# FAMILY INTERACTION AND ANXIETY IN FAMILY OF CHILDREN WITH LEARNING DISABILITIES

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#### Abstract

The objective of this study is to investigate the parent-child interaction in the family and the feeling of anxiety among 20 pairs of parents of Learning Disabilities (LD) children and 20 pairs of parents on non-LD children. The Family Interaction Questionnaire (FIQ) was used to measure the family interaction and the Beck Anxiety Inventory (BAI) was used to measure the level of among the parents. The LD parents were more anxious than of non-LD parents, and the LD parents reflected greater emphasis on organization and restriction in the family system. The findings also found that more ambition and more striving for personal achievement were expected by LD parents but free expression of feelings was not encouraged by them. With respect to the interrelations between feeling of anxiety and family interaction measures, fathers were more concerned about conflicts within the family. On the other hand, the mothers' anxiety was related to greater emphasis on academic achievement. Therefore, the result of this study suggest the needs of family counselling, home training program and early intervention service provided and formulated by Department of Special education and other agencies as well.

Keywords: Family interaction, anxiety, children with learning disabilities, Family Interaction Questionnaire, Beck Anxiety Inventory

#### **Abstrak**

Mempunyai anak kurang upaya adalah satu trauma kepada ibu bapa. Oleh itu, kajian ini mencuba mengkaji hubungan interaksi antara ibu bapa dan anak. Kajian ini mengenal pasti tahap kerisauan 20 pasangan ibu bapa yang mempunyai anak kurang upaya. Soal Selidik Interaksi Keluarga (Family Interaction Questionnaire, FIQ) digunakan dalam mengkaji hubungan interaksi manakala Beck Anxiety Inventory (BAI) digunakan untuk melihat tahap kerisauan tersebut.

Ibu bapa kepada kanak-kanak kurang upaya yang mempunyai paras kerisauan yang lebih tinggi berbanding ibu bapa kanak-kanak normal telah memberi kesan kepada organisasi dan corak komunikasi keluarga. Dapatan menjelaskan ibu bapa ini lebih menjurus kepada pencapaian individu kanak-kanak itu tetapi tidak kepada hubungan perasaan. Seorang bapa lebih mementingkan konflik dalaman keluarga manakala kerisauan seorang ibu pula lebih kepada pencapaian akademik anak-anak kurang upaya ini. Kajian ini mencadangkan supaya kaunseling keluarga, Program Intervensi Awalan daripada Jabatan Pendidikan Khas dan pelbagai agensi harus diberikan kepada ibu bapa yang bermasalah.

Kata Kunci: Interaksi keluarga, kebimbangan, kanak-kanak bermasalah pembelajaran, Family Interaction Questionnaire, Beck Anxiety Inventory

#### **BACKGROUND**

The birth of handicapped child is a traumatic event for any family. It induce a wide range of feelings and reaction in parents and may put considerable strain on the family environment. The parents are facing tremendous problems due to the maladaptive behaviour among these children who are unable to be independent and are constantly in need of attention, nurturing and care compared to normal children (Bryan & Bryan, 1983). These parents must also bear the constant burden such as preparing of food and drink, bathing and clothing among other responsibilities for the children (Kirk & Gallagher, 1989; Norliza, 1998). To make things worse, society's cynical view as well as certain beliefs that a child born with a disability is a curse or God's punishment on the parents (Ruzian, 1997). It is no wonder that we find that many of these parents feel ashamed or embarrassed, stressed, sensitive and easily take offence, afraid and various other negative feelings and reactions.

Children with learning disabilities (LD children) is a generic term used to refer to a group of handicapped children with various types of specific disabilities. In Malaysia, *Jabatan Pendidikan Khas* or Department of Special Education under the Ministry of Education has categorised children with mild and moderate disabilities either mental or physical disabilities as children with Learning Disabilities (Jabatan Pendidika Khas, 1997). The presence of LD child in family has been perceived as the progression through a series of psychological stages as shock, denial, bargaining, anger, depression and acceptance (Kroth & Otteni, 1985).

