Psychological Stress and Competencies among Parents of Children with Learning Disabilities

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Abstract

Background: Learning Disabilities are heterogeneous group of disorders characterized by the unexpected failure of children to acquire, retrieve and use information competently. **Aim;** This study aimed to assess level of psychological stress and competencies among parents of children with learning disabilities. **Study design;** A descriptive research design was utilized to conduct this study. **Setting;** This study was conducted at four private centers of learning disabilities at Zagazig city (the most important center in each zone (eastern, western, northern, southern) Namaa center, Ataa center, early intervention & child development center, and tamkeen center). **Subject;** Convenient sample of 70 parents of children with learning disabilities were chosen for conducting this study. **Data collection tools;** 1) Socio-demographic data sheet, 2) parent stress index, 3) parenting sense of competence scale. **Results;** The results of this study showed that there was significant relationship between level of psychological stress and competencies and having children with learning disabilities among parents. **Conclusion;** The study concluded that parents of children with learning disabilities had high levels of psychological stress and low level of competencies. **Recommendation;** Specialized supporting groups for both parents and children with learning disabilities, for rehabilitation and counseling.

Key words: Learning Disabilities, Stress, Competence, Parents, Children, Nursing

Introduction:

Learning Disabilities (LDs) are heterogeneous group of disorders characterized by the unexpected failure of children to acquire, retrieve and use information competently. LDs are the most severe, pervasive and chronic form of learning difficulty in children with average or above-average intellectual abilities because the concept of learning disability has a brief and turbulent history both conceptually and operationally, making them victims of over expectation and social obligations of parents ***(Mishra & Pahwa, 2018).***

Emotional difficulties can be considered one of the primary issues of the learning disabled and come about as a result of academic failure; in the other, emotional difficulties are a result of the secondary issues: frustration, lack of self-confidence, aggressiveness, and depression that arise from social and academic failure. Fear of failure leads to avoiding communication, which generates feelings of helplessness arising from the inability (or lack of confidence) to influence social conditions ***(Accariya & Khalil, 2019).***

Learning disabilities also cut across all levels of cognitive abilities. This is because it is found among all categories of learners regardless of their age, sex, class placement or mental ability. For instance, a child may be able to read but find it difficult to perform basic mathematical operations. Besides, learning disability is also independent of any handicapping condition. Thus, the need to become aware of children experiencing such problem so that appropriate measures of helping them can be taken can hardly be disputed ***(Narváez-Olmedo, Sala-Roca & Urrea-Monclús, 2021).***

The family which has a child with LD, experiences many challenges such as repeated physical and emotional crises, interactive family issues, ruined schedules, and additional expenses, which can create financial burden and emotional distress for a family. Having a child with LD often requires a reorientation and reevaluation of family goals, responsibilities and relationships. A significantly high proportion of parents of children with learning disabilities have psychiatric diagnosis of

anxiety, depression or both, needing mental health services and support ***(Dervisalij, 2018).***

Parents of children with learning disabilities find themselves in a unique psychosocial situation. Previous findings indicate that these parents, compared with the parents of children with typical development (TD), face greater care giving demands and report higher levels of stress, anxiety, future anxiety and depression ***(Antonopoulou, Manta, Maridaki-Kassotaki, Kouvava & Stampoltzis, 2020; Bujnowska, Rodriguez, Garcia, Areces & Marsh, 2019).***

It is common for parents of children with learning disability to develop psychological stress as children with LD require more attention time and skills from parents during the upbringing process. Literature had shown that parents of children with learning disabilities were at risk of getting psychological distress. The problem is important to be identified because it would affect the dynamics of the family; for example; marital disharmony and poor family relationship Several factors were found to be associated with psychological distress among this group of parents such as personality and socio-demo-graphic like employment status, low income, being married, gender and low educational level. Studies also found that the greater the disability or symptoms, the higher the risk of getting psychological distress ***(Nordin & Husain, 2020).***

