

Mindfulness-Based Intervention for Stress, Emotional Adjustment, and Aggressiveness among Mothers of Children with Autism: A Multiple-Case Study

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Abstract

Background: Caring for a child with Autism Spectrum Disorder (ASD) entails persistent caregiving, behavioral, and educational demands that can substantially elevate maternal psychological distress and perceived stress. Mindfulness-based interventions offer a potential non-pharmacological approach to support parental psychological functioning. **Aim:** This study examined individual patterns of change in perceived stress, emotional adjustment (indicated by Positive Affect [PA] and Negative Affect [NA]), and aggressiveness among mothers of children with autism who participated in an eight-week mindfulness-based intervention. **Methods:** We used a multiple-case study design with three mothers of children with ASD (Case 1, Case 2, and Case 3) who completed an eight-week mindfulness-based intervention. We administered standardized outcome measures—including the PSS-10, PANAS, BPAQ, and MAAS—at pre-intervention, post-intervention, and three-month follow-up. **Results:** Across all three cases, stress and aggressiveness decreased and remained lower at three-month follow-up. Positive Affect increased, and Negative Affect decreased, indicating favorable emotional adjustment. Case 1 showed smaller reductions in stress and aggressiveness but greater affective improvement, whereas Cases 2 and 3 showed larger reductions in stress and aggressiveness. **Conclusion:** The findings provide preliminary case-based evidence that an eight-week mindfulness intervention can support positive trajectories in maternal stress, emotional adjustment, and aggressiveness. Given the small sample size and observational case design, these results warrant cautious interpretation and highlight the need for larger controlled trials.

Keywords:

Autism Spectrum Disorder (ASD); Maternal Well-Being; Caregiving Stress; Mindfulness-Based Intervention; Emotional Adjustment; Aggressiveness; Multiple-Case Study.

Introduction

Autism Spectrum Disorder (ASD) is a neurodevelopmental condition marked by differences in social communication and interaction, as well as restricted or repetitive patterns of behavior (American Psychiatric Association, 2022). Caring for a child with autism involves ongoing developmental, behavioral, educational, and therapeutic demands that may affect parental psychological well-being. Mothers, in particular, may experience substantial caregiving demands and psychological stress (Samsell et al., 2022; Yorke et al., 2018). In this context, stress, emotional adjustment, and aggressiveness are key aspects of maternal psychological functioning, and mindfulness-based

interventions have received increasing attention as a potential approach to supporting parental well-being. The present multiple-case study examines individual patterns of change in these outcomes among three mothers of children with autism who participated in a mindfulness-based intervention.

Autism Caregiving and Maternal Well-Being

Caring for a child with Autism Spectrum Disorder (ASD) often entails ongoing caregiving, educational, behavioral, and emotional demands. Mothers often coordinate assessments and interventions, address behavioral challenges, support communication and learning, and assess their children's evolving development. These responsibilities often overlap with additional household, occupational, and family obligations, creating a complex caregiving environment. Research has consistently identified psychological distress and parenting stress as significant concerns among parents of children with autism. A systematic review and meta-analysis of psychological interventions for mothers of young children with ASD reported improvements in maternal mental health, with moderate-certainty evidence particularly for reductions in parental stress (Tarver et al., 2019).

Maternal well-being constitutes a critical aspect of family functioning and autism care. Parental experiences encompass not only stress but also a range of emotional responses, coping strategies, interpersonal challenges, and efforts to sustain daily family life. Qualitative research has highlighted socioemotional impacts, structural needs, and gaps in knowledge and support among parents of children with ASD (Samsell et al., 2022).

Accordingly, understanding the psychological experiences of mothers is essential when evaluating interventions designed to support families affected by autism. A multiple-case study approach enables detailed examination of how individual mothers experience caregiving demands and how their psychological responses may change following a mindfulness-based intervention.

Maternal Psychological Well-Being in Autism Caregiving

Stress, emotional adjustment, and aggressiveness are key psychological dimensions in the experiences of mothers caring for children with autism. Caregiving for children with autism often requires managing behavioral difficulties, coordinating educational and therapeutic services, addressing communication challenges, and balancing these responsibilities with other family and household obligations. These persistent demands can affect mothers' perceived stress levels and overall emotional well-being.

