

Being the Mother of a Special Child: Resilience and Marital Adjustment in Mothers of Children with Autism Spectrum Disorder

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ABSTRACT

Background: This study aims to examine the levels and the relationship between resilience and marital adjustment in mothers of a child diagnosed with autism spectrum disorder.

Methods: Seventy mothers with a child diagnosed with autism spectrum disorder who have been followed up in the Child and Adolescent Psychiatry Outpatient Clinic of Bakırköy Training and Research Hospital for Psychiatry Neurology and Neurosurgery and 74 mothers with a typically developing child to form the control group were included in the study. The Childhood Autism Rating Scale was applied to assess the severity of autism symptoms in children. Sociodemographic form, Beck Depression Scale and Beck Anxiety Scale were applied. The Psychological Resilience Scale for Adults was used to assess resilience. The Marital Adjustment Scale was applied to evaluate the participants' marital adjustment.

Results: The level of resilience ($P < .001$) and marital adjustment ($P = .002$) in mothers of children with autism spectrum disorder were found to be lower when compared to mothers with a typically developing child. There is a negative correlation between the level of resilience and the severity of autism ($P = .002$) ($r = -0.361$). A positive correlation was found between marital adjustment and resilience ($P < .001$) ($r = 0.465$). High levels of depressive symptoms ($P = .003$), low marital adjustment ($P = .003$), and low educational level were found to be predictive of low resilience ($P = .044$).

Conclusion: Taking advantage of the fact that resilience is a dynamic process, there is a need to develop strategies to increase resilience in mothers of children with autism spectrum disorder, which will also give rise to individual and marital well-being.

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INTRODUCTION

Autism spectrum disorder (ASD) is characterized by disabilities in social interactions and stereotypical behaviors. Research has consistently shown that mothers of children with ASD experience higher levels of anxiety and depression when compared with mothers of a typically developing child.¹

As previously mentioned, one may have the capacity to both inconsistency and resilience against ongoing stressors. Walsh defined resilience as the endurance to life difficulties and to become stronger and more skillful in managing future difficulties through such experiences. Walsh also stated that this could only be achieved when the difficulties make sense for the person, maintain a positive point of view, and are powered by the traditions that connect to broader social networks.² Resilience can be defined as the consequence of the mutual influence of the individual and her environment.

Some of the resilient factors defined by Rutter are high social skills, a feeling of hope, the perception that one has control over her life, not interpreting traumatic experiences as her fault, the ability to accept support, and having good relationships with peers.³ Most caregivers of a child with ASD see their spouse as the most valuable support system. The ability to share the burden with a spouse and communicate effectively about their experiences has been identified as important for the resilience of parents of children with ASD. Previous studies have demonstrated that parents specify that the marital relationship is the strength to meet the needs of autistic children successfully.⁴

On the other hand, Greenlee (2022) defined that the impact on the marital relationship is a fact that has been noted in studies with couples who have a child on the autism spectrum. How parents cope, find meaning, manage, and adapt to ASD probably impacts their marital

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satisfaction. Generally, children with ASD may not be able to live independently, this never-ending parenting cause the couple to experience fewer interactions with one another and less intimacy in their marriage. At the same time, parents who report poorer marital adjustment have been shown to exhibit more maladaptive parenting behaviors.⁵ According to the spillover hypothesis, emotions and behaviors experienced in one relationship can spill over into other relationships. Thus, negative experiences in a couple can spill over into the parent-child dyad, these effects are accepted bidirectional.

Several studies have found relationship satisfaction and stress on the parent depends on many variables, including personal characteristics, child, and contextual variables. Chan (2020) remarked autistic symptoms in children were associated with a series of challenging co-parenting conflicts that triggered poor marital adjustment among parents of children with ASD. Even if their spouses and extended families reject and ignore the autistic child or engage in behaviors such as alienation, criticism, and fault finding, the caregiver's marital satisfaction may decrease.⁶

Factors on which research has focused were parenting styles, poor marital adjustment, relationship dissatisfaction, parental burden, and lower family functionality in parents of autistic children. Most of the studies pointed out that mothers of children with ASD reported a higher subjective burden than fathers.⁷

Çhiş (2022) described marital satisfaction as a subjective assessment of a partnership, whereas marital adjustment is an aspect that intends rather to the relationship and a dynamic process that can be placed on an assessment continuity from poorly adapted to very well-adapted ones.⁸ That is why we preferred to focus on marital adjustment. Yıldız et al (2019) defined particular features of parenting and autism that are specific to Turkey.⁹ However, to date, there is no known study examining marital adjustment in mothers of children with ASD in our country.

