



Investigation of Self-Efficacy, Quality of Life Perceptions and Resilience Levels of Parents with Children with Autism by Mediator Variable Analysis

Ayşenur Nazik Fayız¹, Mehmet Palancı²

Abstract

The aim of this study is to examine the relationship between self-efficacy levels, family resilience perceptions and quality of life of parents with autistic children aged 4-6. The research was carried out with the screening method. A total of 330 parents with autistic children between the ages of 4-6 were contacted, and the Parent Self-Efficacy Scale (PSES), Quality of Life in Autism Inventory (QoLiA), and Family Resilience Scale (FRS), which were determined as the data collection tools, were applied. Data analyzes were performed using intermediary variance analysis and MANOVA, Two-Way ANOVA, and Correlation analysis. According to the results of the research, it was found that the level of resilience and the perception of parental self-efficacy were explanatory on the perception of quality of life. In addition, it was observed that the level of resilience also changed depending on the age of the families and an additional disease their children had. Economic conditions had a direct impact on self- efficacy (SE) and quality of life (QoL). The findings were evaluated as the data to be used within the scope of psychological counseling to be provided to families with disabled children, and in line with family education and guidance in the field of special education.

Keywords

Autism
Self-efficacy
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Introduction

Autism spectrum disorder (ASD) is defined in DSM-V as limited social communication and interaction, limitations in verbal and non-verbal communication skills, difficulty in initiating and maintaining communication, stereotypical behaviors and activities, and excessive commitment to sameness (American Psychiatric Association, 2013). The US Centers for Disease Control and Prevention reported the prevalence of autism as 1 in 150 between 2000 and 2002, 1 in 110 in 2006, 1 in 68 in 2010, and 1 in 59 in 2014 (Centers for Disease Control and Prevention, 2014). In addition, it has been stated that the change observed in the incidence of autism in Australia, where regular screening and controls are carried out, is approximately 100/1. According to another study by Maenner et al. (2021), ASD affects 1 in every 44 children diagnosed in different types and levels in the USA. There is no official study on the incidence of autism spectrum disorder in our country. However, it is stated that this number is approximately 352.000 people, including different types and moderate levels, based on the associations involved in studies conducted on autism support (Federation of Autism Associations, 2019).

¹ Bartın University, Health Services Vocational School, Department of Child Care and Youth Services, Turkey, aysenur.nazik1@gmail.com

² Trabzon University, Fatih Faculty of Education, Department of Special Education, Turkey, mpalanci@trabzon.edu.tr

The increasing awareness of autism as a development problem by different community stakeholders, the increase in the quality of development support provided to children with autism, and the improvement observed in the curative alternative practices provided have increased the interest in the participation to the issue from different segments, including families (Baumer & Spence, 2018; Yıkımsı & Özbey, 2009). Especially in the last 10 years, there has been a noticeable increase in the number of children diagnosed with autism spectrum disorder (Preece et al., 2017). It is reported that the number is increasing in high-income countries, depending on the sensitivity of diagnosis, continuity of support services, and population density (Lord et al., 2020).

This increase is due to reasons as yet unidentified, as well as the urbanizing population, declining primary social support ties, increased labor force participation of mothers, and increasing overall significant pressures to plan for children's healthy living and educational futures. Parents of children with ASD are increasingly worried, and the uncertainty and increased stress negatively affect the quality of life of parents (Khoshakhlagh, Marashian, & Jeyervand, 2022). On the other hand, the fact that the reasons for the formation of autism have not been fully explained and that a method that will provide complete recovery regarding its treatment is unlikely to be developed, worries parents of children with autism even more. As a lifelong developmental problem, autism, when combined with the obligation of families to provide continuous care support, negatively affects the psychological health, social relations and expectations of parents, including their quality of life. It negatively affects the psychological health, social relations, and parents' expectations. Increasing anxiety and hopelessness affect their happiness and psychological well-being, including their families' coping processes (Lazarus & Folkman, 1987; White, McMorris, Weiss, & Lunskey, 2012).

Variables that affect psychological well-being for families lead to significant symptoms such as depression and anxiety, including marital adjustment (Palancı, 2018). In addition, the effects of having a disabled child on families is observed as depression (Durat, Atmaca, Ünsal, & Kama, 2017; Fırat, 2016; Jones, Hastings, Totsika, Keane, & Rhule, 2014), stress (Ooi, Ong, Jacob, & Khan, 2016; Güleç-Aslan, Cihan, & Altın, 2014; Dabrowska & Pisula, 2010; Estes et al., 2009), resilience (Demiray, 2019; Aysever & Demirok, 2019), despair (Erdal & Efiltili, 2021; Kaya & Yöndem, 2020; Tunçel, 2017; Durat et al., 2017), time management (Kırbaç & Özkan, 2013), economic stress (Darling, Senatore, & Strachan, 2012; Hayes & Watson, 2013; Kaner, Bayraklı, & Güzeller, 2011; Ohaeri, 2003; Patterson, 2002; Seltzer & Krauss, 2001; Wong et al., 2015), divorce (Depape & Lindsay, 2015; Hartley et al., 2010), intra-family communication conflict (Hartley, DaWalt, & Schultz, 2017; Langley, Totsika, & Hastings, 2017; Schaaf, Toth-Cohen, Johnson, Outten, & Benevides, 2011), loss of self-confidence (Fırat, 2016; Kaner, 2009; Tahincioğlu, 2016; Tarabek, 2011) and anxiety. This directly or indirectly affects multiple variables that determine the quality of life of the family (Jacob, Scott, Falkmer, & Falkmer, 2015; Meral & Cavkaytar, 2015; Öz, Yüksel, & Nasıroğlu, 2019; Türk & Bumin, 2015). The fact that the new child who joins the family is born affected by disability, the family members accepting the situation, the family adapting to the inadequacy of the child and the uncertain new situations brought about by the disability brings a shock and a difficulty in adaptation. In addition, the ability and resources to cope with the new economic, emotional and psychological difficulties caused by the process also vary from family to family (Yassıbaş & Çolak, 2019). Regardless of the type of disability, the effects of disability are revealed according to the nature of the ecosystem in which both the person diagnosed and the family members are in (Khan, Kamran, & Ashraf, 2017). Especially in the first days following the diagnosis, the adequacy of the self-efficacy perception that organizes the initial ideas about the family's power to struggle should be considered. The level of perceived social support and hope levels by the family helps to feel stronger in the face of autism. It is also known that at this stage, the level of resilience contributes to the active coping behaviors of families as a variable (Wang, Liu, & Zhang, 2022).

Adaptation and psychological well-being problems experienced by the family are also shaped according to the family profiles of children diagnosed with ASD. Most of the care needs of these children are met by their parents, especially by their mothers. In this context, mothers' self-efficacy perceptions and levels of evaluation of their skills (Zhou, Yin, Wang, & Wang, 2019) depend on the personal

resistance of their self-efficacy (Weiss et al., 2013), on the intensity of care and its sustainability (Hastings & Symes, 2002), on other supportive functions related to being a family (Jackson, Pinto-Martin, Deatrick, Boyd, & Souders, 2022), stress coping styles and problem-solving skills (Strauss et al., 2022) affecting family life in many ways, including life satisfaction, physical health and planning of external activities related to home life (Taylor, Luk, & Leadbitter, 2021). In this context, the physical-psychological well-being of parents in the face of autism is determined whether they exhibit sufficient parental involvement behavior towards struggling with the problem (Clarke & Fung, 2022).

It is known that the diagnosis of ASD imposes more stress and psychological tension on the family than other developmental problems (Weiss et al., 2012). It has been revealed by different studies (Guntıy, 2021; Jardenil & Madrigal, 2022; Palancı, 2018; Zhao & Fu, 2020) that the variables that affect the increase or decrease in the quality of life are correlated with the variables that increase the family resilience. This situation is revealed both because of the behavioral characteristics of children diagnosed with ASD and because ASD involves an uncertain and long struggle for families (Ogston, Mackintosh, & Myers, 2011). A study conducted with mothers whose children were diagnosed with autism shows that families that have children with autism who have less difficulty in performing daily routines experience less tension. In addition, it has been observed that the emotional or social support of these families from different sources contributes more to their quality of life (Ektaş, 2017). After the quality of the social support system, the coping power of families with children affected by disability is also affected by the level of resilience of the family. The relationship between family resilience and adaptability skills of families with children who have special needs in times of crisis and situations that cause stress should be especially considered (McConnell, Savage, & Breitreuz, 2014). It can be assumed that the life variables and quality listed up to this section will ultimately affect the family's quality of life.

There are different variables that determine the quality of life of parents with autistic children. Among these, the most frequently mentioned titles in the literature are parent's gender, marital status, education level, income level, perceived parenting skills, and marital stress level (Pepperell, Paynter, & Gilmore, 2018). In addition to studies revealing that stress is a determinant of quality of life and that family income and parenting stress are two important determinants when evaluating these variables together (Hsiao, 2018), it is also known that coping skills qualified according to self-efficacy perception (Giallo, Wood, Jellett, & Porter, 2013), and perceived quality of life level (Cho & Kahng, 2015; Taştan, 2021), cognitive attributions for autism and marital satisfaction (Gau et al., 2012; İnce & Tüfekci, 2015; Karpata & Girli, 2012; Yavuz & Gümüştıkaya, 2021; Yavuz & Şafak, 2021), and other personality traits (Boztaş & Tutkun, 2017) affect the perception of quality of life of the family.

In the study carried out by İnal and Aktürk (2022), researchers discussed the level of self-efficacy and resilience together, which determine the quality of life of families with children with autism. However, the number of studies explaining the positive predictive power of the mediating effect of resilience and self-efficacy levels, which especially affect sustainable positive parenting attitudes, is quite limited. Although resilience is mostly determinant, it has not been adequately addressed which variability depends on the situations in which it is effective or ineffective (Palancı, 2018).

In another study, in which the psychological resilience, resilience and quality of life of parents with children with special needs and parents with children with typically developing children were discussed together, it was revealed that active adaptation strategies, especially the use of social support and the level of resilience, can be classified among the main factors that protect parents against stress (Lindsey & Barry, 2018; Lu et al., 2018; Pozo, Sarriá, & Brioso, 2014). It is thought that self-efficacy as a meta-cognitive concept (Schwarzer & Fuchs, 1996) and resilience, which adds strength and active fighting power (Westphal, Bonanno, & Bartone, 2008) to personality in personality studies, have a related effect on parenting skills. In this context, considering the quality of life levels of parents with children who need special education with the mediation effect of variables that contribute positively to coping skills such as self-efficacy and resilience will reveal a correct causality analysis and a definition of relationship mechanics.

Researchers have handled resilience in various ways for the field of special education. While Masten (2001) defines resilience to support the model discussed in this research as the ability of a person to display in the face of difficult and dangerous situations; Walsh (2015) defines it as the ability to get out of the situation by getting more robust in the face of difficulty, to improve in times of crisis, and as the competence that helps to be strong. Studies show that the subjective well-being and resilience levels of families with children with disabilities make a significant difference compared to families with children with normal development, and the use of existing resources, avoiding negative situations and using coping skills primarily in case of need depend on the level of resilience (Palancı, 2018). Rea-Amaya, Acle-Tomasini, and Ordaz-Villegas (2017) emphasized the importance of resilience in eliminating stress and ensuring that the child is raised in a healthy environment. Emphasizing the role of resilience for the well-being of children and adults under difficult conditions, researchers stated that strengthening and developing resilience is an easier task than trying to avoid difficulties (Avdagic et al., 2018). In order to fulfill the responsibilities related to the care of the child, parents need to assume more than one role and tolerate changes and restrictions in their lives (Hoogsteen & Woodgate, 2013).

