

# Relationship between Perceived Social Support, Depressive Symptoms and Hopelessness Levels of Caregivers of Children with Disabilities

Engelli Çocuğu Olan Bireylerin Depresyon ve Umutsuzluk Düzeyleri ile Algılanan Sosyal Destek Arasındaki İlişki

Melek Aytekin<sup>1</sup>, Nurgül Özdemir<sup>2</sup>, Şengül Kocamer Şahin<sup>3</sup>

<sup>1</sup> Student of Psychiatric Nursing- Gaziantep Children and Obstetrics and Gynecology Hospital, Gaziantep, Turkey

<sup>2</sup> Gaziantep University, Faculty of Health Science, Department of Psychiatric Nursing, Gaziantep

<sup>3</sup> Gaziantep University, Faculty of Medicine, Department of Psychiatry, Gaziantep, Turkey

Yazışma Adresi / Correspondence:

Şengül Kocamer Şahin

Gaziantep University, Faculty of Medicine, Department of Psychiatry, Üniversite avenue- 27310 Şehitkamil, Gaziantep, Turkey

T: +90 342 360 12 00 E-mail : snglkcmr@hotmail.com

Geliş Tarihi / Received : 20.08.2020 Kabul Tarihi / Accepted : 31.12.2020

Orcid :

Melek Aytekin, <https://orcid.org/0000-0003-4905-3149>

Nurgül Özdemir <https://orcid.org/0000-0002-9466-1357>

Şengül Kocaman Şahin <https://orcid.org/0000-0002-5371-3907>

(Sakarya Tıp Dergisi / Sakarya Med J 2021, 11(1):15-24) DOI: 10.31832/smj.779706

## Abstract

Objective	Disability not only affects the disabled child. It also has psychological and social impacts on family members and caregivers. The purpose of the study was to determine the relationship between severity of depressive symptoms and hopelessness levels of caregivers of children with disabilities and their perceived social support.
Materials and Methods	A total of 205 caregivers of disabled children were included in this cross-sectional study. A 'sociodemographic questionnaire', 'Beck Depression Scale', 'Beck Hopelessness Scale' and 'Multidimensional Perceived Social Support Scale' were used to assess the subjects in this cross-sectional study. Direct and indirect effects of a predictor in path models of mediation and moderation were calculated. The bootstrapping method has been used to calculate confidence intervals for indirect effects.
Results	It was determined that the hopelessness levels were high ( $r = 0.594, p < .001$ ) for individuals with high levels of depressive symptoms, the perceived social support was low for caregivers with high hopelessness levels ( $r = -0.149, p = .033$ ), and that the perceived social support levels were low for caregivers with high levels of depressive symptoms ( $r = -0.128, p = .068$ ). It was shown that hopelessness increases, and depression develops indirectly with decreasing psychosocial support.
Conclusion	This study reveals the importance of perceived social support in the development of hopelessness and depression, which increase the burden of caregivers. Increasing the psychosocial support systems of caregivers of children with disabilities can reduce their levels of hopelessness and depression and increase their ability to care.
Keywords	Depression; Disability; Caregiver; Hopelessness; Perceived social support

## Öz

Amaç	Engellilik sadece engelli çocuğu etkilemez. Aynı zamanda aile üyeleri ve bakıcılar üzerinde psikolojik ve sosyal etkileri vardır. Bu çalışmada, engelli çocuğu olan bireylerin depresyon ve umutsuzluk düzeyleri ile algılanan sosyal destek arasındaki ilişkinin belirlenmesi amaçlanmıştır.
Gereç ve Yöntemler	Kesitsel tipteki bu çalışmaya toplam 205 engelli çocuğu olan birey dahil edildi. Değerlendirme için "sosyodemografik anket", "Beck Depresyon Ölçeği", "Beck Umutsuzluk Ölçeği" ve "Çok Boyutlu Algılanan Sosyal Destek Ölçeği" kullanıldı. Mediasyon ve moderasyon yol modellerinde bir yordayıcının doğrudan ve dolaylı etkileri hesaplandı. Bootstrapping yöntemi, dolaylı etkiler için güven aralıklarını hesaplamak için kullanıldı.
Bulgular	Engelli çocuğu olan bireylerde ölçek toplam puan ortalamaları; Beck Depresyon Ölçeği $21,53 \pm 12,82$ , Beck Umutsuzluk Ölçeği $9,21 \pm 4,75$ , Çok boyutlu algılanan sosyal destek ölçeği $44,72 \pm 15,72$ olarak saptandı. Depresyon düzeyi yüksek olan bireylerin umutsuzluk düzeylerinin yüksek ( $r = 0,594, p = 0,000$ ), umutsuzluk düzeyleri yüksek olan bireylerin algıladıkları sosyal desteğin düşük olduğu ( $r = -0,149, p = 0,033$ ), depresyon düzeyleri yüksek olan bireylerin algıladıkları sosyal destek düzeylerinin düşük olduğu ( $r = -0,128, p = 0,068$ ) saptandı. Bireylerin depresyon, umutsuzluk ve algıladıkları sosyal destek düzeyleri ile engelli çocuklarının bakımlarını karşılayabilme ve çocuklarıyla yeterince ilgilenilme durumları arasında istatistiksel olarak anlamlı bir fark olduğu saptandı ( $p < 0,05$ ).
Sonuç	Bu çalışma, bakım verenlerin yükünü artıran umutsuzluk ve depresyon gelişiminde algılanan sosyal desteğin önemini ortaya koymaktadır. Engelli çocukların bakım verenlerinin psikosozyal destek sistemlerinin artırılması, umutsuzluk ve depresyon düzeylerini azaltabilir ve bakım yeteneklerini artırabilir.
Anahtar Kelimeler	Depresyon; Engellilik; Bakımveren; Umutsuzluk; Algılanan sosyal destek

