Original Article

An Evaluation of Anxiety in Parents with Disabled Children and their Coping Strategies

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Abstract

Objective: This research was conducted to determine the anxiety levels and coping strategies of the parents who have handicapped children.
Methods: Study population included the of parents of 1163 handicapped children who were from 15 rehabilitation centers in a city of, which are working in cooperation with the Ministry of National Education. Of all 405 parents who included in the study and who had handicapped children were reached. Constant State-Trait Anxiety Inventory, Coping Strategies Scale and an information form used for the data collection. Study variables were presented as means and percentages. Data was analyzed with the use of chi-square test, student's t-test and one-way ANOVA.
Results: Mothers constitutes 78.5 % and fathers 21.5% of the study population. The parents mean age 38.0± 9.1 years. It was found that 42.2% of the handicapped children was in 7-14 year age-group, 55.3% of the handicapped children was boy and 57 % was in mentally handicapped category.
Conclusions: According to these results a statistically important difference was identified between the age , marital status, economic condition, education of the parents who have handicapped children, the age of the handicapped child and anxiety level. A relation was identified between handicapped children's parents status of being acknowledge by the neighbourhood, receiving psychiatric support, the status of sharing distress and anxiety levels. According to the results of the present work the level of the coping with distress was higher in the parents having handicapped child, who receive psychological and social support.

Key words: Coping strategies, Disabled, Parents, Children, Anxiety Levels

Introduction

The International Classification of Functioning, Disability and Health (ICF) defines disability as an umbrella term for impairments, activity limitations and participation restrictions. Disability is the interaction between individuals with a health condition (e.g. cerebral palsy, Down syndrome and depression) and personal and environmental factors (e.g. negative attitudes, inaccessible transportation and public buildings, and limited social supports). A disability is a condition or function judged to be significantly impaired relative to the usual standard of an individual or group. The term is used to refer to individual functioning, including physical impairment, sensory impairment, cognitive impairment, intellectual impairment mental illness, and various types of chronic disease (WHO 2016, Jones 2001).

When a new child joins the family, the family order and relations change giving new roles to family members. If the newcomer is an unhealthy child, however, this may cause stress and the family's sorrow and emotional reactions may intensify as the distance between the expectation of a healthy child and reality expands (Ozguven 2000).

According to the World Disability Report issued by the WHO in 2011, 15% of the world population, that is, approximately more than 1

billion people are estimated to live with a disability. The report states that there are 785 million (15.6%) disabled people aged 15 years and above, and 95 million children between 0 and 14 years of age living with a disability (WHO 2011).

In our country, 12.28% of the population is disabled as stated in the 2002 Disabled in Turkey survey of the Turkish Statistical Institute. According to the 2011 data from the National Disabled Platform of the World Disability Foundation, 8.5 million of the total population of Turkey, which is 72.5 million, is disabled. When these numbers are evaluated together with their families, disability is of great importance worldwide (TUIK, WDU).

Disability is an unchangeable and continuous condition. Therefore, meeting the needs of a disabled child can be much longer lasting and difficult for the parents. Studies have shown that a disabled child's needs for care and education, social attitude and judgments relating to disability as well as uncertainty about the child's present and future status are significant sources of stress and anxiety that the families have to face (Ozkan 2002).

Studies have reported that parents who have a disabled child are under more stress, have higher levels of anxiety and have lower levels of self-confidence, higher stigma, lower on self-esteem and harmony in marriage than parents who do not have any disabled children (Glidden & Schoolcraft 2003, With *et al.* 2003, Uguz *et al.* 2004, Ali et al 2012, Cantwell et al 2015).