Reasons such as lack of information about autism, erroneous cultural beliefs, families blaming themselves for the child's diagnosis of autism, limited social support resources, and inability to understand and manage the behaviors exhibited by the child with autism may put families with autistic children under more stress (Brei, Schwarz, & Tasman, 2015). In families with children diagnosed with autism, the continuity and quality of the social support provided by the spouses to each other is shaped by the level of perceived resilience (Ilias, Cornish, Park, Toran, & Golden, 2019) and that there is a positive relationship between the level of quality of life and the level of resilience (Yavuz & Gümüşkaya, 2021). It is also predicted that perceived social support mediates a positive outlook towards the future and less stress (Avşaroğlu & Okutan, 2018).

Quality of life is defined by the World Health Organization (WHO) as an individual's perception of their position in life in relation to their goals, expectations, standards and concerns in the context of the culture and value systems in which they live (Theofilou, 2013). According to another definition, quality of life is a person's perception of meeting their individual needs in the social environment and to complete their responsibilities. (Schalock, Bonham, & Verdugo, 2008). Parental quality of life, on the other hand, is defined as having the necessary equipment to meet their needs, being able to perform daily tasks on their own, and maintaining this situation in an enjoyable way (Park et al., 2003).

The routines of parents' daily lives may change due to situations such as self-harm, disturbing, repetitive, and stereotypical behaviors seen in many children with autism. These situations, which can lead to a negative perception of life satisfaction, may negatively affect the problem behaviors exhibited by children, their desire to stick to their routine, and their everyday needs. Studies indicate that families with children with autism avoid being in environments outside the home. Because the difficulties of caring for these children when they are out of the house and the existence of problematic behaviors that may disturb the environment make the families very uneasy (Fox, Benito, & Dunlap, 2002). Studies conducted on families with children diagnosed with ASD are very limited (Gardiner & Iarocci, 2012). Taking care of a child diagnosed with autism can also have an impact on the competencies and quality of life of families (Allik, Larsson, & Smedje, 2006). In the study of Kuhlthau et al. (2010), examining the quality of life of children with chronic diseases and without any health problems, it was seen that the quality of life scores of people with chronic disease and without any health problems in the control group were positively higher than those in the autism spectrum disorder. In another study conducted with parents of children with ASD and Down Syndrome, the quality of life perceptions of families with children with and without a developmental disability were discussed. Research findings show that

families with children who are not diagnosed with any disability have higher quality of life perceptions (Karaduman & Parlar, 2020). Considering the emotional tendencies of mothers, it was found that they had a lower quality of life compared to fathers' (Kuru & Piyal, 2018).

In the literature, studies directly correlate with quality of life, especially having a child with autism (Cappe, Poirier, Sankey, Belzil, & Dionne, 2018; Hutchison, Feder, Abar, & Winsler, 2016) and disability (Mugno, Ruta, D'Arrigo, & Mazzone, 2007). However, the number of studies that enumerate variable relations within a model and in the context of causality is limited. It is thought that considering the variables in such an ordering and relationship structure will contribute to the studies in the literature by providing a further explanation. In addition, with this research, it is considered important to explain the conceptual relationships that can affect the quality of the support to be provided to families both within the scope of family education practices in the field of special education and within the scope of psychological counseling services. Practices aimed at increasing the quality of life of field professionals will contribute to data-based intervention skills and timing if they have comprehensive information about the cut-off points that can be considered both positive and negative in this regard, and self-efficacy and resilience levels that will provide adequate support for coping skills. In this context, testing the intermediary roles of variables such as self-efficacy and resilience, which can be studied directly, on increasing the quality of life, constitutes the main purpose of the research. In addition, the demographic variables of being a family and the differences that may be caused by some classifying variables that are predicted to affect the family ecosystem within the scope of quality of life were also analyzed. In this context, the predicted intermediary model is given below in Figure-1. In this context, the main purpose of the research is to reveal how the quality of life and parental self-efficacy perceptions of the parents of children with ASD are related to the level of resilience. The sub-problems of the research conducted for this purpose are given Figure 1.

1. Is there a relationship between parental self-efficacy (SE), quality of life (QoL) and resilience levels (RL) of families of children diagnosed with ASD? In which order are the effect calculations on this subject revealed?
2. Does the fact that the family has another child and therefore the intensity of the care services provided make a difference for the level of SE, QoL and RL?
3. Resilience, as a metaformative variable in different studies, mostly plays a more prominent role in explaining family resistance than other variables. However, does the additional illness that the family cannot control and the feelings of exhaustion/desperation brought about by aging offer negative results despite their resilience? Do variables that cannot be controlled by internal personal resources break the resistance to coping?
4. Is there an explanatory mediator analysis effect between SE, QoL and RL?

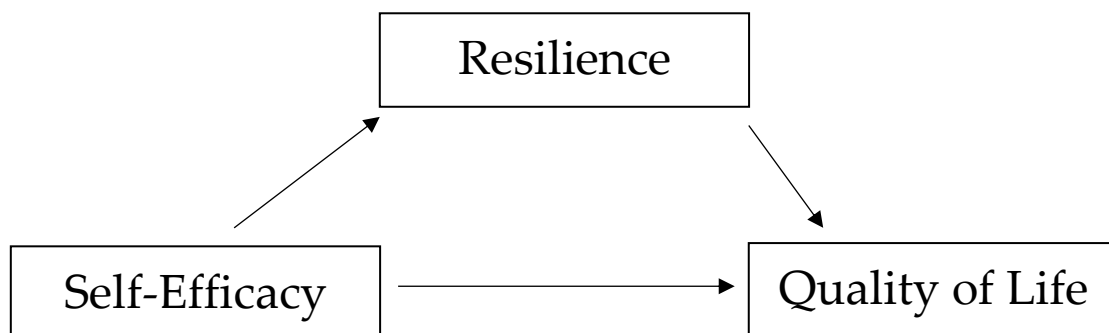


Figure 1. Relationship Model between Resilience, Self-Efficacy and Quality of Life

Method

Research Pattern

This research is a descriptive correlational study aiming to reveal the relationship between resilience, self-efficacy levels and quality of life of parents who have a child diagnosed with autism up until a year ago. In descriptive correlational studies, it is aimed to determine the existence and content of the relationships between two or more variables. According to the results obtained from descriptive-relational studies, exact cause-effect relationship cannot be obtained, but some predictions are possible due to the clues obtained from the variables examined (Yıldırım & Şimşek, 2021).

Research Group

The study group consists of 330 parents who live in Ankara, Trabzon, Bartın, Zonguldak, Karabük and Kastamonu provinces, who have a child diagnosed with autism and who voluntarily agreed to participate. The convenience sampling method (Büyüköztürk, Kılıç-Çakmak, Akgün, Karadeniz, & Demirel, 2022; Yıldırım & Şimşek, 2021) was used in the research.

Of the parents participating in the study, 206 were mothers and 124 were fathers. A total of 101 of the parents were 33-37 years old, 72 were 23-27, 79 of them were 28-32 years old, and 78 were 38 years or older. While 92 of the parents were high school graduates, the number of primary school graduates and bachelor's degree or higher was 82, and the number of secondary school graduates was 156. While the monthly income of 28.79% of the parents was between 4001-5000 TL, 27.28% of them had a monthly income of 3001-4000 TL, 16.36% of them 3000 TL and below, 16.06% of them 6001 TL and above, and 11.51% of them between 5001-6000TL.

While 77.58% of the parents in the study group were married, 22.42% lived separately from their spouses, 138 of the parents had two children, 135 had one child, and 57 had three or more children. Of the children diagnosed with autism in the study, 224 were boys and 106 were girls, 25.28% of these children were 5 years old, 25.76% were 6 years old, 24.54% were 4 years old, 13.33% were 7 years old, and 9.09% were 8 years old. In addition, while 76.94% of children with autism did not have any health problems, 26.06% had health problems.

Data Collection Tools

Parental Self-Efficacy Instrument for Children with Disabilities (PSICD): PSICD was developed by Guimond, Moore, Aier, Maxon, and Diken (2005) and adapted into Turkish by Cavkaytar, Aksoy, and Ardiç (2014). The developed scale is used to determine the parenting self-efficacy levels of parents with children with disabilities. The scale is a 7-point Likert-type rating scale and consists of 17 items in total. The lowest score that can be obtained from the scale is 17 and the highest score is 119. A high score from the scale means a high level of self-efficacy. The Cronbach's alpha coefficient of the scale was found to be .95 out of 17 items that make up the scale. It was determined that the total correlations of the items ranged from .52 to .83 in the calculation of item-total correlation over all 17 items that make up the scale. In order to determine the test-retest reliability of the scale, Pearson correlation coefficient was calculated and $r = .79$, $p < .001$ and Cronbach Alpha internal consistency coefficient of the scale was determined as $\alpha = 0.95$. As a result of the validity and reliability studies, it has been revealed that the scale measures the feature in a one-dimensional way. The Cronbach Alpha internal consistency coefficient calculated for this study was found to be $\alpha = 0.91$.

Quality of Life in Autism Questionnaire-Parent Version (QoLA): The Turkish adaptation study of the scale developed by Eapen, Crnčec, Walter, and Tay (2014) to evaluate the quality of life of parents of children with autism was carried out by Özgür, Aksu, and Eser (2017). The scale consists of two parts; A and B. Part A consists of 28 questions developed to determine the perceptions of parents about the quality of life, and part B consists of 20 questions about determining how much of a problem the issues experienced by the autistic child cause for the family. According to the explanatory factor analysis, Part A consists of 6 sub-dimensions as individual well-being, social dimension, environmental dimension, independence dimension, physical dimension and health dimension and Part B consists of 3 sub-dimensions as friends, school and other problems. The scale, in which children with autism assess how

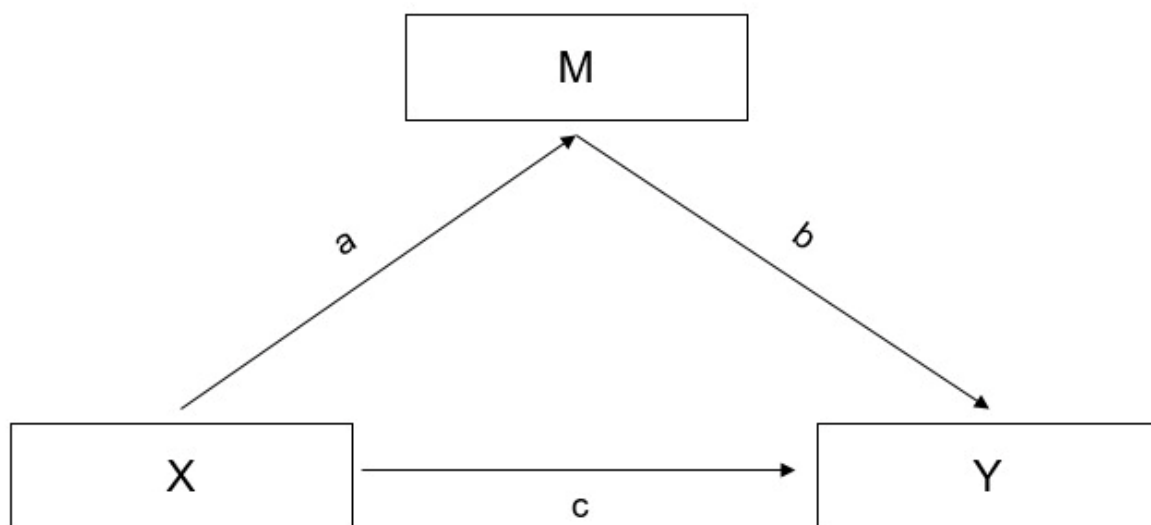
difficult their behaviors are for parents, is a 5-point Likert-type rating scale, with five being evaluated as “no problem for me” and one expressed as “it was too much of a problem for me”. A high score from the scale indicates that the behaviors exhibited by their children due to autism pose less of a problem for families. The Cronbach's alpha coefficient was calculated as .93 for the Part A (.88 for this study) and .94 for the Part B (.89 for this study). The test-retest intra-class correlation coefficient was 0.68 and 0.76 for Sections A and B, respectively.