Specifically, our study aimed to pay attention to clarifying the level of resilience and marital adjustment in mothers of

children with ASD and to point out the relationship between marital adjustment and resilience. Our first hypothesis is to determine if mothers of children with ASD report poorer resilience and marital adjustment, our second hypothesis is whether the child's ASD severity, marital adjustment, and descriptive characteristics of mothers predict the low level of resilience

MATERIAL AND METHODS

Participants

In our study, which was designed as a case-control study, 70 mothers of a child aged 2-6 years who were diagnosed with ASD according to the Diagnostic and Statistical Manual (DSM-5) diagnostic criteria and followed up in Child and Adolescent Psychiatry Outpatient Clinic of Bakırköy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery were included.

Initially, the presence of another psychiatric comorbidity and physical disability in children with ASD were evaluated based on the DSM of Mental Disorders to be excluded from the study. The Childhood Autism Rating Scale (CARS) was used to confirm the diagnosis of ASD by a trained psychologist. Denver II Developmental Screening Test was used to evaluate the skills that the child should do in the age period, for commenting on developmental problems by a trained and certified psychologist. Some of the items were tested practically with the child, and some of them were tested by asking the mother.

Mothers of 18 children whose autism severity was below 30 points, according to CARS, and 2 mothers who have 2 children with ASD were excluded from our study. Our study did not include illiterate mothers and those diagnosed with any mental disorder

Clinical interviews were conducted with the mothers by the researcher according to the DSM-5 diagnostic criteria. Sociodemographic form, Beck Depression Scale, The Psychological Resilience Scale for Adults (RSA), Marital Adjustment Scale (MAS), and Beck Anxiety Scale were also applied.

Seventy-four mothers with typically developing children who stated that their child's development was followed by the family health center they were registered with were included in our study and consecutively formed the control group. It is a limitation to study marital quality cross-sectionally as relationships change with time. Because of this, we preferred the same age range of the children and mothers, indicating that they were at similar stages of the life cycle. Previous studies on parents with children with disabilities have focused on early childhood and so we limit the child's age range from 2 to 6 years.

All participants were informed about the purpose of the study and had given written informed consent. Ethical committee approval was received from the Ethics

MAIN POINTS

- About 62.7% of mothers whose child was diagnosed with autism spectrum disorder notified poor marital adjustment.
- A positive, weak-moderate correlation was found between marital adjustment and resilience in mothers of a child with autism spectrum disorder.
- Low education, low marital adjustment, and too many depressive symptoms were important predictors of low resilience.
- Mothers of a child with autism spectrum disorder reported "social resources" as the highest protective factor and "future perception" as the lowest protective factor.
- There was a negative correlation between the total score of resilience, the subdimension scores of family cohesion, social resources, and the autism symptom severity of the child.

Committee of Bakırköy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery with the Approval Number = e 2782.

Instruments

Denver II Developmental Screening Test: It compares 0- to 6-year-old children's skills with their peers. It's not an intelligence test, it's a development test with 134 items. Level of Retardation in Personal-Social Field, Fine-Motor Area, Language, and Gross Motor Area can be evaluated. Turkish standardization was done by Yalaz et al in 2009.

The Childhood Autism Rating Scale: The scale is a 15-item observational rating scale developed by Eric Schopler et al that includes interviews with primary caregivers, detailed developmental and family history, assessment of intellectual functioning, and behavioral observations. Assessors base their ratings on duration, intensity, frequency, and atypicality of the specified behavior taking into account the chronological age of the child. Each of the 15 items is rated on a 7-point scale ranging from "within normal limits for that age," encoded as one, to "severely abnormal for that age," encoded as 4. The total score is determined by summing the scores for 15 items: 15 if all items are within normal limits and 60 if severely abnormal on all items. The total Cronbach's alpha coefficient of the scale was found to be 0.95.

