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Original Research Article

Study of parenting styles, family functioning and its relation to coping strategies in children of specific learning disorder

Enagandula Rupesh[1], Shipra Singh[2]*, Alka A. Subramanyam[3], Ravindra M. Kamath[3]

[1]Consultant Psychiatrist, Patiala, Punjab, India
[2]Department of Psychiatry, PGIMS, Rohtak, Haryana, India
[3]Department of Psychiatry, B. Y. L. Nair Hospital and T. N. Medical College, Mumbai, Maharashtra India

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***Correspondence:**
Dr. Shipra Singh,
E-mail: ssomvanshi27@gmail.com

ABSTRACT

Background: Families of children with disabilities otherwise experience higher stress; and relation between parenting styles and coping of children is well known. Parental factors and family functioning may play a role in shaping the child, especially having issues like SLD. The objective is to study was coping strategies of children with SLD, parenting styles of their parents, their family functioning and relation of these with each other.
Methods: It is a cross-sectional study undertaken after Institutional Ethics Committee approval, parent's consent and child's assent. Participants were 100 consecutive children, diagnosed with SLD, 9-13 years of age. Tools used were: Semi-structured proforma, Parenting Practices Questionnaire, Family Assessment Device and Children's Coping Strategies Checklist Revision 1.
Results: Authoritarian parenting style was significantly was associated with less use of 'active' and 'support seeking'; and increased use of 'distraction' and 'avoidance' strategies. High scores on Authoritative style was associated with 'active' and 'support seeking' strategies. Avoidance coping strategy was associated with poor (high scores) and active coping strategies with higher (low scores) on problem solving, communication, and general family functioning.
Conclusions: Parenting practices and family functioning can be pivotal in determining child's attitude and coping. Assessment of this can be routinely included in child evaluation.

Keywords: Coping strategy, Family functioning, Parenting style, Specific learning disorder

INTRODUCTION

Specific Learning Disability (SLD) is academic under-achievements in reading (dyslexia), written expression (dysgraphia) and mathematics (dyscalculia) that is unexpected as compared to the child's intellectual ability, potential and opportunity to learn. This is at times accompanied with motor incoordination, difficulty in understanding and expressing age appropriate communication, thereby leading to inability to understand abstract meanings or narrate stories in an organized manner.[1]

SLD makes it agonizing for a child to perform in school. The persistent scholastic backwardness leads to eventual demoralization, low self-esteem, chronic frustration, and poor peer relationships. There is high association of comorbid disorders, including Attention-Deficit/Hyperactivity Disorder (ADHD), communication disorders, conduct disorders, and neurotic disorders.[2] The

drop-out rates in adolescents are about one and a half times more in comparison to children without SLD.

An epidemiological study in British school children in age group 8-10 years had the prevalence of 3.9%-dyslexia, 1.3% -dyscalculia and 2.3% combined (dyslexia and dyscalculia) with overall prevalence of SLD of 7.5%.[3] A similar study found the prevalence rate as 7.4%, amongst this estimated prevalence for boys was 8% and for girls 6%.[4] An Asian study had a prevalence of 6.3% - dyslexia and 12.6% - probable dyslexia with male to female ratio of 3.4:1. On an average 1 in every 6 or 7 children suffers from SLD as seen in Indian as well as other studies.[5]

Studies have demonstrated that families of children with disabilities experience higher levels of stress or distress when compared to the families of typically developing children.[6,7] The impact of having a SLD child in specific is also substantial. Parents of children with SLD have significantly higher stress level as compared to non-referred as shown by previous studies.[8,9]

These children often realize that they have a problem and have a varying understanding of its causes, treatment and effects. Intentionality in causing symptoms and causality may also be not well understood. Very often they believe that the situation is beyond them and they have no control over it. This with poor understanding of their affliction and various socio demographic and parental factors could lead eventually to psychopathology.

Thus present study focuses on exploring relation of coping strategies of children having SLD with the parenting styles of their parents and the family functioning.

