



The Effect of Applied Group Training on Perceived Social Support, Depressive Symptoms, and Self-Compassion Given to Mothers with Children with Autism: a Quasi-Experimental Study

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Abstract

To investigate the effect of applied group training given to mothers of children with autism on perceived social support, depressive symptoms, and self-compassion. The sample of the study, which was conducted quasi-experimentally in non-randomized groups, consisted of 44 mothers of children with autism, 22 in the experimental group and 22 in the control group. A descriptive characteristics form, the Multidimensional Scale of Perceived Social Support, Beck Depression Inventory, and Self-Compassion Scale were used to collect data. A total of 48 h of practical group training was given to the mothers over a period of 6 weeks, providing them with an environment where they could interact within the group. Data were analyzed using the SPSS 22.0 program. Number, percentage, mean, standard deviation, repeated measurements t-tests, and complementary Bonferroni tests were used to evaluate the data. There was a significant increase in perceived social support ($t = -6.697$; $p < .001$) and self-compassion ($t = -8.676$; $p < .001$) scores and a significant decrease in depression scores ($t = 4.840$; $p < .001$) of the experimental group. These changes were not statistically significant in the control group ($p > .05$). It was determined that applied group education could reduce depression levels by increasing the social support perception and self-compassion levels of mothers of children with autism. Future research could examine the short- and long-term effects of such interventions on both caregivers and children with autism. Regular group training can contribute to the psychosocial empowerment of mothers.

Keywords Social support · Depression · Self-compassion · Mothers · Autism

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Introduction

Autism spectrum disorder (ASD) is a neurodevelopmental disorder characterized by persistent challenges in social interaction, communication skills, and repetitive behaviors (American Psychiatric Association, 2022). Mothers often bear a disproportionate share of caregiving responsibilities for individuals with ASD (Deb et al., 2020). This situation causes them to face significant difficulties in their lives and negatively affects their psychological well-being (Deb et al., 2020; Schnabel et al., 2020). It has been revealed that mothers with children with autism have higher levels of depression, anxiety, stress, and burnout compared with parents with neurotypical children (Yorke et al., 2018).

It is known that mothers with children with autism have low levels of perceived social support and self-compassion and high levels of depressive symptoms (Dykens et al., 2014; Feinberg et al., 2014). Social support is expressed

as the financial and moral support provided by those in the immediate environment such as the spouse, family members, and friends to the person who is facing stressful and difficult living conditions (Aktaş, 2013). However, mothers with children with autism often experience social isolation and have difficulty accessing support resources (Tabatabaei et al., 2022). Many mothers report that they feel alone in the care of their children and do not receive adequate social support (Ebadi et al., 2021). Studies show that participation in parent education and support groups increases mothers' perception of social support and positively affects mental health (Deb et al., 2020; Postorino et al., 2017). Some mothers experience emotional burnout and a sense of isolation due to the inadequacy of their social support systems (family, friends, community services). Lack of social support reduces mothers' psychological resilience and increases symptoms of depression and anxiety (Zandi et al., 2025).

Mothers with children with autism often experience self-blame and feelings of inadequacy. Mothers who are constantly thinking "What more can I do?" about their children's development have difficulty developing self-compassion for themselves (Neff, 2011). Self-compassion refers to the individual's development of an understanding, patient, and accepting attitude towards oneself (Neff, 2011). One factor that may be an important coping strategy is self-compassion, which involves being kind to oneself in times of difficulty, recognizing the shared nature of human suffering, and being mindfully aware of negative thoughts and emotions (Neff & Faso, 2015). Studies have shown that individuals with high levels of self-compassion have higher levels of coping with stress and emotional well-being, and depressive symptoms are lower (Lennard et al., 2021). In another study, self-compassion was found to predict psychological well-being, lower distress, and lower parenting stress. If self-compassion is found to be causally related to these outcomes, interventions aimed at cultivating self-compassion and decreasing affiliate stigma may have benefits for parents of children with ASD (Torbet et al., 2019).

