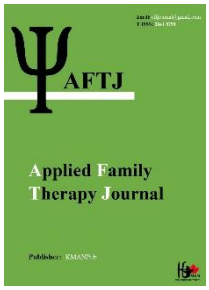
KMAN PUBLISHING INSTITUTE
Journal Website

Article history:
Received 28 May 2026
Revised 27 August 2026
Accepted 03 September 2026
Initial Publication 04 September 2026
Final Publication 01 May 2027

Applied Family Therapy Journal

Volume 8, Issue 3, pp 1-16



E-ISSN: 3041-8798

Comparison of the Effectiveness of Parent Management Training and Life Therapy on Feelings of Shame and Guilt Among Mothers of Children with Autism in Sari

Aref. Zolfaghar Roshan[1], Seyed Abdolmajid. Bahrainian[1*], Fatemeh. Shahabizadeh[1]

[1] Department of Psychology, Bi.C., Islamic Azad University, Birjand, Iran

*** Corresponding author email address**: Abdolmajeed2025@iau.ac.ir

A r t i c l e I n f o

Article type:
Original Article

How to cite this article:
Zolfaghar Roshan, A., Bahrainian, S. A., & Shahabizadeh, F. (2027). Comparison of the Effectiveness of Parent Management Training and Life Therapy on Feelings of Shame and Guilt Among Mothers of Children with Autism in Sari. *Applied Family Therapy Journal*, *8*(3), 1-16.
http://dx.doi.org/10.61838/kman.aftj.6098

A B S T R A C T

Objective: This study aimed to compare the effectiveness of Parent Management Training (PMT) and Life Therapy in reducing feelings of shame and guilt among mothers of children with autism spectrum disorder (ASD) in Sari, Iran.

Methods and Materials: This quasi-experimental study employed a pretest–posttest control-group design with a three-month follow-up. The statistical population consisted of mothers aged 25–45 years who had children diagnosed with autism spectrum disorder and were living in Sari during 2025–2026. A total of 45 eligible mothers were selected through purposive sampling based on predetermined inclusion and exclusion criteria and were subsequently assigned by simple random allocation to three equal groups: Parent Management Training, Life Therapy, and control. Feelings of shame and guilt were assessed using the Shame and Guilt Scale developed by Cohen et al. (2011). The intervention groups received their respective therapeutic programs, whereas the control group received no intervention during the study period. Data were analyzed using mixed-design repeated-measures analysis of variance in SPSS version 26.

Findings: Mixed repeated-measures analysis of variance demonstrated significant changes in feelings of shame and guilt across measurement occasions and significant differences between the experimental and control conditions ($p < .05$). Both Parent Management Training and Life Therapy significantly reduced shame and guilt compared with the control group. Furthermore, a statistically significant difference was observed between the two intervention groups ($p < .05$), with Life Therapy producing greater reductions in feelings of shame and guilt than Parent Management Training. The difference between posttest and three-month follow-up scores was not statistically significant, indicating that the therapeutic improvements achieved following the interventions were maintained over time.

Conclusion: Both Parent Management Training and Life Therapy appear to be effective psychological interventions for reducing shame and guilt among mothers of children with autism spectrum disorder. However, Life Therapy demonstrated comparatively greater effectiveness. These interventions, particularly Life Therapy, may therefore be incorporated into psychological and supportive programs designed to promote the mental health and emotional well-being of mothers caring for children with ASD.

Keywords: *Parent Management Training; Life Therapy; Shame; Guilt; Mothers; Autism Spectrum Disorder.*

1. Introduction

Autism spectrum disorder (ASD) is a neurodevelopmental condition characterized by persistent difficulties in social communication and social interaction, together with restricted, repetitive, or inflexible patterns of behavior and interests. Although the core diagnostic characteristics are expressed in the child, the consequences of ASD extend far beyond the individual and frequently influence the psychological functioning, interpersonal relationships, daily routines, and overall quality of life of the family. Parents of children with ASD often assume complex caregiving responsibilities involving behavioral management, educational coordination, therapeutic follow-up, advocacy, and adaptation of family routines to the child's developmental needs. These demands may be particularly burdensome for mothers, who in many cultural contexts undertake a substantial proportion of direct caregiving responsibilities. Studies have consistently shown that parents of children with ASD experience considerable psychological strain, and chronic parenting stress may be associated not only with poorer parental mental and physical health but also with elevated stress within the child, suggesting a reciprocal family process through which parental and child distress may reinforce one another (van der Lubbe et al., 2025). Recent qualitative evidence has similarly demonstrated that the maternal experience of raising a child with autism can involve a complex trajectory from suffering, uncertainty, and emotional disruption toward adaptation, meaning reconstruction, and appreciation, illustrating the profound psychological transformation that may accompany long-term caregiving (Nematollahi et al., 2025).

The psychological burden experienced by mothers of children with ASD is multidimensional and cannot be reduced solely to general parenting stress. Mothers may confront persistent worries about their child's future, social acceptance, educational opportunities, independence, and behavioral functioning, while simultaneously managing the reactions and expectations of relatives, professionals, and the wider community. Their psychological well-being may consequently depend on intrapersonal capacities such as self-control, self-understanding, and the ability to integrate difficult emotional experiences into a coherent sense of self. Evidence indicates that self-control and integrative self-knowledge can contribute to the prediction of psychological well-being among mothers of children with autism, emphasizing the importance of both behavioral and reflective psychological resources in this population (Niakan et al., 2025). The intensity of caregiving demands is also reflected in research on parenting stress, where valid and reliable measurement of stress among mothers of autistic children has become an important clinical and research priority because elevated stress affects emotional functioning, family interactions, and responses to the child's behavior (Karimi et al., 2023). Moreover, parenting stress among mothers of children with ASD has been found to differ from that experienced by mothers of typically developing children, with differences also emerging in the coping strategies used to deal with everyday pressures (Sadafi et al., 2021).

Parental stress in families of children with ASD is closely connected to the child's behavioral and developmental characteristics. Challenging behaviors, difficulties in emotional and behavioral regulation, repetitive behavior, self-injury, aggression, and noncompliance can increase the demands placed on parents and may gradually erode perceived parental competence. Evidence from parents of preschool-aged autistic children who received community-based early intensive behavioral intervention indicates that parental stress remains an important concern even in the context of structured intervention services, highlighting the need to address parental psychological functioning alongside child-focused treatment (Andreassen et al., 2025). The broader literature likewise indicates that parents' quality of life is affected by a combination of child-related, psychological, and family variables. Research examining predictors of quality of life among mothers and fathers of children with autistic disorder has demonstrated that parental adjustment is shaped by multiple interacting determinants rather than by the child's diagnosis alone (Dardas & Ahmad, 2014). A systematic review of the quality of life of parents of children with ASD similarly concluded that parents frequently experience challenges across psychological, social, and physical domains, further supporting the necessity of interventions that consider the family system rather than focusing exclusively on the child's symptoms (Vasilopoulou & Nisbet, 2016).

Among the emotional experiences that may be particularly important in mothers of children with ASD are shame and guilt. Although these emotions are related, they represent conceptually distinguishable forms of self-conscious affect. Shame generally involves a negative evaluation of the global self and may be accompanied by feelings of inadequacy, inferiority, exposure, withdrawal, and a desire to hide or escape. Guilt, in contrast, is more

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

commonly associated with a negative evaluation of a specific behavior or perceived failure and may motivate apology, compensation, or reparative action. In mothers of children with developmental difficulties, these emotions may emerge when mothers interpret the child's condition or behavior as evidence of parental failure, compare themselves unfavorably with other parents, perceive negative social judgment, or believe that they have not fulfilled culturally defined expectations of motherhood. The experience of shame can therefore become intertwined with self-criticism, social withdrawal, and reduced psychological well-being, whereas excessive or maladaptive guilt may promote chronic self-blame and emotional distress.

