

**The Subjective Experiences of Mothers with Borderline Personality Disorder (BPD) Who Have
Completed Mother-Infant Dialectical Behaviour Therapy (MI-DBT)**

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Abstract

Mother-infant inpatient units frequently receive referrals for mothers with Borderline Personality Disorder (BPD), characterised by emotional dysregulation and interpersonal difficulties. Research suggests that BPD symptoms impair a mother's ability to recognise and respond to her infant's cues. This can be detrimental for the emotional and interpersonal development of infants, who require consistent care during the postnatal period. Providing tailored treatments during the postnatal period is critical in preventing an intergenerational cycle of emotional and interpersonal symptoms. Mother-Infant Dialectical Behaviour Therapy (MI-DBT) has produced improvements on quantitative scales of maternal mental health and the mother-infant relationship. While promising, these improvements were inconsistent across scales and mother-infant dyads. Existing qualitative literature indicates that mothers with BPD experience unique challenges and risk factors which may explain these inconsistent results. These experiences are difficult to capture in quantitative scales, highlighting the need for a qualitative approach, guided by the women themselves. As such, this study aimed to explore the subjective experiences of women who had completed MI-DBT. Thematic analysis of interviews conducted before, post and twelve months after MI-DBT led to the development of five themes: (1) *'Boiling Points,'* (2) *Emotional Literacy,* (3) *Intergenerational Transmission,* (4) *Low Self-Esteem* and (5) *Dealing with Disconnect.* Overall, the women expressed that their emotional literacy and regulation improved after MI-DBT, subsequently addressing key risks and challenges such as uncertainty around their child's cues, low self-esteem and fears of intergenerational transmission. This study consolidates previous research on mothers with BPD and provides support and potential modifications for MI-DBT.

Keywords: Borderline Personality Disorder, mothers, thematic analysis, integrated treatment, mother-infant relationship

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma in any University, and, to the best of my knowledge, this thesis contains no material previously published except where due reference is made. I give permission for the digital version of this thesis to be made available on the web, via the University of Adelaide's digital thesis repository, the Library Search and through web search engines, unless permission has been granted by the School to restrict access for a period of time.

Signature

September, 2020

Contribution Statement

My external supervisor, Associate Professor Anne Sved Williams, is the main creator of Mother-Infant Dialectical Behaviour Therapy (MI-DBT), which is the focus of my thesis. MI-DBT was conducted and initially evaluated by Associate Professor Anne Sved Williams' team at the Helen Mayo House (HMH) mother-infant psychiatric unit. All of the interviews analysed in this thesis were conducted by the HMH team and provided to me as de-identified electronic transcripts. Additionally, HMH research staff calculated all of the statistics I used to describe my sample. Dr. Alyssa Sawyer, my primary internal supervisor, Associate Professor Anne Sved Williams and I collaborated on the aims of my study. My secondary internal supervisor, Associate Professor Rachel Roberts, assisted in the development of a longitudinal qualitative research method. I then conducted the literature review, ethics notification and thematic analysis. Each of my supervisors were involved in the triangulation of themes, noting where their interpretations were similar or different. I wrote up all aspects of this thesis.

Signature

September, 2020

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The Subjective Experiences of Mothers with Borderline Personality Disorder (BPD) Who Have Completed Mother-Infant Dialectical Behaviour Therapy (MI-DBT)

The postnatal period is emotionally demanding for all mothers, particularly mothers already struggling with emotion regulation (Yelland et al., 2015). It is therefore unsurprising that mother-infant inpatient units receive high volumes of referrals for mothers with *Borderline Personality Disorder* (BPD), characterised by emotional dysregulation and interpersonal difficulties (Yelland et al., 2015). Research suggests that BPD symptoms impair a mother's ability to recognise and respond to her infant's cues (Crandell et al., 2003) which can be detrimental for infants, who require consistent care during the postnatal period for healthy development (Helfer, 1987). Difficulties with recognising and responding to infant cues can interfere with an infant's development of emotional regulation and interpersonal functioning, leading to an intergenerational cycle of BPD symptoms (Stepp et al., 2011). Providing high-quality, tailored treatments during the postnatal period could disrupt this cycle.

Mother-Infant Dialectical Behaviour Therapy (MI-DBT) combines BPD treatment with a focus on the unique parenting challenges of mothers with BPD (Sved Williams et al., 2018). MI-DBT has produced quantitative improvements in maternal mental health and the mother-infant relationship, however, improvements were not made on all dimensions tested or by all mother-infant dyads. Existing qualitative literature (Geerling et al., 2019; Zalewski et al., 2015) indicates that mothers with BPD face unique challenges and risk factors which may explain these inconsistent results. These challenges and risk factors are difficult to capture in quantitative scales, highlighting the need for a qualitative approach, guided by the women themselves. To date, the subjective experiences of women who have completed MI-DBT are unknown. As such, this study aimed to explore the subjective experiences of women completing MI-DBT and, in particular, gain a greater understanding of how BPD impacts the mother-infant relationship and how to improve future therapies.

Borderline Personality Disorder

The DSM-5 defines BPD as a “pervasive pattern of instability of interpersonal relationships, self-image and affects, and marked impulsivity beginning by early adulthood,” diagnosed when individuals display at least five out of nine symptoms (American Psychiatric Association [APA], 2013, pp.663). Linehan (1993) argues that most BPD symptoms, including self-harm, impulsivity and relationship instability, are the result of emotional dysregulation. People with BPD display a heightened sensitivity to emotional stimuli and strong emotional reactions that take longer than usual to return to baseline (Donegan et al., 2003). These individuals are most strongly influenced by *interpersonal* stimuli due to their challenging, and often traumatic, experiences with caregivers during childhood (Sved Williams, 2017). Emotional arousal reduces an individual’s ability to *mentalise* or interpret the thoughts, emotions and intentions of oneself and others (Bateman & Fonagy, 2010). As such, it can be challenging for people with BPD to fulfil their role obligations as a partner, employee, friend or parent (Bagge et al., 2004). Consequently, research has found correlations between BPD and adverse outcomes such as poorer academic achievement (Bagge et al., 2004), lower life satisfaction (Marco et al., 2015) and higher unemployment rates (Sansone & Sansone, 2012). BPD symptoms can escalate to unmanageable levels during stressful times, such as the postnatal period.

The Postnatal Period

The *postnatal period*, or the first few months after birth, is a sensitive period for infant development (Helfer, 1987). During this time, infants form an *attachment style* (Bowlby, 1973) with their primary caregivers that has been found to predict future outcomes (Rees, 2007). A *secure attachment*, or emotional connection, forms when an infant’s caregiver accurately interprets their cues and responds appropriately and consistently (Rees, 2007). Knowing how their caregiver will respond allows an infant to develop trust, communication, empathy and self-regulation (Rees, 2007). Without attuned and consistent parenting, infants may develop *insecure attachments*

(Bowlby, 1973). Particularly adverse outcomes have been associated with *disorganised* insecure attachments, resulting when a caregiver's behaviour is alarming and unpredictable, leaving the child with no organised strategy to have their needs met (Main & Soloman, 1990). Disorganised attachment has been linked to emotional and interpersonal difficulties such as aggression, anxiety, hostility and mental illness in adulthood (Cassidy & Shaver, 2016). Due to their emotional and interpersonal difficulties, parents with disorganised attachment styles tend to form disorganised attachments with their own children, resulting in an intergenerational cycle (Steele & Siever, 2010).