Parents with children with autism, especially caregivers, may experience high levels of stress, depression, and social isolation as they adapt to their child's specific needs (Schnabel et al., 2020; Yu et al., 2024). Group training is an important intervention method for helping to reduce these psychosocial risks and support the mental health of parents (Deb et al., 2020). Group-based psychosocial interventions can be effective in reducing mothers' depressive symptoms (Kreslins et al., 2015). Group training provides support to caregivers in managing their children's behavior, improving their communication skills, and increasing their emotional resilience. This improves the quality of life of the mother and child (Tabatabaei et al., 2022). Furthermore, it strengthens social support mechanisms by enabling caregivers who

have had similar experiences to bond and make them feel that they are not alone (Patterson et al., 2012).

Group training improves the psychosocial status of caregivers and has positive effects on the development of children (Deb et al., 2020). Reduced stress levels and increased positive parenting skills of caregivers benefit children from healthier social and emotional development (Patterson et al., 2012). It is of great importance to expand group education programs and increase supportive interventions for caregivers (Tabatabaei et al., 2022). In this direction, the aim of this study was to examine the effect of applied group training given to mothers with autistic children on perceived social support, depressive symptoms, and self-compassion.

Although previous studies have examined the effects of parent education programs for children with autism, the number of comprehensive group education studies that address social support, depressive symptoms, and self-compassion together is very limited (Buchanan-Pascall et al., 2018; Postorino et al., 2017). This quasi-experimental study aims to fill the gap in this area by evaluating the multidimensional effects of group-based interventions for mothers. Also, to contribute to the development of evidence-based policy recommendations on the sustainability and effectiveness of applied group training.

Our hypotheses were as follows:

H1 *Practical group training for mothers would increase perceived social support.*

H2 *Practical group training given to mothers would reduce depressive symptoms.*

H3 *Practical group training given to mothers would increase the level of self-compassion.*

Methods

Study Design

The research was conducted quasi-experimentally with a pre-test-post-test control group.

Sample Population

The research data were collected between September 2024 and January 2025 from three special education and rehabilitation centers located in a city in northern Turkey. The population of the study consisted of mothers who had children diagnosed with autism who were educated in these centers and took care of their primary care, and the sample consisted of mothers of children with autism who met the

inclusion criteria and voluntarily agreed to participate in the study. The inclusion criteria were as follows: being the mothers of a child diagnosed with autism between the ages of 2 and 18 years, being a primary caregiver for at least 1 year, not having previously participated in group training on autism, and not having communication difficulties and intellectual disabilities. The sample size was calculated using the G*Power 3.1.9.7 program. The sample calculation for the two-way mixed analysis of variance (ANOVA) was made by taking into account the two-group and two-measurement research design. In the calculation, the number of samples for each group was calculated as 17 by taking the medium effect size ($f=0.25$), 5% margin of error ($\alpha=0.05$) and 80% power ($1-\beta=0.95$). Considering the possibility of data loss, the sample size for each group was increased by 20%, and 44 people were included in the sample, 22 in each group (Cohen, 1988; Faul et al., 2007). Participants were not randomly assigned to groups, but volunteers who wanted to receive group training were included in the experimental group. Participants who did not want to receive training were assigned to the control group. This design was chosen to ensure that the mothers in the experimental group fully participated in the group training. However, this design also had some important disadvantages, such as bias. To minimize the risk of bias, educators were not informed about which group they were training. Additionally, statistical analyses were performed by an independent blind expert.

Measures

Descriptive Characteristics Questionnaire

The questionnaire consisted of eight questions that included the identifying characteristics of the child with autism and the mother, including questions about the age, sex, education level of the caregiver, and the problems encountered in care. Literature samples were used to create this form (Bearss et al., 2015; Ho & Lin, 2020; Kaçan et al., 2025).

Multidimensional Scale of Perceived Social Support (MSPSS)

This scale was developed by Zimet et al. (1988) and adapted to Turkish by Eker and Arkar (1995). Using the MSPSS, the adequacy of social support received from three different sources is evaluated subjectively (friend support, family support, private person support). The score of the sub-dimensions of the Likert-type scale, which is scored from 1 to 7, varies between 4 and 28, and the total score of the scale varies between 12 and 84. A high score indicates that the perceived social support is high. Cronbach's alpha coefficient for MSPSS was found to be quite high at 0.845.