The social context of autism can further intensify shame-related experiences. Caregivers may encounter stigmatizing attitudes toward autism, misunderstanding of atypical child behavior, or implicit assumptions that behavioral difficulties reflect inadequate parenting. In such circumstances, stigma may become internalized as affiliate stigma, causing caregivers to experience negative self-evaluations based on their association with the stigmatized child. Research among caregivers of children with ASD has shown that affiliate stigma is associated with depressive symptoms and that self-esteem, shame, and family functioning play important roles in this relationship (Ting et al., 2018). Thus, maternal shame should not be regarded merely as an individual emotional reaction; rather, it may emerge from the interaction of self-evaluation, social judgment, perceived stigma, family relationships, and caregiving challenges. These experiences are especially important because persistent shame and guilt can undermine adaptive coping and may reduce mothers' ability to respond flexibly and effectively to the behavioral needs of their children.

The regulation of negative emotions is therefore an essential component of maternal adaptation. Mothers of young children must continually regulate frustration, worry, anger, helplessness, and self-evaluative emotions while remaining responsive to their children's needs. Research on emotion regulation, stress, and affect in mothers of young children has demonstrated that maternal emotion regulation is multifaceted and closely linked to the experience of stress and affective functioning (Deater-Deckard et al., 2016). For mothers of children with ASD, this regulatory demand may be even more pronounced because challenging child behavior often occurs repeatedly and under socially demanding circumstances. Empirical findings also support the relevance of directly targeting maternal shame and guilt. Cognitive emotion regulation training has been reported to reduce feelings of shame and guilt among mothers of children with autism, suggesting that these emotions are modifiable through structured psychological intervention (Zamiri, 2021). Similarly, research with mothers of children with learning disabilities has shown that self-compassion training can reduce feelings of shame and guilt, indicating that interventions aimed at modifying self-directed emotional responses may have considerable value for mothers of children with developmental difficulties (Farzi Vanastanagh et al., 2020).

The broader psychological vulnerability of mothers of children with ASD also supports the use of structured interventions. Acceptance and Commitment Therapy has been shown to reduce depression, anxiety, and stress among mothers of children with autism, demonstrating that interventions directed toward psychological flexibility and acceptance can improve maternal mental health (Rezaei, 2021). Spiritual health has likewise been investigated as an important dimension of functioning among mothers of children with autism, reflecting the need to consider meaning, purpose, existential resources, and psychological balance when addressing the broader well-being of these mothers (Soltani et al., 2022). Taken together, these findings suggest that effective intervention may require both practical skills for managing the child's behavior and psychological processes that enable mothers to reorganize their emotional relationship with caregiving, self-evaluation, and life challenges.

One established intervention for addressing parenting difficulties is Parent Management Training (PMT). PMT is a behavioral intervention designed to teach parents systematic methods for modifying child behavior through changes in antecedents, consequences, reinforcement contingencies, communication patterns, and parental responses. The approach is grounded in behavioral learning principles and emphasizes the active role of parents as agents of change within the child's natural environment. Core techniques commonly include identifying target behaviors, increasing positive attention, using praise and reinforcement, establishing predictable rules, giving effective instructions, selectively ignoring minor inappropriate behaviors, implementing appropriate consequences, and developing consistent behavior-management plans. Kazdin's model of Parent Management Training represents one of the best-established behavioral frameworks for addressing child and adolescent conduct problems and provides a structured basis for teaching parents

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

how to reinforce adaptive behavior while reducing problematic behavior (Kazdin, 2017).

The relevance of PMT to autism is particularly important because parents frequently manage behaviors that may be persistent, functionally complex, and disruptive to everyday family life. Research examining common components of Parent Management Training programs for preschool children with ASD has identified recurring intervention elements focused on behavioral principles, reinforcement, antecedent management, parent–child interaction, and the practical transfer of therapeutic techniques to the home environment (Eskandari et al., 2020). More recent findings have also demonstrated the effectiveness of parent behavior management training in reducing challenging behaviors among high-functioning students with ASD, supporting the applicability of behaviorally oriented parent interventions within the autism population (Bardideh & Mokhtari, 2024). Similarly, comparative research has shown that both problem-solving training and behavior management training for mothers can improve externalizing behavioral problems among children with ASD, suggesting that strengthening mothers' behavioral management skills can influence the family environment and child functioning (Habibi et al., 2023).

PMT has also demonstrated efficacy across other populations characterized by behavioral and regulatory difficulties. Parent management approaches have been used to improve symptoms associated with attention-deficit/hyperactivity disorder and related behavioral difficulties (Bayrami, 2017). Comparative research involving children with attention-deficit/hyperactivity disorder has further supported the usefulness of Parent Management Training for cognitive and behavioral outcomes, including attention control (Askari et al., 2019). In mothers of children with externalizing behavior problems, Parent Management Training has also been compared with Acceptance and Commitment-based parenting training, with findings indicating its relevance for improving parental self-efficacy (Azimifar et al., 2018). Furthermore, combining Parent Management Training with mindful parenting has been associated with improvements in parenting stress, parent–child relationships, and child externalizing problems, highlighting the potential for behavioral parent training to influence both child outcomes and parental functioning (Kowsari et al., 2000).

An important mechanism through which PMT may influence maternal shame and guilt is improvement in perceived parental competence. Mothers who do not have effective strategies for responding to challenging behavior may interpret unsuccessful interactions as evidence that they are inadequate parents. Repeated behavioral crises may consequently strengthen self-criticism, helplessness, shame, or guilt. Through structured behavioral skills, PMT can provide parents with an alternative explanatory framework in which problematic behavior is understood as modifiable through observable contingencies rather than as evidence of personal failure. Greater mastery over child behavior may consequently weaken maladaptive self-blame and increase parental efficacy. Research comparing Parent Management Training with self-compassion programs has demonstrated that both approaches can influence self-criticism among mothers of children with learning disabilities, suggesting that behavioral parent interventions may affect not only parenting behavior but also self-directed evaluative processes (Farzi Vanastanagh et al., 2021). At the same time, the effects of Parent Management Treatment are not uniform across families. A systematic review of parental and familial predictors and moderators of Parent Management Treatment programs has emphasized that treatment response may depend on parental characteristics, family processes, and contextual factors (Dedousis-Wallace et al., 2021). This highlights the importance of comparing PMT with interventions that operate through different psychological mechanisms.

Life Therapy represents a conceptually different intervention pathway. Rather than focusing primarily on the modification of child behavior, Life Therapy emphasizes meaning, purpose, hope, personal goals, enthusiasm for life, psychological balance, positive orientation, decision-making, and systematic management of major life domains. For mothers of children with ASD, these themes may be especially relevant because caregiving can gradually narrow personal identity around the child's needs, disrupt future-oriented goals, and contribute to a sense that important areas of life have been neglected. An intervention that helps mothers reconsider the meaning of their experiences, establish realistic and personally valued goals, restore hope, and rebalance life domains may reduce global negative self-evaluation and facilitate a more adaptive interpretation of the caregiving role. Such processes may be particularly relevant to shame and guilt because both emotions are closely tied to how individuals evaluate themselves in relation to standards, expectations, responsibilities, and perceived failures.