## INTRODUCTION

Disability is defined as the inability of an individual to continue his/her life naturally because of flaws in their mental, physical and psychological behaviours and their innate deficiencies and defects.<sup>1,2</sup> According to the World Health Organisation, disability is defined as an impairment or limitation in the healthy development of the bodily functions of an individual and the execution of these bodily functions.<sup>3</sup>

Social support is defined as psychological and instrumental resources provided by social networks for an individual to cope with stress.<sup>4</sup> It can be stated that the perceived social support is quite high for an individual who believes that he/she is loved and respected by others and that there are other people he/she can receive help from when necessary and who thinks that his/her relationships provide satisfaction.<sup>5</sup>

Hopelessness involves negative expectations for the future and negative assessments related to the future.<sup>6</sup> Severity of depressive symptoms and hopelessness are directly proportional.<sup>7</sup> Other symptoms that accompany hopelessness are symptoms observed in major depression, such as unhappiness, despair, guilt, inability to work, inability to make decisions and inaction.<sup>8</sup>

Disability not only affects the disabled child. It also has physiological, psychological and social impacts on family members and caregivers, and may cause various problems.<sup>9</sup> Studies which put forth this change indicate that there are breakdowns in the social lives, professional lives and family relations of families with disabled children.<sup>10</sup>

Cultural and ethnic differences in parenting styles in different countries<sup>11</sup> are also expected to manifest in the care of children with disabilities. Parents in Turkey have different hurdles to overcome when providing care to their children with intellectual disabilities that are different from those in other Western countries.<sup>12</sup> In the traditional culture of Tur-

key, where interdependence is emphasised, authoritarian parenting - which provides a high degree of control over children - is at the forefront.<sup>13</sup> This culture may cause individuals to be more dependent on their parents. However, from a more favourable perspective, individuals who grow up with responsibility and duty awareness, strive more to provide support for their families and relatives if these efforts do not transform into oppression.<sup>14</sup> The emotions caused by disabled children in parents are also closely related to the reactions of people in their immediate circle, such as relatives and friends.<sup>15,16</sup> Things may get even more complicated as a result of these reactions.<sup>16,17</sup>

The purpose of the present study was to determine the relationship between severity of depressive symptoms, hopelessness levels and perceived social support in individuals with disabled children. A hypothesis was developed to determine the directions of relationships: As psychosocial support decreases, hopelessness increases and depression develops indirectly.

## MATERIALS and METHODS

### Study population

This was a cross-sectional descriptive study. Individuals who applied to pediatric outpatient or whose children hospitalized in pediatric clinic of the Ministry Of Health Gaziantep Obstetrics and Gynecology and Children Hospital during the dates of February 2017 to April 2018 for treatment of their disabled children comprised the study population. Parents of children with physical and/or intellectual disabilities were included in the study. Physical disabled children are selected as who needs some form of mobility aid, such as walker, crutches and/or wheelchairs. The diagnosis of intellectual disability had been made according to the DSM 5, and a clinical examination was performed by a psychiatrist. Verbal communication barriers (hearing and speaking) in the individual with the disabled child were considered as exclusion criteria. Interviews were conducted individually with the parents of the disabled children, and those who agreed to participate in the study were in-

formed about the study by a psychiatric nurse.

### Procedure

The purpose of the study was explained to the participants after which they were informed that participation was entirely voluntary and that they could opt-out whenever they wished to do so. In addition, they were asked to fill in the 'Informed Consent Form', 'Personal Information Form' as well as the 'Beck Depression Scale', 'Beck Hopelessness Scale' and 'Multidimensional Scale of Perceived Social Support'.

### Data Acquisition Tools

**Beck Depression Scale (BDS):** Beck et al. (1961) developed the BDS for measuring the behavioural findings of depression in adolescents and adults.<sup>18</sup> It is a self-assessment scale comprising 21 multiple-choice questions used for measuring the risk, level and severity of depression in both healthy individuals and those with depression. Each item contains four options listed in the order of emotional severity and is scored between 0 and 3. Hisli et al. carried out the Turkish adaptation of the BDS as well as the required validity and reliability studies.<sup>19</sup> Cronbach's alpha was 0.91. Studies were conducted with polyclinic patients to determine the breakpoints of the BDS. It was observed as a result of the study that BDS scores of 17 and above can distinguish depression that requires treatment at an accuracy of above 90%.<sup>20</sup>

**Beck Hopelessness Scale (BHS):** This scale was developed by Beck et al. to measure the pessimism level of the individual related to the future as well as negative expectations.<sup>21</sup> Seber carried out the translation, validity and reliability studies for the BHS as a result of which an  $\alpha$  value of 0.86 was determined.<sup>22</sup> Durak (1994) conducted studies on the scale afterwards and acquired more detailed information on its validity, reliability and factor structure.<sup>23</sup> It was reported that hopelessness was not the case for those with scores ranging between 0 and 3, a slight hopelessness existed for individuals with scores ranging between 4 and