Beck Depression Scale (BDS)

The BDS is a self-report scale that measures an individual's emotional, cognitive, somatic, and motivational states (Beck, 1961). Although it was developed to evaluate the symptoms of depression in detail, it also provides the evaluation of cognitive status. The BDS consists of 21 items, two items are emotion, 11 items are cognition, two items are behavior, five items are bodily symptoms, and one item is interpersonal symptoms. Each question is given a score between 0 and 3 and results ranging from 0 to 63 are obtained. Scores of 0–9 are considered as none/minimal depression, 10–18 as mild depression, 19–29 as moderate depression, and 30–63 as severe depression. The Turkish validity and reliability studies were performed by Teğin (1987) and Hisli (1988). The cut-off point for the scale was reported as 17 points and the Cronbach Alpha internal consistency coefficient was 0.866.

Self-Compassion Scale (SCS)

The SCS is a self-report scale developed by Neff (2003) and adapted to Turkish by Akın et al. (2007). It consists of a total of six sub-dimensions and 26 items: Self-Compassion, Self-Judgment, Being Aware of Sharing, Isolation, Consciousness and Excessive Identification. The total score of the 5-point Likert type scale ranges from 26 to 130. Because self-judgment, isolation and excessive identification are negative sub-dimensions, their articles are reverse-coded. The averages of the six subscales give the total self-compassion average. Scores between 1 and 2.5 indicate a low level of self-compassion, a score of 2.5–3.5 indicates a moderate level, and a score of 3.5–5 indicates a high level of self-compassion. The internal consistency coefficients of the scale were found to be between 0.72 and 0.80 (Akın et al., 2007).

Procedure

The data were collected in two stages: pre-test and post-test. The experimental group participated in a multifaceted group training that lasted a total of 6 weeks and 48 h. In the literature, it is recommended that psycho-education groups should continue for an average of 6 to 20 sessions (Güçray & Çekici, 2009). Because the children's special education continued simultaneously with the group education, a longer group education risked absenteeism. Therefore, the education was planned for 6 weeks. Mothers attended the group education by stating in advance the day they were available on Tuesday or Thursday. Two participants attended on different days than planned because it conflicted with their children's special education hours. However, this did not change the balance of numbers between the groups.

Practical group training sessions were held in groups of three and sometimes five in the training rooms by making an appointment with the caregivers when they came to the special education institutions with their children. Mothers were able to interact in the training sessions. A WhatsApp group was created for transportation purposes with the mothers in the experimental group, with their approval. Make-up workshops were created every week for mothers who could not attend, and completion of the 6-week program was ensured. Scales were applied to the experimental and control groups before and after the group training. Various literature samples were used to decide on the content and duration of group training sessions (Bearss et al., 2015; Drew et al., 2002; Dykens et al., 2014; Feinberg et al., 2014; Ho & Lin, 2020; Iadarola et al., 2018; Jocelyn et al., 1998; Kaçan et al., 2025). Group workshops were conducted by various experts in accordance with the content of the topic as follows:

Week 1: Eight hours of “effective communication training” were given to the mothers in the experimental group. Topics included: What are the benefits of using ‘I’ language and ‘you’ language? Using the role play method for ‘I’ language examples. What are we saying, what is understood? What is the meaning of behaviors, what do they tell? Effective communication training was given by a doctoral communication specialist who works with children and individuals with special needs.

Week 2: As part of the “Compassionate Moments with Myself Practical Workshop”, participants received 8 h of practical training on compassionate moments with myself. This practice aimed to increase the awareness of the participants by supporting them to get in touch with their own bodies, minds and emotions, and to gain self-help skills that they could apply in difficult moments with self-compassion and being in the moment. This training was given by a mental health nurse with a Ph.D.

Week 3: Eight hours of training on coping with the behavioral problems of children with autism was completed. Information was given about behavior reduction techniques to cope with children’s problem behaviors. This workshop was completed by a doctoral special education specialist.

Week 4: Eight hours of “pleasant free time with my child” training was given. This training included suggestions on how mothers with children with autism could spend their free time with their children more functionally. This workshop was completed by a doctoral special education specialist.