Life Therapy may also facilitate a shift from rigid self-judgment toward a broader understanding of adversity, personal resources, and meaningful living. Mothers caring

for a child with ASD often experience practical restrictions and emotional demands that cannot be eliminated completely. Therefore, an intervention focused only on symptom reduction may be insufficient if mothers continue to experience hopelessness, loss of personal direction, or imbalance across life domains. The phenomenological literature indicates that mothers of autistic children may move through experiences of suffering toward appreciation and psychological transformation, suggesting that meaning reconstruction can become an important component of adaptation (Nematollahi et al., 2025). Similarly, psychological well-being among mothers of children with ASD has been linked to self-control and integrative self-knowledge, supporting the idea that mothers benefit from interventions that strengthen self-awareness, purposeful action, and coherent understanding of their experiences (Niakan et al., 2025). In this respect, Life Therapy may address dimensions of maternal functioning that are not directly targeted by conventional behavioral parent programs.

The importance of maternal coping and adaptive functioning became especially visible during the COVID-19 pandemic, when mothers of children with ASD were required to manage home education, therapeutic disruption, family routines, and behavioral challenges under highly constrained conditions. Qualitative findings from Indonesian mothers demonstrated the complexity of providing home education to children with ASD during the pandemic and highlighted the substantial responsibilities carried by mothers when external supports were reduced (Daulay, 2021). Such evidence reinforces the need for interventions that enhance not only specific caregiving skills but also broader capacities for problem solving, adaptation, hope, and life management. These capacities may be directly relevant to shame and guilt because mothers who experience greater personal agency and psychological coherence may be less likely to interpret caregiving difficulties as global failures of the self.

Cultural and family factors must also be considered when examining maternal emotional responses. Research on parents of children with ASD has shown that gender roles can influence caregiving experiences, mental health, and coping, underscoring the importance of examining mothers as a distinct caregiving group rather than assuming that the psychological consequences of autism are identical for all parents (Ang & Loh, 2019). In societies where mothers are expected to assume primary responsibility for child development and behavior, these expectations may intensify guilt when the child displays difficulties and may increase shame when family behavior is exposed to public evaluation. These social and cultural pressures can interact with chronic parenting stress, perceived stigma, and self-criticism, creating a psychological context in which mothers become particularly vulnerable to self-conscious negative emotions.

The comparison of PMT and Life Therapy is therefore theoretically and clinically meaningful because the two interventions approach maternal distress from substantially different directions. PMT primarily attempts to alter the caregiving environment by increasing parental behavioral competence and improving the management of child behavior, whereas Life Therapy primarily targets the mother's broader psychological relationship with meaning, life goals, hope, priorities, and self-evaluation. Both mechanisms may reduce shame and guilt, but they may do so through different pathways. PMT may reduce these emotions indirectly by increasing perceived competence and reducing repeated negative parent–child interactions, while Life Therapy may reduce them more directly by restructuring how mothers interpret their lives, personal standards, perceived inadequacies, and future possibilities. Existing studies have provided support for behavioral management interventions, emotion-regulation interventions, self-compassion approaches, and other psychological therapies among mothers of children with developmental difficulties; however, direct comparisons between PMT and Life Therapy with respect to shame and guilt remain limited.

This gap is important because intervention selection should be based not only on whether a treatment is effective but also on whether one intervention produces greater and more stable improvements in the specific psychological outcomes experienced by the target population. Given the chronic caregiving demands associated with ASD, it is also necessary to determine whether improvements remain stable after the end of treatment. The inclusion of a follow-up assessment is therefore particularly valuable because short-term post-intervention improvement may not necessarily indicate enduring therapeutic benefit. Comparative evidence can help clinicians determine whether a primarily behavioral parent-training model or a broader life-oriented therapeutic model is more effective for reducing maladaptive self-conscious emotions among mothers of children with ASD.

Accordingly, the present study aimed to compare the effectiveness of Parent Management Training and Life Therapy in reducing feelings of shame and guilt among mothers of children with autism spectrum disorder in Sari.

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

2. Methods and Materials

2.1. Study Design and Participants

The present study was an applied research project employing a quasi-experimental pretest–posttest design with two experimental groups, a control group, and a three-month follow-up assessment. The statistical population consisted of all mothers aged 25–45 years who had a child diagnosed with autism spectrum disorder (ASD) and attended Mehrgan, Segal, and Omid clinics in Sari, Iran, during 2025–2026. A total of 45 eligible mothers were selected through purposive sampling based on the predefined inclusion and exclusion criteria. The inclusion criteria comprised being the mother of a child diagnosed with autism spectrum disorder, being between 25 and 45 years of age, having at least a high-school diploma, and having no severe or incurable physical illness such as cancer or other comparable medical conditions that could interfere with participation in the intervention. The exclusion criteria included unwillingness to continue participation in the study and absence from more than two intervention sessions. Following recruitment, the 45 participants were randomly allocated in equal numbers to three groups, consisting of a Parent Management Training group (n = 15), a Life Therapy group (n = 15), and a control group (n = 15). Before recruitment and implementation, the required institutional permissions and research ethics approval were obtained, together with the necessary authorization for registration of the clinical trial. In consultation with the academic supervisors, the researchers established the procedures for study implementation, informed consent, and participant engagement in the educational and therapeutic sessions. The researchers subsequently attended Mehrgan, Segal, and Omid psychological clinics in Sari and, after obtaining permission to access the list of potentially eligible mothers of children with ASD, identified individuals who met the study criteria. An introductory meeting was conducted to explain the purpose and importance of the research, the study procedures, the potential usefulness of the interventions, and the voluntary nature of participation. Written informed consent was obtained from all participants before enrollment. After random allocation, all participants completed the study questionnaire as a self-report pretest. The two experimental groups then received their respective interventions, which were delivered by a psychologist trained in the relevant therapeutic approaches, whereas the control group received no psychological intervention during the corresponding study period. Immediately after completion of the interventions, all three groups completed the same instrument as the posttest, and the assessment was repeated three months later to examine the maintenance of intervention effects. To comply with ethical considerations and ensure equitable access to intervention, participants in the control group were offered an educational intervention after completion of the entire research process, including the follow-up assessment.

2.2. Measures

Feelings of shame and guilt were assessed using the Guilt and Shame Proneness Scale (GASP) developed by Cohen, Wolf, Panter, and Insko (2011). The instrument consists of 16 scenario-based items designed to assess individual differences in proneness to guilt and shame across situations resembling common experiences in everyday life. Each item describes a hypothetical situation involving a potentially undesirable behavior or outcome and presents a possible cognitive, emotional, or behavioral reaction to that situation. Respondents are instructed to imagine themselves in each scenario and indicate how likely they would be to respond in the manner described. Responses are scored on a five-point Likert scale ranging from 1 (very unlikely/rarely) to 5 (very likely/very often), with higher scores reflecting greater proneness to the corresponding emotional response. The instrument assesses two broad dimensions, guilt and shame, each of which encompasses cognitive-evaluative and behavioral components. Guilt comprises negative behavior evaluation, reflecting negative judgments about a specific action or transgression, and guilt-related reparative behavior, reflecting the tendency to correct, compensate for, or repair the consequences of a perceived wrongdoing. Shame comprises negative self-evaluation, reflecting negative judgments directed toward the self, and shame-related withdrawal behavior, reflecting tendencies toward avoidance or withdrawal following exposure of a perceived failure or transgression. The original psychometric evaluation by Cohen et al. (2011) demonstrated acceptable internal consistency across the subscales, with Cronbach's alpha coefficients ranging approximately from .61 to .71. In an Iranian psychometric evaluation, Jokar and Kamali reported Cronbach's alpha coefficients of .83 and .51 for guilt and shame, respectively. Internal consistency was also evaluated in the present study, yielding Cronbach's alpha coefficients of .82 for guilt, .79 for shame, and .86 for the total scale, indicating satisfactory reliability for the study sample. The questionnaire was administered at three

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

measurement occasions—pretest, posttest, and three-month follow-up—to determine changes in shame and guilt over time and to compare the effects of the two interventions with those observed in the control condition.

