

Investigation of the **Relationship** between Humor Use and Psychological **Resilience of Mothers with Special Needs Children**

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Investigation of the Relationship between Humor Use and Psychological **Resilience of Mothers with Special Needs Children**

Semih Cayak, Özge Erduran Tekin

Article Info	Abstract
Article History	Mothers of children with special needs have various difficulties, mostly as direct
Received:	caregivers of the child. The level of coping with these difficulties is also related
21 February 2023	to the psychological resilience of mothers. Although there are many coping
Accepted: 18 June 2023	mechanisms to protect the psychological resilience of people, humor is one of
10 Julie 2025	them. For this purpose, it was aimed to examine the relationship between the levels
	of coping with humor and psychological resilience of mothers who have children
	with special needs. The study group of this research, which was designed
Keywords	according to the relational survey model, consisted of 480 mothers with children
Individuals with special needs	with special needs, whose educational examinations were completed by applying
Psychological resilience Coping through humor	to various Guidance and Research Centers in Istanbul in the spring semester of the
Mothers of individuals with	2022-2023 academic year. In the study, Coping with Humor Scale and Brief
special needs	Psychological Resilience Scale were used as data collection tools. In the study, the
	relationships and differences between the variables were examined through the
	ANOVA test, Pearson correlation coefficient and regression analysis. As a result
	of the correlation analysis, it was found that there was a positive, moderate, and
	significant relationship between the mothers' scores on coping with humor and
	psychological resilience scores. As a result of the regression analysis, it was found
	that the level of coping with the difficulties brought by this situation through
	humor predicts the psychological resilience of mothers who have children with
	special needs. As a result of the study, it was seen that humor is an important
	coping tool in increasing the psychological resilience of mothers with children
	with special needs, and various suggestions were made for educators and mental
	health professionals.

Introduction

Family is the most important building block of society and children have a special place in the family (Canarslan & Ahmetoğlu, 2015). Every woman and man who marries and starts a family desire to have a physically and mentally healthy child (Kiani & Nami, 2017). Having a child and the addition of a new member to the family leads to major and radical changes in the lives of women and men. Transition to parenting roles and taking responsibility for the child is undoubtedly a difficult situation for parents to get used to at first (Reilly, Entwisle & Doering, 1987; Sivrikaya & Tekinarslan, 2013). However, sometimes a child may be born with some permanent health problems, in other words, with some special needs. Mothers and fathers who dream of having a healthy child and the good days they will spend with their children experience deep sadness and great disappointment in such a situation (Bitsika & Sharpley, 2004). In fact, this situation may cause the family to be unable to take care of their child sufficiently from time to time and may even make it necessary for the family to receive psychological support. Undoubtedly, this process is not the same for every parent. The fact that parents accept this situation they face, do what is necessary for their children in their future lives and create new life routines as soon as possible is closely related to their psychological strength and positive outlook on life (Suzuki, Hiratani, Mizukoshi, Hayashi & Inagaki, 2018; Takuri, 2014). If parents constantly think about this negative situation of their children in daily life and feel sad, it will not add anything to themselves and will not benefit their children. In this respect, parents are expected to get rid of the effect of this negative situation they face and spend their future days more quality and happier by holding on tightly to life. Based on this information, in this study, the relationship between the use of humor, which is seen as a tool to make individuals feel more positive and cheerful in their daily lives, and psychological resilience, which refers to the psychological resilience of individuals in the face of the difficulties they face, was examined in the context of mothers with children with special needs.

Psychological Resilience

The duration of overcoming the effects of traumatic experiences and stressful situations that individuals face throughout their lives varies. While it is quite difficult and sometimes impossible for some individuals to overcome the effects of stressful and negative life events they face, it may be relatively less challenging for some individuals. The power of individuals to recover themselves in such situations is referred to as psychological resilience in positive psychology (Doğan, 2015). Psychological resilience is the ability of individuals to cope with negative situations by using individual, familial and social factors in the face of experiences that may cause negative situations in their lives and to continue their functions by adapting to these situations (Arslan, 2015). According to Walsh (2015), the concept of psychological resilience is defined as an active process that enables to come out of a difficult situation in a stronger way and to be resilient and develop against the crises experienced.