The presence of a disabled child in the family is an emotional burden, a stressful life experience and a stressor that requires constant coping reactions for all family members. Looking at the studies on families with disabled children in the literature, upon the birth of a disabled child, families experience intense psychological disorders such as anxiety, stress, depression, anger, guilt, and shame (Olsson & Hwang 2001, Abbeduto *et al.* 2004, Baker *et al.* 2005, Powell *et al.* 2006, Singer 2006, Unsal *et al.* 2009, Cheshire *et al.* 2010, Kaya *et al.* 2010, Guillamo *et al.* 2012, Gallagher & Hannigan 2014, Miodrag et al 2015). Looking other studies on families with disabled children in the literature,

Such parents adopt avoidance, one of the emotion oriented coping mechanisms that denies the disability, and they lead an isolated life away from society. The studies in the literature demonstrate that coping strategies of families are dependent on the age of the disabled child and the process of the family's adaptation to the disability (Lin 2008). Nurses assume important roles in decreasing anxiety, which has negative effects on the behavioural, cognitive and emotional conditions of parents with disabled children, and in coordinating strategies for coping with anxiety (Ozida 2002).

Every family can be affected differently by having a disabled child due to the structure of the community they belong to, their own subjectivity, their personal characteristics and their sources of support. Giving care to a disabled child puts a great burden on the family; mothers in particular are affected from this much more. For this reason, there is a need in our country for studies dealing with families with disabled children (Aysan and Ozben 2007, Bahar et al. 2009, Natan 2007, Sardag 2010, Hatton 2010). The purpose of this research was to determine anxiety levels in parents with disabled children and assessing the strategies used to cope with such anxiety.

Materials and Method

The study was conducted in Malatya, a province in Turkey. The population in this descriptive research consisted of the families of 1163 children with disability registered at 15 private education and rehabilitation centres operating under the National Education in central Malatya between September 2011 and December 2011. 836 of these students were children with mental disability and 327 of them were children with physically disability.

From these 1163 children with disability, the parents of 405 disabled children who were chosen randomly using the stratified sampling method and were contacted. Of these children, 231 were children with mentally disability, 97 children with physically disability and 77 both children with mentally and physically disability.

Collection of Data

The data were collected using the questionnaire described above and was administered between September 2011 and December 2011 to the parents when they waited for their children at special training and rehabilitation centres as well as to other parents at their homes by way of face-to-face interviews held by the investigator after obtaining an appointment. The questionnaire was

administered to one of the parents of the disabled child in this study. The process took approximately 30 minutes for each parent.

Data collection tools

A questionnaire containing 25 questions was prepared by the investigator based on the literature. The questionnaire contained the State-Trait Anxiety Inventory developed by Spielberger (1970) and associates whose validity and reliability in Turkish were tested by Oner and Le Compte (1977). The Coping Strategy Indicator scale developed by Amirkhan (1990), which was adapted to Turkish and whose validity and reliability were tested by Aysan (1994), was also used in collecting data.

State-Trait Anxiety Inventory

Developed by Spielberger and associates, this inventory is divided into two subscales, state and trait, each consisting of 20 questions. The state anxiety scale measures how an individual feels at a certain moment and in particular circumstances and the trait anxiety scale measures how an individual feels irrespective of the state and circumstances the person is in. The feelings or behaviours expressed in the State Anxiety are answered on a scale from (1) not at all, (2) somewhat, (3) moderately so, and (4) very much so, depending on the severity of such experiences. They are marked on the Trait Anxiety as (1) almost never, (2) sometimes, (3) often, and (4) almost always. Higher scores indicate higher levels of anxiety and lower scores indicate lower levels of anxiety (Oner & Le Compte 1985). The State-Trait Anxiety Inventory has been used in many studies conducted across the world and in Turkey (Gungor 2008, Dogru & Aslan 2008, Coskun & Akkas 2009, Uyaroglu 2009, Guillamo 2012). They reported reliability coefficients between .94 –.96 for the Turkish version of the State Anxiety Inventory and .83–.87 for the Trait Anxiety Inventory (Oner & Le Compte , Aydemir & Koroglu 2000). The alpha value was .95 in this study.

Coping Strategy Indicator (CSI)

This scale consists of 3 subscales, namely Problem Solving, Social Support Seeking and Avoidance. There are 11 items in each subscale and the total subscale scores range between 11 and 33. There is a three-point Likert-type evaluation from (1) not at all, (2) a little and (3) a lot. Higher total subscale scores indicate an increase in the defined quality (Aysan 1994). CSI has been used in many studies conducted across the world and in Turkey (Keskin *et al.* 2010, Kara & Acikel 2011, Sarikaya 2011). Cronbach's alpha for the scale is .92. (Aysan 1994) and the alpha value in this study was .92.