Family Resilience Scale (FRS): The scale was developed by Kaner and Bayraklı (2010) in order to evaluate parents' perception of resilience. Consisting of 37 items, the scale is in 5-point Likert type. In the scale, the statement “This does not describe me at all” is scored with 1 point, while the statement “This describes me very well” is scored with 5 points. The level of family resilience is determined by the total score obtained from the scale. A high score from the scale means that the person's perception of resilience is high. The Cronbach 's alpha and two-half reliability coefficients of the scale were found to be between .54-.91 and .53-.87, respectively. Test-retest reliability values ranged from .33 to .80 and all were significant. Cronbach alpha values were calculated as .86 and .82 for this study.

Demographic Information Form: The form was developed by the researcher to determine the age, gender, income level, education level, number of children of the parents with a child with autism, and demographic characteristics of the child with autism such as age, gender and health status.

Analysis of Data

Data analysis of the research was done with SPSS 22.0. Before analyzing the data, distribution homogeneity, skewness and discordant extreme values were checked with SPSS Explorer. After the forms that were eliminated as a result of the preliminary analysis from the data obtained from a total of 342 participants, the final analyses were carried out on the answers of 330 participants. Data were analyzed by using correlation, Two-Way ANOVA, MANOVA and Mediator Variable Analysis. SPSS 22.0 program was used for mediator variable analysis. Intermediary variable data analysis processes were carried out by using the PROCESS Macro, which was developed and added to the package program by Hayes (2012). Considering the nature of the research data and the research model, Multiple Mediation Model 4 was chosen and analyses were made. The output obtained from the data were analyzed with 5000 Bootstrap samples and the estimation confidence interval of at least 95% ($p < .05$). In the study, perceived quality of life was considered as the dependent variable and self-efficacy perception as the independent variable. Resilience level was the mediator variable that was recommended to be examined in the model.



M= Resilience level (Mediator variable); X= Perceived quality of life (Dependent variable); Y= Self-efficacy (Independent variable)

Figure 2. Mediator Variable Analysis Model

A symbolic representation of the proposed intermediary model is presented in Figure 2. The relationship between the levels of self-efficacy, resilience and quality of life (dependent variable) of families with autistic children according to the economic levels of the families was examined by MANOVA analysis. Resilience tends to be considered as a meta-cognitive concept that contributes strongly to psychological well-being in different studies. For this reason, it draws attention in repeated studies as a variable that produces a significant effect by differentiating from other variable sets in most studies. Two-Way ANOVA analysis was conducted using additional variables with a high probability of increasing the negativity that could produce a difference for resilience. Economic stress is shown in the literature among life conditions that are difficult to control by personal internal resources. The effect of the structure, which will be added to the difficulties of having a disabled child as an effective external stress source, on resilience and self-efficacy has been tried to be understood with this interaction effect analysis. Likewise, MANOVA analysis was conducted to see how the aforementioned dependent variables were affected by the stress state of the parents' children, whether they had a continuing health problem other than autism or not. It is thought that the independent variable relations in question will be more explanatory than the way they are handled in this study. Resilience can turn into coping with the problems that may arise from having children who develop differently up to a certain age or economic limit, or to exhibit an approach of submission after a certain level. It is desired to understand whether meta-cognitive variable interactions such as resilience and self-efficacy create a preference difference for coping or submission. It is assumed that the analysis of this preference can better explain the causality sources.

Before the analysis, it was tested whether the dataset provides sufficient prerequisites to perform MANOVA. Firstly, skewness was calculated as -0.18 and kurtosis was calculated as 0.21 . Values between -1 and $+1$ indicate that it is a suitable distribution for analysis. The variance homogeneity of the data was also examined with the prerequisite Levene test. Since the F value calculated for each dependent variable was at the $p > 0.05$ level of significance, it was accepted that the initial equality values between the groups were met. The p value of the covariance matrix between the variables across the groups in MANOVA was calculated with Box's M: 32.8 . Since it was greater than 0.05 , it was observed that this prerequisite was met. Adhering to these results, it was accepted that there was no need to use an additional correction and calculation type option. Only Wilk's Lambda value was interpreted in the analyses, depending on the convenience offered by the current analyses listed.

Ethical Approval

The Ethical Approval for the study was received from Bartın University Social and Human Sciences Ethics Committee with the protocol number 2021-SBB-0365. Anonymous data of families are protected in accordance with ethical procedures. The diagnosis of ASD can be made technically and legally at the earliest age of 3 years. The age range of 4 years is the earliest period when the onset of symptoms has been reported to occur. The age of 6 increases the level of feeling good or bad for families, depending on the school starting period. For families, depending on possible improvements, waiting for children to continue normal education or to take part in a special education school/special education class is a decisive stress transaction on SE, QoL and RL level.

Results

The normality distributions and descriptive statistics of the scores obtained by the parents from the scales are presented in Table 1.

Table 1. Descriptive Statistics of Parents' Scores from Scales

Scale	N	\bar{X}	SD	Skewness	Kurtosis	min	Max	α
QoLA Form A	330	75.0398	26,82254	.584	-.548	32.00	137.00	.979
QoLA Form B	330	62.0448	17.03945	.245	-.606	28.00	100.00	.962
PSICD	330	79.2388	27.58301	-.200	-1.070	20.00	119.00	.981

In line with the information obtained, it was found that the scales worked with a high degree of reliability in the relevant sample group. In addition, when the normality of the data was examined, Parametric tests were used because the skewness and kurtosis coefficients were in the range of $+1.96$ and the number of samples was greater than 20 (Tan, 2016). In addition, it was determined that the histogram graphics examined supported this situation. For this reason, t-test for two independent variables and ANOVA for more than two independent variables were used in the study. Pearson Correlation Analysis was applied to determine the relationship between parents' quality of life and self-efficacy. Cohen (1988) found that the correlation coefficient for correlational relationships was $r = .10 - .29$ small; $r = .30 - .49$ medium and $r = .50 - 1.00$ large. As can be seen in Table 2, data homogeneity analyzes are presented.

Table 2. Data Set MANOVA Suitability Pre-Analysis Values

Distribution normality test (Kolmogorov-Smirnov)	SE	QoL	RL	
Kolmogorov Smirnov Z.	1.27	.99	1.16	
P	.15	.24	.13	
Levene test for equality of variance	F	df1	df2	p
SE	.78	14	*****	.59
QoL	.52	14		.82
RL	.96	14		.33
Equality test of covariance matrices				
Box's M	32.8			
F	.65			
df1	40			
df2	16571.1			
P	.75			

Table 3. MANOVA Analysis Findings Examining the Effects of Economic Conditions on the Levels of SQ, QoL and RL of Parents with Autistic Children

Source	Wilks' λ	Value	F	Hypothesis Sd	Error Sd	P	n^2
Intersection	Wilks' λ	.01	3524.4	2.0	108.0	.000	.42
Additional		.49	9.19	4.0	176.2	.01	.37

As can be seen in Table 3, the levels of SE, QoL and RL of parents who have a child with ASD differ significantly according to their economic conditions ($\lambda: .49$, $F: 9.19$; $p < .01$). The distribution of the calculated values is given in Table 3 below. As can be seen in Table 4, MANOVA test calculation values are given.

Table 4. Interaction Values Between Self-Efficacy, Quality of Life and Resilience

Source	The Dependent Variable	Kt	Sd	KO	F	p	n ²
Corrected model	SE	225.3	2	113.2	23.29	.000	.62
	QoL	256.3	2	125.9	29.2	.000	.70
	RL	160.0	2	96.4	17.3	.000	.49
Intersection	SE	1508.2	1	1508.2	4350.7	.000	.96
	QoL	1665.7	1	1665.7	4772.5	.000	.98
	RL	202.5	1	202.5	29.6	.112	.51
Additional	SE	225.3	2	113.2	4350.7	.000	.62
	QoL	256.3	2	125.9	4772.5	.000	.70
	RL	66.0	2	21.4	29.6	.112	.24
Error	SE	22.4	**	.49			
	QoL	29.9		.52			
	RL	8.2		.06			
Total	SE	2934.3					
	QoL	2103.4					
	RL	1786.6					
Adjusted total	SE	208.7					
	QoL	240.1					
	RL	199.8					

According to the Tukey test used for the post-comparison range calculations of the homogeneously distributed data. The difference for self-efficacy was found to be significant between low and high income groups and for quality of life between all low, middle and high income groups. The level of resilience does not differ between the groups depending on the economic conditions.

Table 5. MANOVA Analysis Findings on the Number of Children of Parents with Autistic Children with SQ, QoL and RL Levels

Source	Wilks' λ	Value	F	Hypothesis Sd	Error Sd	P	n ²
Intersection	Wilks' λ	.01	2765.4	2.0	76.0	.00	.70
Additional		.92	1.11	10.0	177.2	.58	.13

As can be seen in Table 5, it has been calculated that the levels of SE, QoL and RL of parents who have a child with ASD do not differ significantly according to their economic conditions (λ : .92, F: 1.11; $p > .05$). Interaction values for this analysis are given in Table 5. As can be seen in Table 6, MANOVA test calculation values are given.

Table 6. Interaction Values Between Self-Efficacy, Quality of Life and Resilience

Source	The dependent variable	kt	sd	KO	F	p	n2
Corrected model	SE	6413.3	2	1413.2	2.17	.30	.16
	QoL	356.3	2	57.9	1.2	.42	.09
	RL	112.5	2	21.2	9	.55	.06
Intersection	SE	1121250.2	one	1121250.2	141.2	.02	.76
	QoL	325923.1	one	325925.1	99.6	.05	.60
	RL	24154.5	one	24154.5	36.7	.12	.22
Additional	SE	7255.1	2	1002.2	1.13	.36	.12
	QoL	334.2	2	53.9	1.04	.57	.09
	RL	28.9	2	44.4	4	.68	.03
Error	SE	420711.7	**	239.4			
	QoL	125635.1		16.3			
	RL	7211.6		1.8			
Total	SE	12364.4					
	QoL	9784.2					
	RL	5.2017					
Adjusted total	SE	21457.3					
	QoL	13241.7					
	RL	7.2233					

Analysis performed to explain the sub-problem

Table 7. Two-Way ANOVA Test Examining the Effect of Age and Autism Diagnosis on Resilience Level in addition to Disease Survival Status

Two-Way ANOVA Analysis	Sd	KO	F	p	Eta-square
(1) Additional Disease	one	.69	1.3	.26	.05
(2) Age of parent	one	10.19	45.83	.000	.112
(12)	one	6.85	22.61	.01	.72
Error	387	.94			

As can be seen in Table 7 In the two-way analysis of variance carried out to examine the interaction effect between having another disease that constantly affects the health status of the children of parents with autistic children and the increase in the age of the parents in the context of resilience, the level of "interactive effect" was found to be $F=22.61$, $p<.01$. When the additional disease option included in the analysis among the main effects is examined, the calculated difference is not significant at the level of $F= 1.3$, $p>.05$. However, the effect level calculated for the age of the parent $F=45.83$, $p<.001$ is statistically significant. It is understood that the difference is revealed depending on the parents over the age of 40. When the disease and age factor come together, the component that has a negative effect on the level of resilience constitutes the power of action.