8, a moderate level of hopelessness was present for those with scores ranging between 9 and 14 and individuals with scores ranging between 15 and 20 had high levels of hopelessness.<sup>24</sup>

**Multidimensional Scale of Perceived Social Support (MSPSS):** Eker et al. worked on the factor structure, validity and reliability of the revised scale.<sup>25,26</sup> Cronbach's alpha was 0.89 in total evaluation. The MSPSS is a scale comprised of 12 items. Each contains three groups of four items related to the source of the support. These are 'family', 'friends' and 'significant other'. Each item was scored with a 7-point Likert scale. The sub-scale score is obtained by summing the scores of the four items in each sub-scale, and the total scale score is calculated by adding up the scores for each of the sub-scales. High scores indicate that perceived social support is high.

### Statistical Analysis

The compliance of the data with a normal distribution was tested via the Shapiro-Wilk test. The Student t-test was used for comparing the properties with a normal distribution in the two independent groups, and the Mann-Whitney U test was used for comparing the properties without normal distribution in the two independent groups. In addition, a one-way analysis of variance and Fisher's least significant difference multiple comparison tests were used for properties with normal distributions in the comparison of numerical data in more than two independent groups, whereas the Kruskal-Wallis test and all multiple pairwise comparison tests were used for properties without normal distribution. We calculated the direct and indirect effects of a predictor in path models of mediation and moderation. The bootstrapping method was used to calculate confidence intervals for the indirect effects. Mediation models are extended regression models that make the effect of particular covariates in the model explicit. Moderation was performed by multiplying the predictor variables. The relationships between the numerical variables were tested via the Spearman correlation coefficient. Cronbach alpha

coefficients were calculated for testing reliability. The average  $\pm$  standard deviation was used for numerical variables as descriptive statistics, whereas the number and percentage values were presented for categorical variables. SPSS Windows version 24.0 package software was used for statistical analyses, and  $P < .05$  was accepted as statistically significant.

Written approvals were obtained before the study from Gaziantep University Clinical Studies Ethics Council and Gaziantep University Union of Public Hospitals General Directorate (Ethical Code: 27.02.2017 / 65). Explanations were made to the individuals who participated in the study regarding the purpose of the study and the content of the forms after which their verbal consent was taken, and they were asked to sign a written voluntary consent form.

## RESULTS

A total of 205 individuals with disabled children consisting of 167 mothers and 38 fathers participated in the study. It was determined that 28.8% of the participants were older than 40 years, 86.3% were married, and 34.1% were primary school graduates. It was observed that 68.8% of individuals did not have social security, 29.3% were relatives with their spouses, and 32.7% had a daughter, and 34.1% had a son. Table 1 presents the frequency and percentage values for the sociodemographic characteristics of individuals with disabled children.

VARIABLES	n	%
<b>Age</b>		
18-24	26	12.6
25-29	34	16.6
30-34	43	21.0
35-39	43	21.0
40 and above	59	28.8
<b>Gender</b>		
Female	167	81.5
Male	38	18.5
<b>Marital Status</b>		
Married	177	86.3
Single	28	13.7
<b>Education Status</b>		
Not literate	54	26.3
Primary School	98	47.8
High School	37	18.
University	16	7.8
<b>Kindredship Among Spouses</b>		
Yes	60	29.3
No	145	70.7
<b>Physical Disability</b>		
Yes	7	3.4
No	198	96.6

Of the disabled children, 53.2% were male, 32.7% were in the 4 to 6 years age interval, 73.7% were receiving care from private rehabilitation centres (Table 2).

**Table 2.** Socio-Demographic Characteristics of Individuals with Disabled Children which are related to their Disabled Children

VARIABLES	n	%
<b>Gender of the Disabled Child</b>		
Female	96	46.8
Male	109	53.2
<b>Age of the Disabled Child</b>		
0-3	39	19.0
4-6	67	32.7
7-12	46	22.4
12-15	35	17.1
16-18	18	8.8
<b>Disabled Child receiving care from private rehabilitation centres</b>		
Yes	151	73.7
No	54	26.3

It was determined that 54.1% of parents received specialist support for their disabled children, 37.6% did not have sufficient knowledge on the status of their disabled children, 31.2% did not deal with the care of their children at a sufficient level, 47.3% could not meet the financial needs associated with the care of their disabled child, 61.5% did not receive state support for the care of their disabled child, 54.1% could not properly spare time for their other children because they have a disabled child, 84.4% had accepted the disability of their children as a family and that 71.2% felt guilty for the disability of their children. It was determined that the people in the immediate circle of 46.8% of the individuals distanced themselves because of the disability of the child, that 79.5% experienced feelings of shame because of the disability of their child since they go out to different social environments with their disabled child. Also, around 53.7% of the participants display negative attitudes and behaviours towards the disabled child, and 80.0% have concerns related to the future of their disabled child.

The average BDS total score for individuals with disabled children was determined as  $21.53 \pm 12.82$ , BHS was  $9.21 \pm 4.75$  and MSPSS was  $44.72 \pm 15.72$ . Table 3 presents the average total scores and sub-scales scores of the BDS, BHS and MSPSS.