Shea & Bauer (1994) despite of that all parents experience "down period" that the recurring feelings of grief were triggered by unreachable milestone, worries about the future and introspection. It seems that the presence of a LD child in a family can be viewed as a significant ongoing stress within the system. A study by Green (1990) indicated that many families who have LD children, in comparison with families with non-LD children demonstrate a rather disjointed style of family communication, coupled with unclear behavioural expectations for the children and other family members. Margalit & Almougy (1991) indicated that Israeli families with LD children were somewhat less supportive than families non-LD children.

The pattern of family interaction dimension assesses the amount of relationship to which family members feel they belong to and are proud of the family, the extent of family support to which there is open expression within the family, and the content of communication in the family. The personal development dimension portray on the developmental directions which may be built up by family living such as self-concept, attitudinal, achievement orientation and self-regulation.

Past studies have shown that there is a significant relationship between parents and handicapped children mothers that have been the primary subjet. In comparison to the parents, mothers are facing tremendous problems due to the maladaptive behaviour among these children who are unable to be independent and are constantly in need of attention, nurturing and care compared to normal children (Bryan & Bryan, 1983). These mothers must also bear the constant burden such as preparing of food and drink, bathing and clothing among other responsibilities for the children (Kirk & Gallagher, 1989; Norliza, 1998). Nevertheless, past studies reported fewer distress and depress unlike mothers and father role in the family is less support. To make things worse, society's cynical view as well as certain belief that a child born with a disability is a curse of God's punishment on either mothers or fathers (Ruzian, 1997). It is now wonder that we find that fathers are more ashamed or embarrassed, stressed, sensitive and easily take offence, afraid and various other negative feelings and reactions compared to mothers. Longo and Bond (1984) found that fathers suffer from more depression than the mothers. On the other hand, Goldberg, Marcovitch, McGregor and Lojkasele (1986) found that it is the mothers who suffer from depression more. According to Kamarulzaman (2001) unfavourable family communication was found to be the silent predictors for affective learning problem of the children.

Carr (1988) conducted a longitudal study on parents with Down syndrome children between the ages of six weeks and twenty one years. He found that parents with Down syndrome children suffer from slight depression.

A study conducted by Singer and Irvin (1989) and Cameron (1986) also proved that many parents suffer from depression upon realizing their children are disabled. This is proven by the reaction and feelings in the parents such as shock, sadness, confusion, guilt, denial, loss of self-confidence and other unreasonable emotions (Cameron, 1986; Kroth & Otteni, 1985; Mandell & Discuss, 1989; Peterson, 1987; Turnbull & Turnbull, 1986; Mohd Ridzwan, 1997). In addition, some parents show unstable reactions and feelings such as aggression, nervousness, anger and uncooperativeness (Shea & Bauer, 1994).

A report from Winchester Portage collected for a period of 5 years showed that parents with disabled children suffered from clinical depression (Cameron, 1986). This depression caused many family problem, 25% of whom neglected the children's educations and 10% of them have caused the deaths of their own children. A large percentage of those suffering from depression are the fathers (Longo & Bond, 1984). However, there have been studies conducted that show a larger percentage of the mothers as suffering from depression compared to the fathers (Goldberg, Marcovitch, MacGregor & Lojkasek, 1986).

Kirk and Gallagher (1989) on the other hand have discovered two problems as the main reason as the main reason for the parent's emotional disturbance upon the discovery of their children's disabilities. Firstly, the parents feel anxious and worried over their children's futures. Thus, they feel that it would've been best if the child had never been born because the child inconveniences them in terms of its education as well as work. The parents are also disappointed in the destruction of their hopes and dreams for a child such as this. The second problem arises from the fact that the parents must take care of the child's wants and needs. These children usually face difficulties when eating, dressing, sleeping, among other problems. As such, the parents are forced to look after the children's whims since the children themselves are unable to be independent and care for their own daily needs. Studies have shown a disjointed style of family communication. According to Green (1990), the parents of these families often exhibit unstable and unpredictable behaviour. Margalit and Almougy (1991) have also found that these parents were not very accommodating towards their learning-disabled. These children were also subjected to lack of attention as well as cruelty from their parents (Mandell & Fiscus, 1989). On top of that, unsatisfactory relationship within the family is a contributing factor why parents lose hope regarding the abilities of the learningdisabled children (Kirk & Gallagher, 1989; Ramli, 1997).