The stress of the postnatal period may disrupt the parenting of mothers with BPD, leading to the transmission of attachment difficulties from mother to child (Stepp et al., 2011). Major life adjustments and stressors make mothers particularly vulnerable to the development or exacerbation of mental illnesses during the postnatal period (Yelland et al., 2015). BPD has particularly strong links to the postnatal period, with clinicians at the Helen Mayo House (HMH) mother-infant psychiatric unit providing a BPD diagnosis to 23.1% of mothers admitted (Yelland et al., 2015). Scholars theorise that infant interactions may dysregulate mothers with BPD because they activate abandonment and rejection fears from the mother's childhood (Fonagy & Target, 1997; Lyons-Ruth et al., 2005; Marcoux et al., 2017). These fears stem from non-attuned or inconsistent parenting, considered to be a key risk factor for BPD development (Sved Williams, 2017). Fonagy et al.'s (1996) finding that 92% of participants with BPD had insecure attachment styles supports this theory. Furthermore, studies have found correlations between BPD and childhood trauma as high as 93% (Laporte & Guttman, 1996). Without attuned and consistent parental responses as infants, people with BPD are likely to develop defence mechanisms such as hypervigilance to abandonment and rejection (Donegan et al., 2003), negative expectations of others and a fragile self-image (Agrawal et al., 2004). As will be discussed at greater depth in the following section, these defence mechanisms make it difficult for mothers to recognise and respond to their infants' cues. Consequently, maternal BPD has been strongly linked to the development of disorganised infant attachments (Hobson et al., 2005). Knowing that many mothers with BPD *and* their infants have

insecure attachment styles suggests that attachment difficulties are transmitted intergenerationally, often in the form of BPD (Stepp et al., 2011). The fact that the postnatal period is both an emotionally demanding time for mothers with BPD and a critical period for healthy infant development makes it a pivotal time to break this cycle.

Parenting with BPD

Research suggests that the ways that mothers with BPD interact with their infants can impair the infants' emotional and interpersonal development (Stepp et al., 2011). Several observational studies have reported that mothers with BPD enact insensitive and controlling behaviours towards their infants, such as rough handling and ignoring infant distress (Crandell et al., 2003; Hobson et al., 2005; Newman et al., 2007; White et al., 2011). Kiel et al. (2011) found that mothers with BPD took longer than controls to respond to their infants' distress, doing so with less positive affect and comforting behaviours. Mothers with BPD have also been labelled as "less engaged" (Crandell et al., 2003), displaying fewer instances of smiling, mirroring and play initiation (White et al., 2011). Longitudinal studies (Eyden et al., 2016; Genet et al., 2015; Lyons-Ruth et al., 2013) have found that these parental behaviours often result in the intergenerational transmission of emotional and interpersonal difficulties such as disorganised attachment styles, mental illness, suicidality and aggression. These problematic parental behaviours have been attributed to the BPD symptoms of emotional dysregulation and disrupted mentalisation.

Problematic parental behaviours in mothers with BPD have been linked to issues with *mentalisation*, or the ability to accurately interpret the mental state of oneself and others (Bateman & Fonagy, 2010). To respond to infant cues, parents must first mentalise with their infants. Marcoux et al. (2017) compared the ability of 10 mothers with BPD and 28 controls to mentalise with their 12-month-old infants by recording their proportions of attuned and non-attuned comments. For example, commenting, "you're tired of trucks, let's try puzzles," when the infant appears engaged with trucks, is non-attuned. While mothers with BPD were 3.6 times more likely to produce non-

attuned comments, they produced equal proportions of attuned comments, suggesting that mentalisation deteriorates in specific contexts. The authors propose that when a mother experiences interpersonal stress, particularly with her infant, her capacity for mentalisation deteriorates. The theory that BPD mentalisation is influenced by interpersonal stress is explored in several studies (Daros et al., 2013; Fonagy & Luyten, 2009) with the conclusions discussed below. Ultimately, if a mother's capacity to read her infant's cues is influenced by her emotional state, emotionally dysregulated mothers with BPD are less likely to form secure attachments with their infants.

Research suggests that an individual's capacity for controlled mentalisation deteriorates upon emotional arousal (Fonagy & Luyten, 2009). Fonagy and Luyten (2009) propose that when emotionally aroused, people switch from *controlled* mentalising, which is conscious and reflective, to *automatic* mentalising, driven by nonconscious defence mechanisms formed during attachment. As described earlier, the attachment experiences of people with BPD contribute to the development of defence mechanisms such as hypervigilance, abandonment fears, negative expectations of others and a fragile self-image (Agrawal et al., 2004; Donegan et al., 2003). When emotionally aroused, people with BPD may lack the cognitive resources for controlled mentalisation (Daros et al., 2013), instead drawing on these defence mechanisms (Fonagy & Luyten, 2009). As people with BPD are easily and intensely aroused by interpersonal stimuli (Sved Williams, 2017), this switch occurs regularly. To illustrate this switch, imagine a mother with BPD interacting with her crying infant. When calm, the mother might understand that the crying is normal, but as the crying intensifies, the distressed mother may automatically assume that her infant hates or is angry with her (Hobson et al., 2009). Experimental research provides support for impaired mentalisation under interpersonal stress. For example, in their emotion recognition task, Daros et al. (2013) found that participants with BPD were just as successful as controls at recognising low-intensity emotions but significantly worse at recognising emotions signifying social threat, such as high-intensity anger and disgust. Additionally, in qualitative studies, mothers with BPD have described an inability to process

information rationally upon continual infant crying (Geerling et al., 2019). Teaching mothers to regulate their emotions and maintain control over their thoughts and behaviours could encourage more sensitive parenting during times of distress, preventing the intergenerational transmission of BPD symptoms.

The Mother's Perspective

To our knowledge, Zalewski et al. (2015) conducted the only qualitative study examining the experiences of BPD treatment from a mother's perspective. Their insights can assist in the development and evaluation of BPD therapies. The sample of 23 mothers with BPD was recruited from intensive outpatient or partial hospitalisation programs in Western Pennsylvania. The challenges described by the women were unique to mothers with BPD. For example, the women described guilt over emotional outbursts around their children, worries about symptom transmission and uncertainty about their children's cues. Additionally, many believed that their emotional difficulties stemmed from their own upbringing and empathised with their children for also having an emotionally dysregulated parent. Despite this, the mothers struggled to explain their disorder to their children due to concerns that the child was too young and their own lack of BPD knowledge. The women expressed that these challenges impaired their parenting and mental health. The current study explores the relevance of these challenges and risk factors to a new sample of mothers with BPD, considering whether they change throughout MI-DBT.

When asked about potential parenting-specific BPD treatments, the mothers were very supportive (Zalewski et al., 2015). They hoped an integrated therapy would provide commonality with other mothers with BPD, techniques to teach their children emotional regulation and increased parenting confidence. When imagining what might inhibit participation, the mothers expressed fears that their parenting would be judged, fears of exposing their children to other parents with BPD and logistical concerns such as finding childcare. The current study will explore whether women

completing MI-DBT possessed similar treatment desires and concerns, and whether these needs were fulfilled.