Perceived stress is defined as the extent to which individuals evaluate situations in their lives as stressful. The Perceived Stress Scale (PSS) measures the degree to which individuals perceive their circumstances as unpredictable, uncontrollable, or overwhelming (Cohen et al., 1983). Previous research has demonstrated associations between children's emotional and behavioral difficulties and parental psychological distress, although these relationships may differ based on specific child and parent characteristics (Yorke et al., 2018). In this study, perceived stress was assessed as a principal psychological outcome across individual cases.

In the present study, emotional adjustment refers to a broader pattern of adaptive emotional functioning experienced and reported by mothers. This construct differs from emotional regulation, which refers to the processes involved in modifying or managing emotional responses. Positive Affect (PA) and Negative Affect (NA) from the PANAS were used as operational indicators of emotional adjustment rather than as direct measures of the entire construct. The Positive and Negative Affect Schedule (PANAS) measures both positive and negative dimensions of affective experience (Watson et al., 1988). Higher positive affect indicates more frequent experiences of active and pleasurable emotional states, while higher negative affect indicates more frequent experiences of unpleasant emotional states. Assessing PA and NA together provides a multidimensional perspective on mothers' emotional adjustment, rather than conceptualizing emotional well-being as a single dimension.

Aggressiveness constitutes an additional psychological dimension relevant to responses to prolonged stress and caregiving demands. In this study, aggressiveness refers to measurable aggression-related tendencies and does not suggest that mothers are violent or harmful. The Buss–Perry Aggression Questionnaire conceptualizes aggression across four domains: physical aggression, verbal aggression, anger, and hostility (Buss & Perry, 1992). These domains enable a multidimensional assessment of aggression-related responses. Consequently, changes in aggressiveness were evaluated as an additional psychological outcome following participation in the mindfulness-based intervention.

Mindfulness was investigated as the intervention approach relevant to these psychological outcomes. Mindfulness generally involves attending to present-moment experiences with awareness and an accepting, non-reactive orientation. Dispositional mindfulness is conceptualized as receptive awareness of present-moment experiences (Brown & Ryan, 2003). Mindfulness may be particularly relevant for mothers of children with autism, as caregiving often involves repeated and demanding situations that require sustained attention and adaptive responses. Mindfulness-based practices aim to cultivate present-moment awareness and a more accepting, non-reactive orientation toward experiences.

Previous research has documented reductions in parental stress following mindfulness-based interventions, although findings have varied across psychological outcomes and intervention approaches (Chua et al., 2022; Peng et al., 2025). Examining stress, positive and negative affect, and aggressiveness together may provide a broader understanding of psychological changes among mothers of children with autism. Accordingly, the present multiple-case study assessed these outcomes across three individual cases at pretest, posttest, and three-month follow-up.

Evidence from Previous Research

Previous research has increasingly focused on psychological interventions for parents of children with ASD. Evidence suggests that interventions targeting parents can affect psychological outcomes such as stress and mental health, although findings are not entirely consistent across outcomes and intervention types. A meta-analysis of 37 studies identified small but significant effects of parent interventions on parental outcomes, particularly parenting confidence and mental health. In contrast, effects on stress and family adjustment were less consistent. Mindfulness-based interventions have received considerable attention. A systematic review and meta-analysis of mindfulness-based and acceptance-based interventions among parents of children with developmental disabilities reported reductions in parental stress, anxiety, and depression. However, evidence for increases in parental mindfulness was inconclusive (Chua et al., 2022). Similarly, a meta-analysis of mindfulness interventions involving individuals with ASD and their caregivers found significant improvements in subjective well-being following intervention, with available effects maintained at three-month follow-up; however, the authors emphasized the need for further controlled research (Hartley et al., 2019).

Recent evidence continues to support investigating mindfulness-based interventions while also highlighting existing limitations. A systematic review of mindfulness-based stress reduction for individuals with ASD and their caregivers found preliminary evidence of reduced caregiving stress and improved caregivers' emotional states. However, the review emphasized that evidence remains limited because of small sample sizes, heterogeneity, and the small number of caregiver-focused studies (Luo et al., 2026). Collectively, previous research establishes a foundation for examining mindfulness among mothers of children with ASD. However, further research is required to understand individual patterns of change across multiple psychological outcomes.