Family interaction usually indicates to the patterns of emotional and social climate among the family members, the direction of personal growth in the family system and the patterns of family structure.

The study on family climate of LD children is quite abundant in Western countries such as the United Kingdom, United States, Norway etc. Of course, the past studies in those countries are not conclusive because the Malaysian families may be different.

#### METHODOLOGY

### **Research Design**

### **Subjects**

This study utilise the quota sampling technique consisting of 40 Malay families divided into two groups: (a) 20 parents (fathers and mothers) of children with LD, and (b) 20 parents (fathers and mothers) of non-disabled children in Primary schools. The families live in Rantau Panjang in the state of Kelantan. Children with learning disabilities refer to children with minor and medium physical disabilities and are mentally normal or with only sight mental disabilities but still capable of accepting education as normal or grouped as educable mentally retarded.

#### **Instruments**

Family Interaction Questionnaire (FIQ). To measure the family interaction, the researcher used the FIQ and it was adopted from Moos conceptualization (Moss & Moss, 1983). Later, it was adapted in order to investigate the interaction parent-child interaction in the family. The FIQ consists of true-false items which comprises of 9 subscale scores (cohesiveness in the family, free expressiveness, family support, academic-orientation, intellectual-valued, affection, moral values, organizational and restrictive in the family system). Kamarulzaman (2001) reported validity coefficient of the FIQ is ranging from 0.79 and the item-to-subscale correlation coefficient ranging from 0.23 to 0.89, and the alpha Cronbach reliability between the separate subscale ranging from 0.75 to 0.91.

**Beck Anxiety Inventory (BAI)**. The BAI was translated and adapted to assess the anxiety levels of the parents. The BAI consists of 21 statements to which the responds by choosing not all, mildly, moderately and severely with each statements.

Using external criticism, the content validity of the BAI Malaysian adaptation is 0.78 and the alpha cronbach reliability is 0.93. This instrument contains 21 items and therefore the highest total score for this questionnaire is 63 while the lowest is 0. Based on Beck, Steer and Brown (1996) suggestion, the scores have been divided into five categories:

Table 1: Level of Anxiety

Tuble 1. Level of Thirdely			
31 and below	Normal		
32 - 37	Mild anxiety level		
38 - 41	Moderate anxiety level		
42 - 52	High anxiety level		
53 and above	Profound anxiety level		

#### **Procedure**

To measure the family interaction and level of anxiety, the researcher requested the parents or guardians of the children with learning disabilities to respond to the each item in the instruments. The researcher requested the cooperation from the special educator to contact and arrange for meetings with the parents or guardians of the children with learning disability. These parents assemble in a classroom and the researcher hands each of them a set of the BAI. They are asked to answer or give a respond to each item in the questionnaire. The researcher used the semi-interview technique by reading to the respondents the items in the questionnaire. This step was undertaken to help those who are not skilled in reading and understanding formal Bahasa Melayu or Malay Language in the questionnaire. In addition, this step is meant to minimise misunderstanding and dishonesty in answering the questionnaire items. At the same time, this ensure that the researcher is able to explain each item to the respondents.

### Analysis

The data were analysed using statistical technique which involved Hotelling T and Pearson Product Moment Correlation. Hoteling T is appropriate statistical technique be used in comparing the two independent samples in this study. Meanwhile coefficient of Pearson Product Moment Correlation is use to investigate the direction and strength of the linear relationship between the two dichotomous variables in this study.

#### RESULTS

### **Family Interaction**

Hoteling T was used to compare the two group of families (independent variables) on three family interaction dimensions. The findings showed that there is significant difference between the two profiles,  $T^2 = 12.807$ , yielding F(3, 36) = 4.04, p < 0.05. The mean scores on the three dimensions for each group are presented on Table 2. Two of three dimensions accounted by the significant differences between the two profiles. It is also found that parents with LD children perceived the interaction of their families as encouraging more personal growth of its members (t(38) = -2.00, p < 0.05) and as emphasizing the management system values (t(38) = -2.43, p < 0.05). The difference of the third dimensions that of relationships, was not significant in the expected direction.