Sociodemographic Form: The authors developed a detailed questionnaire and prepared it separately to obtain information about mothers of a child diagnosed with ASD and mothers with a typically developing children. This form includes information such as the mother's age, early life experience, education level, employment status, number of children, pregnancy process, monthly income of the family, and so on.

Psychological Resilience Scale for Adults

The RSA was developed by Friberg et al to evaluate intrapersonal and interpersonal aspects of resilience. It is a scale with 33 items, each scored between 1 and 5. The scale consists of 6 subdimensions. These are the perception of the future, structural style, perception of self, family cohesion, social resources, and social competence. The validity and reliability study of RSA was carried out by Basım and Çetin.¹⁰ The scale does not have a defined cutoff score. As the score increases, psychological resilience increases. The total Cronbach's alpha coefficient of the scale was found to be 0.84.

Marital Adjustment Scale: It was developed by Locke and Wallace. Marital Adjustment Scale is used to measure marriage quality. It was adapted to Turkish culture by Tutarel-Kışlak.¹¹ Consisting of 15 items, this scale measures both overall marital satisfaction and the deal on various issues (philosophy of life, expression of emotions, sexuality, social rules, friends, family budget) and relationship style (trust, conflict resolution, leisure time,

activities). The scores are between 1 and 58. The cutoff point for distinguishing compatible and incompatible married persons was determined as 43.5. The total Cronbach's alpha coefficient of the scale was found to be 0.92.

Beck Depression Inventory: This scale, which was used to measure the severity of depressive symptoms, was developed by Beck (1961) The scale contains 21 self-report sentences. Each item is scored between 0 and 3. The total score varies between 0 and 63. The cutoff score on the scale is 17. Its validity and reliability study was carried out by Hisli (1988). The total Cronbach's alpha coefficient of the scale was found to be 0.90.

Beck Anxiety Scale: This scale has 21 symptom categories, providing a Likert-type measurement and each item is scored between 0 and 3. Its validity and reliability study was carried out by Ulusoy et al (1998). The total Cronbach's alpha coefficient of the scale was found to be 0.93.

Statistical Analysis

Statistical analyses were performed with Statistical Package for the Social Sciences (SPSS) version 21.0 (IBM SPSS Corp.; Armonk, NY, USA) package program. Descriptive statistics are given as mean \pm SD if the variables were normally distributed and as median (minimum-maximum) only if the variables were non-normally distributed. Percentages were given with frequencies. Pearson chi-square and Fisher-Freeman-Halton test were used to compare categorical variables. The Kolmogorov-Smirnov test was used to assess the conformity of continuous variables to normal distribution. Comparisons between groups of continuous variables were made in independent groups by (Student) *t*-test and Mann-Whitney *U* test if the variables were non-normally distributed. The Spearman correlation coefficient was used to assess the linear relationship between variables. Logistic regression analysis was used to determine the independent variables that predicted some clinical characteristics of the patients. Variables with a significant *P*-value in the univariate logistic regression analysis were included in the multiple logistic regression analysis as predictor variables. The forward likelihood ratio method was used in multiple logistic regression analysis. A value of *P* < .05 was accepted for statistical significance.

RESULTS

Data on Children with ASD

Children with ASD have been analyzed regarding the level of developmental delay detected in the Denver II Developmental Screening Test and CARS score. According to CARS scores, it was examined that the rate of mild-to-moderate autism was 54.3% (Table 1).

Table 1. Data on Children with Autism Spectrum Disorder in Terms of Denver II Developmental Screening Test, Childhood Autism Rating Scale Score

	Children with ASD (n=70)	
	Mean ± SD	
Age (months)	42.03 ± 13.38	
Level of retardation in personal-social field (months)	17.32 ± 10.05	
Level of retardation in fine-motor area (months)	9.76 ± 11.29	
Level of retardation in language (months)	20.85 ± 11.27	
Level of retardation in gross motor area (months)	8.92 ± 10.23	
	n	%
CARS score		
Mild-to-moderate autism	38	54.3
Moderate-to-severe autism	19	27.1
Severe autism	13	18.6

ASD, autism spectrum disorder; CARS, Childhood Autism Rating Scale.

