to dyscalculic elementary school girls.
- Mothers are more indifferent towards dyscalculic elementary school girls as compared to boys.

5. CONCLUSIONS:

- Statistically no significant differences occur between dyscalculic elementary school boys and girls on protecting, indifferent, rejecting, rewarding and punishment dimensions of father-child relationship.
- Dyscalculic elementary school girls are more protected by their fathers in comparison to dyscalculic elementary school boys.

- Fathers are more indifferent, rejecting, rewarding and punishing to dyscalculic elementary school boys in comparison to girls.
- There exists a significant difference between dyscalculic elementary school boys and girls on loving dimension of father-child relationship.
- Dyscalculic elementary school boys are significantly more loved by their fathers as compared to dyscalculic elementary school girls.
- Dyscalculic elementary school boys and girls differ significantly from each other with regard to protecting dimension of mother-child relationship as girls are more protected by their mothers in comparison to boys.
- There are statistically no significant differences between dyscalculic elementary school boys and girls on different dimensions of mother-child relationship namely (indifferent, loving, rejecting, rewarding and punishment).
- Dyscalculic elementary school boys are more loved, rejected, rewarded and punished by their mothers in comparison to dyscalculic elementary school girls.
- Mothers are more indifferent towards dyscalculic elementary school girls as compared to boys.

6. EDUCATIONAL IMPLICATIONS:

Significant difference is found between dyscalculic elementary school boys and girls on loving dimension of father-child relationship as boys are significantly more loved by their fathers in comparison to dyscalculic elementary school girls. This may be due to the fact that in a conservative society daughters are still looked as liability, no doubt their position has improved a lot but still parents usually treat their sons more warmly and affectionately as compared to their daughters. There should not be any discrimination on the basis of gender. The girls should be equally treated as the boys in the home by their fathers as the girls have also significant place and status in the home.

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