Individuals with high psychological resilience are thought to have the ability to quickly reach a state of well-being in the face of illness, depressive mood, undesirable situations and different transition situations, to recover themselves, and to leave their troubles behind professionally (Ramirez, 2007). In this respect, individuals with high levels of psychological resilience are expected to successfully resolve the difficulties they face as a result of negative experiences (Masten, 2001; Özsoy, 2021). Masten & Coatshword (1998) considered psychological resilience as a competence that enables adaptation and development against difficulties or risky situations and stated that an evaluation can be made in terms of two dimensions when looking at the common features found in the definitions in the literature. In this context, according to the researchers, "in order to be able to talk about psychological resilience, there should be difficulties such as a threat, risk or trauma that is important for the individual" and "the person should be able to adapt to the situations experienced and the adaptation to be successful". Psychological resilience is affected by individual, familial and environmental relationships. In psychological resilience, individuals are first exposed to risk factors and then adapt well to the negative effects of the risky situation thanks to protective factors. For this reason, it is necessary to understand "risk factors",

"protective factors" and "positive outcomes" when explaining psychological resilience (Tümlü, 2012). Risk factors for psychological resilience are examined in two categories as "individual and family", "social and environmental". Situations such as health problems, disability, academic failure, being an early parent, having traumatic experiences are among the individual and familial factors. Conditions such as migration, war, natural disasters, cultural norms, low socioeconomic level and geographical characteristics are considered as environmental and social risk factors (Gürgan, 2006).

Another concept affecting psychological resilience is protective factors. In order to understand how individuals who have been exposed to the same risk situations overcome negative situations, it is necessary to analyse the characteristics of the environment in which the individuals are located. In this direction, it is thought that the examination of protective factors is important for understanding the concept of psychological resilience (Masten & Reed, 2002). The first of these factors, which are pioneers in coping with stress, is "problem-focused coping", which focuses on eliminating the existing obstacles and producing solutions, and "emotion-focused coping", which refers to the person's distance from the situation that causes stress and the effort to manage stress. The severity and effects of the factors that pose a risk for psychological resilience may differ from person to person. Factors characterised as protective may not protect each individual at the same level. However, factors considered risky may not affect each individual negatively at the same level. Therefore, it is thought that positive outcomes such as the competences of the individual are also effective for psychological resilience. What is meant by positive outcomes are the competences gained as a result of using the protective factors and coping with risks? These competences are one of the important elements of psychological resilience (Gizir, 2007).

Based on this information, psychological resilience, which is expressed as a competence that enables a person to overcome the difficult situations encountered in life and even to come out of these difficult situations in a stronger way, has an important place in the lives of individuals and this competence level of individuals needs to be strengthened (Masten, 2001).

Use of Humor

Communication is a compulsory concept for human beings to express themselves as a social being. In order for people to live in society, they need to be in communication with their environment (Tutar & Yılmaz, 2005). Effective communication not only provides information exchange between people, but also enables people to understand each other better, share their thoughts, benefit from the knowledge and experience around them, and be more successful in solving problems (Akkaya, 2019). One of the most commonly used ways of communication is humor (Martin, 2007). Humor has a special place in human social interactions (Shammi & Stuss, 1999). Humor used in a positive way strengthens the sense of trust, which is a basic human need, positively affects the social relations of the person and helps the person to establish healthy communication with other people by reducing conflicts in relationships (Martin et al., 2003; Miller, 1996).

Humor is defined as a situation that strongly affects emotions and can be funny, cheerful, entertaining and even satirical (Bag, 2020). Humor is the ability to see the fun side of events and situations instead of being constantly

serious (Åstedt-Kurki & Isola, 2001). In this respect, humor is also defined as a kind of intellectual game in solving the fantasy of events or relationships known to be impossible (McGhee, 1989). Humor, which has an important place in human life, has psychological benefits as well as physiological benefits (Kırtay, 2012). As a matter of fact, humor is a point that has been recognised since the very beginning of the development of psychotherapy. Freud (1928) defined humor as a healthy and mature defence mechanism and suggested that humor is used as a tool by the superego to soothe the anxious ego. Accordingly, individuals try to make fun of the situation that arouses anxiety and to show that the situation is not too important to be anxious. Similarly, May (1953) stated that individuals can get away from their problems or gain the perspective of reevaluating them through humor.