Data analysis

Statistical analysis of the research data was conducted on a computer. Numbers, percentages, average chi-square, t-test and ANOVA variance analysis were used in evaluating the data. T-test, one-way variance analysis and Kruskall Wallis test were used in comparing independent variables such as socio-demographic data and continuous variables. The relationship between coping strategy and state-trait anxiety was analysed using Pearson correlation analysis.

Ethical Concerns of the Research

The permissions required to conduct the research were obtained from the Ethics Committee of Inonu University School of Medicine and Malatya Education Directorate. The mothers and fathers of disabled children were briefed about the research by the investigator and their verbal consents were obtained.

Results

Mothers comprised 78.5% and fathers 21.5% of those who were included in the research. The mean age of mothers and fathers was 38.00±9.1. 51.6% had a moderate economic status and 20.1% had a poor economic status. 39.8% of the mothers were graduates of primary school and 7.7% of them graduates of a university; 43% of the fathers were graduates of high-school and 16.3% of them graduates of a university. 42.2% of the disabled children were in the 7-14 age group, 55.3% of them were male, 57% were mentally disabled and 24% were physically disabled. 61.5% of the disabled children had a disability ratio of 70 or more, 36% of them between 40- 69. (The proportions of disability were classified according to the age and percentage of disability according to the disability research of the Turkish Statistics Institution for 2010) (Table 1).

Table1 : Demographic Characteristics of Parents of Children with Disabilities

Demographic Characteristics	n	%
Age group		
18-25 ages	44	10.9
26-35 ages	112	27.7
36-45 ages	167	41.2
46-55 ages	70	17.3
56-65 ages	12	3.0
Parent		
Mother	318	78.5
Father	87	21.5
Marital status		
Married	371	91.6
Divorced	34	8.4
Economic Status		
The good	114	28.1
The bad	82	20.2
The middle	209	51.6
Number of children		
1-3 children	288	71.1
4-6 children	101	24.9
7 and beyond	16	4.0
Maternal Education		
Illiterate	75	18.5
Literate	40	9.9
Primary Education	161	39.8
High School	98	24.2
University	31	7.7
Dad Education		
Illiterate	5	1.2
Literate	27	6.7
Primary Education	133	32.8
High School	174	43
University	66	16.3
Disability Demographics Distribution Regarding Children		
Disabled child's age		
0-6 age	125	30.9
7-14 age	171	42.2
15-24 age*	109	26.9
The sex of the disabled child		
Female	181	44.7
Male	224	55.3
Type of disability		
Physical	97	24
Mental	231	57
Both	77	19
Disability rate		
20-39	10	2.5
40-69	146	36.0
70 and above (* Turkish Statistics Institution 2010)	249	61.5

Table 2: Average Ratings Scales

VARIABLES	Mean.±S. D
State-Trait Anxiety Scale Scores	
The State Anxiety Scale	39.01±6.8
The Trait Anxiety Scale	45.56±9.7
Coping Strategies Scale Score (CSI)	
Problem Solving Score	25.96±4.4
Social Support Seeking Score	22.98±5.1
Avoidance Score	21.26±3.9

Table 3: State-Trait Anxiety Inventory and the relationship between the Coping Strategies Scale

VARIABLES	The State Anxiety		The Trait Anxiety	
	r	**p**	**r**	**p**
CSI				
Problem Solving	-0.43	0.388	-0.91	0.067
Social Support Seeking	0.15	0.758	-0.11	0.818
Avoidance	0.10	0.039*	0.18	0.000**

***: p<0.05, **:p<0.001**

Table 3: Comparison of demographic characteristics of parents and the troubles they have to face in their social lives due to the disability of their children with their anxiety level