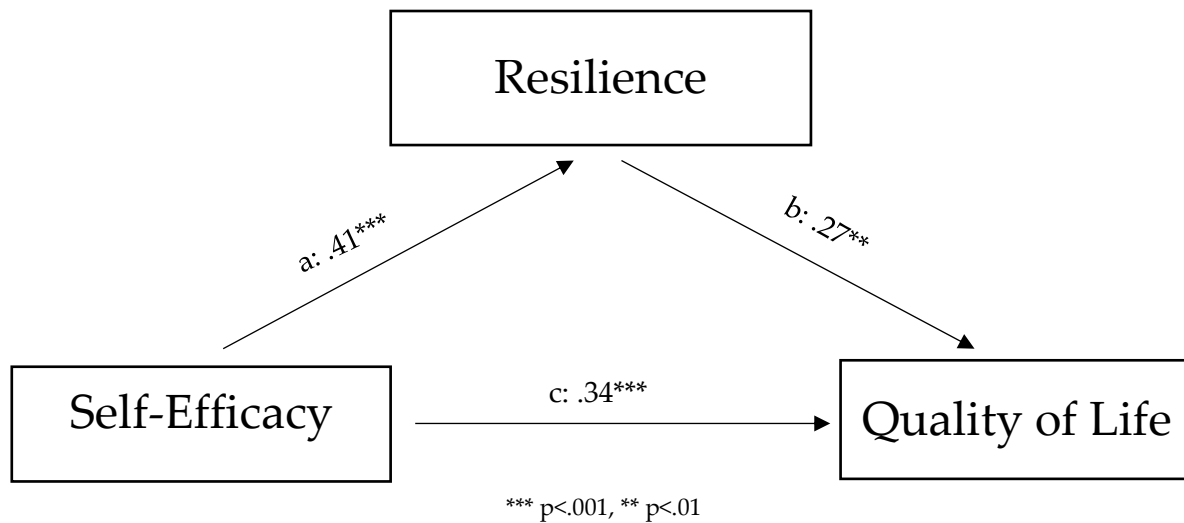
Mediator analysis to explain the subproblem

Figure 3. Mediator Variable Analysis Model Examining the Mediating Role of Resilience Level in the Relationship between Quality of Life and Self-Efficacy

For mediator variable analysis, the effect of self-efficacy level on resilience and perceived quality of life and the effect of resilience level on perceived quality of life were examined. In Figure 3 the mediation test performed, the primary variables added to the model show direct relationships, and the relationship variability added to the final model additionally shows the calculation values of the intervening indirect relationships. According to the results of the analysis, the linear relationship calculations between the self- efficacy levels, resilience levels and quality of life of families with a child with autism were statistically significant (a: $\beta = .52$, $p < .001$; b: $\beta = .39$, $p < .01$ and c: $\beta = .40$, $p < .001$, respectively). With the addition of the resilience model to the total model, a significant decrease was observed in the indirect effect calculation values (Sobel 3.30; a: $\beta = .42$, $p < .001$; Sobel 2.62; b: $\beta = .27$, $p < .01$ and Sobel 2.68; c: $\beta = .31$, $p < .001$). When the calculated confidence intervals are evaluated, the model is meaningful as a whole and the calculation values are within the safe values for estimating the presence of full mediation effect.

Discussion and Conclusion

In this study, the relationship between self-efficacy, quality of life and resilience levels of parents with autistic children was examined in terms of various variables. Studies in the literature on special education and psychological counseling reveal that the active coping variables that affect psychological well-being, including the self-efficacy levels of parents with children with different disabilities, are lower than those of parents with normally developing children (Eisenhower & Blacher, 2006; Gallagher, Philips, Oliver, & Carroll, 2008; Karst ve Van Hecke, 2012; Lloyd & Hastings, 2009a; Paczkowski & Baker, 2007). The causality and relations of this situation with different variables were tried to be understood. However, when having a child with autism is considered as a stressful external variable, it is important to consider the multiple relationships and personal coping competencies that will reveal this variability with rich models. When the literature is examined, it has been found that there are many studies showing that having a child with special needs increases the stress on individuals (Brown, Whiting, Kahumoku-Fessler, Witting, & Jensen, 2019; Dardas & Ahmad, 2014; Hajhashemi, Caltabiano & Lovisotto, 2016; Eren, 2019; Kaytez, Durualp, & Kadan, 2015; Kurşun, 2018). However, these studies were mostly based on categorical variable analyses or comparative analysis of individually significant coping variables. The relationship between the current study and the variable set, which will help to make causality analysis, has been discussed in an analysis integrity that will provide explanations for this purpose.

Disability can be considered as an important stress transaction that continues throughout life and negatively affects the emotional expectations of having a child within the family as a whole. In this context, the power to determine internal personal resources is considered as resilience and self-efficacy in this research with a certain causality order. In particular, a holistic study that tries to understand the causality of the common relationships of these variables that will directly affect the quality of life has not been found in the literature. In this context, it was decided to conduct a two-way ANOVA analysis while the preliminary investigations regarding the findings were continuing. It was observed that the resilience levels of the families presented a stronger resistance variability to the variability of having children diagnosed with autism spectrum disorder. It was observed that parents' self-efficacy and quality of life changed relatively more easily (non-measurement sources or the variable's own power). In this case, the effect of the disease, the unavoidable aging process and related anxieties, which are supposed to cause the personal resource that offers stronger resistance, such as resilience, to be handled in a way that exceeds the intrapersonal resources, has been tested. It has been found that such hard-to-change, life-flow-related variables negatively affect a resistant variable as well as resilience as a stress transaction.

According to the results of the research, income level creates a significant difference on resilience, quality of life and self-efficacy. In the literature review conducted, there are studies that are similar to our research findings (Akoğlu, Şahin, & Çakmak, 2018; Altıntaş, 2011; Bayat, 2005; Bhana & Bachoo, 2011; Campbell-Sills, Forde, & Stein, 2009; Çam & Özkan, 2009; Greeff & Walt, 2010; Gutman, 2008; Şengün, 2018; Taşdemir, 2013; Upadhyaya & Havalappanavar, 2008) showing that there is no relationship between income level and resilience (Kadı & Eldeniz-Çetin, 2018; Kumbasar, 2016; Turan, 2017).

In their study in which they examined the life satisfaction and family resilience levels of parents with children with autism spectrum disorder and intellectual disability, Yavuz and Gümüşkaya (2021) stated that there was a significant difference between the level of resilience in the sub-dimension of self-efficacy. Toprak (2018) stated that income level makes a significant difference on the quality of life of families in his thesis study conducted with families with children affected by intellectual disability. Another study that is consistent with our research finding was carried out by Deveci Şirin (2014). The researcher, in his study with families with children diagnosed with developmental disabilities, revealed that income level has a significant effect on the quality of life of families.

It has been determined that there is a consistency between the results of the study investigating the relationship between the quality of life of families with children with special needs and the income level and the results of some previous studies (Deveci-Şirin, 2014; Hu, Wang, & Fei, 2012; Mugno et al., 2007; Tunay, 2021).

The number of children, economic conditions and probable health problems explain the indirect and direct effects on the sub-problems of the research. The findings show that the possible supports to be provided in this context will contribute more to the self-efficacy and quality of life, and then to the level of resilience in the process.

In the study carried out by Carpena (2015), it was revealed that income level has a significant effect on predicting the resilience of families with a child diagnosed with autism spectrum disorder. Walsh (2003) in his theory explaining resilience with the Family Resilience Model, suggested that income sources, especially being economically comfortable, are among the factors affecting family resilience. According to the results of the research, the income level has a significant effect not only on the resilience levels of the families, but also on the quality of life and self-efficacy levels. The fact that the needs of children with special needs such as care, health and rehabilitation are higher than children with normal development affects the income level of the families.

Another variable considered in the study is the age of the parents. The results of the research show that the advanced age of the parents and the child's having a disease in addition to autism have a negative effect on resilience. While some of the studies in the literature show that increasing age

positively affects resilience (Campbell-Sills et al., 2009; Friborg, Hjemdal, Rosenvinge, & Martinussen, 2003; Ha, Hong, Seltzer, & Greenberg, 2008; Lloyd & Hastings, 2009b; Lundman, Strandberg, Eisemann, Gustafson, & Brulin, 2007), some studies have stated that being young has a positive effect on resilience (Lee, Shen, & Tran, 2008). In addition to all these, there are also some studies showing that there is no relationship between age and resilience (Boyraz & Sayger, 2011; Hystad, Eid, Johnsen, Laberg, & Thomas Bartone, 2010; Kaner et al., 2011; Sojo & Guarino, 2011).

This research has shown that external stressors that are difficult or impossible to control can also neutralize resilience despite other positive sources. For this reason, especially special education field workers, school guidance services and psychological counselors should evaluate the risk of additional disease and interaction effect due to the duration of living with a child with autism (parents' aging) for families with positive coping resources in this regard. For such situations, it should be especially important for field experts and employees that people are supported to use their combat power more evenly over time and to receive additional preventive support. The causality relationships tried to be tested with this research support the results of the research listed above with the findings obtained by the MAVOVA analysis carried out. The findings obtained, depending on the quality of life of economic conditions (Brei et al., 2015; Brown et al., 2019; Cappe et al., 2018) obtained similar results. Autism affects families' perceptions of self-efficacy and quality of life. However, the finding obtained with this research reveals that the main source of influence that shapes this perception and efficacy expectation significantly and keeps it high is the perceived resilience level of the families. Especially in future researches, the personality traits and personal resources that affect the level of resilience will be discussed separately, and it will provide up-to-date important data for future research. Similarly, family resilience plays a major role in helping families with children with special needs cope with the difficulties they face and maintain their lives in a routine (Strnadová, 2006). According to Strnadová, the stress experienced, problem-solving competencies, stress management skills, family relationships, and social support resources can affect the resilience levels of families. In the literature review, various variables assumed to be effective on the resilience of families were discussed. In their study, Çetrez-İşcan and Malkoç (2017) strived to pursue the aim of determining to what extent the coping and resilience levels of families with children with special needs explained their hope levels. According to the research results, they determined that coping and resilience levels had a predictive effect on the hope levels of families. Keniş-Coşkun et al. (2020) stated in their study that having a child with special needs causes stress, which in turn has a negative impact on the resilience levels of families. In the study conducted by Altındağ-Kumaş and Sümer (2019), researchers aimed to determine the relationship between the self-efficacy, resilience and stress levels of families with children with special needs aged 3-5 years, and it was determined that income level created significant differences between the families' total scores of self-efficacy and resilience. Bayraklı and Kaner (2012) studied the variables that affect resilience in mothers of children with and without intellectual disability. Research results shows that social support and problem-focused coping skills positively affect resilience. This and similar studies are important in that they point out the priority variables to be brought to families or included in psycho-education programs within the scope of the main variable of resilience. In the training of special education teachers and psychological counselors, it is important to monitor, develop and support these concepts for family guidance. Because with the current research, it has been found that the level of resilience has a formative effect on the perception of self-efficacy and quality of life.

In a similar study conducted by Aktan, Orakçı, and Durnalı (2020), researchers examined the relationship between burnout, life satisfaction and quality of life in parents with children with special needs, and the mediating role of burnout in the relationship between life satisfaction and quality of life. It has been revealed that burnout has a negative relationship with life satisfaction and quality of life, and a positive relationship between quality of life and life satisfaction. Research results show that quality of life predicts burnout, and burnout negatively predicts life satisfaction. In this context, it is important to understand the factors that cause or increase exhaustion.