People may face various problems and difficulties throughout their lives. Humor is a phenomenon that approaches events with a humorous perspective and gives people joy and happiness. In this respect, humor, which is a natural part of human life, can help people maintain their body and soul balance by making them laugh (Filiz & Karaca, 2021). However, humor is not entirely entertainment and entertainment is not entirely humor (Altınkurt & Yılmaz, 2011). In addition, there are times when humor is used negatively as well as beneficially. For example, some people may use humor to give themselves an advantage in a discussion, while others may use it in a way that devalues others and humiliates their personality or status (Zelvys, 1990). Knowing the types of humor is very important in terms of the effectiveness of its conscious use in practice. Martin et al. (2003) determined that there are four types of humor. These are; "spontaneous humor" which the individual uses to show himself/herself and with others, "aggressive humor" which the individual uses to belittle other people, and "self-deprecating humor" which the individual tells information about himself/herself in a funny and false way.

Humor, which is one of the most important elements in reducing the stress of individuals, helps to make more positive and harmonious cognitive evaluations and psychological well-being when faced with problems (Maiolino & Kuiper, 2016). In addition, humor contributes to the solution of any problem and the formation of a consensus environment (Mierop, 1999). In this respect, humor ability is accepted as a positive and desirable personality trait (Kuiper & Martin, 1998).

The Relationship between Humor Use and Psychological Resilience of Mothers with Children with Special Needs

Many changes occur in the lives of couples with marriage. One of them is that couples want to have children (Arıcıoğlu & Gültekin, 2017). A child is the most important building block of the family system, which is the most basic element of society, and is considered as a means for a woman and a man to ensure the continuity of their generation and to strengthen their bonds with each other (Ataman, 2003). In this process, the dreams of the parents and all their relatives are based on the expectation of a mentally and physically healthy baby (Şendil & Balkan, 2005). However, individuals may encounter many negative situations that affect them from time to time in life, which are shocking and stressful (Doğan, 2015). While families make plans and dreams with the thought of a healthy child, they may unexpectedly have a child with special needs (Sarwar, Panatik, Rajab & Nordin, 2019). In such a case, parents experience great disappointment and devastation when they learn that their child's

disability is irreversible (Poddar et al., 2015). They may show different reactions to this situation, including guilt, sadness, inadequacy or denial (Küçüker, 1993).

Compared to children with normal development, children with disabilities in any field need more help and support from their families in many situations and environments. This situation causes disruption of the usual situations in family life, negatively affects the lives, emotions and behaviours of family members and may cause them to experience more stress (Al-Krenawi et al., 2011; Kaner, Bayraklı & Güzeller, 2011). On the other hand, in families whose children have any illness, it is seen that mothers mostly undertake the basic care needs of the child, and fathers often take a supporting role to the mother. Although this situation is also valid for families whose children do not have any health problems, this distribution of roles becomes more apparent especially in the families of sick children or children with special needs. As a result, it is stated that stress and depression levels of mothers are more severe than fathers (Hastings, Kovshof, Ward, Espinosa, Brown & Remington, 2005). As a matter of fact, it is stated in studies that mothers with children with special needs experience psychological problems such as depression (Azeem et al., 2013), stress (Weiss et al., 2013), anxiety (Dykens et al., 2014) and inability to cope with mental and behavioural problems (Carlson & Miller, 2017) more than mothers of children with normal development (Hanson & Hanline, 1990). In addition, negative emotions and intense stress experienced by family members not only affect their mental, physical and psychological health, but also negatively affect the quality of their relationships with their children and their ability to care for the child with special needs (Peer & Hillman, 2014).