Features	Count	State Anxiety	p	Trait Anxiety	p
Age Group					
18-25 age	44	38.47 (7.5)		42.45 (9.5)	
26-35 age	112	39.03 (6.9)	p=0.193[a]	44.06(10.0)	**p=0.036[a]**
36-45 age	167	38.77 (6.4)		46.25 (9.2)	
46-55 age	70	39.02 (6.4)		47.80 (9.3)	
56-65 age	12	44.25 (8.4)		48.41 (9.9)	
Parent					
Mother	318	39.25 (6.8)	p=0.185[b]	46.39(9.6)	**p=0.001[b]**
Father	87	38.16 (6.6)		42.54(9.8)	
Marital Status					
Married	372	38.63 (6.2)	**p=0.001[b]**	44.92 (9.4)	**p=0.001[b]**
Divorced	33	43.26 (10.9)		52.61(10.3)	
Economic Status					
The good	114	36.98 (6.8)		40.81(10.3)	
The bad	82	42.06 (8.1)	**p=0.001[b]**	50.67 (9.8)	**p=0.001[b]**
The middle	209	38.93 (5.7)		46.15 (8.1)	
Maternal Education					
Illiterate	75	39.42 (6.9)		47.10(10.6)	
Literate	40	39.37 (7.4)		46.62(10.2)	
Primary Education	161	39.34 (5.7)	p=0.351[c]	46.21 (7.5)	p=0.070[c]
High School	98	38.76 (6.9)		43.58(10.7)	
University	31	36.70 (9.6)		43.38(12.8)	
Dad Education					
Illiterate	5	44.40 (9.1)		49.40 (8.5)	
Literate	27	39.74 (5.4)		48.11 (9.1)	
Primary Education	133	39.87 (6.9)	p=0.097[a]	48.39 (8.6)	**p=0.001[a]**
High School	174	38.94 (6.6)		44.18 (9.9)	
University	66	36.78 (6.6)		42.18(10.2)	
Blame					
Yes	92	39.26(7.5)		47.16(10.9)	
No	313	38.94(6.5)	p=0.688[b]	45.09 (9.3)	p=0.073[b]
Share The Troubles					
Share with your peers	132	38.84(6.1)		44.71 (9.2)	**p=0.041[a]**
With Children	25	37.48(6.2)	p=0.694[a]	43.56(10.4)	
Their Families	77	38.59(5.8)		44.94 (9.7)	
With Friends	31	38.00(9.3)		42.13(12.1)	
No One	141	39.90(7.3)		47.79 (9.1)	
Acceptance Of The Disabled Child By The Community			**p=0.003[b]**		**p=0.001[b]**
Yes	260	38.23(6.3)		44.12(9.5)	
No	145	40.33(7.3)		47.98(9.6)	
Receiving Psychiatric Support			**p=0.008[b]**		**p=0.002[b]**
Yes	97	37.41(7.2)		42.95(11.0)	
No	308	39.52(6.6)		46.38 (9.2)	
Type of disability					
Physical	97	38.96(8.3)		43.60(11.9)	
Mental	231	38.61(5.5)	p=0.165[c]	46.15 (8.5)	p=0.077[c]
Both	77	40.31(7.9)		46.19 (9.8)	

[a] Kruskal- Wallis, [b] Unpaired t test, [c] ANOVA test

Table 4: Comparison of demographic characteristics of parents and the troubles they have to face in their social lives due to the disability of their children with their coping strategies