Learning disability nurses must have the knowledge, skills, attitudes and abilities to work in partnership with people of all ages who have learning disabilities, and with their families and careers, in order to help individuals to develop individually and fulfill their potential in all aspects of their lives, irrespective of their disabilities ***(Dean, 2018).***

Significance of the study:

Children with learning disabilities are liable to have emotional, psychological and social problems: they are prone to anxiety, depression, and behavioral disorders, as well as feelings of low self-esteem and social isolation. They may show distinctly different patterns of psychosocial functioning and have difficulty adjusting to social frameworks, functioning in various social situations, dealing with feelings of failure, and delaying gratification ***(Accariya & Khalil, 2019).***

The prevalence of learning disability among primary school children in Egypt was 16. 5%. Also, the prevalence of specific reading disability (SRD) among the elementary school children (grade 1 to 3) is 1%, and the male to female ratio was 2.7% to 1%. The prevalence was far lower than that reported in western countries ***(Ismail, Mohamed & Soltan, 2019).***

A significantly high proportion of parents of children with learning disabilities have psychiatric diagnosis of anxiety, depression or both, needing mental health services and support. Those parents may struggle with a multitude of emotions interchangeably over years, and often have feelings of guilt that somehow they caused the child to be disabled, for logical or illogical reasons ***(Dervisalij, 2020).***

The parents of children with learning disabilities are at increased risk for elevated stress ***(Alsaman & El-Naiem, 2021).*** Early intervention has positive outcomes for parents of children with learning disabilities. Early intervention leads to an increase in developmental, social and functional outcomes for children ***(Hohlfeld, Harty & Engel, 2018).***

Aim Of The Study

This study aimed to:

- Assess psychological stress and competencies among parents of children with learning disabilities.

Research Questions:

- Is there a relation between having children with learning disabilities and psychosocial stress and competencies among their parents?

Subjects And Methods

A- Research design:

A descriptive design research design was conducted to achieve the aim of this study.

B- Setting:

This study was conducted at four private centers of learning disabilities at Zagazig city (the most important center in each zone (eastern, western, northern, southern) Namaa center, Ataa center, early intervention & child development center, and tamkeen center.

C- Subject:

Sample was collected from all parents of children with learning disabilities attending

regularly any of four previously mentioned settings over one month period. It was collected from 70 parents of those children (all of attending regularly parents) according to the following criteria.

***Inclusion criteria for parents:**

1-Ages from 20 years to above

2-Both sexes

3-Parents living in the same dwelling

***Inclusion criteria for children:**

1- School age children range between 6 to 12 years old.

2-Both sexes.

3-Normal I. Q.

4-Free from visual problems, hearing problems or psychiatric problems.

D-Tools of data collection

Tool (1): Socio-demographic data sheet-:

It was designed by the researcher. It was composed of two parts:

a) For children: it included age, sex, education, child order…. . etc.

b) For parents: it included age, sex, marital status, family members, residence, and level of education, occupation, and family income.

Tool (2) parent stress index:

It was developed by ***Abdin, (1983),*** to measure parenting stress of children with chronic illness. Arabic version was translated by ***Elbeblawy, (1988),*** was utilized in this study. It consisted of 99 items. Each item presented with five graded response: strongly agree, agree, uncertainty, disagree, and strongly disagree. The items are grouped into two main groups of stressor, namely child related- stress and parent-related stress.

Child related domain: this domain assesses the presence of child behaviors and characteristics that are stressful to parents. It includes six subscales, namely child distractibility and hyperactivity (9 items), child reinforcing parents (6 items), child's mood (5 items), child acceptability to parent (7 items), child adaptability (10 items), and child demandingness (9 items).

Parent related domain: this domain assesses parents stressors related to personal adjustment and family functioning. It has seven subscales, namely parent sense of competencies (13 items), parent attachment (7 items), restriction of parental role (7 items), parental depression (9items), relationship with spouse (6 items), social isolation (6 items) and parental health (5 items).