It is possible for individuals to adapt to stressful situations by taking advantage of the protective factors they have, to develop in the face of these situations and to achieve a positive result thanks to psychological resilience, which has a multidimensional structure (Akgün, 2022). Psychological resilience is an important factor that prevents the negative effects of stress for mothers with children with special needs and enables successful adaptation skills (Weiss, 2002). It is known that individuals with high psychological resilience are more likely to adapt to new situations and that these individuals overcome the difficulties experienced (Zengin, 2013). In this respect, different suggestions are offered by experts to increase the psychological resilience levels of individuals. One of these suggestions is the use of humor in communication (Houston et al., 1998; Martin & Lefcourt, 2004)

Today, humor, which has increased in importance and popularity with the rise of positive psychology (Martin, 2007), is used not only to joke and create joy, but also as a reaction to stressful experiences of individuals and as a coping strategy (Chauvet & Hofmeyer, 2007). Thus, humor protects the individual from the harsh effects of the harsh realities of life and facilitates adaptation (Thorson & Powell, 1993). When the researches conducted in the literature are examined, it is seen that humor helps to cope with stress (Öz & Hiçdurmaz, 2009), to contribute positively to the learning process (Chen & Lee, 2017; Torok, McMorris & Lin, 2004), to cope with anxiety (Akkaya, 2019), to increase self-esteem and subjective well-being (Kağan & Atalay, 2018; Martin et al, 2003) and increasing psychological and physical well-being (Lefcourt, Davidson & Kueneman, 1990). However, no research has been found in the literature on how the use of humor affects the psychological resilience levels of mothers of children with special needs who have to spend most of their lives struggling with some social and psychological problems, especially intense stress.

Based on this information, this study aims to examine the relationship between the level of use of humor as a coping strategy against stressful situations and psychological resilience of mothers with children with special needs. Thus, it is thought that this gap in the literature will be filled and a contribution will be made to strengthening the psychological resilience of mothers with children with special needs.

Purpose of the Study

The aim of this study is to examine the relationship between the coping levels of mothers with children with special needs through humor and their psychological resilience. In line with this general purpose, answers to the following questions were sought:

- -What are the coping levels and psychological resilience levels of mothers with children with special needs through humor?
- -Do the coping through humor and psychological resilience levels of mothers with children with special needs show significant differences according to age variable?
- -Do the coping through humor and psychological resilience levels of mothers with children with special needs differ significantly according to the number of children they have?
- -Do the coping through humor and psychological resilience levels of mothers with children with special needs differ significantly according to the type of special needs of the child?
- -Is there a significant relationship between the coping levels of mothers with children with special needs through humor and their psychological resilience?
- -Are the coping levels of mothers with children with special needs through humor a significant predictor of their psychological resilience?

Method

Research Model

This study was designed in the relational survey model aiming to examine the relationship between two or more variables. The relational survey model is to reveal the relationship or effect between two different quantitative variables through a correlation coefficient (Fraenkel et al., 2012).

Working Group

The study group of the research consisted of 480 mothers of children with special needs who applied to various Guidance and Research Centres in Istanbul and completed the educational examination of their children. The data of the study were collected in the 2022-2023 academic year. Considering the sensitivity of the group to be collected, the ease of reaching the group to be researched was taken into consideration and the data were collected from mothers who volunteered to participate in the study using convenience sampling method. In convenience sampling method, considering the limitations of the group to be researched, the study can be carried out by selecting the data from the groups that are easier to reach (Büyüköztürk et al., 2014). The age range of the mothers constituting the study group of the research was between 21 and 53 years (\bar{X} =36.04; Se=.36). Of the children of

the mothers in the study group, 1.9% (n=9) had intellectual disability, 28.3% (n=136) had autism, 40% (n=192) had physical disability, 22.1% (n=106) had specific learning disability and 7.7% (n=37) had multiple disabilities. Considering the total number of children the mothers had, 24.4% (n=117) had one child, 37.1% (n=178) had two children, and 38.5% (n=185) had three or more children.

Data Collection Tools

The data collection tool consists of three parts. In the first part, there are questions to learn the personal information of the participants. The second and third sections include "Coping with Humor Scale" and "Brief Psychological Resilience Scale".