FEATURES	Count	COPİNG STRATEGİES					
		Problem Solving	p	Social Support Seeking	p	Avoidance	p
Age Group							
18-25 age	44	24.56(4.4)		23.1 (4.8)		22.02(3.8)	
26-35 age	112	26.57(4.4)	**p=0.001[a]**	23.24(5.3)	p=0.105[a]	21.55(3.9)	p=0.227[a]
36-45 age	167	26.62(4.3)		23.46(4.8)		21.27(3.9)	
46-55 age	70	24.62(4.5)		21.52(5.2)		20.21(3.7)	
56-65 age	12	24.08(3.7)		21.83(5.3)		21.25(4.9)	
Parent			p=0.402[b]				
Mother	318	25.86(4.4)		23.29(4.8)	**p=0.019[b]**	21.57(3.5)	**p=0.002[b]**
Father	87	26.32(4.7)		21.85(5.8)		20.13(4.8)	
Marital Status				22.93(5.1)		21.25(3.9)	
Married	372	25.93(4.4)	p=0.655[b]	23.58(5.0)	p=0.475[b]	21.41(3.9)	p=0.822[b]
Divorced	33	26.29(4.8)					
Economic Status							
The good			**p=0.007[c]**		**p=.044[c]**		p=0.780[c]
The bad	114	26.58(4.5)		23.77(5.0)		21.01(4.8)	
The middle	209	26.15(4.4)		22.97(5.1)		21.07(3.9)	
	82	24.62(4.3)		21.92(4.9)		21.41(3.7)	
Maternal Education							
Illiterate	75	25.48(4.6)		22.82(5.5)	p=0.744[c]	22.02(3.8)	p=0.103[c]
Literate	40	25.00(4.0)	p=0.430[c]	22.55(4.4)		20.82(3.7)	
PrimaryEduc.	161	26.20(4.4)		23.10(5.0)		20.88(3.8)	
High School	98	26.17(4.4)		23.32(4.2)		20.75(4.2)	
University	31	26.48(4.7)		22.09(4.5)		20.45(3.9)	
Dad Education							
Illiterate	5	24.20(3.2)		22.80(1.6)		23.80(1.0)	
Literate	27	25.11(4.8)	p=0.067[a]	23.70(4.9)	p=0.870[a]	21.62(3.8)	p=0.230[a]
PrimaryEduc.	133	25.21(4.4)		22.54(5.0)		21.32(3.4)	
High School	174	26.15(4.2)		23.25(5.0)		21.39(4.2)	
University	66	27.06(4.7)		22.90(5.0)		20.48(4.1)	
Blame							
Yes	92	25.02(4.2)	**p=0.020[b]**	23.55(4.6)	p=0.220[b]	22.31(3.6)	**p=0.003[b]**
No	313	26.24(4.5)		22.85(5.2)		20.95(3.9)	
Share The Troubles							**p=0.035[a]**
Share with your					**p=0.001[a]**		
peers	132	26.81(4.0)	**p=0.001[a]**	23.40(4.9)		21.06(4.1)	
With Children	25	24.81(5.0)		22.04(4.7)		19.80(2.9)	
Families With	77	26.74(4.1)		24.09(5.2)		21.27(3.4)	
Friends	31	26.73(4.6)		26.06(4.2		21.38(4.0)	
No One	141	24.64(4.5)		21.51(4.9)		22.83(4.0)	
Acceptance Of The Disabled Child By The Community							**p=0.001[b]**
Yes	260	26.42(4.4)	**p=0.008[b]**	23.11(5.3)	p=0.519[b]	20.49(3.8)	
No	145	25.19(4.4)		22.77(4.7)		22.56(3.7)	
Receiving Psychiatric Support			**p=0.020[b]**		**p=0.003[b]**		p=0.748[b]

Yes	97	26.88(4.1)		24.32(5.0)		21.15(3.8)	
No	308	25.67(4.5)		22.56(5.1)		21.30(3.9)	
Type of disability							
Physical	97	25.98(4.5)		23.3(5.1)		20.89(3.9)	
Mental	231	25.83(4.1)	p=0.939[c]	23.09(4.9)	p=0.880[c]	21.27(3.6)	
Both	77	26.06(4.7)		22.72(5.2)		22.14(4.1)	**p=0.032[c]**

[a] Kruskal- Wallis, [b] Unpaired t test, [c] ANOVA test

Looking at the mean scores of the scales used in this research, the mean state anxiety score was 39.01±6.8 and the mean trait anxiety score was 45.56±9.7, the mean problem solving score was 25.96±4.4, the mean social support seeking score was 22.98±5.1, and the mean avoidance score was 21.26±3.9 (Table 2).

According to the results of the Pearson Correlation Analysis, examining the relationship between the strategies of coping with anxiety, there was a positive relationship between state anxiety and avoidance subscale (p=0.039, r=0.10) and a positive relationship between trait anxiety and avoidance (p=0.000, r=0.18) (Table 3).

A positive relationship was observed in the study between the ages of parents and the level of trait anxiety (p<0.05). The level of trait anxiety was higher in mothers (p<0.05). There was a positive relationship between being a single (divorced) parent and state-trait anxiety (p<0.05). A negative relationship was found between the economic status of parents and the level of their state-trait anxiety (p<0.05). There was also a negative relationship between fathers' level of education and their trait anxiety (p<0.05). Parents who were blamed by people around them had high trait anxiety (p<0.05). Parents whose disabled children were rejected by people around them were observed to have high state-trait anxiety (p<0.05).