Weeks 5 and 6: In the last workshop, a total of 16 h of “psychodrama experience” group activity was completed. The psychodrama experience session was conducted to enable caregivers to share their traumatic experiences, be supported and develop positive coping methods. This training was given in practice by a certified psychodramatist.

Post-test data were then collected and feedback was received from the mothers. The post-test data of the control group were also collected in the same week in the special education centers where they were enrolled.

Ethical Aspect of the Study

Permission was obtained from the ethics committee of the relevant university for this study (2024-KAEK-117/20.11.2024). Written permission was obtained from the special education and rehabilitation institutions where the study was conducted, through the university, and informed consent was obtained from the caregivers who participated in the study. In addition, a clinical trial number was obtained for the study (NCT06862804).

Statistical Analysis

The data obtained in the study were analyzed using the Statistical Package for the Social Sciences (SPSS) for Windows 22.0 program. In the evaluation of the data, number, percentage, mean, and standard deviation were used as descriptive statistical methods. The differences between the ratios of categorical variables in independent groups were analyzed using Chi-square and Fisher exact tests. Kurtosis and Skewness values were examined to determine whether the research variables were normally distributed. In the relevant literature, the results regarding the kurtosis skewness values of variables are accepted as normal distribution when they are between +1.5 and −1.5 (Tabachnick et al., 2013), +2.0 and −2.0 (George et al., 2010). It was determined that the variables showed normal distribution. Parametric methods were used in the analysis of the data. Independent groups *t*-test was used to compare quantitative continuous data between two independent groups.

Results

There was no difference between the two groups in terms of the descriptive characteristics of mothers and their children with ASD ($p > .05$). Table 1 shows the distribution of the descriptive characteristics of the mothers and their children with ASD who were included in the experimental and control groups.

Table 2 shows the distribution of Mothers’ Perceived Social Support, Depression and Self-Compassion Averages included in the experimental and control groups. When the mean total Perceived Social Support scores of the experimental and control groups were compared in terms of pre-test and post-test, the mean pre-test score of the experimental group was found as 47.36 ± 15.35 and the mean

Table 1 Distribution of descriptive characteristics of mothers and children with ASD

		Experiment <i>n</i> (%)	Control <i>n</i> (%)	<i>p</i>
Mother's Education Status	Literate	4(18.2%)	3(13.6%)	$\chi^2 = 9.021$
	Primary school	3(13.6%)	12(54.5%)	$p = .061^a$
	Secondary school	5(22.7%)	3(13.6%)	
	High school	7(31.8%)	2(9.1%)	
	University	3(13.6%)	2(9.1%)	
Marital Status	Married	16(72.7%)	17(77.3%)	$\chi^2 = 0.121$
	Single	6(27.3%)	5(22.7%)	$p = .500^b$
Income Status	Income Less Than Expenses	7(31.8%)	2(9.1%)	$\chi^2 = 3.535$
	Income Equal to Expenditure	14(63.6%)	19(86.4%)	$p = .171^a$
	Income More Than Expenses	1(4.5%)	1(4.5%)	
Presence of Additional Caregiver Support	Yes	15(68.2%)	17(77.3%)	$\chi^2 = 0.458$
	No	7(31.8%)	5(22.7%)	$p = .368^b$
Problems Related to Caregiving Responsibilities	Obsessed	9(40.9%)	7(31.8%)	$\chi^2 = 2.869$
	Not Being Understood by Other People	3(13.6%)	1(4.5%)	$p = .580^a$
	Health Problems	2(9.1%)	5(22.7%)	
	Anger Problem	1(4.5%)	2(9.1%)	
	No problem	7(31.8%)	7(31.8%)	
Gender of the child with ASD	Woman	9(40.9%)	5(22.7%)	$\chi^2 = 1.676$
	Man	13(59.1%)	17(77.3%)	$p = .166^b$
Age of the child with ASD (Years)	2–5	8(36.4%)	8(36.4%)	$\chi^2 = 2.104$
	6–9	4(18.2%)	7(31.8%)	$p = .551^a$
	10–13	5(22.7%)	2(9.1%)	
	14–17	5(22.7%)	5(22.7%)	
Educational Status of the child with ASD	Primary school	11(50.0%)	16(72.7%)	$\chi^2 = 5.704$
	Secondary school	4(18.2%)	5(22.7%)	$p = .127^a$
	High school	5(22.7%)	1(4.5%)	
	No	2(9.1%)	0(0.0%)	