The Descriptive Characteristics of Mothers

Mothers were compared in terms of their sociodemographic characteristics. The difference between the case and control groups for age, marital status, marriage age, duration, and the number of marriage variables was not statistically significant ($P > .05$). Mothers of children with ASD had lower levels of education ($P = .012$) and were more likely to be unemployed ($P = .004$). The family type ($P = .040$) and the average monthly income level of the family ($P < .001$) were significantly different between the groups (Table 2). No significant difference was found between the groups of mothers in terms of the number of children, age at pregnancy, birth order of the child, use of assisted reproductive techniques, type of labor, history of stillbirth, complications in the mother during pregnancy, complications in the infant due to labor, and social support in childcare ($P > .05$). Breastfeeding duration was found to be shorter in mothers whose child was diagnosed with ASD ($P = .002$). Having a planned pregnancy was significantly different between the groups ($P = .030$). No significant difference was found between the groups of mothers in terms of the early life experiences such as loss of the mother, loss of the father, divorce of parents, alcohol dependence on the father, loss of an important another person, and domestic violence during their childhood ($P > .05$). Only separation from parents during childhood was reported to be 28.6% ($n = 20$) in the case group; it was reported as 13.5% ($n = 10$) in the control group ($P = .026$) (Table 2).

Depression scores of mothers whose child was diagnosed with ASD (minimum-maximum: 1-30/median: 9) were found to be statistically significantly higher (minimum-maximum: 0-20/median: 6) ($P < .001$). No significant difference was found in the anxiety scores of the 2 groups,

respectively: (median: 4.5/minimum-maximum: 0-38) and (median: 4/minimum-maximum: 0-22) ($P > .05$).

Out of 70 mothers of children with ASD, 3 were divorced and were not included in the evaluation of marital adjustment. It was observed that the marital adjustment score in mothers of children with ASD (median: 40/minimum-maximum: 9-54) was significantly lower than the median of mothers with a typically developing child (median: 45/minimum-maximum: 15-59) ($P = .002$). According to the cutoff score of the scale, compatible marital adjustment was found in 25 (37.3%) mothers of children with ASD and 42 (56.8%) mothers with a typically developing child. A comparison of psychological resilience scale (RSA) total scores, sub-scale scores of the mothers whose child was diagnosed with ASD, and mothers with typically developing child was given in Table 3.

The Relationship Between Resilience of Mothers Whose Child Was Diagnosed with Autism Spectrum Disorder and Children's Autism Severity

There were significantly negative weak correlations between total resilience ($r = -0.361$) ($P = .002$) and the subdimensions, family cohesion ($r = -0.289$) ($P = .015$), social resources ($r = -0.381$) ($P = .001$), and scores of the mother whose child was diagnosed with ASD and the CARS score ($P < .05$). There was no statistically significant correlation between the CARS score and the other subdimensions of resilience (self-perception, future perception, social competence, and structural style) ($P > .05$) (Table 4).

The Relationship Between Resilience and Marital Adjustment

A positive weak, statistically significant linear correlation was found between the marital adjustment score and the total resilience score in mothers whose child was diagnosed with ASD ($r = 0.465$) ($P < .001$). Besides a positive weak linear correlation was found between the resilience subdimensions as the future perception ($r = 0.352$) ($P = .003$), family cohesion ($r = 0.403$) ($P = .001$), social resources ($r = 0.252$) ($P = .040$), and marital adjustment score ($P < .05$). There was no statistically significant relationship between the MAS score and other subdimensions of resilience (self-perception, social competence, structural style) in mothers whose child was diagnosed with ASD ($P > .05$). A positive, moderate, and statistically significant linear correlation was found between the MAS score and the total resilience score in mothers with typically developing child ($r = 0.571$) ($P < .001$). Also, there were positive, weak, and statistically significant linear correlations between the MAS score and all subdimensions of resilience in mothers with typically developing children (Table 5) ($P < .05$).