There was a negative relationship between psychiatric support received by parents and their state-trait anxiety (p<0.05). No significant relationship was found between the type of disability the child had and anxieties of the parents (p>0.05) (Table 4).

According to the study, parents in the 26-45 age group had better problem-solving skills (p<0.05). Mothers were found to use the social support seeking and avoidant coping strategies more (p<0.05). There was a positive relationship between parents' economic statuses and their problem-solving and social support seeking strategies (p<0.05). The study showed that parents who were blamed for having disabled children used problem-solving strategies less and avoidance strategies more (p<0.05). Parents who did not share their difficulties used problem-solving and social support seeking strategies less and avoidance strategies more (p<0.05). Parents whose disabled children were accepted by the community used problem-solving strategies more and avoidance strategies less (p<0.05). Parents who received psychiatric support had better problem-solving and social support seeking skills (p<0.05). A significant relationship was found between the type of disability and avoidance subscale (p<0.05) (Table 5).

Discussion

In our research, we found that parents with disabled children had higher levels of trait anxiety and they used the problem solving method to cope with it. In a study by Keskin, parents who had higher levels of state anxiety used the problem solving strategy to cope with it (Keskin *et al.* 2010) (Table 2).

A positive relationship was found in the research between state-trait anxiety and the avoidance subscale. In the study by Keskin, a negative relationship was found between state-trait anxiety and problem solving ability and between state anxiety and social support seeking (Keskin *et al.* 2010) (Table 3).

A significant relationship was found in the research between the parents' age groups, and their trait anxiety levels and using problem solving as their coping strategy. It was also observed that as the ages of parents advanced, their state and trait anxiety scores increased and those parents in the 26-45 age group had better problem solving skills (Table 4, 5). Coskun and Akbas found a significant relationship between the age group of mothers with disabled children and their trait anxiety levels (Coskun & Akkas 2009). However, no significant relationship was

found between the ages of mothers and their state and trait anxiety levels in the study conducted by Dogru and Arslan (Dogru & Aslan 2008).

A significant relationship was found between the gender of parents with disabled children and their trait anxiety as well as social support seeking and avoidance as their coping strategies. Accordingly, the mean scores of mothers were higher than fathers in state-trait anxiety as well as in social support seeking and avoidance as coping strategies. Kullu, Marvin and Gungor also found in their study that mothers with disabled children had more psychological troubles than fathers (Marvin 2001, Gungor 2008, Kullu 2008). Francis research has indicated that mothers more than fathers report higher stigma (Francis 2012). Sarikaya found that mothers with mentally disabled children tried to seek more social support than fathers (Sarikaya 2011).

A statistically significant relationship was found in the research between marital status and anxiety levels. Accordingly, single parents were found to have higher state and trait anxiety scores than those who were married. Kullu, Olsson and Hwang reported in their studies that those parents of disabled children who were not married were more exposed to stress and depression (Kullu 2008, Olsson & Hwang 2001). Kwoket found that stigma is associated with burden, marital satisfaction (Kwok et al.2014).

A statistically significant relationship was found in the research between marital status and anxiety levels. Accordingly, single parents were found to have higher state and trait anxiety scores than those who were married. Kullu, Olsson and Hwang reported in their studies that those parents of disabled children who were not married were more exposed to stress and depression (Kullu 2008, Olsson & Hwang 2001). Accordingly, the fact that a single parent has to look after a disabled child and to perform all the activities that need to be performed in daily life may be the reasons for increased worry, anxiety and depression in single parents.

A significant relationship was found in the research between the economic status of the parents and their state-trait anxiety levels as well as their coping strategies of problem solving and social support seeking. According to these findings, as the economic status increased, the anxiety levels of parents decreased and their problem solving and social support skills improved. Dogru, Arslan, Gungor, Coskun and associates found in their study that there was a significant relationship between the economic statuses of parents and their anxiety levels (Dogru & Aslan 2001, Gungor 2008, Coskun & Akkas 2009).