İnal (2022), on the other hand, in his study examining the psychological resilience, resilience and life satisfaction of parents with children with disabilities and with normal development, found that there is a significant relationship between resilience and life satisfaction of parents who have children with disabilities and children with normal development. He also revealed that this relationship is higher in families with children. When the studies dealing with the variables that positively affect the quality of life of parents with special needs children are examined, it has been found that increasing the self-efficacy levels of parents through various educational programs positively affects the quality of life of families (Barlow, Powell, & Gilchrist, 2006; Davis ve Gavidia-Payne 2009; Williams, Cullen, & Barlow, 2005). The results of our research shows that resilience and self-efficacy levels and quality of life levels of parents with autistic children predict each other. Pre-measurement, follow-up and development of variables that show such consistent similarities and are supported by the results of our research should be prioritized as a target in the processes of family guidance and education, family counseling and psychological counseling to be developed for the field of special education. It is known that the problems that arise due to the decrease in the quality of life cause depression, excessive anxiety, divorce and other consequences that negatively affect the quality of life (Palancı, 2018).

Studies indicate that self-efficacy belief in the face of difficult and insurmountable situations contributes to more resilience, and thus, high self-efficacy has a positive effect on resilience (Rutter, 1987).

According to our research results, it has been found that the additional illness of the autistic child and the advanced age of the parent negatively affect the resilience levels in the face of stress sources. Resilience positively affects the self-efficacy and quality of life perceptions of families with children with autism. The worsening economic conditions of the families alone affect the level of self-efficacy and quality of life. However, economic conditions alone do not negatively affect the level of resilience. It is among the findings of the present study that the number of siblings does not have a significant effect on the listed variables.

Limitations and Recommendations

Although the research has explained the resilience, quality of life perception and social support of families with autistic children in a relational manner, it also contains some limitations. The first limitation of the study is that the research data were collected only from the provinces of Ankara, Trabzon, Bartın, Zonguldak, Karabük and Kastamonu. The fact that the data were limited to these provinces may have affected the generalizability of the study. For this reason, it can be planned to carry out future studies with a larger sample group.

Another limitation of the study is that it does not include the degree of diagnosis of families with children with autism. The type and degree of autism with a diagnosis of negative or positive spectrum can affect the research variables and findings. The research does not include this separation.

Again, the study was conducted with families with autistic children aged 4-6 years. The research only provides an explanation for families with children in the age group called early childhood. The real pressures and effects of being involved in social life, where more interaction with school life and social development will be observed, are not explained by the findings of this research. The impact of kindergartens and pre-schools on families is relatively more limited in terms of gains and relatively low in expectation compared to other formal education institutions.

Another limitation is the high number of questions in the measurement tools used in the data collection process. Many measurement tools were used to reflect the model of the study, but reaching the participants and ensuring that the tools were filled in reliably was a very challenging situation.

According to the results of the research, suggestions for future research are as follows:

- In terms of the severity of autism spectrum disorder, the study can be considered as severe and mild, atypical and non-atypical groups.
- Research findings show that uncontrollable variables eliminate observed compliance scores. For this reason, it should not be ignored that the depletion of the support and coping resources to be provided to families with impersonal development and difficult-to-control living conditions will emerge more quickly.
- The findings reveal that there is a relationship between the level of self-efficacy and the perception of quality of life. The progress of families in providing care and development support to children with ASD should be revealed by teachers and psychological counselors with rating lists. It can be predicted that this practice will reduce the perception of helplessness and exhaustion that hinders seeing concrete progress. With this method, it is also possible to gain the ability to evaluate self-efficacy more objectively.
- Providing school and psychological counseling practices and possible psycho-education to first-degree family relatives will help the social support system to be used more effectively. The direct relationship between the quality of the perception of social support and the quality of life should be considered. The negative effect of the number of children, additional diseases and demographic characteristics of families on resilience in the process helps to explain this relationship mentioned in the literature.
- These groups can be considered separately, as the effects of negative and positive spectrum conditions will be different for possible future research designs. The data obtained from the research findings show that hard-to-control variables affect the perception of quality of life and resilience level.
- Considering the temperament and character traits of the parents, the resistance or passive coping behaviors they will provide can be investigated in depth.
- Supporting coping resources and types of families or providing psycho-education can be designed to strengthen resilience resources and contribute to the perception of self-efficacy. Findings show that working in this direction will positively support the process for field experts.
- Reviewing the findings, it may well be foreseen that the planning of concrete training and group guidance training that will increase the resilience practices of the parents to transform their coping skills into active coping type will be beneficial.
- Concerns that will vary depending on the equality or inequality of opportunity offered by the additional social support systems that families have and the education-health infrastructure they can access for their children can be analyzed. Families with such concerns are more negatively differentiated according to the findings. When the intensity of support and priority of intervention are to be determined, it can be said that it would be beneficial to prioritize families with additional health problems, overcrowding and low level of social support according to the findings.

References

- Akoğlu, G., Şahin, H., & Çakmak, A. (2018). *Özel gereksinimli çocuğa sahip annelerin aile yaşam kalitesi ve mutluluk düzeyleri arasındaki ilişkinin incelenmesi*. Paper presented at the International Congress on Politic, Economic and Social Studies, Venedik.
- Aktan, O. Orakçı, Ş., & Durnalı, M. (2020) Investigation of the relationship between burnout, life satisfaction and quality of life in parents of children with disabilities. *European Journal of Special Needs Education*, 35(5), 679-695. doi:10.1080/08856257.2020.1748429
- Allik, H., Larsson, J. O., & Smedje, H. (2006). Health-related quality of life in parents of school-age children with Asperger Syndrome or High-Functioning Autism. *Health and Quality of Life Outcomes*, 4(1). doi:10.1186/1477-7525-4-1
- Altındağ Kumaş, Ö., & Sümer, H. M. (2019). Özel gereksinimli küçük çocuğu olan annelerin öz yetkinlikleri, yılmazlık düzeyleri ve stres düzeyleri arasındaki ilişkilerin belirlenmesi. *Kastamonu Education Journal*, 27(1), 163-173. doi:10.24106/kefdergi.2445
- Altıntaş, B. (2011). *Trabzon il merkezinde otizm tanısı ile eğitim gören çocukların ailelerinde stres, tükenmişlik düzeyi ve yaşam kalitesinin değerlendirilmesi* (Unpublished master's thesis). Karadeniz Teknik University, Trabzon.
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders (DSM-5)* (5th ed., E. Köroğlu, Trans.). Ankara: Physicians Publishing Union.
- Avdagic, E., Wade, C., McDonald, M., McCormack, D., Dakin, P., Macvean, M., L., ... Phan, T. (2018). Resilience in young children: A delphi study to reach consensus on definitions, measurement and interventions to build resilience. *Early Child Development and Care*, 190(13), 2066-2077. doi:10.1080/03004430.2018.1556211
- Avşaroğlu, S., & Okutan, H. (2018). Zihin engelli çocuğu olan ailelerin yaşam doyumları, iyimserlik ve psikolojik belirti düzeylerinin incelenmesi. *MANAS Sosyal Araştırmalar Dergisi*, 7(1), 59-76. Retrieved from <https://dergipark.org.tr/tr/download/article-file/578148>
- Aysever, H., & Demirok, S. M. (2019). Özel gereksinimli çocuğa sahip ebeveynlerin sosyal destek algılarının ve yılmazlık düzeylerinin incelenmesi. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 20(3), 561-595. doi:10.21565/ozelegitimdergisi.467417
- Barlow, J., Powell, L., & Gilchrist, M. (2006). The influence of the training and support programme on the self-efficacy and psychological well-being of parents of children with disabilities: A controlled trial. *Complementary Therapies in Clinical Practice*, 12(1), 55-63. doi:10.1016/j.ctcp.2005.02.005
- Baumer, N., & Spence, S. J. (2018). Evaluation and management of the child with Autism Spectrum Disorder. *Child Neurology*, 24(1), 248-275. doi:10.1212/CON.0000000000000578
- Bayat, M. (2005). *How family members perceptions of influences and causes of autism may predict assessment of their family quality of life* (Doctoral dissertation). Loyola Univesity, Chicago.
- Bayraklı, H., & Kaner, S. (2012). Zihin engelli ve engelli olmayan çocuğa sahip annelerde yılmazlığa etki eden değişkenlerin incelenmesi. *Kuram ve Uygulamada Eğitim Bilimleri*, 12(2), 1-18.
- Bhana, A., & Bachoo, S. (2011). The determinants of family resilience among families in low-and middle-income contexts: A systematic literature review. *South African Journal of Psychology*, 41(2), 131-139. doi:10.1177/008124631104100202
- Boyras, G., & Sayger, T. V. (2011). Psychological well-being among fathers of children with and without disabilities: The role of family cohesion, adaptability and paternal self-efficacy. *American Journal of Men's Health*, 5(4), 286-296. doi:10.1177/1557988310372538
- Boztaş, Z., & Tutkun, Ö. F. (2017). Özel gereksinimli çocuğu olan anne-babaların yaşam doyumu düzeyi. *Akademik Sosyal Araştırmalar Dergisi*, 5(50), 390-399.

- Brei, N. G., Schwarz, G. N., & Klein-Tasman, B. P. (2015). Predictors of parenting stress in children referred for an Autism Spectrum Disorder diagnostic evaluation. *Journal of Developmental and Physical Disabilities*, 27(5), 617-635. doi:10.1007/s10882-015-9439-z
- Brown, M., Whiting, J., Kahumoku-Fessler, E., Witting, A. B., & Jensen, J. (2019). A dyadic model of stress, coping, and marital satisfaction among parents of children with autism. *Family Relations*, 69(1), 138-150.
- Büyüköztürk, Ş., Kılıç-Çakmak, E., Akgün, Ö. E., Karadeniz, Ş., & Demirel, F. (2022). *Bilimsel araştırma yöntemleri* (32th ed.) Ankara: Pegem Akademi Yayıncılık.
- Campbell-Sills, L., Forde, D. R., & Stein, M. B. (2009). Demographic and childhood environmental predictors of resilience in a community sample. *Journal of Psychiatric Research*, 43(12), 1007-1012. doi:10.1016/j.jpsychires.2009.01.013
- Cappe, É., Poirier, N., Sankey, C., Belzil, A., & Dionne, C. (2018). Quality of life of French Canadian parents raising a child with Autism Spectrum Disorder and effects of psychosocial factors. *Quality of life research: An International Journal of Quality of Life Aspects of Treatment, Care and Rehabilitation*, 27(4), 955-967. doi:10.1007/s11136-017-1757-4
- Carpenna, G. (2015). *Predictors of family resilience in families of children with Autism Spectrum Disorder* (Master's thesis). Adler University, Vancouver.
- Cavkaytar, A., Aksoy, V., & Ardiç, A. (2014). Ebeveyn öz yeterlik ölçeği geçerlik ve güvenilirlik çalışmasının güncellenmesi. *Anadolu Journal of Educational Sciences International*, 4(1), 69-76. doi:10.18039/ajesi.09903
- Centers for Disease Control and Prevention. (2014). Prevalence of Autism Spectrum Disorder among children aged 8 years-autism and developmental disabilities monitoring network. *Surveillance Summaries*, 67(6), 1-23.
- Cho, S., & Kahng, S. K. (2015). Predictors of life satisfaction among caregivers of children with developmental disabilities in South Korea. *Asian Social Science*, 11(2), 154-166. doi:10.5539/ass.v11n2p154
- Clarke, L., & Fung, L. K. (2022). The impact of autism-related training programs on physician knowledge, self-efficacy, and practice behavior: A systematic review. *Autism*, 26(7), 1626-1640. doi:10.1177/13623613221102016
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates, Publishers.
- Çam, M. O., & Özkan, O. (2009). Otistik çocuk sahibi ailelerin yaşam kalitelerinin incelenmesi. *Öz-Veri Dergisi*, 6(2).
- Çetrez İşcan, G., & Malkoç, A. (2017). Özel gereksinimli çocuğa sahip ailelerin umut düzeylerinin başa çıkma yeterliği ve yılmazlık açısından incelenmesi. *Trakya Üniversitesi Eğitim Fakültesi Dergisi*, 7(1), 120-127. Retrieved from <https://dergipark.org.tr/en/pub/trkefd/issue/27304/287426>
- Dabrowska, A., & Pisula, E. (2010). Parenting stress and coping styles in mothers and fathers of pre-school children with autism and Down syndrome. *Journal of Intellectual Disability Research: JIDR*, 54(3), 266-280. doi:10.1111/j.1365-2788.2010.01258.x
- Dardas, L. A., & Ahmad, M. M. (2014). Quality of life among parents of children with autistic disorder: A sample from the Arab world. *Research in Developmental Disabilities*, 35(2), 278-287.
- Darling, C. A., Senatore, N. ve Strachan, J. (2012). Fathers of children with disabilities: Stress and life satisfaction. *Stress and Health*, 28(4), 269-278. doi:10.1002/smi.1427
- Davis, K., & Gavidia-Payne, S. (2009). The impact of child, family, and professional support characteristics on the quality of life in families of young children with disabilities. *Journal of Intellectual and Developmental Disability*, 34(2), 153-162. doi:10.1080/13668250902874608
- Demiray, G. (2019). *Özel gereksinimli çocuğu olan ailelerde yaşam kalitesi, umutsuzluk ve yılmazlık arasındaki ilişkilerin incelenmesi* (Unpublished master's thesis). Marmara University, İstanbul.