METHODS

It was a cross sectional study carried out in the Child Psychiatry Clinic of a tertiary care teaching institute, after obtaining Institutional Ethics Committee approval. A total of 100 consecutive children, diagnosed with Specific Learning Disabilities according to DSM-5 criteria, but not having any acute medical or psychiatric co-morbidities, aged 9-13 years, were included in study. A written informed consent from the parents/guardians of the children and assent from the child were taken before commencing the study. Interview was conducted by a single interviewer, using a semi-structured proforma to obtain demographic, psychosocial and disorder related variables. In addition, the following scales were applied:

Parenting practices questionnaire

This questionnaire consists of 62 items used to measure characteristics of authoritative, authoritarian and permissive parenting styles.[10] 27 of these items relate to authoritative parenting style with a Cronbach alpha of 0.91; 20 items relate to authoritarian parenting style with a Cronbach alpha of 0.86 and there are 15 items with a Cronbach alpha of 0.75. This questionnaire is based on 5 point likert scale with one being "I never exhibit this behavior' and five being "I always exhibit this behavior'.

Family Assessment Device (FAD)

It is a 60-item self-report measure of family functioning answered on a 4-point Likert scale ranging from 'strongly agree' to 'strongly disagree'.[11] It contains seven subscales designed to assess the six dimensions of the McMaster Model of Family Functioning: Problem Solving, Communication, Roles, Affective Responsiveness, Affective Involvement and Behavior Control, and contains a seventh General Functioning scale. Cut-off scores: Problem Solving: 2.20, Communication: 2.20, Roles: 2.30, Affective Responsiveness: 2.20, Affective Involvement: 2.10, Behavior Control: 1.90, General Family Function: 2.00. Greater than or equal to cut-off score equals unhealthy functioning on that scale.[12] years or older family members can respond to this questionnaire. The FAD has good construct validity, significantly correlating with the corresponding Clinical Rating Scale of the McMaster family assessments. The internal consistencies range from alpha = 0.71 to 0.92. Test re-test reliabilities at a one-week interval have been reported between 0.66 and 0.76 for the different subscales.[12-14]

Children's Coping Strategies Checklist-Revision 1 (CCSC-R1)[15]

It contains 54 statements which all start with ''If I have a problem'' followed, for example, by a statement such as ''I tell others how I would like to solve it''. The children could choose between four reactions: never (1), sometimes (2), often (3) and always (4). Items for the CCSC-R1 are grouped by their subscales/dimensions and also by the larger factors on which they have loadings. The four major factors: Active Coping Strategies (alpha = 0 .88), Distraction Strategies, Avoidance Strategies (alpha = 0.65), Support Seeking Coping Strategies (alpha = 0.86)

Frequency counts and percentages will be used to summarize qualitative variables, while chi-square test will be used to compare categories. Analysis of variance will give comparison of different response categories.

RESULTS

Demographic data

Age of the participating children ranged from 9 to 13 years (median age 12 years). 53% were boys and rest girls. Among parents who took part in the study, 38% were males and 62% females. 85% of children had all three types of SLD (dyslexia, dysgraphia and dyscalculia) and rest had either two of the three types. The predominant family type was nuclear (72%). Predominant number of families (41%) were from Class

IV of Prasad's socio-economic class, followed by class III (19%). 43% of parents were graduates and 9% had completed their post-graduation.

Parenting practice

On Parenting Practice Questionnaire, mean scores in the 'authoritative parenting style' and the specific sub-factor 'easy going' are the highest scores among the three parenting styles (Table 1).

Table 1: Factor scores of parenting practices questionnaire.

Parenting Practice	Mean	SD
Authoritarian	2.09	0.536
a. Corporal punishment	2.15	0.72
b. No reasoning	1.84	0.47
c. Autocratic	2.13	0.81
d. Directiveness	2.37	0.79
e. Emotional	1.95	0.71
Authoritative	3.54	0.95
a. Warmth and involvement	3.67	0.98
b. Verbal encouragement	3.68	0.88
c. Easy going	3.91	1.10
d. Reasoning	3.21	0.96
e. Democratic discipline	3.24	1.08
Permissive	1.79	0.45
a. Ignoring misbehaviour	1.66	0.59
b. Child centered	1.89	0.46
c. Indulgent	1.81	0.50

Coping strategies of child

Assessment of coping strategies showed that, mean scores of active coping (2.56) and support seeking coping strategies (2.51) are relatively higher than that of avoidance (2.17) and distraction strategies (2.42). Amongst the individual subscales, direct problem-solving strategy (3.07) has the highest and repression (1.82) has the lowest score (Table 2).