Research Gap

Although prior studies have suggested potential benefits of mindfulness-based interventions for parents of children with ASD, several gaps persist. First, much of the existing literature relies on group-level quantitative designs, which limit understanding of how individual mothers experience and respond to interventions. Second, previous research has often focused on outcomes such as stress, anxiety, depression, or general psychological well-being, with comparatively less attention to the combined examination of stress, emotional adjustment, and aggressiveness. In the present study, emotional adjustment is operationalized through Positive Affect and Negative Affect, providing separate indicators of positive and negative emotional experiences.

Finally, systematic reviews have noted methodological limitations, heterogeneity among interventions, and the need for better-quality studies in this area (Chua et al., 2022; Luo et al., 2026; Peng et al., 2025). Further research is therefore needed to examine individual mothers in greater depth and document changes across multiple psychological outcomes. A multiple-case study design addresses this need by enabling detailed examination of individual patterns of change rather than relying solely on group-level averages.

Rationale of the Study

The rationale for this study stems from the psychological demands associated with autism caregiving and the increasing evidence supporting mindfulness-based approaches for parental stress. Existing research indicates that mindfulness interventions may reduce parenting stress and improve aspects of parental psychological well-being, although the evidence remains heterogeneous and does not demonstrate uniform effects across all outcomes (Peng et al., 2025; Chua et al., 2022).

A multiple-case study is particularly suitable when the objective is to examine individual experiences and patterns of change in detail. Rather than focusing solely on whether an intervention produces a statistically significant group-level effect, this study investigates how individual mothers' stress levels, emotional adjustment, and aggressiveness change following a mindfulness-based intervention. This study provides an opportunity to examine the intervention at the individual level and to identify similarities and differences among cases. Such detailed analysis may complement existing quantitative research and contribute to a more context-sensitive understanding of mindfulness-based interventions among mothers of children with autism.

Aim and Research Questions

Aim

To examine individual changes in stress, emotional adjustment, and aggressiveness among mothers of children with autism who participated in a mindfulness-based intervention.

Research Questions

RQ1: What changes in perceived stress are observed in individual mothers across pretest, posttest, and 3-month follow-up?

RQ2: What changes in emotional adjustment (Positive Affect and Negative Affect) are observed across these time points?

RQ3: What changes in aggressiveness are observed across these time points?

RQ4: What similarities and differences are observed across the individual cases (Case 1, Case 2, Case 3)?

Methods

Research Design

This multiple-case study was conducted as an in-depth descriptive sub-study embedded within a larger controlled trial evaluating a mindfulness-based intervention against a comparison condition. For this analysis, we selected three intervention participants (Case 1, Case 2, and Case 3) to examine individual patterns of change in depth across time points.

Participants and Case Selection

The study comprised three mothers of children with ASD, each representing an individual case. Participants were selected based on eligibility criteria and their participation in the mindfulness-based intervention and follow-up assessment.

The inclusion criteria were as follows: (a) being a mother of a child with a formal diagnosis of ASD; (b) being between 25 and 45 years of age; (c) providing informed consent to participate; and (d) being available to complete the intervention and follow-up assessments. We excluded mothers who did not meet the eligibility criteria or could not complete the study procedures.

Confirmation of ASD Diagnosis and Screening

The child's ASD diagnosis was verified using existing formal diagnostic documentation provided by the mother. The researchers screened potential participants before enrolment to determine eligibility. The researchers recorded relevant sociodemographic and caregiving information, including maternal age, educational background, occupation, and the child's age, for case description.

We selected three mothers who met the eligibility criteria, completed the eight-week intervention, and provided data at all three assessment points for the present multiple-case analysis, and designated them as Case 1, Case 2, and Case 3.

Measures

We administered the following standardized measures pre-intervention, post-intervention, and at the three-month follow-up.

Mindfulness: The Mindful Attention Awareness Scale (MAAS; Brown & Ryan, 2003) assessed dispositional mindfulness. Participants rated 15 items on a six-point response scale, with higher scores indicating greater mindfulness.