The analysis in Table 2 also shows that the three dimensions among the two groups of mothers reflected a significant difference between the two mean profiles,  $T^2 = 12.96$ , yielding F (3, 36) = 4.09, p < 0.05. Only one dimension accounted for the significant difference between the profiles, i.e. mothers of the LD children perceived the interaction of their families as emphasizing management system.

**Table 2:** Means and Standard Deviations of FIQ Dimensions

Subject	Family	Personal	Management		
	Communication	Growth	System		
LD parents					
M	6.42	5.26	5.52		
S.D.	1.01	0.76	0.70		
Non-LD parents					
M	6.81	4.75	4.67		
S.D.	1.09	0.83	1.35		
LD mothers					
M	6.19	5.41	5.69		
S.D.	1.16	0.86	0.19		
Non-LD mothers					
M	6.78	5.04	4.62		
S.D.	1.00	0.89	1.53		

LD fathers			
M	6.89	5.09	5.34
S.D.	1.19	1.05	1.16
Non-LD fathers			
M	6.86	4.45	4.74
S.D.	1.62	1.17	1.33

The differences of the other two dimensions were not found to be significant as expected. From this analysis, it also shows that the three dimensions from the group of father shows there is no significant differences neither in FIQ profiles nor in the three dimensions.

In addition to, this study the effect of the handicapped child on fathers and mothers' interaction in a family were compared by using Hotteling  $T^2$ . The analysis shows that there is no significant differences were found between fathers and mothers of LD children, although he differences with the families on non-LD children were significant ( $T^2 = 44.40$ ; F(3, 36) = 3.38, p < 0.05). We can assume that the anxiety in families of LD children reduced the differences between the fathers' and mothers' perceptions. In this study, one of the prioritised findings should be given to the significant differences between mothers and fathers of LD children. We found that the fathers of this group perceived their management system in the family as more characterized by increased free expression of feelings of the children than did the mothers of the same group (t(38) = 3.50, p < 0.05). However, it should be noted that there are same significant difference exists in the control families.

Table 3 shows the analysis of the Hotelling  $T^2$  based on data of the self-evaluation of the parents who acts as the main guardian in the family regarding the interaction in the family of the children with learning disabilities.

The analysis of the two main profiles, consisting the score on the 10 subscales, the findings shows that there is no significant difference for the parents, nor for the fathers' group. However, comparison of these two profile for the mothers showed a significant difference,  $T^2 = 45.65$ , yielding F(3, 36) = 3.48, p < 0.05. This difference was accounted for by the following subscales, i.e. mothers of LD children perceived their families as less encouraging expressiveness (t(38) = -2.41, p < 0.05) than as mothers of non-LD children did. In addition LD mothers stressed the need of for increased personal achievement. With respect to management system in the family, both increase in organization (t(38) = -2.11, p < 0.05) and control (t(38) = -2.01, p < 0.05) were reported by these mothers.

# **Level of Anxiety**

The analysis in Table 4 shows the means score and standard deviation of the anxiety of the parents of LD children and non-LD children. Referring to beck, Steer and Brown (1996) suggestion the analysis indicated that fathers and mothers of the LD children suffered from high level of personal anxiety (fathers: means score = 32.45; mothers: means score = 44.70) and it expressed higher than fathers and mothers of the non-LD children (mean score: father = 31.18, mother = 22.73) as shown in table 3. In addition the difference between the LD and non-LD groups of fathers and mothers was still notable.