- DePape, A. M., & Lindsay, S. (2015). Parents' experiences of caring for a child with Autism Spectrum Disorder. *Qualitative Health Research*, 25(4), 569-583. doi:10.1177/1049732314552455
- Deveci Şirin, H. (2014). Ailelerde sosyo-demografik-ekonomik değişkenlerin aile yaşam kalitesine etkileri. *Anadolu Eğitim Liderliği ve Öğretim Dergisi*, 2(1), 31-46. Retrieved from <https://dergipark.org.tr/en/pub/ajeli/issue/1522/18709>
- Durat, G., Atmaca, G. D., Ünsal, A., & Kama, N. (2017). Özel gereksinimi olan çocukların ailelerinde umutsuzluk ve depresyon. *Osmangazi Tıp Dergisi*, 39(3), 49-57. doi:10.20515/otd.300262
- Eapen, V., Crnčec, R., Walter, A., & Tay, K. P. (2014). Conceptualisation and development of a quality of life measure for parents of children with Autism Spectrum Disorder. *Autism Research and Treatment*, 2014, 160783. doi:10.1155/2014/160783
- Eisenhower, A., & Blacher, J. (2006). Mothers of young adults with intellectual disability: Multiple roles, ethnicity and well-being. *Journal of Intellectual Disability Research*, 50(12), 905-916. doi:10.1111/j.1365-2788.2006.00913.x
- Ektaş, E. E. (2017). *Otizm tanısı almış çocukların annelerinin psikolojik dayanıklılık, öz duyarlılık ve psikolojik iyi oluşları arasındaki ilişkinin incelenmesi* (Unpublished master's thesis). Maltepe University, İstanbul.
- Erdal, H. E., & Efilti, E. (2021). Özel gereksinimli çocuğa sahip annelerin umutsuzluk düzeyi tanrı algısı ve çocuğunu kabul-ret düzeyleri arasındaki ilişkinin incelenmesi. *MANAS Sosyal Araştırmalar Dergisi*, 10(1), 199-223. doi:10.33206/mjss.820058
- Eren, G. (2019). *Zihinsel engelli çocuğa sahip babaların stres düzeyleri ve stresle başa çıkma yöntemlerinin incelenmesi: Karma desenli bir çalışma* (Unpublished master's thesis). Muğla Sıtkı Koçman University, Muğla.
- Estes, A., Munson, J., Dawson, G., Koehler, E., Zhou, X. H., & Abbott, R. (2009). Parenting stress and psychological functioning among mothers of preschool children with autism and developmental delay. *Autism: The International Journal of Research and Practice*, 13(4), 375-387. doi:10.1177/1362361309105658
- Federation of Autism Associations. (2019). What is autism?. Retrieved from <http://www.odfed.org/otizm/>
- Fereidouni, Z., Kamyab, A. H., Dehghan, A., Khiyali, Z., Ziapour, A., Mehedi, N., & Toghroli, R. (2021). A comparative study on the quality of life and resilience of mothers with disabled and neurotypically developing children in Iran. *Heliyon*, 7(6), e07285. doi:10.1016/j.heliyon.2021.e07285
- Fırat, S. (2016). Otistik çocukların anne-babaların depresyon ve kaygı düzeyleri. *Çukurova Üniversitesi Tıp Fakültesi Dergisi*, 41(3), 539-547. doi:10.17826/cukmedj.237509
- Fox, L., Benito, N., & Dunlap, G. (2002). Early intervention with families of young children with Autism Spectrum Disorder and problem behavior. In J. Lucyshyn, G. Dunlap, & R. Albin (Eds.), *Families and positive behavioral support: Addressing the challenge of problem behavior in family contexts* (pp. 251-270). Baltimore: Paul H. Brookes.
- Friborg, O., Hjemdal, O., Rosenvinge, J. H., & Martinussen, M. (2003). A new rating scale for adult resilience: what are the central protective resources behind healthy adjustment?. *International Journal of Methods in Psychiatric Research*, 12(2), 65-76.
- Gallagher, S., Philips, A. C., Oliver, C., & Carroll, D. (2008). Predictors of psychological morbidity in parents of children with intellectual disabilities. *Journal of Pediatric Psychology*, 33(10), 1129-1136. doi:10.1093/jpepsy/jpsn040
- Gardiner, E., & Iarocci, G. (2012). Unhappy (and happy) in their own way: A developmental psychopathology perspective on quality of life for families living with developmental disability with and without autism. *Research in Developmental Disabilities*, 33(6), 2177-2192. doi:10.1016/j.ridd.2012.06.014

- Gau, S. F., Chou, M. C., Chiang, H. L., Lee, J. C., Wong, C. C., Chou, W. J., & Wu, Y. Y. (2012). Parental adjustment, marital relationship, and family function in families of children with autism. *Research in Autism Spectrum Disorder*, 6(1), 263-270. doi:10.1016/j.rasd.2011.05.007
- Giallo, R., Wood, C. E., Jellet, R., & Porter, R. (2013). Fatigue, wellbeing and parental self-efficacy in mothers of children with an Autism Spectrum Disorder. *Autism: The International Journal of Research and Practice*, 17(4), 465-480. doi:10.1177/1362361311416830
- Greeff, A. P., & Walt, K. J. (2010). Resilience in families with an autistic child. *Education and Training in Autism and Developmental Disabilities*, 45(3), 347-355.
- Guimond, A., Moore, H., Aier, D., Maxon, E., & Diken, I. (2005) *Parental self efficacy instrument for children with disabilities (PSICD): Short version* (Unpublished scale). Arizona: Arizona State University.
- Gunty, A. L. (2021). Rethinking resilience in families of children with Autism Spectrum Disorders. *Couple and Family Psychology: Research and Practice*, 10(2), 87-102. doi:10.1037/cfp0000155
- Gutman, L. M. (2008). Social and emotional development in infancy and early childhood. In J. B. Benson & M. M. Haith (Eds.), *Risk and resilience* (pp. 24-34). UK: Elsevier Inc.
- Güleç-Aslan, Y., Cihan, H., & Altın, D. (2014). Otizm spektrum bozukluğu tanılı çocuk sahibi annelerin deneyimleri. *Elektronik Sosyal Bilimler Dergisi*, 13(50), 96-111. doi:10.17755/esosder.41128
- Ha, J.-H., Hong, J., Seltzer, M. M., & Greenberg, J. S. (2008). Age and gender differences in the well-being of midlife and aging parents with children with mental health or developmental problems: Report of a national study. *Journal of Health and Social Behaviors*, 49(3), 301-316. doi:10.1177/002214650804900305
- Hajhashemi, K., Caltabiano, N. J., & Lovisotto, R. (2016). *Stress, affective symptoms and marital satisfaction in parents of children with autism spectrum disorder*. Münih: GRIN Verlag.
- Hartley, S. L., Barker, E. T., Seltzer, M. M., Floyd, F., Greenberg, J., Orsmond, G., & Bolt, D. (2010). The relative risk and timing of divorce in families of children with an Autism Spectrum Disorder. *Journal of family psychology: JFP: Journal of the Division of Family Psychology of the American Psychological Association (Division 43)*, 24(4), 449-457. doi:10.1037/a0019847
- Hartley, S. L., DaWalt, L. S., & Schultz, H. M. (2017). Daily couple experiences and parent affect in families of children with versus without autism. *Journal of Autism and Developmental Disorders*, 47(6), 1645-1658. doi:10.1007/s10803-017-3088-2
- Hastings, R. P., & Symes, M. D. (2002). Early intensive behavioral intervention for children with autism: Parental therapeutic self-efficacy. *Research in Developmental Disabilities*, 23(5), 332-341. doi:10.1016/s0891-4222(02)00137-3
- Hayes, A. F. (2012). PROCESS: A versatile computational tool for observed variable mediation, moderation, and conditional process modeling. Retrieved from <http://www.afhayes.com/public/process2012.pdf>
- Hayes, S. A., & Watson, S. L. (2013). The impact of parenting stress: A meta-analysis of studies comparing the experience of parenting stress in parents of children with and without Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 43(3), 629-642. doi:10.1007/s10803-012-1604-y
- Hoogsteen, L., & Woodgate, R. L. (2013). Centering autism within the family: A qualitative approach to autism and the family. *Journal of Pediatric Nursing*, 28(2), 135-140. doi:10.1016/j.pedn.2012.06.002
- Hsiao, Y.-J. (2018). Autism Spectrum Disorders: Family demographics, parental stress, and family quality of life. *Journal of Policy and Practice in Intellectual Disabilities*, 15(1), 70-79. doi:10.1111/jppi.12232
- Hu, X., Wang, M., & Fei, X. (2012). Family quality of life of Chinese families of children with intellectual disabilities. *Journal of Intellectual Disability Research*, 56(1), 30-44.