The Relationship Between Resilience, Depression, and Anxiety

A negative and statistically significant weak correlation was found between the total resilience score and the

Table 2. Comparison of the Descriptive Characteristics of the Mothers with a Child Diagnosed with ASD and the Mothers with a Typically Developing Child

	The Mothers with a Child Diagnosed with ASD (n=70)		The Mothers with a Typically Developing Child (n=74)		P
	Mean ± SD	Minimum-maximum/Median	Mean ± SD	Minimum-Maximum/Median	
Age	32.91 ± 5.73		33.70 ± 5.75		.412*
Age of marriage	23.44 ± 4.59		24.14 ± 4.99		.388*
Duration of marriage		2-27/8		3-24/8	.451****
	n	%	n	%	P
Level of education					.012**
Elementary	37	52.9	25	33.8	
High school	25	35.7	27	36.5	
University	8	11.4	22	29.7	
Working status					.001**
Housewife	52	74.3	45	60.8	
Working	10	14.3	27	36.5	
Unemployed	3	4.3	2	2.7	
Quitting a job after an ASD diagnosis	5	7.1	–	–	
Marital status					.112***
Married	67	95.7	74	100	
Divorced	3	4.3	0	0	
Number of marriage					.356***
First Marriage	67	95.7	73	98.6	
Second Marriage	3	4.3	1	1.4	
Family type					.033**
Nuclear	53	75.7	67	90.5	
Extended	15	21.4	7	9.5	
Divorced	2	2.9	0	0	
Average monthly income of the family					<.001**
1600-2000	17	24.3	4	5.4	
2001-3000	33	47.1	25	33.8	
3001-4000	6	8.6	21	28.4	
4000 and above	14	20.0	24	32.4	

*Independent samples *t*-test.

**Pearson chi-square test.

***Fisher-Freeman-Halton test.

****Mann-Whitney *U* test: $P < .05$.

depression score for mothers whose child was diagnosed with ASD ($r = -0.456$) ($P < .001$). There was a moderate negative correlation between the total resilience score and the depression score for mothers with typically developing children ($r = -0.34$) ($P < .001$). In both groups, as the depression score decreased the total resilience score increased. There was no statistically significant correlation between the total resilience score and the anxiety score of mothers whose child was diagnosed with ASD ($P = .060$). There was a negative weak statistically significant correlation between the total resilience score and the anxiety score of mothers with typically developing children ($r = -0.342$) ($P = .003$).

Predicting Resilience

In the univariate logistic regression analysis, when the relations with the dependent variable (total RSA score is below the median value=less than 129 points) were examined, variables with a significant *P*-values; child diagnosis, female age, level of education, working status, planned pregnancy, marital adjustment score, Beck depression score, Beck anxiety score, status of assisting in child care were included in the multivariate analysis as predictor variables. Omnibus test *P* values were as follows: female age $P = .038$ level of education, $P = .049$, marital adjustment score $P < .001$, Beck depression score, $P < .001$, Beck anxiety score $P < .001$, and child

Table 6. Variables Predicting Total Resilience Scale Score Below Median=Results of Univariate and Multiple Logistic Regression Analysis

Variables	Univariate Logistic Regression Analysis			Multiple Logistic Regression Analysis		
	Odds Ratio	95% CI	P	Odds Ratio	95% CI	P
Female age	0.940	0.886-0.998	.042			
Typically developing child, child diagnosed with ASD	Reference					
	2.946	1.496-5.801	.002			
Level of education						
University	Reference			Reference		
Primary school	2.960	1.188-7.376	.020	3.073	1.030-9.170	.044*
High school	1.714	0.673-4.365	.258	1.044	0.333-3.280	.941
Working status						
Working	Reference					
Unemployed	1.610	0.755-3.437	.218			
Planned pregnancy						
Yes	Reference					
No	1.812	0.907-3.619	.092			
Status of assisting in child care						
Yes	Reference					
No	1.661	0.852-3.240	.137			
Total number of children						
≤2	Reference					
≥3	0.698	0.319-1.529	.369			
Beck depression score	1.186	1.107-1.281	<.001	1.135	1.043-1.235	.003*
Beck anxiety score	1.087	1.033-1.143	.001			
Marital adjustment score	0.882	0.838-0.927	<.001	0.915	0.864-0.970	.003*

*P < .05.