Dialectical Behaviour Therapy

Research suggests that treating maternal mental health alone is insufficient at improving the mother-infant relationship (Forman et al., 2007). *Dialectical Behaviour Therapy* (DBT) currently has the best evidence base for BPD treatment, teaching individuals how to mindfully observe and accept their emotions in order to interpret and respond to social stimuli appropriately (Linehan, 2017). Clinicians have noted that when a mother is emotionally overwhelmed, her focus lies on her inner turmoil rather than her infant (Apter & Sved Williams, 2018). Consequently, improving maternal mental health often flows onto the dyadic relationship between mothers and infants (Yelland et al., 2015). Despite this, mothers with BPD have called for mental health treatments specifically targeting the unique challenges of parenting (Zalewski et al., 2015). Their most pressing concerns, such as fears of transmitting their issues onto their children, are the result of being a mother *with* BPD, rather than simply a mother or a person with BPD. General BPD clinicians may lack the understanding, resources and time to effectively manage these unique parenting-specific issues. Additionally, mothers may struggle to attend their mental health treatment, due to issues around childcare or cost, and employ their learning at home while their child requires attention (Zalewski et al., 2015). Overall, mental health treatments must be tailored to the unique challenges and risk factors of mothers with BPD in order to improve the mother-infant relationship.

Parenting Therapies

Research indicates that targeting the mother-infant relationship through parenting therapy alone will not necessarily be effective for emotionally dysregulated mothers, nor will it improve maternal mental health (Forman et al., 2007). Firstly, most of the issues described

by mothers with BPD are not covered in general parenting therapies (Zalewski et al., 2015). Even if parenting treatments covered the content needed for mothers with BPD, research has found that emotional dysregulation mitigates recruitment, retention, engagement, skills acquisition and skills enactment in parenting treatments (Maliken & Katz, 2013). Additionally, postpartum depression research has found that even when the mother-infant relationship improves, mothers may still suffer from poor mental health (Forman et al., 2007). Ultimately, treatments for mothers with BPD during the postnatal period must combine BPD and parenting interventions in order to reduce maternal mental health difficulties and ensure healthy mother-infant relationships.

An Integrated Approach

To our knowledge, only three parenting-specific BPD treatments have been developed for the postnatal period (McCarthy et al., 2016; Renneberg & Rosenbach, 2016; Sved Williams et al., 2018). Sved Williams et al.'s (2018) treatment, labelled Mother-Infant Dialectical Therapy (MI-DBT), shows the most promise thus far, demonstrating efficacy in quantitative measures of maternal mental health and the mother-infant relationship. MI-DBT was created by a team at the HMMH mother-infant psychiatric unit in South Australia in response to a lack of treatments for their high volumes of mothers with BPD. MI-DBT incorporates the techniques and knowledge from several effective parenting interventions into DBT, already known to be effective for BPD treatment (Linehan, 2017). In the treatment groups, HMMH clinicians deliver weekly 2.5-hour MI-DBT sessions over 24-weeks. Sessions are divided amongst the four DBT modules (Linehan, 2015), with a focus on using skills to manage parenting stress, develop secure infant attachments and support healthy infant development. At the end of each session, the mothers reunite with their infants, with song and dance activities allowing them to practice their new skills. Sved Williams et al. (2018) have conducted quantitative evaluations of MI-DBT to be discussed below.

Existing MI-DBT Evaluation

Preliminary evaluations suggest that maternal mental health and the mother-infant relationship improve after MI-DBT (Sved Williams et al., 2018). In their study of 23 mother-infant dyads, with infants aged approximately 15.1 months, Sved Williams et al. (2018) used well-validated self-report scales for borderline symptoms, depression, anxiety, parenting sense of competence and parental reflective functioning (mentalisation) to measure maternal mental health. Statistically significant improvements of medium-large effect sizes were made across all dimensions except for parenting sense of competence. Additionally, a standardised observational assessment known as the CARE Index measured changes to the quality of the mother-infant relationship in the dyads. For the CARE Index, mothers and infants were videotaped in three-minute play interactions (Crittenden, 2005). Trained observers rated the dyads on seven aspects of behaviour, including responsiveness for mothers and cooperativeness for infants, to comprise an overall Dyadic Synchrony Score, reflecting the caregiver's sensitivity to their infant's cues (Crittenden, 2005). Following MI-DBT, 15 out of 23 dyads improved their score, three did not change and five slightly reduced their performance. These results provide promising evidence that MI-DBT is effective at improving maternal mental health and the mother-infant relationship.

Despite the promising results found in quantitative evaluations of MI-DBT, improvements were not made on all measures or by all mothers. Previous qualitative studies (Zalewski et al., 2015) indicate that mothers with BPD face unique challenges and risk factors, such as guilt over lashing out at their children and fears of intergenerational transmission, which may also influence maternal mental health and parenting in mothers with BPD. These factors may explain discrepancies in quantitative results and are worth exploring further. As there are no quantitative scales to capture these specific issues, researchers should employ a qualitative design to explore the subjective experiences of

women who have completed MI-DBT. By allowing mothers with BPD to guide the research, the impact of their unique challenges and risk factors can be described, potentially explaining why MI-DBT was less effective in some areas. As such, the aim of this study was to explore the subjective experiences of women before and after MI-DBT and, in particular, to gain a greater understanding of how BPD impacts the mother-infant relationship and how to improve future therapies.

Aims

To our knowledge, no study has reported on the subjective experiences of mothers with BPD before and after parenting-specific BPD treatments. Research suggests that mothers with BPD face unique challenges and risk factors to their mental health and parenting. The complexity of these issues and their specificity to mothers with BPD makes them difficult to assess quantitatively, highlighting the need for a more flexible, qualitative approach. As such, the aim of this study was to explore the subjective experiences of women before and after MI-DBT. Exploring the experiences of mothers with BPD throughout MI-DBT might assist in the development, evaluation and modification of therapies and bolster understandings of the unique challenges and risk factors faced by this population.

Method

Context, Setting and Participants

In South Australia, the *Women's and Children's Health Network-Women's and Children's Hospital* (WCHN-WCH) offers support to mothers whose mental health impairs their ability to care for their infants. MI-DBT took place in *Helen Mayo House* (HMH), a WCHN-WCH inpatient service housing mothers and their 0-2-year-old infants. Initially, only HMH inpatients participated in MI-DBT, however over time, snowball recruitment allowed for the inclusion of women referred by external clinicians and the participants themselves.

Before participating, eligible participants read detailed MI-DBT information forms and provided written consent. Eligible participants had a full or partial BPD diagnosis, at least one child under three years old to which they were the primary caregiver at the start of the group, English fluency and a commitment to attending all sessions. Participants were excluded if they had an insufficient cognitive capacity to understand the content, a history of substance abuse which would affect group functioning or a history of psychosis. Participants from MI-DBT Groups 5 and 6 were invited to participate in interviews and have their transcripts used for research. All eight women in Group 5 completed all interviews while five out of the eight women from Group 6 completed all interviews, leading to a sample of 13 out of a possible 16 women. Group 5 commenced on February 2, 2017 and Group 6 commenced on November 14, 2017, with both groups lasting 24 weeks.

Ethics Approval

Approval to conduct MI-DBT and interviews was obtained from the *Women's and Children's Hospital Human Research Ethics Committee*. This approval was extended to allow the primary researcher to analyse de-identified transcripts. The *University of Adelaide Human Research Ethics Committee* was notified (Notification No. 34405) about this external ethics approval before analysis began.