Perceived Stress: The Perceived Stress Scale-10 (PSS-10; Cohen et al., 1983) assessed perceived stress. Higher total scores indicate greater perceived stress.

Emotional Adjustment: The Positive and Negative Affect Schedule (PANAS; Watson et al., 1988) assessed positive affect (PA) and negative affect (NA). In this study, PA and NA served as operational indicators of emotional adjustment. Higher PA and lower NA represented a more favorable pattern of emotional adjustment.

Aggressiveness: The Buss–Perry Aggression Questionnaire (BPAQ; Buss & Perry, 1992) assessed aggressiveness across four dimensions: physical aggression, verbal aggression, anger, and hostility. Higher scores indicate greater aggressiveness.

Mindfulness-Based Intervention Sessions

The mindfulness-based intervention was delivered over eight weekly sessions, with each session lasting approximately 60 minutes. The intervention progressed from foundational mindfulness practices to awareness of thoughts and emotions, acceptance, self-care, and integration of mindfulness into everyday caregiving. The intervention was delivered to the three participants using the following session framework.

Table 1: Intervention Sessions

Session	Focus	Core practices
1	Introduction to mindfulness	Orientation, present-moment awareness, mindful breathing
2	Mindful breathing	Breath awareness, attention redirection
3	Body awareness	Body scan, awareness of tension and sensations
4	Mindful movement	Slow mindful movement, bodily awareness
5	Thoughts and emotions	Observation of thoughts/emotions, non-reactivity
6	Sitting meditation and acceptance	Breath/body awareness, acceptance, non-judgment
7	Loving-kindness and self-care	Loving-kindness, self-compassion, self-care
8	Integration and continuation	Review, integration, maintenance of practice

After the eight-week intervention, participants were encouraged to continue practicing mindfulness independently and incorporate brief mindfulness practices into their everyday caregiving routines. The final session also emphasized maintaining regular practice and applying mindfulness skills to stressful thoughts, emotional experiences, and challenging caregiving situations. The post-intervention assessment was conducted following completion of the eight-week intervention, and a three-month follow-up assessment was subsequently conducted to examine changes over time.

Home Practice

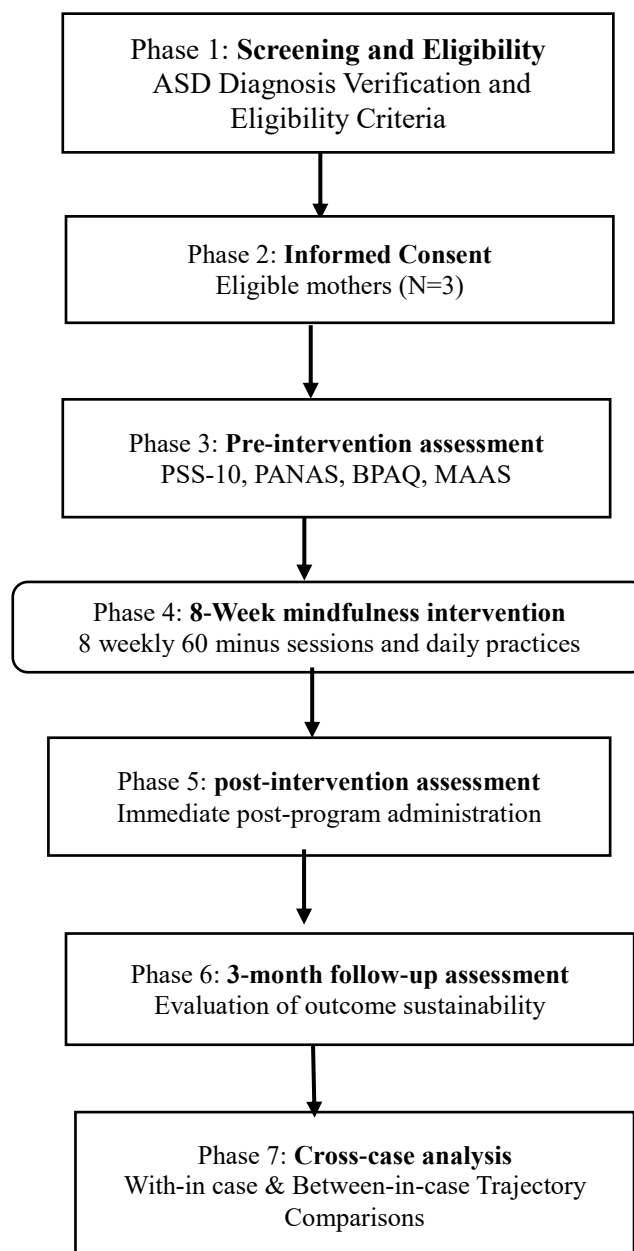
After each weekly session, participants were encouraged to practice mindfulness for 15–20 minutes per day at home. The investigator provided audio-guided practices to support regular practice. Participants were encouraged to practice the techniques introduced during the corresponding session and to apply present-moment awareness during routine caregiving activities.