A significant relationship was found in the research between sharing troubles experienced by parents and their trait anxiety levels as well as problem solving, social support seeking and avoidance subscales. Those parents who had shared their troubles had lower scores of state-trait anxiety and higher scores of problem solving and social support seeking. Kullu and Isikhan found that parents who had shared their troubles had lower levels of depression (Isikhan 2005, Kullu 2008).

A significant relationship was found in the research between acceptance of the disabled child by the community and the state-trait anxiety levels of parents as well as their problem solving and avoidance strategies. Those parents whose disabled child had not been accepted by the community had higher scores of anxiety and lower scores of problem solving and social support seeking. In the study by Keskin, parents who experienced the distress of their disabled children not being accepted by the community had higher anxiety and social support seeking scores as compared to others (Keskin *et al.* 2010). In the literature, parents who higher social support reported less caregiver stigma and less depressive symptomology (Cantwell 2015, Siklos and Kerrns 2006, Feldman et al. 2002).

A significant relationship was found in our research between receiving psychiatric support by the parents and their anxiety levels as well as their problem solving and social support seeking strategies. Those parents who had received psychiatric support had lower levels of anxiety and their problem solving and social support seeking skills had improved greatly. In the study by Keskin, there was a significant difference between mothers' statuses of receiving psychiatric support and their state-trait anxiety levels and problem solving strategies (Keskin *et al.* 2010). In the study by Cantwell et al, stigma has been found to impact psychological health both through reducing coping effectiveness and also through isolation; both of these are extremely harmful to parents of children with disabilities (Cantwell et al 2015).

No significant relationship was found between the child's type of disability and their parents'

state anxiety or trait anxiety. However, those parents who had children with both types of disability were observed to have higher state and trait anxiety scores. In the study by Dereli, the parents who had children with both mental and physical disabilities had higher depression scores, but there was no statistically significant difference between the child's type of disability and their family's depression level (Dereli & Okur 2008). In the literature, mothers of mentally disabled children experienced stress more frequently than the mothers of children with other types of disabilities (Hayden & Goldman 1996, Rodriguez & Murphy 1997). Having children with both mental and physical disabilities may be a more traumatic and hard-to-accept situation for parents.

A significant relationship was found in our research between blamed of parents with disabled children by the community, and problem solving and avoidance subscales. According to these findings, those parents who had been blamed by the community had higher scores of social support seeking and avoidance.

A significant relationship was found in our study between the child's type of disability and avoidance subscale. The parents who had both physical and mental disabilities in their children were observed using the avoidance strategy more often. Accordingly, since having children with both mental and physical disabilities constitutes a hard-to-accept condition for parents with disabled children and receive blame from those who surround them, this may have resulted in their resorting to the avoidance strategy more often. In the study by Keskin, there was a significant difference between mothers' statuses of receiving psychiatric support and their state-trait anxiety levels and problem solving strategies (Keskin *et al.* 2010).

Limitations of the Research and Generalizability

This study was conducted in a 15 private education and rehabilitation centres operating under the National Education in central Malatya and therefore cannot be considered as representative of Turkey.

Conclusion and Suggestions

According to these results, a significant relationship was found between the age, gender, marital status and economic status of parents with disabled children and their anxiety levels. A statistically significant relationship was found between the age, gender and economic status of parents with disabled children and their coping strategies. Those parents with disabled children who received psychiatric and social support were found to have higher levels of coping with their anxiety. Those parents with an increased level of anxiety used the avoidance strategy more often. It may be suggested that public health nurses should inform society about disabilities and those parents with disabled children about their problems, encourage more positive and welcoming approaches to disabled children by contributing to social awareness, promoting sharing of problems among close relatives, friends, families of other disabled children, social environment and expert people who were educated in this subject in order to reduce the anxiety experienced by parents. A significant relationship in the positive direction was found between the type of disability and the avoidance subscale for coping strategy. Therefore, the families of children with mental and physical disabilities should be given more psychosocial support to enable them to help their children cope with their mental and physical insufficiency and relieve their anxiety. Nurses can raise awareness in people about disabilities and problems of families with disabled children during home visits, in schools and when they come to healthcare institutions. A larger sample from many and different university departments could provide us more reliable results.

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