Procedure

In the pilot study (Sved Williams et al., 2018), a trained DBT therapist and two experienced clinicians implemented an adapted version of Linehan's (2015) DBT on six mother-infant dyads. These adaptations were manualised into a structured program called MI-DBT, which is still conducted on an ongoing basis. In addition to the usual DBT training, MI-DBT adaptations teach mothers how to use DBT skills to manage parenting stress, develop secure infant attachments and support infant emotional regulation. The two MI-DBT groups in this study completed weekly sessions for 24 weeks, with six sessions allocated to each of the four DBT modules (Linehan, 2015):

- 1) *Mindfulness*: Adaptations for this module drew on Coyne and Murrell's (2009) *Acceptance Commitment Therapy* parenting model. Mothers were taught to notice their challenging thoughts and emotions without judgement, allowing them to respond to challenges calmly.
- 2) *Distress Tolerance*: This module was adapted using Marvin et al.'s (2002) *Circle of Security*. Firstly, each mother reflected upon the defensive strategies she used in response to her child's distress, learnt from her insecure attachment. Secondly, mothers learnt to reinterpret their infants' cues less defensively, fostering better attachments (Marvin et al., 2002).
- 3) *Emotion Regulation*: In line with Murray's (2014) infant-psychology work, mothers were taught strategies to facilitate emotional regulation in their infants. Additionally, mothers were taught how to soothe their infants while emotionally dysregulated themselves.
- 4) *Interpersonal Effectiveness*: Also informed by Murray (2014), this module was adapted to teach mothers about infant communication so that they could understand their infants' cues and respond appropriately.

During the 2.5-hour-long sessions, infants were cared for by paid professionals and volunteers. After the sessions, a 15-minute block was allocated for a musical reunion between the mothers and their infants, during which the dyads sang and danced together, allowing mothers to practice their new skills. Semi-structured interviews were conducted within one month before (pre), within one month after (post) and 12-months after (follow-up) MI-DBT Groups 5 and 6. Questions related to the women's emotions, coping strategies, treatment desires, relationships and challenges with their infants. A detailed outline of interview questions is provided in the Appendix. The pre- and post-group interviews were conducted face-to-face at either the participant's home or a private therapy room in HMH and lasted approximately 20-30 minutes. Follow-up interviews were conducted via telephone and lasted approximately 15 minutes. Interviews were conducted by HMH research staff and audio-recorded for electronic transcription. Electronic transcripts were de-identified before being given to the primary researcher for analysis. Interviews from 13 participants were analysed in this study, as these were all that were available when analysis commenced.

Measures

The Index of Relative Advantage and Disadvantage (IRSAD) summarises the economic and social conditions of households within an area (ABS, 2018). An area's score is determined by variables such as average income, the number of people in skilled professions and the number of people with qualifications. The IRSAD places areas in deciles of 1-10, with 1 reflecting the bottom 10% of scores (least advantaged) in a state or territory and 10 reflecting the highest 10% (most advantaged).

Analysis

The de-identified interview transcripts were analysed using inductive thematic analysis (TA) (Braun & Clark, 2006). As there is currently no completely transferrable process for conducting longitudinal TA (Saldaña, 2003), the primary researcher adopted a similar approach to Fadyl et al. (2016), as their study had a similar sample size and three timepoints. As outlined by Braun and Clarke (2006), the researcher first read and familiarised themselves with all transcripts. Secondly, as per Fadyl et al.'s (2016) recommendations, the researcher used a matrix [Table 1] to identify codes in each participant's pre-group interview and specify how these codes changed in the post- and follow-up interviews. All codes were developed inductively during analysis. As per the TA protocol, the researcher then searched for patterns in the data, reviewed and named themes then described these themes in a final analysis. At the review stage, the researcher triangulated their responses with three other researchers who had also coded the transcripts, with all conclusions considered reasonable. The researcher intended to explore the main themes in the data, rather than every idea introduced, in an attempt to understand the common experiences of mothers with BPD.

Table 1*Coding matrix repeated for all participants*

	Pre-group	1-month post	12-months post
Participant 1	Initial codes	Changes/ maintenance in initial codes + emergent codes	Changes/ maintenance in updated codes + emergent codes

Results

Demographics

13 women completed all three interviews. Participants 1-8 were in MI-DBT Group 5 ($n = 8$) while participants 9-13 were in Group 6 ($n = 5$). The average age of the women was 31.8 years ($SD = 6.3$), with the average infant aged 16.4 months ($SD = 9.9$) [Table 2]. Most women had one infant participating with them in MI-DBT however two mothers participated with two infants. On average, the women were placed in decile 3.8 ($SD = 2.8$) of the IRSAD, reflecting a moderate-high level of disadvantage. Deciles ranged from 1-9, with the highest proportion of women living in decile 2 areas, ($n = 7$) reflecting the lowest 20% of socioeconomic conditions in South Australia.

Table 2*Summary of participant demographic information*

Variable	Mean (SD)
Mother's ages	31.8 years (6.3)
Children's ages	16.4 months (9.9)
IRSAD	Decile 3.8 (2.8)

Themes

Five themes, labelled (1) *'Boiling Points,'* (2) *Emotional Literacy,* (3) *Intergenerational Transmission,* (4) *Low Self-Esteem* and (5) *Dealing with Disconnect,* were developed.

1. *'Boiling Points'*

Most participants described an inability to fully process their challenging emotions, instead letting these emotions accumulate to unmanageable levels. While overwhelmed, previously controlled thinking and behaviour would become more automatic, often impairing functioning. The quote below neatly encapsulated this theme and inspired the title *'Boiling Points.'*

I tend to internalise everything and then things just boil over...which might result in drinking or overdosing or that sort of thing. (Participant 4, pre-group)

Before MI-DBT, many participants described extreme, long-lasting emotions that largely controlled their lives. The most commonly cited emotions were anger, sadness, loneliness and anxiety. Common attempts to cope included physically releasing tension (e.g. throwing things, self-harm), distraction (e.g. obsessive cleaning, sucking sour lollies) or, most frequently, "bottling" up their emotions. By denying their emotional responses, unresolved feelings and grievances accumulated and gained strength. Eventually, many participants would describe something along the lines of a 'boiling point' at which their previously controlled thoughts and behaviours became automatic and impulsive. For many mothers, this switch was triggered when her child was crying or misbehaving. Most women possessed insight into this switch, acknowledging that their thinking during these episodes became irrational or essentially non-existent. For example, Participant 10 described her incapacity to engage with her children while frustrated:

Dealing with the girls' frustration is a big one...it leads to me just shutting off and not dealing with the situation...at that point the only thing that I do is look out for their safety.

(Participant 10, pre-group)

Likewise, the finding that many participants experienced guilt or shame following these episodes demonstrated their implicit social and emotional awareness. As will be discussed in Theme 4, guilt and shame were two prominent emotions which worsened following these 'boiling points.' For example, Participant 1 compared her self-harm injuries to a tattoo, conveying that they were a permanent consequence of a temporary lapse in rational thinking:

It helps for the second that I do it and then once I've calmed down, I look at it and I'm like "You're a frickin' idiot" you know? It's like a tattoo that you've got when you're drunk... you always regret it. (Participant 1, pre-group)

After MI-DBT, most women expressed that they still experienced challenging emotions. While some women reported worsened emotions, often due to their changing situation, most reported that their difficult emotions arose less frequently and intensely. More importantly, many women described an increased ability to recognise when they were approaching these 'boiling points' and take a moment to regain control over their impulsive thoughts and behaviours. For example, Participant 3 described imagining what her son was thinking while he was misbehaving in order to respond more patiently:

When he has one of his meltdowns...I try to put myself into his little mind & realise that he doesn't really understand. (Participant 3, follow-up)

While most women acknowledged that MI-DBT taught them emotion regulation techniques, the level at which these techniques were applied varied. A shared observation of many participants was that emotion regulation techniques were the least accessible when their emotions were running high. Additionally, participants noted that the techniques were less practical when they were interacting with others, especially their children, and lacked the time or focus to self-soothe. For example, Participant 3 described her difficulties applying mindfulness when caring for her child:

I try to do some mindfulness but that's difficult with this one around [laughter]. You can't really do that when they're the ones causing the problems, you've got to...attend and umm... just settle down, I need to think about a red balloon for a minute [laughter]...maybe you can do it for a few seconds... (Participant 3, post-group)

Despite not always being able to consciously employ specific techniques, many women described the techniques becoming “second nature” (Participant 2, follow-up). Even if they could not remember the specifics, they knew that the general principle behind emotion regulation was to pause, accept their emotions and think consciously before acting. Overall, it seems that after MI-DBT, most women were able to shift back to their more controlled thinking during these ‘boiling points.’