Throughout the intervention, the investigator monitored participants' home practice. Participants maintained home-practice records documenting practice frequency, approximate duration, and difficulties encountered. These records documented their engagement with the intervention and helped guide appropriate support in subsequent sessions.

Intervention Procedure

The study was conducted in the following sequence:

Figure 1: Study design and Intervention Procedure Flowchart



We assessed mindfulness, perceived stress, positive affect, negative affect, and aggressiveness at pre-intervention, post-intervention, and three-month follow-up.

Data Analysis

Given the study's focus on three individual cases, the analysis focused primarily on the case level. We compared pre-intervention, post-intervention, and three-month follow-up scores for each participant across measures of mindfulness, perceived stress, positive affect, negative affect, and aggressiveness. We analyzed score changes to describe the direction and magnitude of change across assessment points. Within each case, we examined patterns from pre-intervention to post-intervention and three-month follow-up, then compared cases to identify common and divergent trends. Because the analysis included only three cases, it remained descriptive, emphasizing within-case trajectories and cross-case patterns rather than statistical tests of intervention efficacy. Consequently, we interpreted the findings as case-level patterns of change rather than evidence of generalized intervention efficacy.

Ethical Considerations

The research followed the ethical guidelines established by the Ethics Committee of Lovely Professional University, Punjab, India. Participation was voluntary, and the study ensured anonymity and confidentiality throughout. We obtained written informed consent from all participants before their inclusion.

Case Presentations and Descriptions

We examined three mothers who received the mindfulness-based intervention as individual cases. For each participant, we examined changes in perceived stress, positive affect (PA), negative affect (NA), and aggressiveness at pre-intervention, post-intervention, and three-month follow-up. PA and NA served as operational indicators of emotional adjustment. The case descriptions emphasize the direction and pattern of change across the three assessment points.

CASE 1

Case 1 was a married mother aged 40–45 years who was not employed outside the home and reported full-time caregiving responsibilities. She belonged to a nuclear family and had completed pre-degree/Plus Two education. She reported an above-average economic status. Her child was a girl aged 15–20 years and was the third-born child. The child had a formal diagnosis of Autism Spectrum Disorder. Case 1 completed the eight-week mindfulness-based intervention and all three assessment points.

The participant's perceived stress score decreased from 18 at pre-intervention to 17 at post-intervention and 16 at the three-month follow-up, indicating a gradual reduction in perceived stress across the assessment points.

The participant's positive affect (PA) score increased from 25 at pre-intervention to 35 at post-intervention and 41 at the three-month follow-up. Conversely, negative affect (NA) decreased from 36 at pre-intervention to 25 at post-intervention and 19 at follow-up. This pattern indicates increased positive affect alongside decreased negative affect across the assessment points.

Aggressiveness also declined, decreasing from 42 at pre-intervention to 35 at post-intervention and 33 at the three-month follow-up. Overall, Case 1 showed reductions in perceived stress and aggressiveness, along with increased positive affect and decreased negative affect across assessment points.

CASE 2

Case 2 was a married mother aged 40–45 years who was not employed outside the home and reported full-time caregiving responsibilities. She belonged to a nuclear family and had completed a degree. She reported an average economic status. Her child was a boy aged 15–20 years and her first-born. The child had a formal diagnosis of Autism Spectrum Disorder. Case 2 completed the eight-week mindfulness-based intervention and all three assessment points.