2.3. Interventions

The first experimental group received a Parent Management Training intervention adapted from the framework described by Kazdin (2017). The program was delivered by a psychologist trained in the intervention and consisted of eight 90-minute group sessions conducted twice weekly over approximately one month. The first session focused on establishing an appropriate understanding of autism-related behavioral difficulties and modifying parental attitudes toward problematic behaviors. Psychoeducation addressed self-injurious and aggressive behaviors, their possible causes, common manifestations, available approaches to management, identification of problematic behavior patterns, and the importance of positive parental responses; participants were assigned exercises involving the use of praise and positive attention. The second session introduced positive and differential reinforcement, helped mothers identify effective reinforcers for their children, and taught the systematic use of rewards and privileges to strengthen adaptive behavior; participants practiced these principles by completing a positive-reinforcement monitoring schedule. The third session concentrated on techniques for increasing desirable behaviors through effective praise and encouragement and reducing undesirable behaviors by interrupting reinforcement contingencies. Mothers practiced prompted praise and learned how parental responses can unintentionally maintain problematic behaviors. The fourth session focused on behavioral management strategies involving positive attention to compliance, effective delivery of parental requests and commands, behavioral control, and the selective use of planned ignoring for inappropriate behaviors that could safely be ignored. Homework involved practicing attention and planned-ignoring strategies in daily parent–child interactions. The fifth session addressed behavioral shaping, response-cost principles, and appropriately implemented time-out or temporary removal from reinforcing situations for high-risk, aggressive, or self-injurious behaviors, with an emphasis on reducing maladaptive behaviors in both home and educational settings. The sixth session taught mothers to establish a structured home-based token economy and to use the removal of rewards or privileges in a consistent and proportionate manner to prevent or reduce severe misconduct. The seventh session addressed parent–child compliance, completion of assigned tasks, and coordination between home and school, while also examining the use of physical punishment as a primary disciplinary strategy and helping mothers replace punitive practices with more appropriate evidence-based behavioral management techniques. The eighth and final session consolidated the material taught throughout the program, reviewed participants' implementation experiences and homework assignments, reinforced strategies for managing future behavioral difficulties, and emphasized continued application of the learned techniques across home and school contexts. Throughout the intervention, homework assignments were used to facilitate the transfer of session-based learning to everyday interactions with the child and to strengthen mothers' practical mastery of behavioral management strategies.

The second experimental group participated in an eight-session Life Therapy program adapted from the intervention protocol described by Hassanzadeh and Talebi (2023). Sessions lasted 90 minutes and were conducted twice per week over approximately one month by a psychologist trained in this therapeutic approach. The first session was devoted to establishing the therapeutic framework, facilitating acquaintance between the therapist and group members and among participants themselves, explaining group rules and expectations, administering the pretest, and providing a general introduction to the concept of life, its major domains, and the consequences of individuals' orientations toward their lives. The second session explored participants' perceptions of the meaning and purpose of life, the fundamental principles of living, and personal life goals. Particular attention was given to strengthening hope and positive expectations regarding therapy and to explaining how hope may facilitate coping with life challenges and barriers. Participants were introduced to a problem-solving orientation and were assigned the task of constructing a personal life compass identifying major life domains, existing difficulties, and possible solutions. The third session began with a review of homework and discussion of participants' thoughts and emotions, followed by instruction on the formulation of behavioral or specific goals and broader nonbehavioral goals, as well as differentiation among short-, medium-, and long-term goals. The Eisenhower matrix was introduced as a method for organizing priorities and improving decision-making, and

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

participants were assigned exercises involving a decision-making form and the formulation of personal life goals. The fourth session reviewed the previous assignments and introduced the concept of zest or enthusiasm for life, characteristics of individuals who demonstrate greater enthusiasm for living, and the relationship between engagement with life and psychological well-being. Participants discussed fundamental principles of living and identified practical strategies for cultivating greater enthusiasm and involvement in their daily lives. The fifth session focused on the concepts of hope and hopelessness, the psychological role of hope, and characteristics associated with hopeful individuals; participants were subsequently asked to construct a life-wheel diagram to evaluate balance and satisfaction across major life domains. The sixth session expanded on the principles of life management and the life-wheel framework and included discussion of well-being and balance across different areas of functioning, after which participants revised or further developed their personal life-wheel diagrams. The seventh session introduced life satisfaction, positive thinking, and the deliberate creation of a psychologically constructive life environment, while also discussing the concept of the life circle and the relationships among important domains of personal functioning; participants completed a life-circle exercise as homework. In the eighth and final session, the therapist reviewed the assigned exercises, integrated and summarized the major concepts covered throughout the intervention, obtained participants' commitment to continuing relevant exercises after termination of the program, provided individualized and group feedback, acknowledged participants' engagement in the therapeutic process, and administered the posttest. Across sessions, the Life Therapy program emphasized purposeful living, goal clarification, hope, engagement with life, balanced life management, problem solving, positive orientation, and the application of these concepts to participants' everyday psychological and family experiences.

2.4. Data Analysis

Data obtained at the pretest, posttest, and three-month follow-up assessments were analyzed using SPSS version 26. Descriptive statistics were initially used to summarize the study variables and examine the distribution and general characteristics of the data across the Parent Management Training, Life Therapy, and control groups at each measurement occasion. To evaluate intervention effects, a mixed-design repeated-measures analysis of variance was conducted, with time representing the within-subject factor across the three measurement occasions and group representing the between-subject factor across the three study conditions. This analytical framework was used to determine whether shame and guilt scores changed significantly over time, whether overall differences existed among the three groups, and, most importantly, whether the pattern of change across pretest, posttest, and follow-up differed as a function of intervention condition. Where statistically significant omnibus effects were obtained, appropriate pairwise comparisons were conducted to identify differences between the Parent Management Training group, Life Therapy group, and control group and to examine changes between measurement occasions. Particular attention was given to comparisons between the two active interventions to determine their relative effectiveness and to comparisons between posttest and follow-up scores to evaluate the stability of therapeutic effects over the three-month follow-up period. Prior to interpretation of the inferential analyses, the relevant statistical assumptions associated with repeated-measures analysis were evaluated. Statistical significance was determined at an alpha level of .05.

3. Findings and Results

In this section, the descriptive findings, including the means and standard deviations of the pretest, posttest, and follow-up scores for feelings of shame and guilt among mothers of children with autism spectrum disorder, are presented separately for the three groups (two experimental groups and one control group).