- Hutchison, L., Feder, M., Abar, B., & Winsler, A. (2016). Relations between parenting stress, parenting style, and child executive functioning for children with ADHD or autism. *Journal of Child and Family Studies*, 25(12), 3644-3656. doi:10.1007/s10826-016-0518-2
- Hystad, S. W., Eid, J., Johnsen, B. H., Laberg, J. C., & Thomas Bartone, P. (2010). Psychometric properties of the revised Norwegian dispositional resilience (hardiness) scale. *Scandinavian Journal of Psychology*, 51(3), 237-245. doi:10.1111/j.1467-9450.2009.00759.x
- Ilias, K., Cornish, K., Park, M. S., Toran, H., & Golden, K. J. (2019). Risk and resilience among mothers and fathers of primary school age children with ASD in Malaysia: A qualitative constructive grounded theory approach. *Frontiers in Psychology*, 9, 2275. doi:10.3389/fpsyg.2018.02275
- İnal, A. E. (2022). Özel gereksinimli çocuklar ile normal gelişim gösteren 1 çocukların ebeveynlerinin psikolojik dayanıklılık, yılmazlık ve yaşam doyumlarının incelenmesi. *Uluslararası Akademik Yönetim Bilimleri Dergisi*, 8(12), 21-45. doi:10.51947/yonbil.1088348
- İnal, A. E., & Aktürk, A. İ. (2022). Examination of the psychological resilience, family resilience and life satisfaction of the parents of children with special needs and the parents of children with normal development. *Uluslararası Akademik Yönetim Bilimleri Dergisi*, 8(12), 21-45.
- İnce, Z. E., & Tüfekci, F. G. (2015). Engelli çocuğu olan ebeveynlerde evlilik uyumu ve yaşam doyumunun değerlendirilmesi ve etkileyen faktörlerin belirlenmesi. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi*, 4(1), 102-112.
- Jackson, S. Z., Pinto-Martin, J. A., Deatrack, J. A., Boyd, R., & Souders, M. C. (2022). High depressive symptoms, low family functioning, and low self-efficacy in mothers of children with Autism Spectrum Disorder compared to two control groups. *Journal of the American Psychiatric Nurses Association*. doi:10.1177/10783903221104147
- Jacob, A., Scott, M., Falkmer, M., & Falkmer, T. (2015). The costs and benefits of employing an adult with Autism Spectrum Disorder: A systematic review. *PloS One*, 10(10), e0139896. doi:10.1371/journal.pone.0139896
- Jardenil, S. T., & Madrigal, D. (2022). Paternal resilience in time of pandemic: A phenomenological inquiry on the experiences of fathers of children with autism. *Recoletos Multidisciplinary Research Journal*, 10(1). doi:10.32871/rmrj2210.01.02
- Jones, L., Hastings, R. P., Totsika, V., Keane, L., & Rhule, N. (2014). Child behavior problems and parental well-being in families of children with autism: The mediating role of mindfulness and acceptance. *American Journal on Intellectual and Developmental Disabilities*, 119(2), 171-185. doi:10.1352/1944-7558-119.2.171
- Kadı, S., & Eldeniz Çetin, M. (2018). Investigating the resilience levels of parents with children with multiple disabilities based on different variables. *European Journal of Educational Research*, 7(2), 211-223.
- Kaner, S. (2009). Zihin engelli çocukların duygusal ve davranışsal problemlerinin değerlendirilmesinde anne baba ve öğretmen tutarlılığı. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Dergisi*, 42(2), 239-263. Retrieved from <http://dergiler.ankara.edu.tr/dergiler/40/1223/13981.pdf>
- Kaner, S., & Bayraklı, H. (2010). Aile Yılmazlık Ölçeği: Geliştirilmesi, geçerliği ve güvenilirliği. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 11(2), 47-62.
- Kaner, S., Bayraklı, H., & Güzeller, C. O. (2011). Anne-babaların yılmazlık algılarının bazı değişkenler açısından incelenmesi. *Özel Eğitim Dergisi*, 12(2), 63-78. doi:10.1501/Ozlegt_0000000161
- Karaduman, H., & Parlar, H. (2020). Gelişimsel yetersizliğe sahip çocuğu olan ve normal gelişim gösteren çocuğa sahip ebeveynlerin aile yaşam kalitesi algılarının incelenmesi. *İZÜ Eğitim Dergisi*, 2(3), 101-121.
- Karpat, D., & Girli, A. (2012). Yaygın gelişimsel bozukluk tanılı çocukların anne babalarının yas tepkilerinin, evlilik uyumlarının ve sosyal destek algılarının incelenmesi. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 13(2), 69-89.

- Karst, J. S., & Van Hecke, A. V. (2012). Parent and family impact of Autism Spectrum Disorders: A review and proposed model for intervention evaluation. *Clinical Child and Family Psychology Review*, 15(3), 247-277. doi:10.1007/s10567-012-0119-6
- Kaya, M. O., & Yöndem, Z. D. (2020). Otizmlı çocuęu olan annelerde psikoeęitim grup programının algılanan stres düzeyine etkisi. *Uşak Üniversitesi Eęitim Araştırmaları Dergisi*, 6(1), 20-33. Retrieved from <https://dergipark.org.tr/en/pub/usakead/issue/51718/634528>
- Kaytez, N., Durualp, E., & Kadan, G. (2015). Engelli çocuęu olan ailelerin gereksinimlerinin ve stres düzeylerinin incelenmesi. *Eęitim ve Öęretim Araştırmaları Dergisi*, 4(1), 197-214.
- Keniş-Coşkun, Ö., Atabay, C. E., Şekeroęlu, A., Akdeniz, E., Kasil, B., Bozkurt, G., & Karadaę-Sayęı, E. (2020). The relationship between caregiver burden and resilience and quality of life in a Turkish pediatric rehabilitation facility. *Journal of Pediatric Nursing*, 52, e108-e113. doi:10.1016/j.pedn.2019.10.014
- Khan, M. A., Kamran, R., & Ashraf, S. (2017). Resilience, perceived social support and locus of control in mothers of children with autism vs. those having normal children. *Pakistan Journal of Professional Psychology: Research and Practice*, 8(1), 1-13.
- Khoshakhlagh, M., Marashian, F., & Jayervand, H. (2022). Comparing the effectiveness of positive psychotherapy and pivotal response treatment in family satisfaction in mothers of children with autism. *The American Journal of Family Therapy*, 1-13. doi:10.1080/01926187.2022.2071355
- Kırbaş, Ö. Z., & Özkan, H. (2013). Down sendromlu çocukların annelerinin aile işlevlerini algılama ve sosyal destek düzeylerinin deęerlendirilmesi. *İzmir Dr. Behçet Uz Çocuk Hastanesi Dergisi*, 3(3), 171-180.
- Kuhlthau, K., Orlich, F., Hall, T. A., Sikora, D., Kovacs, E. A., Delahaye, J., & Clemons, T. E. (2010). Health-related quality of life in children with Autism Spectrum Disorders: Results from the autism treatment network. *Journal of Autism and Developmental Disorders*, 40(6), 721-729. doi:10.1007/s10803-009-0921-2
- Kumbasar, A. (2016). *İşitme engelli ve engelli olmayan çocuklara sahip ailelerde sosyal destek algısı, yıılmazlık ve tükenmişlik düzeylerinin incelenmesi* (Unpublished master's thesis). Hacettepe University, Ankara.
- Kurşun, Z. (2018). *Yaygın gelişimsel bozukluęu olan ve normal gelişim gösteren çocukların anne babalarının stres düzeyleri ve stresle başa çıkma yollarının karşılaştırılması* (Unpublished master's thesis). İstanbul Ticaret University, İstanbul.
- Kuru, N., & Piyal, B. (2018). Perceived social support and quality of life of parents of children with Autism. *Nigerian Journal of Clinical Practice*, 21(9), 1182-1189.
- Langley, E., Totsika, V., & Hastings, R. P. (2017). Parental relationship satisfaction in families of children with Autism Spectrum Disorder (ASD): A multilevel analysis. *Autism research: Official Journal of The International Society for Autism Research*, 10(7), 1259-1268. doi:10.1002/aur.1773
- Lazarus, R., & Folkman, S. (1987). Transactional theory and research on emotions and coping. *European Journal of Personality*, 1(3), 141-169. doi:10.1002/per.2410010304
- Lee, E. O., Shen, C., & Tran, T. V. (2008). Coping with hurricane Katrina: Psychological distress and resilience among African American evacuees. *Journal of Black Psychology*, 20(5), 1-19. doi:10.1177/0095798408323354
- Lindsey, R., & Barry, T. (2018). Protective factors against distress for caregivers of a child with Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders*, 48(4), 1092-1107. doi:10.1007/s10803-017-3372-1
- Lloyd, T. J., & Hastings, R. (2009a). Hope as a psychological resilience factor in mothers and fathers of children with intellectual disabilities. *Journal of Intellectual Disability Research*, 53(12), 957-968. doi:10.1111/j.1365-2788.2009.01206.x

- Lloyd, T., & Hastings, R. (2009b). Parental locus of control and psychological well being in mothers of children with intellectual disability. *Journal of Intellectual and Developmental Disability*, 34(2), 104-115. doi:10.1080/13668250902862074
- Lord, C., Brugha, T. S., Charman, T., Cusack, J., Dumas, G., Frazier, T., ... Veenstra-VanderWeele, J. (2020). Autism Spectrum Disorder. *Nature reviews. Disease Primers*, 6(1), 5. doi:10.1038/s41572-019-0138-4
- Lu, M. H., Wang, G. H., Lei, H., Shi, M. L., Zhu, R., & Jiang, F. (2018). Social support as mediator and moderator of the relationship between parenting stress and life satisfaction among the Chinese parents of children with ASD. *Journal of Autism and Developmental Disorders*, 48(4), 1181-1188. doi:10.1007/s10803-017-3448-y
- Lundman, B., Strandberg, G., Eisemann, M., Gustafson, Y., & Brulin, C. (2007). Psychometric properties of the Swedish version of the Resilience Scale. *Scandinavian Journal of Caring Sciences*, 21(2), 229-237. doi:10.1111/j.1471-6712.2007.00461.x
- Maenner, M. J., Shaw, K. A., Bakian, A. V., Bilder, D. A., Durkin, M. S., Esler, A., ... Cogswell, M. E. (2021). Prevalence and characteristics of Autism Spectrum Disorder among children aged 8 years - autism and developmental disabilities monitoring network, 11 sites, United States, 2018. *Surveillance Summaries*, 70(11), 1-16. doi:10.15585/mmwr.ss7011a1
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-238. doi:10.1037/0003-066X.56.3.227
- McConnell, D., Savage, A., & Breikreuz, R. (2014). Resilience in families raising children with disabilities and behavior problems. *Research in Developmental Disabilities*, 35(4), 833-848. doi:10.1016/j.ridd.2014.01.015
- Meral, B. F., & Cavkaytar, A. (2015). Otizmli çocuk ailelerinin aile yaşam kalitesi algıları. *Kastamonu Eğitim Dergisi*, 23(3), 1363-1380. Retrieved from <https://dergipark.org.tr/en/pub/kefdergi/issue/22598/241399>
- Mugno, D., Ruta, L., D'Arrigo, V. G., & Mazzone, L. (2007). Impairment of quality of life in parents of children and adolescents with pervasive developmental disorder. *Health and Quality of Life Outcomes*, 5(22), 1-9. doi:10.1186/1477-7525-5-22
- Ogston, P. L., Mackintosh, V. H., & Myers, J. B. (2011). Hope and worry in mothers of children with an Autism Spectrum Disorder or Down syndrome. *Research in Autism Spectrum Disorders*, 5(4), 1378-1384. doi:10.1016/j.rasd.2011.01.020
- Ohaeri, J. U. (2003). The burden of caregiving in families with a mental illness: A review of 2002. *Current Opinion in Psychiatry*, 16(4), 457-465. doi:10.1097/01.yco.0000079212.36371.c0
- Ooi, K. L., Ong, Y. S., Jacob, S. A., & Khan, T. M. (2016). A meta-synthesis on parenting a child with autism. *Neuropsychiatric Disease and Treatment*, 12, 745-762. doi:10.2147/NDT.S100634
- Öz, B., Yüksel, T., & Nasıroğlu, S. (2019). Otizm spektrum bozukluğu tanısı alan çocukların annelerinin depresyon-anksiyete belirtileri ve damgalanma algısı. *Nöro Psikiyatri Arşivi*, 57, 50-55. doi:10.29399/npa.23655
- Özgür, B. G., Aksu, H., & Eser, E. (2017) Turkish validity and reliability of quality of life in autism questionnaire-parent version. *Anatolian Journal of Psychiatry*, 18(4), 344-352. doi:10.5455/apd.249390
- Paczkowski, E., & Baker, B. L. (2007). Parenting children with and without developmental delay: The role of self-mastery. *Journal of Intellectual Disability Research*, 51, 435-444.
- Palancı, M. (2018). Engelli çocuğa sahip anne babaların aile yılmazlığı, öznel iyi oluş ve evlilik uyumlarının psiko-sosyal yeterlikler ile yordanması. *Eğitim ve Bilim*, 43(193), 217-236. doi:10.15390/EB.2017.4384