ASD, autism spectrum disorder.

diagnoses by using RSA.¹² Unlike our study, Grant et al did not include parents with typically developing child as a control group; they just pointed out how these disorders specifically impact parents. Turkish validity study of the Family Resilience Assessment Scale was conducted with caregivers of children with disabilities. In the present study, we emphasized psychological resilience of mothers and not the other caregivers; so we used RSA.

Additionally, in our study, the subdimension resilience scores of mothers whose child was diagnosed with ASD were found to be lower than the scores of mothers with typically developing child. Nevertheless, both groups reported “social resources” as the highest protective factor the social support from friends and relatives with whom one has established intimacy apart from family resources. Besides, mothers of a child with ASD reported “future perception” (the beliefs on opportunities for plans) and the mothers with typically developing child reported, “structural style” (skills of maintaining a daily routine and having the ability to plan) as the lowest protective factor. Using the same scale similar to our study, Grant et al emphasized that parents of children followed up with different diagnoses reported “social resources” as the

highest protective factor and “future perception” as the lowest protective factor.¹² As well as it has been reported that caregivers of a child with ASD receive much less social support than families with typically developing child.¹³

In our study, mothers were asked about their responses to their child’s diagnosis of ASD: 11.4% (n=8) were surprised; 15.7% (n=11) felt fear-anxiety; 11.4% (n=8) felt unhappy; 11.4% (n=8) felt helplessness, anger, distress, emptiness, thought they were unlucky; 34.3% were still unsure about the validity of their child’s ASD diagnosis; and 15.7% blamed themselves for the diagnosis. These findings may suggest that mothers perceived their child’s diagnosis as a traumatic experience. Such emotional reactions have been associated with the feeling of loss or grief experienced by mothers.¹⁴ Similar to our findings, it has been reported that parents are likely to blame themselves because they believe they are responsible for their children’s behaviors, thinking that they are liable. It is stated that the attitudes of others cause parents to feel socially isolated and not let in.¹⁵

In our study, there was a negative correlation between the total score of resilience, the subdimension scores of

family cohesion, social resources, and the autism symptom severity of the child. The studies emphasized that especially the mother's perception of autism symptom severity was a cross-cultural factor that predicted parenting stress.¹⁶ The strength of our work was that we analyzed the symptom severity with CARS; in our group, the rate of mild-to-moderate autism was 54.3% and severe autism was 18.6%. Studies on ASD severity show a positive relationship with parental stress.¹⁷ They also reported a negative association between marital quality and a child's severity of autistic behaviors.^{18,19} However, not all mothers of children with high autism symptom severity report psychological distress. Specific to parents' perception of having a child diagnosed with ASD, positive beliefs, emotional acceptance and understanding, sense of coherence, cognitive reframing, and adaptability have been reported as resilient strategies for parents, and because of these factors some mothers may not express psychological distress.²⁰

In our study, the low educational level of mothers was one of the variables that significantly predicted a low level of resilience. In a study conducted in Greece, whose sociocultural structure is similar to that of our country, it was reported that the higher the educational level of parents with autistic children, the higher the social support they received.²¹ Greeff and Walt report that one of the resilience factors was the high socioeconomic level of the parents whose children were diagnosed with autism.²² In our study, no relationship was found between family income level and resilience; however, consistent with the literature, the level of resilience increased with increasing education level. It has been reported that parents with lower educational levels and socioeconomic status may recognize ASD symptoms later and this has been associated with more stress and an increased risk of depression.²³ It can be thought that as the education level of the parent increases, the ease of access to information about autism and the tendency to find solutions increases. As a result, the self-efficacy perception of the parent is positively affected, which increases resilience. Langley pointed out that financial pressures increase depressive symptoms, which can result in poorer marital satisfaction.¹⁸ Di Renzo also mentioned the adverse effects of low education levels on maternal stress and marital adjustment.¹⁷