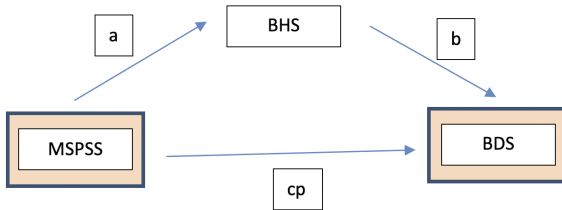
**Table 3.** Beck Depression Scale, Beck Hopelessness Scale and Sub-Scales, Multidimensional Perceived Social Support Scale and Sub-Scales Total Score Averages (s=205)

	x $\pm$ S.d.	Min.	Max.
Beck Depression Scale	$21.53 \pm 12.82$	0.00	63.00
<b>Beck Hopelessness Scale</b>			
Hope	$3.22 \pm 2.09$	0.00	7.00
Feelings and Expectations About the Future	$2.01 \pm 1.67$	0.00	5.00
Loss of Motivation	$3.98 \pm 2.12$	0.00	8.00
Total BHS Score Average	$9.21 \pm 4.75$	0.00	20.00
<b>MSPSS and Sub-Scales</b>			
Family	$17.19 \pm 6.67$	4.00	28.00
Friend	$14.65 \pm 6.75$	4.00	28.00
Significant Other	$12.89 \pm 6.34$	4.00	28.00
Total MSPSS Score Average	$44.72 \pm 15.72$	12.00	84.00
x $\pm$ S.d.: Mean $\pm$ Standard deviation, MPSS: Multidimensional Perceived Social Support Scale			

A positive and statistically significant relationship was determined between the BDS and BHS applied to individuals with disabled children ( $r = 0.594$ ,  $p = .000$ ). No correlation was determined between the BDS and MSPSS ( $r = -0.128$ ,  $p = .068$ ). A negative and statistically significant relationship was determined between the MSPSS and BHS ( $r = -0.149$ ,  $p = .033$ ).

We tested the hypothesis that BHS mediates the relationship between the MSPSS and BDS where decreases in the MSPSS improve the BHS, which in turn increases the BDS. In other words, increases in the MSPSS were associated with decreases in the BDS indirectly through decreases

in the BHS (Figure 1). Specifically, for every 0.055 ( $a = -0.055$ , Std. = 0.021) unit decrease in the association between the MSPSS and BHS, there was a 0.084 decrease in the BDS ( $a = -0.084$ , Std. = 0.033). (Exogenous variable: MSPSS, Mediator variable: BHS, Endogenous variable: BDS) (Table 4).



BDS: Beck Depression Scale, BHS: Beck Hopelessness Scale, MPSS: Multidimensional Perceived Social Support Scale, a: relationship direction from MSPSS to BDS b: relationship direction from BHS to BDS cp: relationship direction from MSPSS to BDS

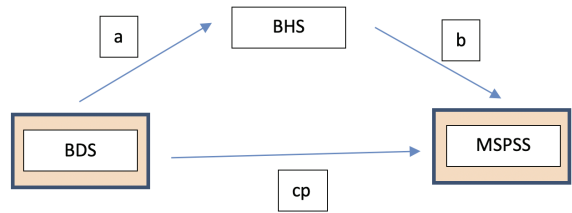
Figure 1: Mediation model between Beck Depression Scale, Beck Hopelessness Scale, Multidimensional Perceived Social Support Scale

		Estimates	Std. Err.	Z	p-value
BDS	BHS (b)	1.527	0.157	9.751	<0.001
	MSPSS (cp)	-0.038	0.047	-0.793	0.428
BHS	MSPSS (a)	-0.055	0.021	-2.645	0.008
a*b	Indirect Effect (ab)	-0.084	0.033	-2.552	0.011*

BDS: Beck Depression Scale, BHS: Beck Hopelessness Scale, MPSS: Multidimensional Perceived Social Support Scale

On the other hand, we also tested another hypothesis that assumed the BHS still mediates the relationship between the MSPSS and BDS where increases in the BDS improve the BHS, which in turn increase the MSPSS (Figure 2). We

were not able to prove that either the BDS has a direct or an indirect effect on the MSPSS (0.428 and 0.091, p-values of direct and indirect effects, respectively) (Exogenous variable: BDS, Mediator variable: BHS, Endogenous variable: MSPSS) (Table 5).