^aChi-square; ^bFisher Exact

post-test score was 64.55 ± 12.99 . In the control group, the mean pretest score was 48.91 ± 10.95 and the mean post-test score was 51.32 ± 11.18 ($t = 3.619$; $p = .001$). The results of the dependent groups *t*-test show that there was a significant increase in the experimental group ($t = -6.697$; $p < .001$; $d = 1.428$), but there was no significant change in the control group ($t = -1.099$; $p = .284$) (Table 2).

In terms of mean Depression total scores, the mean pre-test total score of the experimental group was 17.14 ± 5.95 , and the mean post-test score was 10.41 ± 4.25 . The control group's mean pretest score was 14.00 ± 7.26 , and the mean post-test score was 14.14 ± 7.11 . A significant decrease was observed in the experimental group ($t = 4.840$; $p < .001$; $d = 1.032$), but there was no significant change in the control group ($t = -1.000$; $p = .329$, Table 2).

In terms of mean Self-Compassion total scores, the mean pre-test score of the experimental group was 64.32 ± 8.18 and the mean post-test score was 83.134 ± 6.91 . The mean pre-test score of the control group was 65.41 ± 6.92 and the mean post-test score was 66.32 ± 7.41 ($t = 7.786$; $p < .001$). A significant increase was observed in the experimental group ($t = -8.676$; $p < .001$; $d = 1.850$), but no significant change

was observed in the control group ($t = -1.918$; $p = .069$, Table 2).

Discussion

In this study, the effects of group training for mothers with autistic children on perceived social support, depressive symptoms, and self-compassion were examined. Our study results show that perceived social support increased, depressive symptoms decreased, and self-compassion levels increased in mothers who participated in group education. The lack of changes in the findings of the control group is an important indicator emphasizing the effectiveness of the intervention. These results, in parallel with the findings in the existing literature, show that group-based interventions can be effective in providing psychological recovery and support; our findings are discussed in relation to various literature examples.

Social support includes informal support, both tangible and emotional, from interpersonal relationships, and formal support from ASD support groups (Martinez et al.,

Table 2 Mothers' distribution of perceived social support, depression, and Self-Compassion averages