Table 1

Means and Standard Deviations of Pretest, Posttest, and Follow-Up Scores for Shame and Guilt in the Experimental and Control Groups

Dependent Variable	Group	Pretest M	Pretest SD	Posttest M	Posttest SD	Follow-Up M	Follow-Up SD
Negative Self-Evaluation	Experimental (PMT)	13.60	2.50	11.07	3.19	11.47	2.87
	Experimental (LT)	13.47	1.68	9.73	1.71	9.80	1.89
	Control	13.80	1.82	13.80	1.57	13.56	1.65

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

Withdrawal Behavior	Experimental (PMT)	14.20	1.85	11.67	1.79	11.66	1.91
	Experimental (LT)	13.73	1.67	10.07	1.33	10.28	1.23
	Control	14.60	1.45	14.27	1.28	14.13	1.35
Shame	Experimental (PMT)	27.80	4.05	22.73	4.54	23.00	4.40
	Experimental (LT)	27.20	3.18	19.80	2.65	20.07	2.81
	Control	28.20	2.90	28.00	2.59	27.73	2.81
Negative Evaluation	Experimental (PMT)	14.93	2.15	12.67	2.22	12.67	1.95
	Experimental (LT)	14.87	2.06	11.33	1.86	11.17	1.65
	Control	15.00	2.23	14.53	2.16	14.40	1.84
Reparative Actions	Experimental (PMT)	13.87	2.10	11.80	2.21	11.80	2.07
	Experimental (LT)	13.33	1.71	10.07	1.48	10.00	1.69
	Control	14.73	1.75	14.53	1.84	14.33	1.71
Guilt	Experimental (PMT)	28.80	4.17	24.47	4.19	24.47	3.81
	Experimental (LT)	28.07	3.43	21.47	2.94	21.20	2.85
	Control	29.73	3.84	29.20	3.89	28.80	3.18

As shown in Table 1, the mean pretest scores for shame and guilt were approximately similar across the two experimental groups, namely Parent Management Training (PMT) and Life Therapy (LT), and the control group. However, at posttest, the mean shame and guilt scores of the experimental groups differed considerably from those of the control group. The follow-up values for both experimental groups and the control group are also presented in the table. Based on the results of the Shapiro–Wilk test, all reported significance levels were greater than .05, indicating that the data were normally distributed. The results of Levene's test showed no statistically significant differences among the variances of the study groups for shame and guilt; therefore, the assumption of homogeneity of variances was satisfied. The results of Box's M test indicated that, considering the reported degrees of freedom and the obtained variance statistic, the significance level was .092; therefore, the assumption of equality of covariance matrices was supported. In addition, the results of Mauchly's test of sphericity were not statistically significant, indicating that the assumption of sphericity across the three measurement occasions was satisfied.

Table 2

Summary of Mixed Repeated-Measures Analysis of Variance for Group, Measurement Occasion, and Group × Measurement Occasion Interaction

Variable	Source of Variation	Sum of Squares	df	Mean Square	F	p	Effect Size	Statistical Power
Negative Self-Evaluation	Group	169.592	2	84.796	6.413	.01	.694	1.000
	Measurement Occasion	91.067	1	91.067	139.419	.01	.768	1.000
	Group × Measurement Occasion	44.315	2	22.158	33.922	.01	.618	1.000
Withdrawal Behavior	Group	202.454	2	101.227	15.105	.01	.418	.986
	Measurement Occasion	104.114	1	104.114	236.075	.01	.849	1.000
	Group × Measurement Occasion	35.048	2	17.524	39.736	.01	.654	.978
Negative Evaluation	Group	108.293	2	54.146	4.660	.01	.355	.990
	Measurement Occasion	107.803	1	107.803	226.764	.01	.844	1.000
	Group × Measurement Occasion	36.106	2	18.053	3.68974	.01	.644	.997
Reparative Actions	Group	263.569	2	131.784	13.429	.01	.390	1.000
	Measurement Occasion	84.100	1	84.100	221.686	.01	.841	1.000
	Group × Measurement Occasion	32.467	2	16.233	42.791	.01	.671	.999

The results presented in Table 2 indicate that the calculated F values for the effect of measurement occasion, including pretest, posttest, and follow-up, were statistically significant at the .01 level. More specifically, statistically significant group × measurement occasion interaction effects were obtained for the subscales. Accordingly,

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

significant differences were observed among the mean pretest, posttest, and follow-up scores on the subscales among mothers of children with autism spectrum disorder across the three assessment occasions.

Table 3

Summary of Bonferroni Post Hoc Comparisons Across Pretest, Posttest, and Follow-Up Assessments

Variable	Time 1	Time 2	Mean Difference	SE	p
Negative Self-Evaluation	Pretest	Posttest	2.089	.167	.001
	Pretest	Follow-Up	2.012	.170	.001
	Posttest	Follow-Up	.078	.095	1.000
Withdrawal Behavior	Pretest	Posttest	2.177	.109	.001
	Pretest	Follow-Up	2.151	.140	.001
	Posttest	Follow-Up	.026	.109	1.000
Negative Evaluation	Pretest	Posttest	2.089	.126	.001
	Pretest	Follow-Up	2.189	.145	.001
	Posttest	Follow-Up	.100	.102	.994
Reparative Actions	Pretest	Posttest	1.844	.093	.001
	Pretest	Follow-Up	1.933	.130	.001
	Posttest	Follow-Up	.089	.101	1.000

The results presented in Table 3 show statistically significant differences in shame- and guilt-related scores among mothers of children with autism spectrum disorder between the pretest and posttest assessments and between the pretest and follow-up assessments. However, the differences between the posttest and follow-up assessments were not statistically significant, indicating that the therapeutic effects remained stable over the follow-up period. Comparison of the mean scores further indicates that shame- and guilt-related outcomes at both the posttest and follow-up stages differed significantly from the corresponding pretest scores.

Table 4

Summary of Tukey Post Hoc Comparisons Between the Two Experimental Groups

Variable	Group Comparison	Mean Difference	SE	p
Negative Self-Evaluation	PMT vs. LT	1.04	.767	< .001
Withdrawal Behavior	PMT vs. LT	1.15	.546	.01
Negative Evaluation	PMT vs. LT	.97	.719	.01
Reparative Actions	PMT vs. LT	1.36	.661	.01

The results presented in Table 4 indicate statistically significant differences between the Parent Management Training experimental group and the Life Therapy experimental group in negative self-evaluation, withdrawal behavior, negative evaluation, and reparative actions among mothers of children with autism spectrum disorder. Based on the mean differences and the reported effect-size indices, Life Therapy produced greater changes in negative self-evaluation, withdrawal behavior, negative evaluation, and reparative actions than Parent Management Training. Accordingly, Life Therapy demonstrated greater effectiveness than Parent Management Training for these outcomes among mothers of children with autism spectrum disorder.

4. Discussion

The present study aimed to compare the effectiveness of Parent Management Training (PMT) and Life Therapy (LT) in reducing feelings of shame and guilt among mothers of children with autism spectrum disorder. The findings showed that both interventions produced significant improvements in the components related to shame and guilt from pretest to posttest and that these improvements were maintained at the three-month follow-up. More specifically, significant time effects and significant group × time interaction effects were observed for negative self-evaluation, withdrawal behavior, negative evaluation, and reparative actions. The absence of statistically significant differences between posttest and follow-up scores indicated

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

that the therapeutic changes were relatively stable over the follow-up period. Moreover, the comparison between the two active interventions demonstrated that Life Therapy produced greater changes than Parent Management Training across the examined components of shame and guilt. These findings suggest that although both approaches can be beneficial for mothers of children with autism spectrum disorder, Life Therapy may exert a stronger influence on maladaptive self-conscious emotional responses in this population.

The effectiveness of Parent Management Training in reducing shame- and guilt-related outcomes can first be understood in light of the considerable psychological burden associated with parenting a child with autism spectrum disorder. Mothers of autistic children frequently encounter persistent behavioral challenges, difficulties in communication, social stigma, concerns regarding the child's future, and demanding caregiving responsibilities. Chronic exposure to these stressors may weaken parental confidence and increase negative self-evaluations. Recent evidence has shown that chronic parenting stress among parents of children with autism is associated with poorer parental mental and physical health and is also related to elevated stress in their children (van der Lubbe et al., 2025). Similarly, research on parents of preschool-aged autistic children receiving intensive behavioral interventions indicates that substantial parenting stress may remain present even when children receive specialized services (Andreassen et al., 2025). Therefore, interventions that provide mothers with concrete strategies for managing child behavior may reduce not only external parenting demands but also self-directed emotional distress.