Tool (3): Parenting sense of competence scale (PSOC):

It was developed by ***Johonson and Mash`s, (1989).*** Is a 16-item questionnaire measuring parental satisfaction and efficacy and assess how confident parents feel in their ability to handle their child's problems. It yields two subscales: (a) (satisfaction), addressing parent self-perceptions regarding the skills and understanding required to be a good parent (9 items) and (b) (efficacy), the degree to which respondents feel comfortable and capable in their roles as parents and the value they assign to the parental role (7 items).

The scoring system:

***Scoring System of Stress Index:**

The stress items were respectively scored 5 to 1 for the responses from "strongly agree" to "strongly disagree" for each subscale and domain, and for the total scale, the scores of the items were summed-up and the total divided by the number of the items, giving a mean score for the part, this was converted to a percent score. Score % = (the observed score / the maximum score) × 100.

Tool	Reliability		Validity		Internal consistency
	Reliability Coefficient	Cronbach's Alpha	Self validate	Content valiantly	
Parenting stress index	0. 825	0. 761	0. 831	0. 792	Good
Parents' competence and ability to raise their children	0. 803	0. 868	0. 871	0. 861	Good
Total questionnaire	0. 825	0. 831	0. 887	0. 844	Good

The total score was from 99-495 grades:

- Low stress <50%
- Average stress 50-75%
- High stress >75%

*** Scoring System of Parenting Sense of Competence Scale (PSOC)**

It is a 16-item questionnaire their responses are on a 6-point Likert-type scale: "strongly agree", "agree", "mildly agree", "mildly disagree", "disagree", and strongly disagree". These are scored from 6 to 1. The scoring was

reversed for negatively stated items so that a higher score means more satisfaction and more parent efficacy. For each of the two subscales and for the total scale, the scores of the items were summed-up.

Score%= (the observed score/the maximum score) × 100.

The total score was from 16-96 grades:

- Low Competence >75%
- Average Competence 50-75%
- High Competence <50%

Tools validity and reliability

Testing the reliability through Cronbach's Alpha reliability analysis. To achieve the criteria of trustworthiness of the tool reliability a doctor in statistics checked faces and content of all items. The reliability of the tools was assessed through 10% cases (pilot study) using the developed questionnaire. Measuring their internal consistency by determining Cronbach alpha coefficient, proved to be high as indicated in the following table: Cronbach's Alpha reliability analysis

Administrative design:

Approval was obtained from Dean of faculty of nursing, Ain Shams University, then written official letter sent to the director of each private centers, include the aim of the study to get permission to conduct the study.

Ethical consideration:

The ethical research considerations in this study include the following:

1. A written initial approval was obtained from the research ethical committee at the faculty of nursing, Ain Shams University.
2. Individual oral consent was obtained from each participating parents after explaining the nature and benefits of the study.
3. The researcher cleared the objectives and aim of the study to participating parents.
4. The researcher maintained anonymity and confidentiality of participating parents.
5. Participating parents were allowed to choose to participate or not in the study, and given the right to withdraw at any time from the study without giving reasons.

Operational design

The operational design includes preparatory phase, pilot study, and field work.

Preparatory phase:

It included reviewing of the current and recent national and international literature reviews concerning current study by using books, articles, periodicals, magazines and web sites. After reviewing related literature in various aspects of the problems, the study tools were designed and translated into Arabic language by language experts.

Pilot study:

A pilot study was carried out after the adaptation of the tools and before starting the data collection. It was conducted on (10%) of the expected sample size to test the clarity, feasibility and applicability of the study tools. In addition, it served to estimate the approximate required time for interviewing parents as well as to find out any problems that might interfere with data collection. All participants in the pilot study were excluded later from the actual sample.