Coping with Humor Scale

The validity and reliability study of the Coping Through Humor Scale developed by Martin (1996) in Turkish culture was conducted by Yerlikaya (2009). The scale, in which four-point Likert-type rating is used, is unidimensional and consists of seven items. In the adaptation study, Cronbach's alpha value was calculated as .67. The Cronbach alpha value of the Coping Through Humor Scale for this study was calculated as .79.

Brief psychological resilience scale

The Brief Psychological Resilience Scale developed by Smith et al. (2008) to measure the psychological resilience levels of individuals was adapted to Turkish culture by Doğan (2015) through validity and reliability studies. The scale has a unidimensional structure and consists of six items in five-point Likert type. Cronbach's alpha coefficient was calculated as .83 during the adaptation study. The Cronbach alpha value of the psychological resilience scale for this study was calculated as .78.

Data Analysis

Before analyzing the data, incomplete and incorrect coding was reviewed and incorrectly filled data were eliminated. The data collected from 480 mothers with children with special needs who voluntarily participated in the study were included in the analysis. The data were analyzed with SPSS 26 package program. As seen in Table 1, it can be said that the skewness and kurtosis values are within the range of ± 1 and do not show a significant deviation from the normal distribution (Field, 2009). In addition to descriptive analyses in which values such as arithmetic mean and standard deviation were calculated, t test, one-way analysis of variance (ANOVA), Pearson correlation coefficient and multiple regression analysis were used. In the analyses, the significance of the difference between averages was tested at .05 level.

In the interpretation of the arithmetic averages of the five-point Likert-type scale, the range of 1.00-1.79 was evaluated as "very low", 1.80-2.59 as "low", 2.60-3.39 as "medium", 3.40-4.19 as "high" and 4.20-5.00 as "very high". In the interpretation of the arithmetic averages of the four-point Likert-type scale, the averages between

(1.00-1.74) were rated as "very low", the averages between (1.75-2.49) as "low", the averages between (2.50-3.24) as "high" and the averages between (3.25-4.00) as "very high". In the interpretation of the correlation analysis, the range of .00-.30 was accepted as "low", .31-.70 as "medium" and .71-1.00 as "high" level relationship (Büyüköztürk, 2011).

Findings

The arithmetic mean, standard deviation and skewness kurtosis values related to coping through humor and psychological resilience levels of mothers with children with special needs are presented in Table 1.

		Study		
	\overline{X}	Sd	Skewness	Kurtosis
(1) Coping through humor	2.88	3.40	28	.46
(2) Psychological Resilience	3.36	3.09	62	.31

Table 1. Arithmetic Mean, Standard Deviation and Skewness-Proportionality Values of the Variables of the

When Table 1 is examined, it is seen that mothers' coping levels through humor (\overline{X} =2.88) are high and psychological resilience levels (\overline{X} =3.36) are moderate. One-way analysis of variance (ANOVA) was performed to determine whether the scores of the mothers' coping through humor and psychological resilience scale scores showed a significant difference according to the age variable.

 Table 2. ANOVA Results related to the Differentiation of Coping through Humor and Psychological Resilience

 Scores according to Age Variable

	Source of Variance	Sum of Squares	Df	Mean Square	F	р
Coping through	Between Groups	321.844	27	11.920	1.028	.49
humor	Within Groups	5241.623	452	11.597		
	Total	5563.467	479			
Psychological	Between Groups	149.282	27	5.529	.565	.96
resilience	Within Groups	4419.643	452	9.778		
	Total	4568.925	479			

*p<.05

When Table 2 was examined, it was seen that coping through humor scores and psychological resilience scores did not show a statistically significant difference according to the age variable $[F_{(27-452)} = 1.028, p>0.05; F_{(27-452)} = .565, p>0.05].$

One-way analysis of variance (ANOVA) was performed to determine whether the scores of the mothers of the study group on coping through humor and psychological resilience scale showed a significant difference according to the number of children.