2. Emotional Literacy

This theme relates to the women’s difficulties with communicating their emotions. Before MI-DBT, many participants struggled to describe their emotions to the interviewers. For some participants, this was because they “[found] it really hard to...pinpoint what emotions” (Participant 4, pre-group) were affecting them when they were overwhelmed. Other participants expressed that their difficulty was in the verbal translation of their emotional experiences to other people, with Participant 10 expressing that her vocabulary could not adequately capture her experience:

You've kind of got the basic...you can feel angry and happy and sad and frustrated...but I feel like those sorts of words for emotions are like an umbrella word...within those things, sometimes there's other sort of things that may better define how you're feeling and I just don't have that. (Participant 10, pre-group)

Many women noted that their past attempts to discuss their emotions had been distressing or counterproductive, reducing their motivation to be vulnerable again. For example, Participant 10 stated:

I've never really had to deal and talk about my emotions too much...because as young as I can remember...it didn't get you anywhere, so it's no point. (Participant 10, pre-group)

After MI-DBT, many participants expressed that mindfulness techniques taught them to pause during emotional moments and actively observe what they were feeling without judgement. With conscious observation, as well as training on how to recognise different emotions, most participants expressed that they had more clarity over their emotions. For example, Participant 4 observed:

I think sometimes it's about being mindful of what you're feeling rather than just "oh my god I'm feeling so overwhelmed right now," but actually going like "hang on, what is it that's going on, what am I feeling?" (Participant 4, post-group)

With increased clarity, many participants felt more comfortable with these emotions as they knew that they were normal, temporary and manageable. Additionally, recognising their emotions allowed many participants to recognise the maladaptive thoughts and behaviours that often accompanied them, replacing these with more appropriate coping mechanisms. For instance, Participant 6 noted:

Being able to name my emotions has helped a lot and it has enabled me to go "oh, that's a weird response" and kind of self-correct. (Participant 6, post-group)

Overall, most of the women expressed that gaining emotional literacy facilitated their improved emotion regulation. Specifically, emotional literacy was critical in allowing them to pause, accept their emotions and maintain controlled functioning, as described in Theme 1, *'Boiling Points.'*

3. Intergenerational Transmission

Most participants experienced challenging or traumatic childhoods and described how these contributed to their mental health difficulties. For example, Participant 11 mentioned:

My uncle was a terrible person & he did all sorts of things from the age of 7 to 15 that set me up for failure basically, since then I have no idea how to, I don't know, how to be an adult really because I just behave like a child whenever I'm stressed. (Participant 11, pre-group)

The participants feared exposing their children to similar hardships and passing down their mental health difficulties in the process. Many felt “really guilty” (Participant 11, pre-group) or like a “failure” (Participant 12, pre-group) when their children were distressed by their emotional displays. Additionally, anxiety was common when the mothers noticed their traits and behaviours mimicked in their children. For instance, one participant described fearing for her son’s future when he exhibited challenging behaviours:

Every time something bad would happen, I would then go “oh my god, he’s going to be a bad child”, like not “bad,” I don’t really think he’s bad, but he’s going to have this issue or he’s going to be like hitting people when he’s like 14, 15, and thinking the absolute worst.

(Participant 4, follow-up)

Preventing an intergenerational cycle of hardship was a key motivator for many participants to improve their mental health and relationships with their infants. Many mothers described explicitly teaching their new techniques to their children, noting improvements in their children’s emotion regulation and interpersonal skills. Teaching their children MI-DBT skills seemed to improve the mothers’ sense of parenting competency whilst also encouraging them to challenge their own coping mechanisms. For example, Participant 10 described the personal insight she gained through teaching her daughter:

It’s almost like teaching her is like teaching me at the same time. Because you don’t usually say the things to other people that you say to yourself...as I’m trying to work it out and help her through it, I’m kind of hearing more what I’m saying and that’s kind of then giving me something to reflect on for myself. (Participant 10, post-group)

Other participants described improving their children's mental health in more implicit ways. For some, simply feeling more settled themselves seemed to settle their children, and vice versa. For others, their improved emotional literacy allowed their children to adopt new words to describe their feelings. For example, one mother recounted when she implicitly taught her son the word "scary" after leaving the line for a roller-coaster:

We walked out and he was a bit upset and I said you know, "that was a bit scary, that's ok we'll go do something else"...and later that day, cos' there was a lot of big rides, he got a bit overwhelmed by some of the big rides, and he goes "oooh scary"...So that was the day he kind of picked up scary. (Participant 4, post-group)

Improvements in the children's emotional regulation seemed to be sustained in the follow-up interviews. Even when the participants described new challenging behaviours arising in their children, they seemed to believe that these behaviours reflected normal child development, rather than a transmission of their pathology onto their children.

4. Low Self-Esteem

The participants suffered from low self-esteem to various degrees, ranging from "self-doubt" (Participant 1, pre-group) to "self-hatred" (Participant 5, post-group). Most had a strong tendency to make negative assumptions about themselves, particularly in social interactions, worrying that they had done or said something wrong and were being poorly received. For instance, one participant constantly feared that she was coming across as "ignorant" or "annoying," (Participant 1, pre-group) regardless of the other person's response. A few participants even found ways to blame themselves for random, unrelated events. In a striking example, one participant described the implausible internal attributions she would be tempted to make:

I saw another car almost have an accident. Like not with us or anything. And a thought just popped up that it happened because I'm fat. (Participant 5, pre-group)

Low self-esteem was often expressed as guilt and shame. Situational guilt was common when the women felt that their BPD was impacting those around them. Some women experienced a more pervasive sense of shame, describing themselves as fundamentally flawed individuals rather than good people who made mistakes. These beliefs often arose when the participants were having difficulties with their children, with the following example highlighting the sense of parenting incompetency shared by many mothers:

I always go "I'm not a good Mum" because I can't work out why, for instance, he's crying...

(Participant 7, pre-group)

Feelings of guilt and shame commonly resulted in the participants taking criticism very personally, socially withdrawing, feeling undeserving of help and punishing themselves. Participant 5 described not being able to cope with her self-hatred without punishing herself through self-harm:

I just hated myself and I thought, like I thought I couldn't start the day unless I'd been hurt or something terrible would happen if I didn't do it. That kind of thing. And I just thought that I needed to be punished. Like if, just stupid things, like if I hung the washing out incorrectly.