BDS: Beck Depression Scale, BHS: Beck Hopelessness Scale, MPSS: Multidimensional Perceived Social Support Scale a: relationship direction from BDS to BHS b: relationship direction from BHS to MSPSS cp: relationship direction from BDS to MSPSS

Figure 2: Mediation model between Beck Depression Scale, Beck Hopelessness Scale, Multidimensional Perceived Social Support Scale

		Estimates	Std. Err.	Z	p-value
MSPSS	BHS (b)	-0.474	0.277	-1.712	0.087
	BDS (cp)	-0.081	0.103	-0.793	0.428
BHS	BDS (a)	0.213	0.021	10.047	<0.001
a*b	Indirect Effect (ab)	-0.101	0.06	-1.688	0.091

BDS: Beck Depression Scale, BHS: Beck Hopelessness Scale, MPSS: Multidimensional Perceived Social Support Scale

It was determined that 68.8% of individuals with disabled children might take care of their children sufficiently. A statistically significant difference was determined between the average BDS, BHS and MSPSS total scores of individuals who are and are not able to take care of their children sufficiently ( $p < .05$ ). Table 6 presents the comparison of the average BDS, BHS and MSPSS total scores for individ-

**Table 6.** Comparison of the Beck Depression Scale, Beck Hopelessness Scale and Multidimensional Perceived Social Support Scale Total Score Averages for Individuals with Disabled Children with regard to whether they are able to take care of their children sufficiently or not (s=205)

Taking Sufficient Care of Disabled Child	n	%	Beck Depression Scale x ±S.d.	Beck Hopelessness Scale x ±S.d.	Multidimensional Perceived Social Support Scale x ±S.d.
Yes	141	68.8	18.96 ± 12.59	8.57 ± 4.52	46.79 ± 15.95
No	64	31.2	27.17 ± 11.53	10.61 ± 5.00	40.16 ± 14.29
<b>Total</b>	205	100	21.53 ± 12.82	9.21 ± 4.75	44.72 ± 15.72
<b>Statistical Values</b>			z=-4.341 <b>p=0.001*</b>	z=-2.815 <b>p=0.005*</b>	t=2.805 <b>p=0.005*</b>

\*p<0.05 statistically significant; Z: Mann whitney u ; t: Student t test  
x ±S.d.: Mean ± Standard deviation

uals with disabled children regarding whether they can take care of their children sufficiently.

It was determined that 53.2% of disabled children are male. The average BDS total score was determined as 24.31 ± 12.74 for individuals with disabled male children, whereas their average BHS total score was determined as 10.16 ± 4.54, and the average MSPSS total score was 42.45 ± 15.15. A statistically significant difference was determined when the average BDS and BHS total scores, along with the male gender status of the disabled children were compared (p <.05). No statistically significant difference was determined between the average MSPSS total scores when comparisons were made regarding the genders of the disabled children (p >.05). Table 7 presents the comparison of the

average BDS, BHS and MSPSS total scores regarding the gender of the disabled children.

No statistically significant difference was determined when the average BDS, BHS and MSPSS total scores were compared regarding the age groups of the disabled children (p >.05).

**Table 7.** Comparison of Beck Depression Scale, Beck Hopelessness Scale and Multidimensional Scale of Perceived Social Support in terms of Gender Status of Individuals with Disabled Children (N=205)

Gender of disabled child	n	%	Beck Depression Scale x ±S.d.	Beck Hopelessness Scale x ±S.d.	Multidimensional Perceived Social Support Scale x ±S.d.
Yes	96	46.8	24.31 ± 12.74	10.16 ± 4.54	42.45 ± 15.15
No	109	53.2	19.07 ± 12.44	8.38 ± 4.80	46.72 ± 16.00
<b>Total</b>	205	100	21.53 ± 12.82	9.21 ± 4.75	44.72 ± 15.72
<b>Statistical Values</b>			t=2.975 <b>p=0.003*</b>	z=-2.2706 <b>p=0.007*</b>	z=-1.844 p=0.065

\*p<0.05 statistically significant; Z: Mann whitney u ; t: Student t test  
x ±S.d.: Mean ± Standard deviation

## DISCUSSION

In this study, the relationships between severity of depressive symptoms and hopelessness symptom levels and their perceived social support levels were examined for individuals with disabled children in addition to the sociodemographic characteristics that have an impact on these relationships. The results suggest that hopelessness increases and depression develops indirectly with decreasing perceived psychosocial support.

The average BDS total score for individuals with disabled children who participated in the study was  $21.53 \pm 12$ , where 82 is the equivalent to moderate depression severity. This average score was determined at high values ranging between  $14.2 \pm 13$  in similar studies carried out in parents of disabled children.<sup>27,28</sup> The average BHS total score was determined as  $9.21 \pm 4.75$  for individuals with disabled children who participated in the study. Average BHS total score values ranging between 5.6 and 12.4 were determined in similar studies.<sup>29,30</sup> We found that hopelessness increases and depression develops indirectly with decreasing psychosocial support.

The average MSPSS total score was determined as  $44.72 \pm 15.72$  for individuals with disabled children who participated in the study. It was determined that the perceived social support levels of individuals are at moderate levels. These values were determined to vary between 54.5 and 44.9 in similar studies.<sup>29,31,32</sup>

In different cultures, expectations of children with intellectual disabilities are varied.<sup>33</sup> In Turkey, better communication with the child is more important than academic skills, and social support is especially essential from family and friends for wellbeing.<sup>34,35</sup> A negative relationship was observed between hopelessness levels of individuals and their perceived social support. This negative relation was also apparent in previous studies.<sup>29,31</sup> With regard to sub-scales, a negative and statistically significant relationship was observed between feelings and expectations about the future

and family and friends subscales. This result supports the opinion that the feelings and expectations about the future of individuals with disabled children increase negatively as perceived social support from families or friends decreases. Thus, parents and their children with intellectual disabilities reported having family-related and systemic barriers to developing plans.<sup>36</sup> Decreasing psychosocial support seems to decrease hope for the future.