		-					
	Source of Variance	Sum of	Df	Mean	F	р	Bonferroni
		Squares		Square			
Coping through	Between Groups	84.471	2	42.235	3.677	.03*	two children>
humor	Within Groups	5478.996	477	11.486			only child
	Total	5563.467	479				
Psychological	Between Groups	43.371	2	21.686	2.286	.10	-
resilience	Within Groups	4525.554	477	9.488			
	Total	4568.925	479				
*** < 05							

 Table 3. ANOVA Results related to the Differentiation of Coping through Humor and Psychological Resilience

 Scores according to the Number of Children

*p<.05

When Table 3 was examined, it was seen that the scores of coping through humor differed statistically significantly according to the variable of the children the mothers had $[F_{(2-477)} = 3.677, p<0.05]$. Since the variances were distributed homogeneously, Bonferroni multiple comparison test, which does not require the principle of equal sampling number, was used to examine which group was in favor of significance. It was observed that there was a significant difference between the coping through humor scores of mothers with two children (\overline{X} =1.04) and mothers with one child (\overline{X} =.71) in favor of mothers with two children (p< .05). It can be said that the coping with humor levels of mothers with two children among mothers with children with special needs are significantly higher than those of mothers with one child. Again, as a result of the analyses, it was seen that psychological resilience scores did not differ statistically significantly according to the variable of the child the mothers had [$F_{(2.477)} = 2.286$, p> 0.05]. One-way analysis of variance (ANOVA) was performed to determine whether the scores of the mothers' coping through humor and psychological resilience scale showed a significant difference according to the type of special needs the child had.

	Source of	Sum of	Df	Mean	F	р	Bonferroni
	Variance	Squares		Square			
Coping through	Between Groups	631.164	4	157.783	15.195	.000**	Mental deficiency>
humor	Within Groups	4932.333	475	10.384			all other types of
	Total	5563.467	479				special requirements
Psychological	Between Groups	58.640	4	14.660	1.544	.19	-
resilience	Within Groups	4510.285	475	9.495			
	Total	4568.925	479				

 Table 4. ANOVA Results related to the Differentiation of Coping through Humor and Psychological Resilience

 Scores according to the Type of Special Needs the Child has

**p<.001

When Table 4 was examined, it was seen that mothers' coping through humor scores showed a statistically significant difference according to the type of special need the child had $[F_{(4.475)} = 15.195, p<0.001]$. Since the variances were homogeneous, Bonferroni multiple comparison test, which does not require the principle of equal

sampling number, was used to examine which group was in favor of the significance. The group of children with intellectual disability (\overline{X} =6.71), autism (\overline{X} =2.072), physical disability (\overline{X} =5.11), specific learning disability (\overline{X} =4.32) and multiple disabilities (\overline{X} =5.34), there was a significant difference between the coping through humor scores of mothers with children with special needs in favor of mothers with children with special needs in the intellectual disability type (p<.001).

It can be said that the level of coping through humor of mothers who have children with special needs in the type of intellectual disability is significantly higher than that of mothers who have children with other types of special needs. Again, as a result of the analyses, it was seen that the psychological resilience scores of the mothers did not differ statistically significantly according to the type of special needs the child had $[F_{(4-475)} = 1.544, p> 0.05]$. The relationship between coping through humor and psychological resilience scores of mothers with children with special needs was examined by correlation analysis and presented in Table 5.

Table 5. Relationships between Variables

	n	Skewness	Kurtosis	(1)	(2)
(1) Coping through humor	480	28	.46	1	.63**
(2) Psychological Resilience	480	62	.31	.63**	1

**p<.01

When the relationship between the variables of the study was examined, it was seen that there was a positive and moderately significant relationship (r=.63, p<.01) between coping through humor and psychological resilience as seen in Table 5. Considering the results of correlation analysis, it can be said that psychological resilience of mothers with children with special needs increases as their humor use increases. The findings of the regression analysis conducted to examine the predictive effect of mothers' coping levels through humor on their psychological resilience are presented in Table 6:

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Table o Willindle Regression Ana	lysis Results of Coping through Humor	Predicting Psychological Resilience
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Model	Predictor	R	$\Delta \mathbf{R}^2$	В	Se	β	t	F	р
	Variables								
1.	Constant			8.67	.66		13.16	312.904	.000*
	Coping through	(2)	40	57	02	(2)	17.60		
	humor	.63	.40	.57	.03	.63	17.69		
*n< 001									

*p<.001

As seen in Table 6, regression analysis was performed to examine how the use of humor as a coping tool by mothers of children with special needs predicted their psychological resilience. According to the results of the analysis, coping through humor explained 40% of the variance in psychological resilience scores (β =.63, p<.001). It can be said that the use of humor as a coping tool by mothers of children with special needs significantly predicts their psychological resilience.