(Participant 5, pre-group)

After MI-DBT, changes in self-esteem varied. For many women, improvements in emotional regulation were paired with reduced guilt, as there were fewer occasions where they could see their BPD symptoms impacting others. They generally felt more competent in their parenting and realised that most of the challenges they faced with their children were normal. Many women became more self-compassionate when experiencing difficult emotions and were able to recognise when they felt guilt or shame without reason. For example, Participant 6 realised that she would automatically blame herself in situations where she might otherwise feel angry as she had learnt that anger was something to be feared in both herself and others:

I think yeah probably a little bit scared of [anger]. I think also maybe that shame was my go-to emotion and I think maybe, and it's just hypothesising, that maybe I get the anger and I put shame on top of it that I felt angry. (Participant 6, post-group)

With greater self-worth, many participants learnt that they deserved to seek help, speak up when their needs were not met and take time for themselves. Perceptions of self-care seemed to shift from selfish to necessary, for both themselves and their loved ones. In the following example, Participant 10 described her confidence in attending a craft group for mothers:

I don't feel guilty about it because I've not just left her. She's still with me, she can still come up and see that I'm okay and stuff if need be but there's someone else that's kind of keeping an eye on her. I think it's really important for me to recover and it's guilt-free which is really nice. So much of parenting is about guilt, so it's nice that it's not. (Participant 10, post-group)

While the women who expressed more situational guilt in the pre-group interviews generally experienced increased self-esteem after MI-DBT, the women who struggled with deeper shame described slower improvement. These women described a continued tendency to think about themselves negatively but an increased ability to recognise and challenge it. In an illustrative example, Participant 5, who potentially expressed the most pervasive self-hatred in the pre-group interviews recounted a turbulent journey with her self-esteem. In her post-group interview, Participant 5 stated that her self-hatred had reduced but had then come back and “flows into every part of [her] life.” By the follow-up, however, she expressed:

I've still got self-hate. So sometimes just the whole “you're not good enough to do this” or “you'll do it wrong.” Yeah, just that kind of thought is still there but not as bad. (Participant 5, follow-up)

Overall, it seems that the participants' increased parenting and emotional regulation skills improved their overall sense of competence. When the participants felt like they dealt with

situations inappropriately, they were more capable of showing themselves compassion and care. Unfortunately, when the participants' shame was directed at their fundamental character, rather than their behaviours, negative self-talk still pervaded their lives. At the least, it seems that these women were more aware of their shame and intended to challenge it.

5. Dealing with Disconnect

This theme relates to the shifting ways through which the women coped with feeling misunderstood and struggling to understand others. Before MI-DBT, the participants described feeling deeply incompatible with others in how they thought, felt and behaved. They were aware of their tendency to lash out, be intensely emotionally affected by social interactions and misread social cues. In several cases, this awareness of difference was heightened by the stigma around their mental illness, often from close family members. For instance, Participant 1 described the invalidation she perceived from her partner:

I try and explain my impulses, like why I'm acting impulsively, and he's like "that's an excuse" and "it's not your mental problem, it's an excuse"...and he won't go and get it. He's been offered groups and stuff like that for carers of people with BPD and he refuses to go.

(Participant 1, pre-group)

A few participants attempted to manage their differences by warning others about their mental illness. For example, Participant 1 posted warnings on Facebook in the hopes that her friends would empathise if she behaved inappropriately:

When I've been feeling particularly bad, I put out like a warning I guess on Facebook...the last one I did was basically like "I'm going through this again...if I act in these ways..." I umm put like a list up, "please either react in this way or this way and just remember I'm struggling" sort of thing. (Participant 1, pre-group)

Other women attempted to “overcompensate” (Participant 12, pre-group) for their differences, not trusting that their relationships would survive if they did not alter themselves. Overcompensation was expressed as excessive effort, neglecting their own needs to please others and constantly trying to be around others in fear of being alone. Many participants described feeling like they put far more effort into relationships than other people, often resulting in frustrating or disempowering power imbalances. For example, Participant 1 described how attempts to spend time with others only heightened her sense of isolation:

It makes me realise how lonely I actually am. Seeking people out to try and spend time with them often resorts in you know... “sorry I’m busy” or you know...those responses make me feel even worse. It’s like...I’m always there for those people, why aren’t they ever there for me? Yeah, I feel just like, it’s a double standard. I’m always there for my friends, like always, drop of a hat. (Participant 1, pre-group)

For other participants, clinging onto relationships in this way was simply “too hard” (Participant 7, pre-group) and so they focused their energy on single friendships or distanced themselves entirely. The participants who distanced themselves expressed that this was not their ideal situation and that they would rather learn how to maintain healthy relationships.

After MI-DBT, many women seemed more confident that their worthwhile relationships could be maintained without excessive attempts to alter themselves. Instead of overcompensating for their differences, many women began prioritising friendships with people who accepted them, speaking up when they felt like their needs were not being met and no longer doing things they did not want to do simply for the other person’s sake. Participant 11 explained how communicating her needs improved how others treated her and helped to regulate her emotions:

I’m more assertive with the way that I speak to people and so people aren’t treating me the way they were and I’m not bottling it in and getting angry at them...because I kind of cut it off before they can. (Participant 11, post-group)

An added benefit of MI-DBT was that it connected the women with similar people. This mutual understanding provided the women with a rare outlet to be their unfiltered selves, where they could speak freely and seek advice without judgement. In the follow-up interviews, several women expressed that they had maintained their friendships with fellow group members through Facebook. Other women were distressed about the sudden loss of these close relationships after the treatment, citing this as a reason for wanting continual 'check-in' sessions. In addition to follow-up sessions, the participants wanted their close friends and family to be more involved in MI-DBT so that they could also have this shared understanding. Participant 8 explained how mandated partner involvement in therapy might compensate for their lack of motivation to understand:

Opening his eyes into what I'm going through a bit, 'cos I do it by myself, I don't lean on him so much...I have to do it all by myself...I did lie a bit and say we have to do this with our partners. (Participant 8, post-group)

Ultimately, it seems that the increased self-acceptance of participants fed into an increased ability to set boundaries with others and prioritise relationships which did not require that they drastically altered themselves. In relationships where it was close family members, such as parents and partners, being uncooperative, the participants struggled to find positive solutions.

Discussion

Overview

This study aimed to explore the subjective experiences of mothers with BPD before and after MI-DBT. Using thematic analysis, five themes were developed: (1) *'Boiling Points,'* (2) *Emotional Literacy,* (3) *Intergenerational Transmission,* (4) *Low Self-Esteem,* and (5) *Dealing with Disconnect.*

During moments of heightened emotional arousal, or 'boiling points,' the women's controlled thinking was replaced by automatic stress responses and defence mechanisms. MI-DBT seemed to improve the emotional literacy of participants, or the ability to recognise and

communicate their emotions, subsequently allowing them to pause, accept their emotions and maintain control during these 'boiling points.' Through modelling and teaching, the children in this study also displayed improvements in their emotional literacy and emotion regulation, potentially addressing the risk of intergenerational symptom transmission, described in Theme 3. Furthermore, feeling like they were making a positive impact on their children bolstered the women's self-esteem, another key challenge for this population, as described in Theme 4. Improved self-esteem flowed onto the women's relationships, as described in Theme 5, *Dealing with Disconnect*. After MI-DBT, the women seemed more confident that their worthwhile relationships could be maintained without sacrificing their needs and emotions. Ultimately, it seems that MI-DBT may have contributed to improved emotional literacy and regulation in the women, subsequently addressing key risks and challenges such as uncertainty around their child's cues, poor self-esteem and intergenerational transmission.