Studies mostly indicated a positive relationship between the social support perceived by caregivers and depression.<sup>37,38</sup> A study in the UK reported that social support could increase resilience in parents of disabled individuals.<sup>39</sup> A positive parenting programme improves the resilience of caregivers.<sup>40</sup> It was reported as a result of a study conducted in Australia that high social support lowers parent-related stress.<sup>41</sup> Indeed, there is a statistically significant relationship between severity of depressive symptoms and providing care to disabled children. Children with intellectual disabilities were found to be at higher risk of experiencing unsupportive care than children with typical development.<sup>42</sup> Also, increased parent-child conflict was found to be associated with greater behavioural problems for children with intellectual disabilities.<sup>43</sup> This relationship between parental stress and children's behavioural problems was found to be bidirectional.<sup>44</sup> The BDS and BHS scores of individuals who can provide sufficient care to their disabled children are lower compared with those who are not able to provide sufficient care. Parents were found to show a strong sense of responsibility for their child's problematic behaviours.<sup>45</sup> Depressive parents may feel guilty because of their child's behaviours and attribute the source of the problems to themselves. These results lead us to think that an increase in severity of depressive symptoms and hopelessness levels prevents caregivers from providing adequate care to disabled children.

It was determined that severity of depressive symptoms and hopelessness levels of individuals with disabled female children were higher compared with those of individuals



with male disabled children, whereas no statistically significant difference was determined between their levels of perceived social support. It has been proposed in a similar study that hopelessness levels are higher for individuals with disabled female children than with those who are male.<sup>46</sup> However, another study reported that individuals with disabled male children have higher hopelessness levels.<sup>47</sup> Aydoğan and Akıncı (1999) conducted a study in which no statistically significant difference was determined between the hopelessness levels of the parents and the gender of their children.<sup>1</sup> Kaner carried out a study to determine the social support and life satisfaction and found that the gender variable causes no statistically significant difference in the perceived social support levels of parents.<sup>48</sup> The different results of various studies may be related to different expectations. When the social structure in our country is taken into consideration, it can be thought that parents have different levels of expectations and concerns for disabled female and male children.<sup>49</sup> It is thought that society is still sensitive regarding gender roles when it concerns disabled children. It might be considered natural for male children to receive care from others while the physical changes that occur in female children during their adolescence raise concerns of parents. Higher risks regarding sexual abuse towards disabled female children<sup>50</sup> might also be considered a factor that increases the depression and hopelessness of parents concerning the future of their disabled daughters. Data obtained from developed countries also indicate that families that provide care to disabled individuals are undoubtedly defenceless against certain types of stress. However, it has also been suggested that factors such as adaptive coping strategies, perceived social support and a positive evaluation of the disability of the child contribute to the individual.<sup>51</sup>

The fact that there is no control group, and that the disabled children do not have the same diagnoses was the most important limitation of the study. Causality relationships could not be discussed because of the cross-sectional nature of the study. The diagnosis of intellectual disability

was made according to the DSM 5, and a clinical examination was performed by a psychiatrist. Moreover, structured psychiatric assessments, such as the SCID II were not performed. Thus, some accompanying diagnoses were likely to be missed. The lack of knowledge of the degree of intellectual disability is also an important limitation.

## CONCLUSION

A positive relationship was determined between severity of depressive symptom levels and hopelessness levels, while a negative relationship was determined between perceived social support and severity of depressive symptom levels. The increase in severity of depressive symptoms and hopelessness levels may prevent caregivers from providing adequate care to disabled children. Individuals with disabled children should be evaluated psychologically, and they should receive psychological support when it is considered that they have high risks of depression and hopelessness.

## Acknowledgement

The study was derived from Turkish thesis. The authors would like to thank Enago ([www.enago.com](http://www.enago.com)) for the English language review.