Discussion, Conclusion and Recommendations

Having a child is one of the greatest desires for the family, which is the cornerstone of the social structure. However, the addition of a new member to the family requires some changes in the duties of family members, routines of daily life and rules within the family. These difficulties that having a child brings to parents lead to a more stressful and complex situation when the child is born as an individual affected by disability (Akandere, Acar & Bastuž, 2009; Deniz & Göller, 2017). As a matter of fact, while parents dream of giving birth to a healthy child, the joy to be experienced when they learn that their child has special needs is replaced by a sense of shock and grief (Köksal & Kabasakal, 2012). Studies have shown that this situation increases the stress level and depressive symptoms of parents and other family members and can reduce the quality of life (Opoku et al., 2020; Sawyer Cohen & Semple, 2010; Weiss et al., 2013). Therefore, parents with children with special needs need to be psychologically strong in order to cope with these difficulties and be more beneficial to their children. This situation, which is explained as the individual's ability to successfully adapt to the new situation and cope with negativities after challenging and risky life events, is referred to as psychological resilience in the literature (Rutter, 2006). In such a situation, it is very important that mothers, who are the people most responsible for the care of the child, have high levels of psychological resilience. However, studies on this subject indicate that the psychological resilience levels of mothers with children with special needs are lower than other parents (Azarı & Mohammadi, 2016; Deveci et al., 2017).

Different suggestions are offered by researchers to increase the psychological resilience levels of individuals. One of these suggestions is the use of humor (Kuiper, Grimshaw, Leite & Kirsh, 2004; Lilienfeld, Lynn, Namy & Woolf, 2009). Humor, which is based on fun and tolerance, enables individuals to look at serious and sad situations more funny and entertaining. In this way, the person can look at the problem from a different perspective. The seriousness of negative situations and the negative reaction to this situation may also decrease. Thus, more effective coping with the situation that causes stress and sadness can be achieved (Balcioğlu & Öngören, 1973; Gordon, 2010). In this context, this study aimed to examine the relationship between the level of coping with humor and psychological resilience of mothers who have children with special needs.

As a result of this study conducted with mothers of children with special needs living in Istanbul, it was found that the mothers' coping levels through humor were high, but their psychological resilience levels were moderate. When the studies on similar topics in the literature are examined, it is seen that the use of humor is an effective strategy against stressful situations and is frequently used by individuals exposed to different stressors (Kağan & Atalay, 2018; McGhee, 2002). Therefore, it is a positive and desirable situation that mothers have high levels of coping with stressful situations through humor. However, as a result of the study, the psychological resilience levels of mothers of children with special needs were not found to be high. In many similar studies conducted in the literature, it has been revealed that the psychological resilience of mothers of children with special needs is not high (Azarı & Mohammadi, 2016; Bildirici, 2014; Temel, 2015). Undoubtedly, this is not a desirable situation for mothers. In order for them to cope with anxiety and stress, their psychological resilience levels should be high. According to another finding obtained from the study, the scores of the coping through humor scale and psychological resilience scale scores of mothers who have children with special needs do not show a significant

difference according to the age variable. When the literature was examined, it was seen that the use of humor (Arıkan, 2022; Balta, 2016; Ereyi, 2016; Kağan & Atalay, 2018; Kahraman, 2008) and psychological resilience (Sünbül & Gördesli, 2020; Aksoy, 2022; Bektaş & Özben, 2016; Elsel, 2019) were not much related to demographic variables such as age, gender and educational status of the participants.