The participant's perceived stress score decreased from 29 at pre-intervention to 24 at post-intervention and 21 at the three-month follow-up. Positive affect increased from 28 at pre-intervention to 36 at post-intervention and 38 at follow-up, whereas negative affect decreased from 36 to 26 and 21, respectively.

Aggressiveness decreased from 53 at pre-intervention to 35 at post-intervention and 33 at the three-month follow-up. The largest decrease occurred between pre-intervention and post-intervention, with the lower score maintained at follow-up. Overall, Case 2 demonstrated reductions in perceived stress and aggressiveness, accompanied by increases in positive affect and decreases in negative affect across the assessment points.

CASE 3

Case 3 was a married mother aged 40–45 years who was not employed outside the home and reported full-time caregiving responsibilities. She belonged to a nuclear family and had completed a degree. She reported an average economic status. Her child was a boy aged 20–25 years and her first-born. The child had a formal diagnosis of Autism Spectrum Disorder. Case 3 completed the eight-week mindfulness-based intervention and all three assessment points.

The participant's perceived stress score decreased from 25 at pre-intervention to 22 at post-intervention and 20 at the three-month follow-up. Positive affect increased from 28 at pre-intervention to 37 at post-intervention and 40 at follow-up, while negative affect decreased from 37 to 27 and 20, respectively.

Aggressiveness decreased from 60 at pre-intervention to 35 at post-intervention and 33 at the three-month follow-up. The largest decrease occurred between pre-intervention and post-intervention, and the lower score was maintained at the three-month follow-up. Overall, Case 3 showed reductions in perceived stress and aggressiveness, along with increased positive affect and decreased negative affect across assessment points.

Table 2. Case-Level Scores Across Assessment Points

Case	Measure	Pre-intervention	Post-intervention	3-month follow-up
Case 1	Perceived Stress	18	17	16
	Positive Affect (PA)	25	35	41
	Negative Affect (NA)	36	25	19
	Aggressiveness	42	35	33
Case 2	Perceived Stress	29	24	21
	Positive Affect (PA)	28	36	38
	Negative Affect (NA)	36	26	21
	Aggressiveness	53	35	33
Case 3	Perceived Stress	25	22	20
	Positive Affect (PA)	28	37	40
	Negative Affect (NA)	37	27	20
	Aggressiveness	60	35	33

Note. PA = positive affect; NA = negative affect. PA and NA were treated as operational indicators of emotional adjustment.

Cross-Case Analysis and Results

The three cases were compared across pre-intervention, post-intervention, and three-month follow-up assessments to identify common and divergent patterns in perceived stress, emotional adjustment, and aggressiveness. Positive affect (PA) and negative affect (NA) were treated as operational indicators of emotional adjustment. The analysis focused on the direction and magnitude of change within each case and the extent to which similar patterns were observed across cases. Because the analysis involved only three cases, the findings are descriptive and not intended to establish generalized intervention effects.

Cross-Case Changes in Perceived Stress

Perceived stress decreased across all three cases over the assessment period. However, the magnitude of reduction differed between participants. Case 1 showed the smallest numerical reduction, whereas Case 2 showed the largest reduction, followed by Case 3. Despite these differences, all three cases had lower perceived stress scores at the three-month follow-up than at pre-intervention. Overall, this pattern indicated a consistent downward trajectory in perceived stress across the cases.

Cross-Case Changes in Emotional Adjustment

A consistent pattern was observed for both indicators of emotional adjustment. Positive affect increased across all three cases from pre-intervention to post-intervention and remained higher at the three-month follow-up. The magnitude of increase differed somewhat between cases, with Case 1 showing the largest overall increase in PA. In contrast, negative affect decreased across all three cases. The reductions were evident at post-intervention and were maintained at the three-month follow-up. Case 1 showed the largest overall numerical reduction in NA, while Cases 2 and 3 also demonstrated substantial decreases. Taken together, the simultaneous increase in PA and decrease in NA represented a consistent pattern of more favorable emotional adjustment across all three cases at post-intervention and follow-up.