## References

- Akıncı-Aydoğan A. Özürürlü çocuğa sahip anne babaların umutsuzluk düzeylerinin belirlenmesi. 1999, Yayınlanmamış Doktora Tezi. Hacettepe Üniversitesi, Sağlık Bilimleri Enstitüsü.
- Cobb RB, Alwell M. Transition planning/ coordinating interventions for youth with disabilities: A systematic review. *Career Development for Exceptional Individuals* 2009; 32(2):70-81.
- Organization, W.H. *International classification of impairments, disabilities, and handicaps: a manual of classification relating to the consequences of disease, published in accordance with resolution WHA29.35 of the Twenty-ninth World Health Assembly, May 1976*. 1980.
- Cohen, S. Social relationships and health. *American Psychologist* 2004; 59(8):676.
- Ardahan, M. Sosyal destek ve hemşirelik. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi* 2006; 9(2):68-75.
- Liu, R.T., E.M. Kleiman, B.A. Nestor, and S.M. Cheek. *The hopelessness theory of depression: A quarter-century in review*. *Clinical Psychology: Science and Practice* 2015; 22(4):345-365.
- Ribeiro, J.D., X. Huang, K.R. Fox, and J.C. Franklin. Depression and hopelessness as risk factors for suicide ideation, attempts and death: meta-analysis of longitudinal studies. *The British Journal of Psychiatry* 2018; 212(5):279-286.
- Rodríguez-Naranjo, C. and A. Caño. Daily stress and coping styles in adolescent hopelessness depression: Moderating effects of gender. *Personality and Individual Differences* 2016; 97:109-114.
- Sen, E. and S. Yurtsever. Difficulties experienced by families with disabled children. *Journal for Specialists in Pediatric Nursing* 2007; 12(4):238-252.
- Lach, L.M., D.E. Kohen, R.E. Garner, J.C. Brehaut, A.R. Miller, A.F. Klassen, et al. The health and psychosocial functioning of caregivers of children with neurodevelopmental disorders. *Disability and Rehabilitation* 2009; 31(9):741-752.
- Park, I.J., H. Du, L. Wang, D.R. Williams, and M. Alegria. The Role of Parents' Ethnic-Racial Socialization Practices in the Discrimination-Depression Link among Mexican-Origin Adolescents. *Journal of Clinical Child & Adolescent Psychology* 2019:1-14.
- Prevo, M.J. and C.S. Tamis-LeMonda. Parenting and globalization in western countries: Explaining differences in parent-child interactions. *Current opinion in psychology* 2017; 15:33-39.
- Aksoy, A.B., U.P.Ş. Kılıç, and Ö.G. Kahraman. Asya kültürlerinde ebeveynlik stilleri ve uygulamaları. *Çukurova Üniversitesi Sosyal Bilimler Enstitüsü Dergisi* 2009; 18(2):14-25.
- Kaya, T. Gelin-Kaynana İletişiminin Niteliğini Belirleyen Kültürel Etmenler. 2019.
- Taanila, A., L. Syrjäälä, J. Kokkonen, and M.R. Järvelin. Coping of parents with physical and/or intellectually disabled children. *Child: Care, Health and Development* 2002; 28(1):73-86.
- Tokuç, F.Ö. Otistik çocuk ve aile özelliklerinin aile işlevlerine etkisi. TC Marmara Üniversitesi Sağlık Bilimleri Enstitüsü Yüksek Lisans Tezi. İstanbul 2009.
- Canarlan, H., Engelli çocuğa sahip ailelerin yaşam kalitesinin incelenmesi. 2014, Trakya Üniversitesi Sosyal Bilimler Enstitüsü.
- Beck, A.T., C. Ward, M. Mendelson, J. Mock, and J. Erbaugh. Beck depression inventory (BDI). *Arch Gen Psychiatry* 1961; 4(6):561-571.
- Hisli, N. The validity and reliability of the Beck Depression Inventory among university students. *Turkish Journal of Psychology* 1989; 7(23):3-13.
- Hisli, N. Beck Depresyon Envanteri'nin geçerliği üzerine bir çalışma [A study on the validity of Beck Depression Inventory, in Turkish]. *Turkish Journal of Psychology* 1988; 7:3-13.
- Beck, A.T., A. Weissman, D. Lester, and L. Trexler. The measurement of pessimism: the hopelessness scale. *Journal of consulting and clinical psychology* 1974; 42(6):861.
- Seber, G., N. Dilbaz, C. Kaptanoğlu, and D. Tekin. UMUTSUZLUK ÖLÇEĞİ: GEÇERLİLİK VE GÜVENİRLİLİK. *Kriz Dergisi* 1993; 1(3).
- Durak, A. and R. PALABIYIKOĞLU. BECK UMUTSUZLUK ÖLÇEĞİ GEÇERLİLİK ÇALIŞMASI. *Kriz Dergisi* 1994; 2(2):311-319.
- Duman, S., Ö. Taşğın, and S. Özdağ. Beden eğitimi ve spor yükseköğretimde spor yöneticiliği bölümünde okuyan öğrencilerin umutsuzluk düzeylerinin incelenmesi. *Seçuk Üniversitesi Beden Eğitimi ve Spor Bilim Dergisi* 2009; 11(3):27-32.
- Wilcox, S. Multidimensional Scale of Perceived Social Support. *Psychological Trauma: Theory, Research, Practice, and Policy* 2010; 2(3):175-182.
- Eker, D. Çok boyutlu algılanan sosyal destek ölçeğinin gözden geçirilmiş formunun faktör yapısı, geçerlik ve güvenilirliği. *Türk Psikiyatri Dergisi* 2001; 12:17-25.
- Bumin, G., A. Günel, and Ş. Tükel. Anxiety, depression and quality of life in mothers of disabled children. *SDÜ Tıp Fakültesi Dergisi* 2008; 15(1):6-11.
- Natan, K. Zihinsel engelli çocuğu olan ve zihinsel engelli çocuğu olmayan annelerin depresyon ve kaygı düzeyleri. Yayınlanmamış yüksek lisans tezi. İstanbul: Maltepe Üniversitesi Sosyal Bilimler Enstitüsü 2007.