Field work:

The researcher attended the learning disabilities centers three days per week, in the afternoon period from 4.00 PM. To 10.00 PM. The data collection lasted one month September 2020. A number of interviewed parents ranged from 2-3 times a week, 7 parents a day in the extension room which attached to the reception. The researcher interviewed each parent individually and briefly explained the nature and the purposes of the study, and asked him/her for participation. All parents were informed that participation is voluntary. All gathered data will be treated confidentially for research purpose only. Then collection of data has begun with the socio-demographic questionnaire, and it was completed by the researcher within 10 minutes for each parent. After that, the parent stress index scale was also completed by the researcher within about 25 minutes for each parent; in the end, the parenting sense of competence scale took about 10 minutes for each participant. So, each parent needs about 45 minutes to complete the questionnaire.

All information gathered through data collection tools was interpreted to identify the individualized learning needs.

Statistical design

Recorded data were analyzed using the statistical package for social sciences, version 20.0 (SPSS Inc., Chicago, Illinois, USA). Quantitative data were expressed as mean± standard deviation (SD). Qualitative data were expressed as frequency and percentage.

The following tests were done:

- Chi-square (x^2) test of significance was used in order to compare proportions between qualitative parameters.
- Association between two sets of variables
- The confidence interval was set to 95% and the margin of error accepted was set to 5%. So, the p-value was considered significant as the following:
- Probability (P-value)
  - P-value ≤0.05 was considered significant.
  - P-value ≤0.001 was considered as highly significant.
  - P-value >0.05 was considered insignificant.

Limitation of the study:

One of the challenges that the researcher faced in this study was the Corona pandemic and the consequent difficulty of data collection.

Results

Table (1) shows that **the mean age** of the studied children was 9.29±2.51 with higher percentages of males than females (60% than 40%) respectively. Regarding **school** 67.1% of them were from governmental education.

Concerning parents socio-demographic data **table (2a)** showed that the mean age of fathers of the studied children was 38. 43±10.38, and regarding fathers` level of education, (40%) of them had diploma school. While, the mean age of mothers of studied children was 32.27±8.79, and more than half of them (42.9%) had diploma schoolConcerning family data, **table (2b)** shows that more than half of families (55.7%) had less or equal 4 members, and rural families have the same percentage. Family income was not enough in (41.4%) of families. In more than half of families (54.3%) caregivers were father and mother. Parent-child relationship was usual in more than half of families (51.4%). Additionally (74.3%) of parents had normal parent relationship.

Table (3) regarding to total stress index, this table clarifies that more than half of parents of children with learning disabilities (57.1%) having high stress level with p-value (<0. 001).

Table (4) regarding total of parents competence, this table clarifies that, there was only (5.7%) of parents of children with learning disabilities having high competence level with p-value (<0.001).

Table (1): Number and Percentage of the Studied Sample according to Socio-demographic Data of Children n=70

Socio-demographic data of child	No.	%
Age (years)		
6 < 8	24	34. 3
8 < 10	12	17. 1
10 ≤ 12	34	48. 6
$\overline{X}$±SD	9.29±2. 51	
Sex		
Male	42	60. 0
Female	28	40. 0
School		
Governmental Education	47	67. 1
Private Education	7	10. 0
Special Education Service	16	22. 9

Table (2a): Number and Percentage of studied sample according to socio-demographic data of parents n=70

Socio-demographic data of parents	No.	%
Father		
Age (years)		
20-< 30	3	4. 3
30-< 40	40	57. 1
≥40	27	38. 6
$\overline{X}$±SD	38.43±10. 38	
Level of Education		
Preparatory	16	22. 9
Diploma	28	40. 0
University	26	37. 1
Mother		
Age (years)		
20-< 30	24	34. 3
30-< 40	39	55. 7
≥40	7	10. 0
$\overline{X}$±SD	32.57±8. 79	
Level of education		
Read and write	9	12. 9
Preparatory	5	7. 1
Diploma	30	42. 9
University	26	37. 1