Cross-Case Changes in Aggressiveness

Aggressiveness decreased across all three cases. The magnitude of reduction varied considerably between participants. Case 1 showed the smallest numerical decrease, whereas Case 3 showed the largest reduction, followed by Case 2. Cases 2 and 3 showed particularly marked decreases between pre-intervention and post-intervention, with lower scores maintained at the three-month follow-up. Convergence across cases was therefore evident in the direction of change, while the magnitude of change differed between participants.

Convergent and Divergent Patterns

The cross-case analysis identified a clear pattern of convergence across the three cases. All participants demonstrated reductions in perceived stress and aggressiveness, together with increased positive affect and decreased negative affect across the assessment period. These patterns were generally maintained at the three-month follow-up. Differences were primarily observed in the magnitude of change rather than its direction. Case 1 showed smaller reductions in perceived stress and aggressiveness but larger increases in positive affect and larger decreases in negative affect. Cases 2 and 3 showed larger reductions in perceived stress and aggressiveness. These differences illustrate individual variation in the trajectories of psychological outcomes.

Three-Month Follow-Up Pattern

The three-month follow-up scores showed that the direction of change observed at post-intervention was generally maintained beyond the immediate assessment period. All three cases had lower perceived stress, lower negative affect, and lower aggressiveness, along with higher positive affect, at follow-up than at pre-intervention. These findings indicate consistent case-level trajectories across the three participants. However, because the study involved only three cases and did not use inferential

statistical testing at the case level, interpret the findings as descriptive patterns of individual change rather than evidence of generalized intervention efficacy.

Discussion

The present multiple-case study examined changes in perceived stress, emotional adjustment, and aggressiveness among three mothers of children with autism who participated in a mindfulness-based intervention. Across all three cases, perceived stress decreased from pre-intervention to post-intervention and further at the three-month follow-up, although the magnitude of change varied between participants.

Emotional adjustment followed a similar pattern in all cases. Positive feelings increased, while negative feelings went down from before the intervention to after and at follow-up. These results align with earlier research showing that mindfulness-based interventions can help parents of children with autism feel better and experience less stress (Dykens et al., 2014; Neece et al., 2024; Peng et al., 2025). Other studies also found that caregivers' well-being improves, and these effects can last at least three months (Cachia et al., 2016).

Aggressiveness decreased across all three cases, with larger numerical reductions observed in Cases 2 and 3. This variation illustrates differences in individual trajectories. Mindful breathing, body awareness, and observation of thoughts and emotions may plausibly support greater awareness of challenging experiences and less reactive responding. However, the present study did not directly test these mechanisms and should therefore regard them as possible explanations rather than established causal pathways. Previous research on mindfulness-based positive behavior support has similarly reported improvements in maternal stress and family-related behavioral outcomes (Singh et al., 2019; Singh et al., 2020).

It is also important to consider changes seen in the comparison group from the larger study. Because people in the control group also changed over time, we cannot say for sure that the improvements in the three intervention cases were due only to mindfulness. This means we should interpret the results carefully, which matches other research showing that parents can change over time in both mindfulness and comparison groups (Neece et al., 2024).

Overall, the three cases demonstrated consistent improvements in perceived stress, positive affect, negative affect, and aggressiveness, with several changes maintained at three-month follow-up. Given the small number of cases and variability in individual change, these findings should be considered preliminary case-based evidence. Larger controlled studies with standardized mindfulness protocols and longer follow-up are needed to examine these patterns further.

Conclusion

This multiple-case study identified consistent case-level changes among three mothers of children with autism who participated in a mindfulness-based intervention. Perceived stress and aggressiveness decreased, while positive affect increased and negative affect decreased, with several changes maintained at the three-month follow-up. However, individual differences in the magnitude of change and improvements observed in the comparison condition require cautious interpretation. The findings therefore represent preliminary case-based evidence rather than definitive evidence of a causal intervention effect. Future controlled studies with larger samples, standardized protocols, and longer follow-up periods are needed to examine the effectiveness and sustainability of mindfulness-based interventions for mothers of children with autism.

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Conflicts of Interest

The authors declare no conflicts of interest.

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