In our study, marital adjustment was lower in mothers of a child with ASD than the mothers with a typically developing child. We found that 37.3% (n=25) of mothers of a child with ASD had high, while 62.7% (n=42) had poor marital adjustment. In many studies compatible with our findings, parents who are rearing children with ASD have been found to report lower levels of marital satisfaction compared with parents of children without disabilities.^{24,25}

In a meta-analysis, the risk factors for parents' relationship satisfaction were the autistic child's challenging behaviors, parenting stress, and poor psychological well-being, whereas the protective factors were positive cognitive

evaluation and social support.²⁴ The ability to share the burden with a partner and to communicate effectively about their experiences has been identified as important for the resilience of families of children with ASD. It has been shown that spousal support positively affects marital satisfaction and decreases perceived stress levels. If mothers of children with ASD have a less good couple interaction day, it would be associated with a more stressful parenting day.²⁶

In our study, depressive symptoms were found to have a negative correlation with resilience level and marital adjustment in both groups of mothers. Like our study, mothers who perceived receiving higher levels of social support reported fewer depressive symptoms and a few marital problems. Chung (2021) pointed out that there was a high negative correlation between resilience and depressive symptom scores like our findings.²⁷ In our study, depression scores of mothers whose child was diagnosed with ASD were found to be higher compared to mothers with typically developing child. In our study, depression score was also a significant predictor of resilience.

As far as we know, there is a limited number of studies examining the relationship between marital adjustment and resilience. Our study found a positive correlation between resilience and marital adjustment. The marital adjustment score was also found to be one of the significant predictors of resilience. In our study, a positive correlation was also found between subdimensions of psychological resilience (social resources, family cohesion, and future perception) and marital adjustment in mothers of children with ASD. McGrew and Keys reported that social support received in the first year after the diagnosis of ASD was a predictor of the couple's relationship satisfaction.²⁸ A longitudinal study conducted by Gerstein et al concluded that psychological well-being and marital adjustment affected resilience in parents of children with developmental disorders.² Thus situated, it has been reported to reduce depressive complaints. Couple resilience characteristics such as a positive adaptation style, more self-efficacy, and having positive expectations in the relationship were associated with more satisfaction in the dyadic relationship. Besides, resilience may reduce the possibility of the mother's symptoms related to partner divergency and burnout associated with raising an autistic child.²⁹ It is underlined that resilient individuals are optimistic about the future, have confidence in finding solutions to their problems, and have appropriate interpersonal skills to provide social support.³⁰ In this context, it has been shown that if a mother perceives the challenging situation, she faces as manageable and believes that she has sufficient resources to cope, she will experience more marital satisfaction. Our study contributes to the literature with the results that marital adjustment is decreased and resilience level is lower in mothers whose child has ASD. Consistent with

our findings, studies suggest that resilience is positively related to relationship satisfaction.³⁰ It is thought that resilience may affect marital satisfaction by affecting the coping strategies used to face various difficulties in the relationship. It may be acceptable that resilient individuals can easily provide social support in times of need. At the same time, social support directly increases the level of resilience of mothers whose child was diagnosed with ASD.

The findings of this study indicated that excess depressive symptoms decreased marital adjustment and low levels of education; these were significant predictors of low resilience. As a result, if mothers' strategies for parenting a special child next to making their marriage work, they can feel more resilient, not depressed, and vice versa. Our study can contribute to taking part of the parents in the appropriate therapeutic interventions for autism and focus on the impact of their resilience. Since mothers were mainly the primary caregivers, our study usually investigates the female side of resilience and marital adjustment, ignoring the father and extended family members, which may be the limitation of our study.

In the literature, studies conducted to evaluate resilience in parents are generally based on cross-sectional studies similar to ours. Considering that resilience and marital adjustment are dynamic processes, longitudinal studies could be planned. Further studies are needed with a wider age range of autism. Our fundamental clinical recommendation is that more competent marriage and family therapists are needed for effective therapeutic interventions that help the mothers of an autistic child for such a major family issue which will also set on emotional and behavioral health both in parents and the autistic children. We believed the marital adjustment parameter may be improved, and mothers may have higher resilience.

Ethics Committee Approval: This study was approved by Ethics Committee of Bakırköy Research and Training Hospital for Psychiatry, Neurology and Neurosurgery (Approval No: e2782).

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