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Table (2b): Number and Percentage of the studied sample according to socio-demographic data of parents n=70

Socio-demographic data of parents	No.	%
Family Number		
≤4	39	55.7
>4	31	44.3
Residence		
Rural	39	55.7
Urban	31	44.3
Family Income		
Enough	20	28.6
Not Enough	29	41.4
Enough and more	21	30.0
Caregiver		
Mother	32	45.7
Father and mother	38	54.3
Parent-child relationship		
Usual	36	51.4
Spoiled	20	28.6
Violent	14	20.0
Parent relationship		
Normal	52	74.3
Problem	18	25.7

Table (3): Distribution of parents according to level of stress n=70

Level of total stress (%)	No.	%	Chi-square test	
			χ2	p-value
Low stress <50	8	11.4	37.032	<0.001**
Average stress 50-75	22	31.4		
High stress >75	40	57.1		
Total	70	100.0		

Using: Chi-square test
*p-value >0. 05 NS; *p-value <0. 05 S; **p-value <0. 001 HS*

Table (4): Distribution of parents according to level of total sense of competence n=70

Level of Parents' Competence (%)	No.	%	Chi-square test	
			χ2	p-value
Low Competence >75	39	55.7	23.728	<0.001**
Average Competence 50-75	27	38.6		
High Competence <50	4	5.7		
Total	70	100.0		

Using: Chi-square test
*p-value >0. 05 NS; *p-value <0. 05 S; **p-value <0. 001 HS*

Discussion

As regards to the studied children sociodemographic characteristics the study results in table (1) showed that, the mean age of the studied children with LDs was 9.29 ± 2.51 and slightly less than two thirds of them were males. Also, it showed that more than two thirds were from governmental education. The researcher supposed that a higher median age at

diagnosis points to delayed referral and increases male ratio may be because of higher rates of comorbid disorders, including attention deficit hyperactivity disorder (ADHD).

Regarding socio-demographic data of the studied parents, the results in table (2a) illustrated that, the mean age of the studied fathers was 38.43±10.38 while, the mean age of the studied mothers was 32.57±8.79. Also, the study results showed that less than half of the studied fathers and mothers had diploma school.

Concerning socio-demographic data of family in table (2b), the study results showed that more than half of the studied family had less or equal 4 members, and from rural.

Also, the results in table (2b) revealed that more than one third of the studied family hadn't enough family income and less than one quarter of caregivers were fathers. The researcher can interpret the difference between fathers and mothers in parenting according to the time that the parents spend with their children. Furthermore, the little time spent from fathers with their children mostly because of working in addition to not having the same ability of giving and tolerating children as mothers.

Also, the study results in table (2b) illustrated that parent-child relationship was usual in more than half of families while more two third of parents had normal parent relationship. From the researcher point of view, this result might be due to great affection of fathers and mothers for their child.

In the light of this study findings table (3) revealed that there were more than half of parents of children with learning disabilities having high stress level. On the other hand, Malasian study has shown that families parenting a child with disabilities experience higher levels of stress compared to families with children with a typical development. Having a child with disabilities requires more effort and involvement from parents. The stress faced by families raising children with special needs may continue during adolescence and adult life of their children, influencing the quality of family relationships on a long term ***(Benjak, 2019).***

The results in table (4) also demonstrated that only low percent of parents of children with learning disabilities having high competence level Parents whose children have intellectual disability often encounter situations in which they feel helpless, frustrated and incompetent. Continuous feelings of frustration and

disappointment can lead parents to feel less satisfied with themselves as parents ***(Benatov, 2019).***

Conclusion

The current study concluded that parents of children with learning disabilities had high levels of psychological stress and low level of competencies.

Recommendations

The result of this study projected the following recommendations:

- Specialized supporting groups for both parents and learning disabled children, for rehabilitation and counseling.
- Implementing psychosocial interventions based on actual need assessement of children with learning disabilities and their children which lead to reduce their suffering, and improve quality of life.

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