Family assessment

On family assessment, scores on all the subscales are less than cut-off scores, except the Behavioral Control subscale suggesting unhealthy functioning in that domain (Table 3).

Relation of parenting style and family dynamics with child's coping strategies

Authoritarian parenting style was associated with less use of 'active' and 'support seeking' coping strategies by the child, and increased use of 'distraction' and 'avoidance' strategies. High scores on Authoritative style was associated with increased use of 'active' and 'support seeking' strategies; and permissive parenting with increased use of 'avoidance' coping strategy by the child (Table 4).

Table 2: Subscale scores of CCSC-R1 of the study sample.

Coping strategies	Mean	SD
Active coping	2.56	0.47
a) Problem Focused Coping	2.73	0.57
Cognitive Decision Making (CDM)	2.48	0.60
Direct Problem Solving (DPS)	3.07	0.52
Seeking Understanding (SU)	2.65	0.74
b) Positive Reframing Coping	2.39	0.49
Positive Thinking (POS)	2.28	0.52
Optimistic Thinking (OPT)	2.33	0.55
Control (CON)	2.55	0.64
Distracting strategies	2.42	0.59
Physical Release of Emotions (PRE)	2.31	0.76
Distracting Actions (DA)	2.54	0.73
Avoidance strategies	2.17	0.59
Avoidant Actions (AVA)	2.23	0.72
Repression (REP)	1.82	0.49
Wishful Thinking (WISH)	2.46	0.64
Support seeking coping strategies	2.51	0.66
Support for Actions (SUPA)	2.66	0.66
Support for Feelings (SUPF)	2.36	0.71

Table 3: Subscale scores of FAD of the study sample.

Scales of FAD	Mean	SD	Cut-off scores
Problem solving	1.97	0.38	2.20
Communication	2.08	0.33	2.20
Roles	2.05	0.3	2.30
Affective responsivenes	2.16	0.38	2.20
Affective involvement	1.96	0.44	2.10
Behavior control	2.09	0.37	1.90
General family functioning	1.69	0.27	2.00

Table 4: Correlation between Parenting practice (PPQ) and Child coping (CCSC).

Parenting practice	Coping strategies (Pearson's r)			
	Active	Distractior	Avoidance	Support seeking
Authoritarian	-0.636**	0.305**	0.532**	-0.407**
Authoritative	0.750**	- 0.024	- 0.716**	0.761**
Permissive	- 0.021	- 0.095	0.210*	- 0.146

Avoidance coping strategy was associated with poor (high scores) problem solving, communication, and general family functioning. While increased use of active coping strategies was Associated with higher (low scores) problem solving, communication, and general family functioning (Table 5).

Table 5: Correlations between Family assessment (FAD) and Child coping (CCSC).

Family assessment	Coping strategies			
	Active	Distraction	Avoidance	Support seeking
Problem solving	- 0.509**	0.094	0.646**	-0.718**
Communication	- 0.432**	- 0.157	0.549**	- 0.897**
Roles	- 0.201*	0.291**	0.176	- 0.122
Affective responsiveness	- 0.065	- 0.059	- 0.385**	- 0.098
Affective involvement	- 0.469**	0.054	- 0.022	- 0.308**
Behavior control	0.168	0.335**	- 0.271**	0.405**
General family functioning	- 0.292**	0.207*	0.306**	- 0.154

DISCUSSION

Increasing prevalence of SLD, and need for bridging the gaps of comprehensive research for its relation to co-morbid and associative factors created an interest and stirred the objectives of this study to be formed.

Author found that predominantly the children were from nuclear families, lower middle strata of socio-economic class with predominant parents' education being higher secondary education to graduation. Education of the parents has been particularly proved quite important in literature. SLD children need constant stimulation and literate home environment. They run a risk of starting school with lower levels of development and basic skills if there is lower parental education.[16-18] Furthermore, it should be stressed that SLD has a strong genetic component, so that the limited education level of parents, which was identified in these subgroup of children, can be related to their own learning difficulties and thus biologically explain the deficits inherited by children.[19,20] Notwithstanding these circumstances, parental learning disabilities were not verified in the sample studied, and may be a future focus of analysis.