Parent Management Training is particularly relevant in this regard because it directly enhances mothers' behavioral management competencies. Through instruction in positive reinforcement, praise, planned ignoring, response cost, behavioral shaping, consistent consequences, and structured home-based behavior plans, mothers are provided with practical methods for responding more effectively to challenging behavior. This process may reduce feelings of helplessness and perceived parental inadequacy. The present findings are consistent with the theoretical and clinical foundation of Parent Management Training described by Kazdin, in which changes in parental responses and reinforcement contingencies are used to alter maladaptive child behavior and improve parent–child interactions (Kazdin, 2017). They are also aligned with findings indicating that common PMT programs for preschool children with autism typically include reinforcement-based strategies, behavioral principles, parent–child interaction techniques, and structured implementation in the home environment (Eskandari et al., 2020).

The present findings regarding PMT are also supported by studies demonstrating beneficial effects of parent behavior management programs in families of children with autism. Parent behavior management training has been shown to reduce challenging behaviors among students with autism spectrum disorder (Bardideh & Mokhtari, 2024), while behavior management training for mothers has also been found to improve externalizing behavioral problems among children with ASD (Habibi et al., 2023). Although these studies primarily assessed child behavioral outcomes, their findings are relevant to the current results because reductions in disruptive or difficult child behaviors may decrease mothers' feelings of incompetence, frustration, and failure. When a mother acquires effective tools for managing problematic behavior and observes improvements in her child's functioning, her interpretation of parenting difficulties may gradually shift from self-blame toward a more manageable behavioral framework. This cognitive and emotional shift can plausibly reduce negative self-evaluation and shame.

The results are also consistent with evidence from populations experiencing other childhood behavioral and developmental difficulties. Parent Management Training has been associated with improvements in behavioral and attentional outcomes among children with attention-deficit/hyperactivity-related difficulties (Askari et al., 2019; Bayrami, 2017). Furthermore, Parent Management Training has been compared favorably with other parenting interventions in improving parental self-efficacy among mothers of children with externalizing behavior problems (Azimifar et al., 2018). Increased parental self-efficacy is especially relevant to shame and guilt because low perceived competence can intensify maternal self-criticism and the belief that one is failing in the parenting role. Conversely, acquisition of effective parenting skills may strengthen perceived competence and reduce the tendency to interpret the child's difficulties as evidence of personal inadequacy.

The current findings are further supported by research showing that parent-focused interventions can affect broader parental psychological outcomes rather than child behavior alone. Combined Parent Management Training and mindful parenting programs have been associated with reductions in parenting stress and improvements in the parent–child relationship alongside reductions in child externalizing

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

problems (Kowsari et al., 2000). Parent Management Training has also demonstrated effects on self-criticism among mothers of children with learning disabilities (Farzi Vanastanagh et al., 2021). These findings are particularly relevant because self-criticism is closely related to shame. Shame involves global negative evaluation of the self, and mothers who repeatedly criticize themselves for perceived parenting failures may become increasingly vulnerable to withdrawal, inferiority, and feelings of inadequacy. By providing a structured framework for understanding and managing child behavior, PMT may interrupt this cycle of self-criticism and negative self-judgment.

At the same time, the significant effects of PMT should be interpreted within the broader evidence that treatment response varies according to parental and family characteristics. A comprehensive review of Parent Management Treatment programs has shown that parental and familial factors can act as predictors or moderators of treatment outcomes (Dedousis-Wallace et al., 2021). This may help explain why PMT, although effective in the present study, was less effective than Life Therapy. PMT primarily targets behavioral contingencies and parenting practices; however, shame and guilt are complex self-conscious emotions that may be rooted not only in unsuccessful child management but also in deeper beliefs about self-worth, motherhood, social judgment, life expectations, and perceived failure. Consequently, an intervention that addresses broader existential and self-evaluative processes may exert stronger effects on these emotional outcomes.

The greater effectiveness of Life Therapy observed in the present study may therefore be explained by its direct focus on meaning, purpose, hope, life goals, personal priorities, positive thinking, and the restructuring of one's relationship with life challenges. Mothers of children with autism frequently experience caregiving as a long-term and emotionally demanding process that can alter personal identity, future expectations, relationships, and life priorities. A recent phenomenological study described mothers' experiences of living with an autistic child as a developmental journey involving suffering, adjustment, meaning reconstruction, and eventual appreciation (Nematollahi et al., 2025). This finding is highly consistent with the therapeutic principles of Life Therapy. By helping mothers formulate goals, evaluate major life domains, construct a more balanced life orientation, and develop hope, the intervention may enable them to reinterpret autism-related caregiving difficulties within a broader and less self-condemning framework.

Life Therapy may have produced stronger reductions in shame because shame is fundamentally associated with global negative judgments about the self. Mothers who believe that having difficulty controlling their child's behavior reflects a personal failure may experience themselves as inadequate rather than simply perceiving a specific parenting behavior as ineffective. Life Therapy may challenge this global self-condemnation by encouraging participants to differentiate specific life difficulties from their overall identity and personal worth. The emphasis on life meaning, future goals, personal strengths, balance across life domains, and positive orientation may provide mothers with alternative sources of identity and value beyond their role as caregivers. Such a process could directly reduce negative self-evaluation and withdrawal behavior.

The greater effect of Life Therapy on guilt-related outcomes may likewise be understood through its emphasis on goal clarification and realistic life management. Excessive guilt often emerges when individuals perceive that they have failed to meet internalized standards or responsibilities. Mothers of children with ASD may feel guilty about not doing enough for their child, losing patience, spending insufficient time with other family members, or failing to fulfill competing personal and family roles. Life Therapy may help mothers distinguish realistic responsibilities from excessively demanding or unattainable expectations. Through exercises involving the life compass, life wheel, decision-making, and goal formulation, participants may develop more realistic priorities and a clearer understanding of what is under their control. Such changes may reduce maladaptive guilt while preserving adaptive responsibility and constructive reparative behavior.

The present findings regarding shame and guilt are also consistent with previous intervention studies targeting these emotions more directly. Cognitive emotion regulation training has been reported to reduce shame and guilt among mothers of children with autism (Zamiri, 2021). This suggests that self-conscious emotions in this population are responsive to interventions that modify how mothers interpret and regulate stressful experiences. Similarly, self-compassion training has been found to reduce feelings of shame and guilt among mothers of children with learning disabilities (Farzi Vanastanagh et al., 2020). The conceptual overlap between these interventions and Life Therapy is meaningful. Although Life Therapy does not necessarily use the same techniques as emotion regulation or self-compassion interventions, it similarly encourages a broader,

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

more balanced, and less punitive relationship with personal difficulties and life experiences.

The findings can also be interpreted within the literature on maternal emotion regulation. Mothers of young children must regulate multiple emotional states while responding to the demands of parenting, and emotion regulation has been shown to be closely associated with maternal stress and affective functioning (Deater-Deckard et al., 2016). For mothers of children with ASD, the demands for emotion regulation may be particularly intense because of repetitive behavioral challenges, uncertainty, and social exposure. Shame may promote avoidance and withdrawal, while guilt may lead to excessive compensatory behavior or self-blame. Life Therapy's emphasis on hope, positive thinking, purpose, problem solving, and life management may broaden mothers' regulatory resources and help them approach difficult emotional experiences with greater psychological flexibility.

The reduction in shame observed in the present study is also compatible with evidence concerning affiliate stigma in caregivers of children with autism. Shame is a central psychological mechanism through which perceived social stigma may be internalized. Previous research has demonstrated associations among affiliate stigma, shame, self-esteem, family functioning, and depression in caregivers of children with ASD (Ting et al., 2018). Mothers may therefore experience shame not only because of their own judgments but also because they perceive that others negatively evaluate their child's behavior or their parenting. Life Therapy may indirectly weaken the effects of stigma by strengthening internal sources of meaning and self-evaluation, thereby reducing reliance on external judgments when evaluating oneself.