Table 3. Means and Standard Deviation of Parent-child Interaction

Subscale			Parents		Mothers		Fathers
		LD	Non-LD	LD	Non-LD	LD	Non-
							LD
Cohesiveness	M	7.17	7.25	7.09	7.25	7.24	7.24
	S.D.	1.46	1.24	1.49	1.680	1.80	1.83
Expressiveness	M	6.00	7.25	5.95	7.69	6.05	6.85
	S.D.	1.50	0.99	1.54	1.04	1.90	1.75
Conflict	M	5.77	5.75	4.95	4.99	6.60	6.50
	S.D.	1.89	1.71	1.81	1.71	1.56	2.00
Family Support	M	5.85	6.05	5.69	6.76	6.00	5.34
	S.D.	1.09	1.12	1.42	1.33	1.30	1.56
Academic-	M	5.90	4.45	5.95	4.45	5.85	4.74
orientation	S.D.	1.30	1.56	1.36	2.23	1.98	2.00
Intellectual-valued	M	5.45	5.40	5.74	6.05	5.15	4.74
	S.D.	1.64	1.43	1.94	1.31	1.87	1.89
Affection	M	5.05	5.25	5.54	5.19	4.60	5.29
	S.D.	1.53	1.39	1.98	1.01	1.87	1.83
Moral values	M	3.70	2.32	3.50	2.50	3.89	2.14
	S.D.	2.51	1.83	2.73	1.93	1.56	2.18
Organizational	M	6.82	5.82	6.75	5.54	6.89	6.09
	S.D.	1.27	2.12	1.36	2.14	1.74	2.36
Restrictive	M	4.22	3.55	4.64	3.70	3.80	3.39
	S.D.	0.39	1.29	1.30	1.65	1.44	1.27

**Table 4.** Means and Standard Deviation of BAI Dimensions

Group	N	Mean Score	Standard Deviation
LD parents	20	40.16	5.66
Non-LD parents	20	27.45	5.75
LD mother	10	44.70	8.89
Non-LD mothers	10	31.18	7.61
LD fathers	10	32.45	7.61
Non-LD fathers	10	22.73	6.76

# **Relationship Between Family Interaction and Parental Anxiety**

In order to further investigate the interrelations between the parents' anxiety and the different subscales of the FIQ, a Pearson correlation was used as presented on table 5. The findings show that there are different patterns of relationship between the variables.

Table 5 also shows that the fathers' anxiety was significantly related to the dimension of family communication. In the LD group, anxiety is clear related to the perceptions of cohesiveness relationship within the family system, while anxiety in fathers of non-LD children was inversely related to cohesiveness relationship in the family and free expression of feelings among the children. The non-LD fathers' emphasis on intellectual-valued was related to less anxiety. As for the mothers, increased the level of anxiety were related to lower expectations for academic achievement of families of LD children. Increased anxiety in the mothers of non-LD children was related to lower level of family support.

Table 5. Pearson Correlation between Parental Anxiety and FIQ Measures

FIQ	Father	Mother		
	LD	Non-LD	LD	Non-LD
*Family Communication	-0.42*	-0.53	-0.12	0.16
Cohesiveness	-0.21	-0.72**	-0.04	0.05
Expressiveness	-0.20	-0.53**	-0.29	0.01
*Personal growth	0.10	-0.48**	-0.39*	0.09
Family Support	-0.24	-0.34	-0.10	-0.40*

Academic-orientation	0.17	-0.29	-0.55**	0.16
Intellectual-valued	0.03	-0.52**	-0.10	0.05
Affection	-0.02	-0.35	-0.15	-0.03
Moral values	0.19	-0.03	-0.09	0.31
*Management system	-0.09	-0.22	0.23	-0.23
Organizational	-0.23	-0.31	0.01	-0.22
Restrictive	0.14	-0.12	0.28	-0.15

#### DISCUSSION

The main aim of this study is to investigate relationship between the feeling of parents' anxiety and their interaction in the family. As we have seen the results show that parent with LD children reported higher levels of self-anxiety, which increased emphasis on management system dimension of their family system. It is noted that the interaction in the family as being more rigid, controlled and ordered. This indicates that the family has authoritarian styles of parenting. According to Baumrind (1971) authoritarian parenting is a restrictive pattern of parenting in which parents impose many rules, expect strict obedience, rarely if ever explain to the child why it is necessary to comply with all these regulations, and often rely on punitive, forceful tactic to gain compliance. The finding is supported by Margalit & Heiman (1986) that it is difficult for the parents to realize that their child is functioning in a typical manner in certain situations, despite his or her age-appropriate and normal behaviour in other situations. It is this consistency that seems to contribute to the increased stress and anxiety reported by these parents. A study done by Singer and Irvin (1989) and Cameron (1986) also proved that many parents of LD children suffer from depression upon realising their children are disabled. It also exhibit negative reaction and feelings among the parents such as shock, sadness, confusion, guilt, denial, loss of selfconfidence and other unreasonable emotions. In addition, some parents show unstable reactions and feelings such as aggression, nervousness, anger and uncooperativeness (Shea & Bauer, 1994).