Groups	Experiment (<i>n</i> =22)		Control (<i>n</i> =22)		<i>t</i> ^a	<i>p</i>
	Mean	SD	Mean	SD		
Perceived Social Support Total Pretest	47.36	15.35	48.91	10.95	-0.384	0.703
Perceived Social Support Total Posttest	64.55	12.99	51.32	11.18	3.619	0.001
<i>t</i> ^b	-6.697		-1.099			
<i>p</i>	<0.001		0.284			
Friend Support Pretest	17.77	4.89	19.05	4.87	-0.864	0.393
Friend Support Post-test	23.23	3.28	18.82	4.52	3.703	0.001
<i>t</i> ^b	-5.423		0.961			
<i>p</i>	<0.001		0.348			
Family Support Pretest	15.18	6.76	15.23	6.52	-0.023	0.982
Family Support Post-test	21.86	5.48	17.59	6.05	2.455	0.018
<i>t</i> ^b	-5.044		-1.055			
<i>p</i>	<0.001		0.303			
Private Person Support Pretest	14.41	6.62	14.64	4.52	-0.133	0.895
Private Person Support Post-test	19.45	6.97	14.91	4.69	2.545	0.015
<i>t</i> ^b	-6.170		-0.654			
<i>p</i>	<0.001		0.520			
Total Self-Compassion Pretest	64.32	8.18	-0.478	6.92	-0.488	0.635
Total Self-Compassion Post-test	83.14	6.91	7.786	7.41	7.797	<0.001
<i>t</i> ^b	-8.676		-1.918			
<i>p</i>	<0.001		0.069			
Self-Compassion Pretest	15.77	2.97	0.667	4.16	0.670	0.508
Self-Affection Post-test	18.73	3.69	3.158	4.21	3.163	0.003
<i>t</i> ^b	-3.059		1.449			
<i>p</i>	0.006		0.162			
Self-Judgment Pretest	10.64	4.01	-0.645	3.94	-0.645	0.522
Self-Judgment Post-test	16.32	2.87	4.727	3.71	4.734	<0.001
<i>t</i> ^b	-5.778		-1.000			
<i>p</i>	<0.001		0.329			
Awareness of Sharing Pretest	11.55	2.82	-0.261	2.94	-0.261	0.795
Awareness of Sharing Post-test	15.95	3.84	3.687	3.34	3.687	0.001
<i>t</i> ^b	-4.422		-0.777			
<i>p</i>	<0.001		0.446			
Isolation Pretest	9.77	2.31	0.196	3.69	0.196	0.846
Insulation Posttest	12.09	2.37	2.508	3.43	2.508	0.017
<i>t</i> ^b	-2.748		-1.449			
<i>p</i>	0.012		0.162			
Consciousness Pretest	8.55	2.09	-1.724	2.92	-1.724	0.092
Posttest of Consciousness	9.95	2.61	0.055	2.86	0.055	0.956
<i>t</i> ^b	-2.249		-1.000			
<i>p</i>	0.035		0.329			
Excessive Identification Pretest	8.05	1.53	0.523	2.41	0.523	0.604
Over-Identification Post-test	10.09	1.95	3.028	2.50	3.028	0.004
<i>t</i> ^b	-3.842		-1.322			
<i>p</i>	0.001		0.200			
Depression Score Average Pretest	17.14	5.95	1.567	7.26	1.567	0.125
Depression Score Mean Post-test	10.41	4.25	-2.110	7.11	-2.110	0.042
<i>t</i> ^b	4.840		-1.000			
<i>p</i>	<0.001		0.329		-0.478	

^aIndependent Groups *t*-test; ^bDependent Groups *t*-test

Note: *t*-values show the direction of the difference and are negative because they are calculated based on the pretest-posttest average values. Statistically significant values are written in bold

2022). Mothers caring for a child with autism often experience significant physical and emotional challenges, which can contribute to negative psychological outcomes such as depression, particularly in the absence of adequate social support. It is noted that social support is an important protective factor against parental stress and the problems it brings when raising children with additional needs, such as autism (Drogomyretska et al., 2020). In our study, the increase in perceived social support following the group training suggested that caregivers felt more supported and may have perceived their social networks more positively. This finding suggests that the group training may have facilitated information sharing among participants and potentially enhanced their perception of emotional and social support. Thus, the H1 hypothesis was supported. Similar to our study, O'Donovan et al. (2019) found that group-based parent education interventions could provide social support and coping strategies to meet parental health needs while achieving improvements in children's behavior, skills, and socialization by changing parental behavior. In a meta-analysis, it was found that group therapies, especially those involving parent education, reduced caregivers' stress levels and increased their perception of social support (Postorino et al., 2017).

Depression is often accompanied by poor health, high stress, and anxiety in caregivers of children with neurodevelopmental disabilities (Dykens et al., 2014). Highly stressed parents are less effective in their parenting roles and put their children's developmental progress at risk (Dykens et al., 2014). Approximately 33–59% of mothers of children with ASD report depressive symptoms that require psychiatric evaluation (Feinberg et al., 2014). The decreased lack of energy, concentration, and motivation associated with depressive symptoms negatively affect maternal functioning, as well as the mother's capacity to manage the children's health needs (Feinberg et al., 2014). Training empowers parents, and a wide range of programs are available around the world (Deb et al., 2020). Often parents of children with ASD are under emotional stress, and the opportunity to seek and discuss information from a professional can in itself be therapeutic for them (Deb et al., 2020). The decrease in depressive symptoms as a result of group-based training in our study is also an interesting finding. Group training served as an important resource that could help participants ease their emotional burden and contributed to the reduction of depressive symptoms. These findings suggest that psychosocial support programs for families who care for children with autism may be effective in reducing depression levels. Thus, the H2 hypothesis was supported. Feinberg et al. (2014) provided evidence of the short-term effectiveness of a parent training program in reducing parental stress and depressive symptoms in

the months immediately following a child's ASD diagnosis. Similar to our study, mothers of children with autism who received positive adult development training with mindfulness-based stress reduction showed great improvements in anxiety, depression, sleep, and well-being (Dykens et al., 2014). Meta-analyses show that group-based training reduces parents' anxiety and depression levels and increases their psychological resilience (Mihandoust et al., 2021; Robertson & Melville, 2017).