The findings should additionally be viewed in relation to the broader psychological difficulties experienced by mothers of children with autism. Research has shown that mothers of children with ASD experience distinctive patterns of parenting stress and coping compared with mothers of typically developing children (Sadafi et al., 2021). Their psychological well-being has also been associated with intrapersonal resources such as self-control and integrative self-knowledge (Niakan et al., 2025). These findings suggest that interventions addressing only external caregiving difficulties may not fully respond to maternal psychological needs. Life Therapy may have demonstrated greater effectiveness because its emphasis on self-awareness, life organization, and meaningful goal pursuit more directly addresses these internal resources.

The results are also consistent with studies showing that psychological interventions can substantially improve maternal mental health. Acceptance and Commitment Therapy has been found to reduce depression, anxiety, and stress among mothers of children with autism (Rezaei, 2021). Although the theoretical basis of Acceptance and Commitment Therapy differs from Life Therapy, both approaches move beyond direct behavioral management of the child and address the mother's relationship with difficult thoughts, emotions, values, and life experiences. Similarly, attention to spiritual health among mothers of children with autism has highlighted the importance of meaning-related and existential dimensions of maternal adaptation (Soltani et al., 2022). This supports the proposition that interventions strengthening purpose, hope, and life meaning may be especially valuable in this population.

The stability of the therapeutic effects at the three-month follow-up is another important finding. The lack of significant differences between posttest and follow-up scores indicates that the improvements associated with both interventions were maintained after the formal sessions ended. For PMT, this stability may reflect the practical nature of the skills taught. Techniques such as reinforcement, praise, planned ignoring, and behavioral shaping can continue to be applied in daily family interactions after the intervention concludes. For Life Therapy, the maintenance of effects may be attributed to the ongoing applicability of goal-setting, life-management, decision-making, hope-enhancement, and life-balance exercises. Once mothers incorporate these strategies into their daily routines, therapeutic gains may be sustained beyond the structured intervention period.

This maintenance is particularly meaningful given the chronic nature of parenting demands associated with autism. The caregiving experience often extends across developmental stages and may involve ongoing behavioral, educational, and social challenges. Evidence concerning the quality of life of parents of children with ASD has consistently indicated substantial and enduring impacts across psychological, social, and family domains (Dardas & Ahmad, 2014; Vasilopoulou & Nisbet, 2016). During situations such as the COVID-19 pandemic, mothers have also faced additional burdens related to home education and disruption of support services, further demonstrating the need for durable coping and self-management capacities (Daulay, 2021). Therefore, the maintenance of treatment gains in the current study represents an important clinical outcome rather than merely a statistical finding.

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

Gender-related caregiving patterns may also help explain the relevance of the present interventions. Research examining parents of children with ASD has indicated that gender roles influence both caregiving experiences and mental health outcomes (Ang & Loh, 2019). Mothers may experience particularly strong social expectations to manage the child's behavior, maintain family functioning, and fulfill caregiving responsibilities. Under such conditions, child-related difficulties may readily become interpreted as maternal failure, thereby intensifying shame and guilt. Both PMT and Life Therapy may reduce this burden, albeit through different mechanisms: PMT by strengthening perceived behavioral competence and Life Therapy by broadening maternal identity and restructuring personal meaning.

5. Conclusion

Overall, the present findings support the view that shame and guilt among mothers of children with ASD are modifiable psychological outcomes and that both behavioral and life-oriented interventions can be effective. However, the stronger performance of Life Therapy suggests that self-conscious emotions may be influenced more powerfully by interventions that directly address personal meaning, life expectations, self-evaluation, hope, and identity than by interventions focused primarily on behavioral parenting skills. PMT remains clinically valuable because it equips mothers with concrete strategies for managing difficult child behavior and can thereby reduce stress and perceived incompetence. Life Therapy, however, may offer broader psychological benefits by helping mothers reconstruct their relationship with themselves and their life circumstances. Consequently, the two approaches should not necessarily be viewed as mutually exclusive; rather, their distinct mechanisms suggest that they may be complementary in comprehensive interventions for families of children with autism.

6. Limitations & Suggestions

The present study had several limitations that should be considered when interpreting its findings. The sample was relatively small and consisted only of mothers of children with autism spectrum disorder who attended selected clinics in Sari, which may limit the generalizability of the findings to mothers in other geographic, socioeconomic, cultural, or clinical contexts. The use of purposive sampling may also have resulted in the inclusion of participants who were particularly motivated to engage in psychological interventions. In addition, all principal outcomes were assessed using a self-report questionnaire, which may be affected by response tendencies, social desirability, or participants' interpretations of the items. The follow-up period was limited to three months and therefore does not provide evidence regarding the long-term durability of the intervention effects. The study also did not systematically examine potentially influential variables such as severity of the child's autism symptoms, level of challenging behavior, family socioeconomic status, social support, marital functioning, duration since diagnosis, previous psychological treatment, or maternal personality characteristics.

Future studies should replicate these findings with larger samples recruited from multiple clinical and community settings and should consider using probability-based sampling procedures where feasible. Longer follow-up periods, such as six months or one year, would provide stronger evidence regarding the durability of therapeutic effects. Future research could also examine whether the effectiveness of Parent Management Training and Life Therapy differs according to child age, autism severity, level of challenging behavior, maternal parenting stress, perceived stigma, social support, or baseline levels of shame and guilt. The mechanisms underlying treatment effects should also be investigated; for example, future studies could test whether improvements in parental self-efficacy mediate the effects of Parent Management Training and whether increases in hope, meaning in life, or psychological flexibility mediate the effects of Life Therapy. Comparative studies involving additional interventions such as self-compassion training, Acceptance and Commitment Therapy, or emotion regulation training may further clarify which approaches are most effective for specific maternal psychological outcomes. Research could also evaluate combined or sequential interventions integrating behavioral parent training with life-oriented psychological treatment.

From a practical perspective, psychological clinics, autism rehabilitation centers, counseling services, and family support programs should consider incorporating structured interventions for maternal psychological health alongside child-focused autism services. Parent Management Training can be used when mothers require concrete strategies for managing challenging behaviors, increasing appropriate child behavior, and strengthening confidence in parenting. Life Therapy may be particularly appropriate when mothers present with pronounced shame,

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

guilt, hopelessness, negative self-evaluation, loss of personal direction, or difficulty maintaining balance across life domains. Clinicians may also consider combining the two approaches so that mothers simultaneously acquire effective behavioral parenting skills and broader strategies for meaning-making, hope, self-evaluation, and life management. Regular assessment of maternal shame and guilt could help identify mothers at greater psychological risk and enable earlier intervention. Group-based delivery may also provide additional advantages by reducing isolation and allowing mothers to share experiences, normalize emotional responses, and strengthen mutual support.

Acknowledgments

We would like to express our appreciation and gratitude to all those who cooperated in carrying out this study.

Declaration of Interest

The authors of this article declared no conflict of interest.

Ethical Considerations

The study protocol adhered to the principles outlined in the Helsinki Declaration, which provides guidelines for ethical research involving human participants.

Transparency of Data

In accordance with the principles of transparency and open research, we declare that all data and materials used in this study are available upon request.

Funding

This research was carried out independently with personal funding and without the financial support of any governmental or private institution or organization.

Authors' Contributions

All authors have equally contributed to the research process and the development of the manuscript.

Declaration

In order to correct and improve the academic writing of our paper, we have used the language model ChatGPT.