- Akmanış, B. Otistik çocuğu olan annelerin algıladıkları sosyal desteğe göre umutsuzluk düzeylerinin incelenmesi. Yayınlanmamış Yüksek Lisans Tezi. Maltepe Üniversitesi, İstanbul 2010.
- Ünlüer, E. 2-6 yaş arası otistik çocuğa sahip annelerin algıladıkları sosyal destek ve umutsuzluk düzeyleri arasındaki ilişkinin incelenmesi. 2009.
- Görgü, E. 3-7 yaş arası otistik çocuğa sahip olan annelerin algıladıkları sosyal destek düzeyleri ile depresyon düzeyleri arasındaki ilişki. 2005.
- Sungur-Bozdoğan, İ. Zihinsel engelli çocuğa sahip ebeveynlerin algıladıkları sosyal destek ve yalnızlık puanları arasındaki ilişkinin incelenmesi. Yayınlanmamış Yüksek Lisans Tezi, Atatürk Üniversitesi, Eğitim Bilimleri Enstitüsü, Erzurum 2011.
- Wilt, C.L. and M.E. Morningstar. Parent Engagement in the Transition From School to Adult Life Through Culturally Sustaining Practices: A Scoping Review. *Intellectual and developmental disabilities* 2018; 56(5):307-320.
- Yalçın, İ. İyiliği ve sosyal destek arasındaki ilişkiler: Türkiye'de yapılmış çalışmaların meta analizi. *Türk Psikiyatri Dergisi* 2015; 26(1):21-32.
- 3ARICIOĞLU, A. and F. GÜLTEKİN. Zihinsel Engelli Çocuk Annelerinin Sosyal Destek ve Gelecek Algıları: Psikolojik Danışmanların Rollerini. 2017.
- Lee, C.e., M.M. Burke, and C.R. Steller. Exploring the Perspectives of Parents and Siblings Toward Future Planning for Individuals With Intellectual and Developmental Disabilities. *Intellectual and developmental disabilities* 2019; 57(3):198-211.
- Yüzer, S., R. Yiğit, R. Taşdelen, B. Taşdelen, and B. TAŞDELEN. ÇOCUĞU HASTANEDE YATAN ANNELERİN ALDIĞI SOSYAL DESTEK İLE DEPRESYON DÜZEYLERİ ARASINDAKİ İLİŞKİ. *Anadolu Hemşirelik ve Sağlık Bilimleri Dergisi* 2006; 9(4):54-62.
- Atağün, M.İ., Ö.D. Balaban, Z. Atağün, M. Elagöz, and A.Y. Özpolat. Kronik hastalıklarda bakım veren yükü. *Psikiyatride Güncel Yaklaşımlar* 2011; 3(3):513-552.
- Whiting, M., A. Nash, S. Kendall, and S. Roberts. Enhancing resilience and self-efficacy in the parents of children with disabilities and complex health needs. *Primary Health Care Research & Development* 2019; 20.
- Egami, C. Triple P intervention support to improve caregiving resilience for caregivers with children with developmental problems. *Impact* 2018; 2018(10):27-29.
- Patton, K.A., R. Ware, L. McPherson, E. Emerson, and N. Lennox. Parent-related stress of male and female carers of adolescents with intellectual disabilities and carers of children within the general population: A cross-sectional comparison. *Journal of Applied Research in Intellectual Disabilities* 2018; 31(1):51-61.
- Rodas, N., S. Zeedyk, and B. Baker. Unsupportive parenting and internalising behaviour problems in children with or without intellectual disability. *Journal of Intellectual Disability Research* 2016; 60(12):1200-1211.
- Totsika, V., R.P. Hastings, D. Vagenas, and E. Emerson. Parenting and the behavior problems of young children with an intellectual disability: Concurrent and longitudinal relationships in a population-based study. *American journal on intellectual and developmental disabilities* 2014; 119(5):422-435.
- Nece, C.L., S.A. Green, and B.L. Baker. Parenting stress and child behavior problems: A transactional relationship across time. *American journal on intellectual and developmental disabilities* 2012; 117(1):48-66.
- Jacobs, M., L.M. Woolfson, and S.C. Hunter. Attributions of stability, control and responsibility: how parents of children with intellectual disabilities view their child's problematic behaviour and its causes. *Journal of Applied Research in Intellectual Disabilities* 2016; 29(1):58-70.
- Firat, S., R.S. Diler, A. Avci, and G. Seydaoğlu. Comparison of psychopathology in the mothers of autistic and mentally retarded children. *Journal of Korean medical science* 2002; 17(5):679.
- YILDIRIM, A., R.H. AŞILAR, P. KARAKURT, A. Yıldırım, R.H. Aşilar, and P. Karakurt. Engelli çocukların annelerinin ruhsal durumlarının belirlenmesi. *Florence Nightingale Hemşirelik Dergisi* 2013; 20(3):200-209.
- Kaner, S. Engelli Çocuğu olan Anababaların Algıladıkları Stres, Sosyal Destek ve Yaşam Doyumlarının İncelenmesi. Ankara Üniversitesi: Bilimsel Araştırma Projesi Kesin Raporu 2004:7-67.
- Dedeoğlu, S. Toplumsal cinsiyet rolleri açısından Türkiye'de aile ve kadın emeği. *Toplum ve Bilim* 2000; 86:139-170.
- İMREN, S.G., A. Ayşe, C. Yusufoğlu, and A.R. ARMAN. Cinsel istismara uğrayan çocuk ve ergenlerde klinik özellikler ve intihar girişimi ile ilişkili risk etmenleri. *Marmara Medical Journal* 2013; 26(1):11-16.
- John, A. and M. Zapata Roblyer. Mothers parenting a child with intellectual disability in urban India: An application of the stress and resilience framework. *Intellectual and developmental disabilities* 2017; 55(5):325-337.