- Park, J., Hoffman, L., Marquis, J., Turnbull, A. P., Poston, D., Mannan, H., & Nelson, L. L. (2003). Toward assessing family outcomes of service delivery: Validation of a family quality of life survey. *Journal of Intellectual Disability Research*, 47, 367-384.
- Patterson, J. (2002). Integrating family resilience and family stress theory. *Journal of Marriage and Family*, 64(2), 349-360.
- Pepperell, T. A., Paynter, J., & Gilmore, L. (2018). Social support and coping strategies of parents raising a child with Autism Spectrum Disorder. *Early Child Development and Care*, 188(10), 1392-1404. doi:10.1080/03004430.2016.1261338
- Pozo, P., Sarriá, E., & Brioso, A. (2014). Family quality of life and psychological well-being in parents of children with Autism Spectrum Disorders: A double ABCX model. *Journal of Intellectual Disability Research*, 58(5), 442-458. doi:10.1111/jir.12042
- Preece, D., Symeou, L., Stošić, J., Troshanska, J., Mavrou, K., Theodorou, E., & Frey Škrinjar, J. (2017). Accessing parental perspectives to inform the development of parent training in autism in south-eastern Europe. *European Journal of Special Needs Education*, 32(2), 252-269. doi:10.1080/08856257.2016.1223399
- Rea-Amaya, A. C., Acle-Tomasini, G., & Ordaz-Villegas, G. (2017). Resilience potential of autistic children's parents and its relationship to family functioning and acceptance of disability. *British Journal of Education, Society & Behavioural Science*, 20(1), 1-16. doi:10.9734/BJESBS/2017/32522
- Rutter, M. (1987). Psychosocial resilience and protective mechanisms. *The American Journal of Orthopsychiatry*, 57(3), 316-331.
- Schaaf, R. C., Toth-Cohen, S., Johnson, S. L., Outten, G., & Benevides, T. W. (2011). The everyday routines of families of children with autism: Examining the impact of sensory processing difficulties on the family. *Autism*, 15(3), 373-389. doi:10.1177/1362361310386505
- Schalock, R. L., Bonham, G. S., & Verdugo, M. A. (2008). The conceptualization and measurement of quality of life: Implications for program planning and evaluation in the field of intellectual disabilities. *Evaluation and Program Planning*, 31(2), 181-190. doi:10.1016/j.evalprogplan.2008.02.001
- Schwarzer, R., & Fuchs, R. (1996). Self-efficacy and health behaviours. In M. Conner & P. Norman (Eds.), *Predicting health behaviour: Research and practice with social cognition models* (pp. 163-196). İngiltere: Open University Press.
- Seltzer, M. M., & Krauss, M. W. (2001). Quality of life of adults with mental retardation/developmental disabilities who live with family. *Mental Retardation and Developmental Disabilities Research Reviews*, 7(2), 105-114. doi:10.1002/mrdd.1015
- Sojo, V., & Guarino, L. (2011). Mediated moderation or moderated mediation: Relationship between length of unemployment, resilience, coping and health. *The Spanish Journal of Psychology*, 14(1), 272-281. doi:10.5209/rev_SJOP.2011.v14.n1.24
- Strauss, K., Servadio, M., Valeri, G., Casula, L., Vicari, S., & Fava, L. (2022) Association between child behavioural problems and parenting stress in Autism Spectrum Disorders: The role of parenting self-efficacy. *International Journal of Developmental Disabilities*. doi:10.1080/20473869.2022.2052417
- Strnadová, I. (2006). Stress and resilience in families of children with specific learning disabilities. *Revista Complutense de Educación*, 17(2), 35-50.
- Şengün, S. (2018). *Gelişimsel yetersizliğe sahip çocuğu olan annelerin çocuklarını kabul red davranışları ve aile yaşam kalitesi algıları* (Unpublished master's thesis). Selçuk University, Konya.
- Tahincioğlu, C. (2016). *Otizimli çocuğu olan annelerde anksiyete düzeylerinin tükenmişlik ile ilişkisi* (Unpublished master's thesis). Beykent University, İstanbul.
- Tan, Ş. (2016). *SPSS ve excel uygulamalı temel istatistik-1* (1st ed.). Ankara: Pegem Akademi.
- Tarabek, J. (2011). *Relationship satisfaction and mental health of parents of children with autism: A comparison of autism, ADHD, and normative children* (Master's thesis). Virginia Polytechnic Institute and State University, Blacksburg, VA.

- Taşdemir, F. (2013). *Görme engelli öğrenci annelerinin yılmazlık özelliklerinin incelenmesi (İstanbul ili örneği)* (Unpublished master's thesis). Yeditepe University, İstanbul.
- Taştan, S. (2021). Çalışma yaşamında algılanan sosyal destek düzeyi ile umutsuzluk, psikolojik uyumsuzluk ve yaşam kalitesi arasındaki ilişkilerin incelenmesi: İstanbul ilinde 3-15 yaş arası otizm tanılı çocuğa sahip çalışan bireyler üzerinde bir araştırma. *Sosyal Politika Çalışmaları Dergisi*, 21(53), 887-940. doi:10.21560/spcd. vi.881001
- Taylor, L., Luk, S. Y. L., & Leadbitter, K. (2021). Are child autism symptoms, developmental level and adaptive function associated with caregiver feelings of wellbeing and efficacy in the parenting role?. *Research in Autism Spectrum Disorders*, 83. doi:10.1016/j.rasd.2021.101738
- Theofilou, P. (2013). Quality of life: Definition and measurement. *Europe's Journal of Psychology*, 9(1), 150-162. doi:10.5964/ejop.v9i1.337
- Toprak, F. (2018). *Zihinsel engelli ve üstün yetenekli çocuğa sahip ailelerin yaşam doyumları, yaşam kaliteleri ve sosyal destek algılarının karşılaştırılması* (Unpublished master's thesis). Hacettepe University, Ankara.
- Tunay, Z. Ç. (2021). *Otizm spektrum bozukluğu tanısı almış çocuğu olan annelerin yaşam kalitelerinin, yaşadıkları sorunların ve ihtiyaçlarının belirlenmesi* (Unpublished master's thesis). Ankara University, Ankara.
- Tunçel, A. (2017). *Çocuklarında otizm spektrum bozukluğu olan annelerin depresyon, tükenmişlik ve umutsuzluk düzeylerinin çocuktaki otizmin ağırlık derecesine göre karşılaştırılması* (Unpublished master's thesis). Hasan Kalyoncu University, Gaziantep.
- Turan, N. (2017). *Otistik çocuğa sahip ailelerin yılmazlık düzeylerinin incelenmesi* (Unpublished master's thesis). Hasan Kalyoncu University, Gaziantep.
- Türk, A. B., & Bumin, G. (2015). Engelli çocuğa sahip annelerde zaman yönetimi eğitiminin aktivite performansı, depresyon, yaşam kalitesi ve stresle başa çıkma üzerine etkisi: Pilot çalışma. *Ergoterapi ve Rehabilitasyon Dergisi*, 3(1), 13-20. Retrieved from <https://dergipark.org.tr/en/pub/ered/issue/33220/369678>
- Upadhyaya, G., & Havalappanavar, N. B. (2008). Stress in parents of the mentally challenged. *Journal of the Indian Academy of Applied Psychology*, 34, 53-55.
- Walsh, F. (2003). Family resilience: A framework for clinical practice. *Family Process*, 42(1), 1-18. doi:10.1111/j.1545-5300.2003.00001.x
- Walsh, F. (2015). *Strengthening family resilience* (3rd ed.). New York: Guilford Publications.
- Wang, R., Liu, Q., & Zhang, W. (2022). Coping, social support, and family quality of life for caregivers of individuals with autism: Meta-analytic structural equation modeling. *Personality and Individual Differences*, 186(B). doi:10.1016/j.paid.2021.111351
- Weiss, A. J., Robinson, S., Fung, S., Tint, A., Chalmers, P., & Lunskey, Y. (2013). Family hardiness, social support, and self-efficacy in mothers of individuals with Autism Spectrum Disorders. *Research in Autism Spectrum Disorders*, 7(11), 1310-1317. doi:10.1016/j.rasd.2013.07.016
- Weiss, J. A., Cappadocia, M. C., MacMullin, J. A., Vecili, M., & Lunskey, Y. (2012). The impact of child problem behaviors of children with ASD on parent mental health: The mediating role of acceptance and empowerment. *Autism*, 16(3), 261-274.
- Westphal, M., Bonanno, G. A., & Bartone, P. T. (2008). Resilience and personality. In B. J. Lukey & V. Tepe (Eds.), *Biobehavioral resilience to stress* (pp. 219-258). Boca Raton, FL: CRC Press.
- White, S. E., McMorris, C., Weiss, J. A., & Lunskey, Y. (2012). The experience of crisis in families of individuals with Autism Spectrum Disorder across the lifespan. *Journal of Child and Family Studies*, 21(3), 457-465. doi:10.1007/s10826-011-9499-3

- Williams, H. L., Cullen, L. A., & Barlow, J. H. (2005). The psychological well-being and self-efficacy of carers of children with disabilities following attendance on a Simple Massage Training and Support Programme: A 12-month comparison study of adherers and non-adherers. *Complementary Therapies in Medicine*, 13(2), 107-114. doi:10.1016/j.ctim.2005.03.007
- Wong, C., Odom, S. L., Hume, K. A., Cox, A. W., Fettig, A., Kucharczyk, S., ... Schultz, T. R. (2015). Evidence-based practices for children, youth, and young adults with Autism Spectrum Disorder: A comprehensive review. *Journal of Autism and Developmental Disorders*, 45(7), 1951-1966. doi:10.1007/s10803-014-2351-z
- Yassıbaş, U., & Çolak, A. (2019). Otizm Spektrum Bozukluğu olan çocuğa sahip anne babaların yaşam deneyimlerine derinlemesine bakış. *Eğitim ve Bilim Dergisi*, 44(198), 435-467. doi:10.15390/EB.2019.7366
- Yavuz, M., & Gümüşkaya, Ö. (2021). Otizm spektrum bozukluğu ve zihinsel yetersizliği olan bireylerin ebeveynlerinin yaşam doyumu ve aile yılmazlık düzeylerinin incelenmesi. *Ankara Üniversitesi Eğitim Bilimleri Fakültesi Özel Eğitim Dergisi*, 22(4), 799-825. doi:10.21565/ozelegitimdergisi.726030
- Yavuz, M., & Şafak, P. (2021). Otizm spektrum bozukluğu, zihin ve çoklu yetersizliği olan çocukların ebeveynlerinin yaşam doyum düzeylerinin incelenmesi. *Gazi Eğitim Fakültesi Dergisi*, 41(2), 1273-1294. doi:10.17152/gefad.891230
- Yıkılmış, A., & Özbey, F. Y. (2009). Define the expectations of mothers whose autistic children attends to a rehabilitation center. *International Online Journal of Educational Sciences*, 1(1), 124-153.
- Yıldırım, A. ve Şimşek, H. (2021). *Sosyal bilimlerde nitel araştırma yöntemleri* (12th ed.). Ankara: Seçkin Yayınları.
- Zhao, M., & Fu, W. (2020). The resilience of parents who have children with Autism Spectrum Disorder in China: A social culture perspective. *International Journal of Developmental Disabilities*, 68(2), 207-218. doi:10.1080/20473869.2020.1747761
- Zhou, Y., Yin, H., Wang, M., & Wang, J. (2019). The effect of family-focused psychoeducational therapy for autism spectrum disorder children's parents on parenting self-efficacy and emotion. *Archives of Psychiatric Nursing*, 33(1), 17-22. doi:10.1016/j.apnu.2018.08.002