References

Andreassen, M., Lugo, R. G., Eldevik, S., & Eikeseth, S. (2025). Stress in Parents of Preschool Aged Autistic Children Who Underwent Community Based Early Intensive Behavioral Intervention. *Advances in Neurodevelopmental Disorders*. https://doi.org/10.1007/s41252-025-00446-0

Ang, K. Q. P., & Loh, P. R. (2019). Mental Health and Coping in Parents of Children with Autism Spectrum Disorder (ASD) in Singapore: An Examination of Gender Role in Caring. *Journal of Autism and Developmental Disorders*, *49*(5), 2129-2145. https://doi.org/10.1007/s10803-019-03900-w

Askari, M., Fazeli, R., Khademali, M., Aghaee, F., & Piroozan, A. (2019). Comparison of the Impact of Second Language Acquisition and Parent Management Training on Attention Control among Kindergartners with Attention Deficiency and Hyperactivity Disorder. *Journal of Biochemical Technology*, *10*(3), 28-33.

Azimifar, S., Jazayeri, R., Fatehizadeh, M., & Abedi, A. (2018). Comparison of the Effectiveness of Parent Management Training and Acceptance and Commitment-Based Parenting Training on Parental Self-Efficacy in Mothers of Children with Externalizing Behavior Problems. *Quarterly Journal of Modern Psychological Research*, *13*(52), 146-168.

Bardideh, M. R., & Mokhtari, R. (2024). The Effectiveness of Parent Behavior Management Training on Challenging Behaviors of High-Functioning Students with Autism Spectrum Disorder. *Scientific Information Database of Academic Center for Education, Culture and Research (SID)*.

Bayrami, M. (2017). The Effectiveness of Parent Management Training on Improvement of Attention Deficit Hyperactivity Disorder in Children with Epilepsy: Single Subject Study. *Razi Journal of Medical Sciences*, *24*(157), 90-98.

Dardas, L. A., & Ahmad, M. M. (2014). Predictors of Quality of Life for Fathers and Mothers of Children with Autistic Disorder. *Research in Developmental Disabilities*, *35*(6), 1326-1333. https://doi.org/10.1016/j.ridd.2014.03.009

Daulay, N. (2021). Home Education for Children with Autism Spectrum Disorder during the COVID-19 Pandemic: Indonesian Mothers Experience. *Research in Developmental Disabilities*, *114*.

Deater-Deckard, K., Li, M., & Bell, M. A. (2016). Multifaceted Emotion Regulation, Stress and Affect in Mothers of Young Children. *Cognition and Emotion*, *30*(3), 444-457.

Dedousis-Wallace, A., Drysdale, S. A., McAloon, J., & Ollendick, T. H. (2021). Parental and Familial Predictors and Moderators of Parent Management Treatment Programs for Conduct Problems in Youth. *Clinical Child and Family Psychology Review*, *24*(1), 92-119. https://doi.org/10.1007/s10567-020-00330-4

Eskandari, B., Pouretemad, H., Mousavi, M., & Farahani, H. (2020). Common Elements of Parent Management Training Programs for Preschool Children with Autism Spectrum Disorder. *Asian Journal of Psychiatry*, *52*, 102149. https://doi.org/10.1016/j.ajp.2020.102149

Farzi Vanastanagh, F., Taklavi, H., & Ghaffari, A. (2020). The Effectiveness of Self-Compassion Training on Feelings of Shame and Guilt in Mothers of Children with Learning Disabilities. *Ardabil Health and Hygiene*, *11*(3), 422-431. https://sid.ir/paper/414338/fa

Farzi Vanastanagh, F., Taklavi, S., & Ghaffari, A. (2021). Comparison of the Effectiveness of Parent Management and Self-Compassion Programs on Levels of Self-Criticism in Mothers of Children with Learning Disabilities. *Journal of Learning Disabilities*, *10*(4), 104-124. https://doi.org/10.22098/jld.2021.7010.1748

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798

Habibi, D., Hafezi, F., Amiri Majd, M., Asgari, P., & Heydari, A. (2023). Comparison of the Effectiveness of Problem-Solving Training and Behavior Management Training for Mothers on Externalizing Behavioral Problems of Children with Autism Spectrum Disorder. *Scientific Journals Management System*, *12*(2), 75-87. https://doi.org/10.22098/jsp.2023.6905.4114

Karimi, M., Nasri, S., & Ghaemi, F. (2023). Psychometric Properties of the Parenting Stress Scale in Mothers of Autistic Children. *Quarterly Journal of Educational Measurement*, *14*(51), 70-101. https://doi.org/10.22054/jem.2023.71007.3414

Kazdin, A. E. (2017). Parent Management Training and Problem-Solving Skills Training for Child and Adolescent Conduct Problems. In *Evidence-Based Psychotherapies for Children and Adolescents* (pp. 142-158).

Kowsari, F., Sabahi, P., & Makvand Hosseini, S. (2000). The Effectiveness of a Combined Parent Management Training and Mindful Parenting Program on Parenting Stress, Parent-Child Relationship, and Child Externalizing Problems. *Quarterly Journal of Applied Psychology*, *17*(2), 115-139. https://doi.org/10.48308/apsy.2023.229340.1409

Nematollahi, M., Rigi, Z. E., Bagherian, B., & Behzadi Fard, S. (2025). A Journey from Suffering to Appreciation: Mother Living with Autistic Child—A Hermeneutic Phenomenological Study. *BMC Women's Health*, *25*, 517. https://doi.org/10.1186/s12905-025-04047-w

Niakan, Z., Azizi, M., & Ebrahimpour, M. (2025). Predicting Psychological Well-Being of Mothers of Children with Autism Based on Self-Control and Integrative Self-Knowledge. *Psychological Dynamics in Mood Disorders*, *4*(1), 267-279. https://doi.org/10.61838/kman.pdmd.4.1.17

Rezaei, S. (2021). The Effectiveness of Acceptance and Commitment Therapy on Depression, Anxiety, and Stress in Mothers of Children with Autism Disorder. *Clinical Psychology Studies*, *14*(38), 57-73.

Sadafi, M. H., Masjedsaraei, M., & Afrouz, G. (2021). Comparison of Parenting Stress and Coping Strategies in Mothers of Children with Autism Spectrum Disorder and Mothers of Healthy Children. *Quarterly Journal of Childhood Health and Education*, *2*(2), 63-77. http://jeche.ir/article-۱-۴۶-fa.html

Soltani, F., Mardani Hamouleh, M., Seyedfatemi, N., Hamidi, H., & Haghani, S. (2022). Spiritual Health of Mothers of Children with Autism in Tehran: A Descriptive Study. *Iranian Journal of Nursing*, *35*(135), 16-27.

Ting, Z., Yiting, W., & Chunli, Y. (2018). Affiliate Stigma and Depression in Caregivers of Children with Autism Spectrum Disorders in China: Effects of Self-Esteem, Shame and Family Functioning. *Psychiatry research*, *260*, 260.

van der Lubbe, A., Swaab, H., & Vermeiren, R. (2025). Chronic Parenting Stress in Parents of Children with Autism: Associations with Chronic Stress in Their Child and Parental Mental and Physical Health. *Journal of Autism and Developmental Disorders*. https://doi.org/10.1007/s10803-025-06736-9

Vasilopoulou, E., & Nisbet, J. (2016). The Quality of Life of Parents of Children with Autism Spectrum Disorder: A Systematic Review. *Research in Autism Spectrum Disorders*, *23*, 36-49. https://doi.org/10.1016/j.rasd.2015.11.008

Zamiri, M. (2021). *The Effectiveness of Cognitive Emotion Regulation Training in Reducing Feelings of Shame and Guilt in Mothers of Children with Autism* [Master's thesis in Family Counseling, Faculty of Humanities, Bojnord].

AFTJ Applied Family Therapy Journal
E-ISSN: 3041-8798