Parenting styles in this study sample was predominantly found to be more authoritative than compared to the other two styles of authoritarian or permissive. This was in accordance to the need of the children having learning disability and also in consensus to other studies, were it has been shown that high level of authoritative parenting style providing affection, autonomy and responding in the maturity required as per norms and demands of children for better academic performances.[21,22]

A study in SLD children and delinquency also observed that the delinquency was less in children brought up in flexible and creative way (i.e. equivalent to authoritative style) as compared to those brought up by parents who did not believe in accommodating (i.e. equivalent to authoritarian). Further longitudinal studies have also found that authoritativeness could decrease as the disability continuous. SLD being a lifelong disorder with occasional change in minor adaptive coping of these children over time there can bring change in the style of parenting in their parents.[23]

Mean scores of all the subscales of family assessment device were found lesser than the cut-off for pathological families in the study sample, except for 'Behavior control'. Thus, showing no significant family dysfunction or conflicts as favorable for families consisting a child with SLD in majority of the domains. Studies have shown that in troubled or dysfunctional families, children receive less stimulation and of lower quality, which also affects their academic development.[24,25] These factors can also be risk factors present in homes where there are children with LD.

There was no significant association of age, gender and parental gender with coping of the SLD children in the study sample. However, earlier studies have shown mixed findings.[26,27] Considering gender, results in some studies showed that girls used more of avoidance and distraction strategies whether having disability or not, or more of support for feelings and wishful thinking. Few studies found problem solving better in boys but this result was found contradictory in others.[28]

In this study, SLD children predominantly used active and support seeking strategies rather than distraction or avoidance. This finding was in line with other studies in past in normal children where active and supporting seeking strategies were being used more commonly.[29,30] But findings in SLD children have been contrary to these in the form that avoidance or distraction coping strategies being the predominant. The literature also found active and support seeking coping strategies as very crucial for short term long term psychological well-being.[27] However, previous studies found avoidance strategies (non-productive) more commonly used in children with SLD. These distraction and avoidance strategies increase the psychopathology in children.[31]

Some studies have shown better productive coping in the performance of SLD children in sports and physical recreations. This can still be compared to a non-productive coping by avoiding focusing on academic difficulties and excelling in sports.[32] This non-

productive/avoidance coping is essentially a defensive pattern of behaviors including learned helplessness, lack of belief in help, lack of willingness to take treatment, mainly be in denial or use repression for the situations, withdrawn to self, weeping and exaggerated dependency.[33]

Analysis also showed authoritative parenting style was positively correlated with 'active' and 'support seeking' coping strategies. Authoritative parenting has been seen to have better problem solving and communication skills in the families. This is in lines with the results obtained in previous studies.[34-38]There is evidence in studies that 'moderately strict parenting', characteristic of authoritative parenting is correlated to ability to self-regulate problem issues, i.e. authoritative parenting promotes adaptive (active) coping in youth which is reflected in our study.[39] It has been found that children from authoritative families had most adaptable (active) strategies in academic situations. Children from authoritarian families showed lowest adaptable strategies, high passivity, behavior problems and low self-confidence whereas children from permissive families were similar to authoritative families.[40]

CONCLUSION

Author found that authoritative style was related to 'active' and 'support seeking' strategies; and permissive parenting to 'avoidance' coping strategy of the child. Avoidance coping strategy was positively correlated and active coping strategies were negatively correlated to FAD scales of problem solving, communication, and general family functioning. On the other hand, authoritarian parenting style was negatively correlated with 'active' and 'support seeking' coping strategies of the child, and positively correlated with 'distraction' and 'avoidance' strategies. It is thus clear that family dynamics and parenting strategies significantly affect coping of a child with SLD, and thus would affect his behavior and future development of the child's personality. Parenting practices and family functioning are also related to each other. Thus, there is a need to understand and identify such factors in a child attending a clinic, in his parents and also his or her family; and to mold them for better. Small sample size, cross sectional nature and lack of control group were the limitations of this study. In addition, questions about parenting practices were answered by only one of the parents, confounding the results. Research done with a larger sample with a control group, including responses of both parents, and of longitudinal nature would yield more accurate findings. Interventional studies in terms to bringing about change in outcome of study parameters for effective parenting styles, better family functioning and coping in SLD children can also be planned.

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