Analysis

1. 'Boiling Points'

Theme 1, *'Boiling Points'*, illustrates how the thought and behavioural patterns of individuals with BPD may be altered during emotional moments. Under interpersonal stress, the women seemed to switch to 'survival mode,' enacting fight-flight-freeze responses (Bichescu-Burian, 2012; Geerling et al., 2019). In 'fight' mode, the women experienced urges to throw things, yell and scream. 'Flight' behaviours included withdrawing and going for walks alone. 'Freeze' responses were the most common and debilitating for these women, describing mental shutdowns and lost functioning. These responses support the theory that individuals with BPD have a lowered threshold for the fight-flight-freeze response (Jogems-Kosterman et al., 2007). Fonagy and Luyten (2009) hypothesise that this lowered threshold is adopted following trauma, common in people with BPD, as it protects individuals against alarming or threatening others. Trauma was relevant to our sample, as discussed in Theme 3, *Intergenerational Transmission*. We found that fight-flight-freeze responses

were usually triggered by the children's distress, supporting suggestions that infant interactions may trigger childhood traumas in mothers with BPD (Fonagy & Target, 1997; Lyons-Ruth et al., 2005; Marcoux et al., 2017). As found by Hobson et al. (2009), these fight-flight-freeze responses can be frightening for children, impairing their development of secure attachments. In summary, our study consolidates the finding in the existing literature that mothers with BPD are at risk of enacting heightened stress responses around their children, which impair the development of secure attachments.

In addition to the fight-fright-freeze response, the women enacted automatic mentalisation during their 'boiling points.' When the women perceived interpersonal threats, their normal controlled thinking became faster and more defensive. Fonagy and Luyten (2009) might describe this as a switch from *controlled* to *automatic* mentalisation. During this switch, individuals automatically engage defensive thought patterns to cope with fears of abandonment, neglect or maltreatment (Finzi-Dottan et al., 2006). Negative self-evaluations were the most common automatic thoughts in this sample, linking to Theme 1, '*Boiling Points*,' to Theme 4, *Low Self-Esteem*. The women's focus on how they might be coming across or what they might be doing incorrectly seemed to impair their ability to neutrally observe social cues. After MI-DBT, the women employed fight-flight-freeze responses and automatic mentalisation less frequently. Improved control was consistently attributed to the mindfulness and distress tolerance modules, both emphasising a need to pause, observe one's emotions then actively think before responding. This process became habitual for many women, providing tentative evidence that MI-DBT could equip participants with techniques to maintain their emotion regulation alone, after treatment. Future interventions should consider ways to make techniques more accessible for the mothers during infant interactions, as some of the women struggled to self-soothe while engaging with their child.

2. Emotional Literacy

Theme 2, *Emotional Literacy*, describes the women's difficulties with naming and communicating their emotions. Consistent with the literature (Zaki et al., 2013), poor emotional literacy made emotions feel overwhelming and unmanageable to the women and contributed to feelings of disconnect, as described in Theme 5. In line with prior research (Holm et al., 2009; Katsakou et al., 2012; Zalewski et al., 2015), the women wanted to communicate their emotions more effectively to elicit greater understanding from others, particularly their children, problem-solve during conflicts and reduce their isolation. After MI-DBT, the women described significant improvements to their emotional literacy. This supports the theory that emotional literacy is a learnable skill which can be targeted through intervention (Jahangard et al., 2012). Throughout MI-DBT, the women received psychoeducation about how emotions may present and were taught to mindfully observe these emotions as they arose. Subsequently, we suspect that the women's increased ability to verbalise their emotions was partially a result of improved emotion recognition. Consistent with the literature (Barrett et al., 2001; Kang & Shaver, 2004; Teper et al., 2013), emotion recognition facilitated improved emotional regulation in the women. Naming their emotions allowed the women to accept these emotions non-judgementally and employ appropriate coping strategies. Additionally, emotion recognition allowed the women to communicate their emotions to others, providing validation and support. Overall, it seems that MI-DBT may have improved the women's ability to understand and communicate their emotions, subsequently making these emotions more manageable.

3. Intergenerational Transmission

Consistent with the literature, many women attributed their BPD to childhood experiences. During childhood, the women experienced emotionally demanding situations, such as familial substance abuse and maltreatment, and were not given strategies to cope. Instead, the women described how their caregivers modelled maladaptive coping strategies, such as denial and

withdrawal, which they adopted themselves. These insights are consistent with *diathesis-stress models* of BPD, proposing that environmental factors, such as trauma, insecure attachments and modelling, activate genetic predispositions to BPD (Fruzzetti et al., 2005; Steele & Siever, 2010). The women's desire to break this cycle largely drove their treatment efforts. This intrinsic motivation to improve their children's futures has been found in other studies of maternal psychopathology (Oyserman et al., 2000) suggesting that it could be used to draw reluctant mothers towards therapy and encourage perseverance throughout. Consistent with previous studies (Oyserman et al., 2000; Zalewski et al., 2015) the women were eager to revert any damage by teaching emotion regulation skills to their children. The women felt their children benefitted from MI-DBT skills, noting improvements in emotional literacy, as described in Theme 2. Emotional literacy could be highly beneficial to these children as it protects against the development and exacerbation of mental illnesses (Jorm, 2011). In addition to improving the children's emotional literacy, teaching skills to their children consolidated the mothers' own learning. Furthermore, modelling positive behaviours bolstered the women's sense of parenting competency. Other studies have found similar benefits from parents teaching their children emotional regulation skills (Rothenberg et al., 2018). The women's insights consolidated theories about the intergenerational transmission of BPD and provided tentative evidence that MI-DBT could weaken this cycle.

4. Low Self Esteem

Consistent with the literature (Zalewski et al., 2015; Zeigler-Hill & Abraham, 2006), our sample suffered from low self-esteem, particularly in the form of guilt and shame. According to Lewis (1971), shame relates to negative perceptions of the global self, while guilt focuses on specific behaviours. After MI-DBT, guilt seemed to reduce more easily than shame. This may be because MI-DBT reduced the frequency of guilt-inducing behaviours such as yelling, withdrawing and self-harming through its emotional regulation and interpersonal strategies. In Zalewski et al.'s (2015) qualitative study, mothers with BPD expressed that guilt impaired their mental health and ability to

parent effectively. The finding that guilt reduced after MI-DBT suggests that MI-DBT may address a key risk factor of its target population.

Many women made statements more indicative of shame. Shame is a core symptom of BPD, considered to be the result of genetic predispositions being activated by non-attuned or inconsistent parenting (Linehan, 1993). Shame may be exacerbated by the high levels of BPD stigma found in laypeople and healthcare professionals. Ring and Lawn's (2019) review of 30 qualitative studies found that patients with BPD were considered manipulative, unempathetic and attention-seeking by health professionals. Dolman et al.'s (2013) systematic review found that the stigma associated with mental illness is reinforced by being a parent. As Davies and Allen (2007, pp.374) express, mothers with mental illnesses "face particular challenges of identity management because of the inherent tension between the societal ideals around the 'good mother' and social norms associated with mental illness." The traits prototypically associated with BPD, in particular, juxtapose the expectation of mothers to be selfless, calm and empathetic (Henshaw et al., 2014). Our study substantiates this literature, with the women describing how stigma contributed to their pervasive shame. While several women still struggled with shame after MI-DBT, it seems that most women were more capable of managing it. Several factors might explain these changes in shame. Firstly, HMH clinicians are specialised in treating mothers with BPD, allowing them to adopt a more compassionate approach than unspecialised clinicians. Ring and Lawn's (2019) review found that stigma in health professionals was associated with poor BPD knowledge, suggesting that well-informed professionals might be less stigmatising, resulting in lowered shame in treatment users. Secondly, meeting women with shared experiences likely fostered self-compassion in the women. Given its pervasive impact on mothers with BPD, shame may be a useful treatment target in future treatments.