As a result of the research, the psychological resilience scale scores of mothers who have children with special needs do not show a significant difference according to the number of children the mothers have. Similar to the finding of this study, Kındıroğlu (2018) also found that the psychological resilience levels of parents did not differ according to the number of children they had. However, the scores of the coping through humor scale show a significant difference according to the number of children they had. However, the scores of the coping through humor scale show a significant difference according to the number of children the mothers have. Among the mothers who have children with special needs, those who have two children have significantly higher coping levels through humor than mothers who have only one child. Even with the birth of a child with a normal developmental level, a very challenging process begins for parents and different roles and tasks are encountered in addition to parental roles. As a matter of fact, the addition of a child with a disability to the family creates an additional stress and anxiety for the parents as different roles are added to the system, different duties and responsibilities fall on the parents and they are faced with situations that require them to cope with more problems (Küçüker, 1997). Therefore, with the increase in the number of children, it is an expected result that the mother seeks to cope with challenging life situations and accordingly, the level of coping through humor increases. Because humor is known to regulate mood, fight depression and increase morale (du Pre, 1998; McGhee, 2002).

According to another finding obtained from the research, while the psychological resilience scale scores of the mothers who have children with special needs do not show a significant difference according to the type of special needs the child has, the scores of the coping through humor scale show a significant difference according to the type of special needs the child has. The coping levels of mothers who have children with special needs in the type of intellectual disability through humor are significantly higher than those of mothers who have children with other types of special needs. Life satisfaction and psychological well-being of families with children with special needs are negatively affected by this situation (Kim, Lee, Chun, Han & Heo, 2017) and it is known that stress, distress and anxiety levels are higher in these families (Estes et al., 2009; Paster, Brandwein & Walsh, 2009). Therefore, it is stated that parents of children with special needs, especially mothers, have low levels of psychological resilience and therefore will be at risk for different physical and mental health problems (Habibpour et al., 2019). Humor is an indicator of mutual affirmation of interpersonal relationships and joy of life (Bag, 2020). Especially therapeutic humor is used to improve individual relationships (Martin et al., 2003). In this respect, it can be said that it is more difficult to communicate with children with intellectual disabilities compared to children with other physical disabilities. For this reason, the fact that the level of coping through humor of mothers who have children with special needs in the type of intellectual disability is significantly higher than mothers who have children with other types of special needs is a positive situation in terms of the mental health of the mother.

In the study, it was found that there was a positive, moderate and significant relationship between the use of humor as a coping tool by mothers of children with special needs and their psychological resilience. The effective use of humor in daily life positively affects both the cognitive, social and psychological development of individuals and their subjective well-being levels (Kağan & Atalay, 2018). In psychological resilience, it is the ability of the individual to produce positive results in the face of negative situations, major changes and risk situations, to adapt to the new situation and to maintain its functions (Ungar & Lienberg, 2011). Therefore, it can be inferred that using humor as a coping tool will predict psychological resilience. As a matter of fact, similar research findings also support this. For example, Çakmak (2012) stated that using humor therapeutically can support the physical, emotional, social and cognitive development of individuals and thus may have an effect on increasing their psychological resilience. Similarly, Satici & Deniz (2017) revealed a significant relationship between coping with humor and psychological resilience in their research on university students.

As a result; (i) mothers of children with special needs have high levels of coping through humor and moderate levels of psychological resilience; (ii) scores of coping through humor scale and psychological resilience scale do not show a significant difference according to age variable; (iii) scores of psychological resilience scale do not show a significant difference according to age and number of children variables; (iv) the scores of coping through humor scale are significantly higher in mothers with two children compared to those with one child, and in mothers with intellectual disability compared to all other types of special needs; (v) there is a positive and highly significant relationship between coping through humor and psychological resilience. It is a significant predictor of coping through humor and psychological resilience.

Limitations and Suggestions

Data collection tools based on the self-reports of the participants were used to collect the data of the study. In future studies, it may be useful to use different data collection techniques such as interviews and observations by taking this limitation into consideration. Psychological resilience of mothers with children with special needs was found to be at a medium level. Studies should be conducted to increase the psychological resilience of these mothers. In this regard, expert support can be provided to them at certain intervals and thus, they can be made to feel better. Considering that humor use of mothers with special needs predicts their psychological resilience, it is recommended that various psychoeducation practices should be designed by mental health experts to increase the humor use of these mothers.

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