The disruptive behaviors seen in children with ASD can also erode parental competence, perceived self-efficacy, and problem-solving skills (Iadarola et al., 2018). Self-compassion refers to the capacity of individuals to be kind, patient, and understanding towards themselves and is described as an important factor that supports psychological recovery, especially in challenging life situations (Neff, 2003). Self-compassionate individuals have more emotional resources to successfully overcome life challenges. Therefore, self-compassion is likely to play a role in parents' ability to cope with the challenges of raising a child with autism (Neff & Faso, 2015). In a qualitative study, mothers with children with ASD examined their experiences of self-compassion and concluded that mothers felt that self-compassion played an important role in coping with stress in parenting (Bohaddana et al., 2021).

In our study, it was observed that mothers' self-compassion levels increased after group training. This result suggests that mothers may be developing a more compassionate and understanding approach toward themselves, which is often associated with improved coping in other research. This finding shows that group training provides practical information to participants and enables an environment that can promote emotional healing, supporting the H3 hypothesis. Other research also shows that mindfulness training for parents of children with developmental disabilities increases self-compassion in addition to improving well-being and reducing stress (Bazzano et al., 2013; Benn et al., 2012). In the study by Keen et al. (2010), parents with low levels of self-efficacy at baseline showed higher levels of self-efficacy when they received a professionally supported intervention. Several studies indicated that self-compassion-based group training for mothers with children with ASD was effective in reducing levels of depression and burnout (Feinberg et al., 2014; Robertson & Melville, 2017). In a study conducted with mothers with disabled children, it was determined that self-compassion and social support had positive effects on psychological resilience and subjective well-being (Tekinarslan et al., 2023). In our study, perceived social support increased, self-compassion level increased, and depression levels decreased after group training. Our findings support the literature. However, our study is one of the rare studies that examine the simultaneous effects of

group-based psychoeducation on these three variables. In this respect, the study provides an original contribution to the literature by revealing the multifaceted effects of group education both for caregivers of children and adolescents with special needs and in preventive mental health practices. In particular, the consideration of an understudied variable, such as self-compassion in relation to social support and depression, contributes to the deepening of understanding in this field.

Limitations

This study is presented with some limitations. First, the small sample size and the fact that this study was conducted only in a specific geographic area may limit the generalizability of the results. Another limitation is that the study only assessed short-term effects and did not examine long-term outcomes. In addition, this study only assessed mothers' outcomes and did not examine how positive outcomes in mothers affected their children with ASD. The use of a quasi-experimental design in the study can also be considered a limitation. Another limitation was that no video or audio recordings were made during the training because the participants did not give their consent. Thus, the evaluations were made using only measurement tools and were limited to quantitative data.

Conclusion

This study shows that group training for mothers of autistic children may have positive effects on perceived social support, depressive symptoms, and self-compassion. These findings suggest that psychological support and group interventions can play an important role in improving the mental well-being of mothers. This group-based intervention, based on the principles of positive psychology and mindfulness, was found to be effective in increasing the well-being of the caregiver in our study. However, it should be taken into account that this result is limited to the training content and sample used. Group training given by experts in the field is an effective intervention approach that increases psychosocial interaction and support mechanisms among participants. This training contributed to strengthening the mental health of mothers of children with special needs and emphasized the necessity of adult services in order to provide sustainable care. Comparing different interventions with active control groups is recommended for future studies. Future studies should evaluate the sustainable effects of group training with larger sample groups and long-term follow-ups. In addition, the effects of factors such as the content

of group training and the duration of implementation on the effectiveness should be investigated in more detail.

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