Referring to the mothers' profile of family interaction, as predicted, that mothers are more concerned by the family's problem than are the fathers. Most of the mothers are affected by family organization and structure. Although Nola, Grant and Keady (1996) have found that parents who suffer from emotional pressure will feel afraid, worry and tense as well as tortured but it does not happen to all parents. This study shows that the parents do not head towards rehabilitation but spiral towards a level of down period.

Thus, feelings of disappointment return into their lives whenever they think of their children's miserable futures. This study also found that mothers of LD children viewed their family are less enabling of family support and affection reaction from family members. Humphries (1979) remarks that the increased structuring and controlling within families of LD children should not be considered as related to hostile or negative feelings, but rather as efficient coping behaviour for stressful and anxiety-provoking situations.

In such a rigid anxious environment, the mothers view their families as less allowing of free expression of feelings and as less encouraging of personal independence of the family members. Although they expect higher levels of achievement, these expectations are related to their feelings of anxiety. Therefore, the more anxious mothers are the less motivated one.

The results of this study show that the perceptions of family communication given by fathers of LD children do not only differ from those of non-LD group, but also do not different from the mothers' perception. It seems that the continuous emotional disturbance facilitates cooperation between parents and increases the similarity of the fathers' and mothers' perception. The families of LD children do not demonstrate the unique parental perspectives of non-LD group, where fathers look at the family interaction as less encouraging of family support, feeling valued and management system than do mothers. This study has found the roles that mothers and fathers play as the guardian and caregiver within a family. The significance emotional disturbance of mean score between mothers and fathers show that mothers suffer from a higher level of emotional disturbance in comparison to that of fathers. This finding is contrary to the finding of the study conducted by Longo and Bond (1984), which showed that the majority of those who participate in caring process seems to be mothers and it is considered as their daily and ordinary duty as mothers.

These findings are supported by the study conducted by Carr (1988) who found that many parents suffer from slight depression and Cameron (1986) found that parents suffering from the negative feeling and they require psychotherapy. This study shows that parents suffer long-term negative emotional reactions although their disabled children have started school. According to Shea & Bauer (1994), parents take a long time to adapt themselves to the situation they face. As such, it is possible for the parents' emotional instability to return when their children begin school. This is supported by Kratochvil & Devereux (1988) who state that the management or rehabilitation does not happen to all the parents of these children. They find that the parents return to feeling disappointed when they think of their children's futures.

The only area of difference exhibited between the LD mothers and fathers is the evaluation of conflicts in their life.

As compared to mothers, fathers report higher level of interpersonal conflicts. The two group of fathers both seem concerned about the conflicts in their families, but only the LD group relate it to their demonstrated anxiety. The analysis using correlative analysis is hardly to prove that the personal anxiety of the fathers is the result of the conflict interrelations. The analysis of this mean score (fathers = 32.45; mother = 44.70) reveals that the research sample record more than 42.0 and this shows that a large number of parents of LD-children suffer from anxiety that requires program to overcome their problem.

As a conclusion, this study has highlight that parents in Malaysia also suffer from anxiety due to the presence of a LD-child in the family. This gives a major implication to schools that organise Special Education Programs and the Special Education Department who are in charge of the program. It is essential to remember that parents have a close relationship with their children's education. It is believed that a happy and comfortable environment is difficult to have in a family if the parents are suffering from anxiety. As such, parents of children with learning disabilities who are suffering from anxiety and require assistance must be taken seriously. Special Education Department should widen its services to include not only their students, but also the students' parents. This may be realised through counselling services, Early Intervention Programs and Training Programs for parents in the Special Education Program in our schools.

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