5. Dealing with Disconnect

The women displayed two distinct responses to feelings of disconnect from others. Overcompensation related to intense efforts to hold onto relationships while withdrawal occurred when the women found it easier to abandon efforts altogether. Mikulincer et al.'s (2003) extension of Bowlby's (1973) attachment theory is useful in explaining these responses. Mikulincer et al. (2003) propose that when confronted with threatening events, the *primary attachment strategy* is to seek proximity with stable attachment figures. In the absence of stable attachment figures, individuals adopt *secondary attachment strategies* (Mikulincer et al., 2003). Secondary attachment strategies involve defensive fears of abandonment (hyperactivation of the attachment system), during which the individual attempts to maintain closeness with others at all costs, and fears of closeness (deactivation of the attachment system), during which the individual evades the pain of abandonment by avoiding closeness (Mikulincer et al., 2003). The overcompensation we observed might be considered a hyperactivation of the attachment system while withdrawal is potentially a deactivation. Under Mikulincer et al.'s (2003) model, both of these responses stem from underlying expectations that the relationship will fail. In line with the findings in Theme 4, *Low Self-Esteem*, most of the women blamed themselves for relationship issues, expressing that their relationships could only survive if they sacrificed their needs or altered themselves. Ultimately, underlying self-esteem issues meant that the women struggled to find a healthy balance between closeness and distance with others.

After MI-DBT, the women seemed more confident that their worthwhile relationships could be maintained without sacrificing their needs and emotions. The women felt more comfortable with a balanced level of closeness in their relationships, showing fewer tendencies towards overcompensation and withdrawal. While previous approaches to relationship maintenance focused primarily on appeasing the other person, after MI-DBT the women were more inclined to consider their own boundaries, needs and emotions. Descriptions from the women and the literature on BPD

relationships (Crowe, 2004) indicates that this shift may relate to the women's improved self-worth. Crowe (2004) argues that individuals with BPD often behave as they believe others prefer so that others will stay with them and treat them well. After MI-DBT, it seems that the women learned that they did not have to be their most 'pleasing' selves to warrant respect and appreciation from others. The women were particularly comfortable connecting with other mothers with BPD, as their shared experiences made them confident that they would not be judged. Unfortunately, many women still struggled to maintain healthy relationships with family members who refused to compromise with them or educate themselves on BPD. Overall, it seems likely that the women's improved self-esteem, discussed in Theme 4, contributed to their improved confidence in relationships.

Strengths

Given the turbulent nature of BPD, a longitudinal design strengthened this study, allowing researchers to track individual change trajectories. Furthermore, by observing participant responses before and after MI-DBT, researchers were able to evaluate the impact of treatment, albeit with numerous extraneous variables also impacting the participants' changing presentations across the three timepoints.

Even though a convenience sample was utilised, saturation of the main themes was likely achieved. Constantinou et al.'s (2017) comparative method for themes saturation indicates that when approximately three consecutive interviews generate no new themes, saturation has probably been achieved. By Participant 8, it became apparent that all major ideas could be discussed in relation to the themes already developed, with subsequent interviews confirming this. Nelson (2017) argues that saturation can never be achieved, but 'conceptual depth' should provide confidence in the transferability of conclusions to other circumstances. Our data achieved all five conceptual depth criteria, being range, complexity, subtlety, resonance and validity.

This study consolidates the existing literature on parenting with BPD and potential treatments. Firstly, the qualitative findings of this study substantiate the largely quantitative

research on the common behavioural patterns and outcomes for mothers with BPD produced thus far. For example, risks such as emotional outbursts towards children, withdrawal and intergenerational transmission are now quantitatively and qualitatively evident. Secondly, the insights of our sample aligned with the few other qualitative studies of mothers with BPD (Geerling et al., 2019; Zalewski et al., 2015). Specifically, infant-triggered distress, impaired mentalisation while dysregulated, poor emotional literacy, guilt and shame are all unique risk factors which can be targeted in parenting-specific BPD treatments. Furthermore, it appears that the treatment desires of mothers with BPD in Zalewski et al.'s (2015) study, such as gaining commonality with other mothers and teaching their children emotion regulation skills, were fulfilled by MI-DBT. Thirdly, the subjective improvements in maternal mental health and the mother-infant relationship observed in this study substantiate the quantitative improvements observed by Sved Williams et al (2018). Furthermore, this study provides potential explanations for why Sved Williams et al. (2018) found that some dyads did not improve in relationship quality and why improvements in sense of parenting competence were statistically nonsignificant. Some women attributed their continual difficulties with their children to factors such as the child's challenging developmental stage, external issues around custody and periodic mental health 'lows,' unreflective of their overall improvements. Statistically nonsignificant improvements to parenting sense of competence could be explained by the women still experiencing pervasive shame after MI-DBT. The unique risk factors and challenges of mothers with BPD found in this study can become more treatment targets when modifying therapies such as MI-DBT.

Limitations

The varying locations of interviews may have weakened response consistency. Depending on which was most convenient to the participants, pre- and post-group interviews were either conducted at HMH or in the participants' homes. The home may have been more comfortable to some women due to its familiarity, while HMH may have been more comfortable to others due to

the lack of external stressors. There is a possibility that the comfort levels of the women contributed to their response depth. Furthermore, out of convenience, follow-up interviews were conducted via telephone. Not seeing the other person's non-verbal cues may have weakened the level of understanding between the interviewer and interviewee. Depending on their preferences, some participants may have felt less willing to divulge their experiences on either the phone or in person, reducing the consistency of responses across the three timepoints. While interview location may have slightly weakened the consistency of responses, the researchers tried to adopt the approach most convenient to individual participants out of respect for their time. Furthermore, most women seemed to adopt a similar response depth across the interviews, suggesting that varying interview locations did not impact the usefulness of results.

Due to their treatment role at HMH, one of the interviewers was already familiar with several of the women they interviewed. This familiarity could be considered a limitation to this study as the interviewer's questions and responses might have been driven by their prior knowledge of the participant. Contrastingly, this familiarity could be considered a strength as the participants had already established good rapport with their interviewer as a treatment ally and may have felt more comfortable divulging emotional information.

The fact that children were present during several of the interviews may have reduced response richness. In some transcripts, it was evident that children were demanding their mothers' attention, occasionally interrupting her mid-sentence. For future qualitative studies on mothers with BPD, it might be useful for researchers to provide childcare during all interviews. Childcare would also make it easier to conduct interviews in a consistent location, such as HMH.

Implications

The unique risks and challenges found in other qualitative studies of mothers with BPD (Geerling et al., 2019; Zalewski et al., 2015), such as uncertainty about their children's cues, fears of intergenerational transmission and guilt over the impact of their disorder, were consolidated in this

study. It seems that the MI-DBT skills focused on emotional regulation and literacy contributed to improvements in each of these areas. Subsequently, this study provides further support that MI-DBT might contribute to improved maternal mental health and mother-infant relationships. An added benefit of MI-DBT, outside of its teachings, was its ability to connect women with others who shared their experience. For many women, the group provided a continual source of support and validation after therapy. Other women felt that these connections diminished after treatment, recommending continual 'check-in' sessions after treatment. 'Check-in' sessions may also be useful for ensuring that the women utilise their training when faced with new challenges. Furthermore, it might be useful for future therapies to incorporate a greater focus on reducing shame and coping with unsupportive family members, as these issues were a continued source of distress after MI-DBT. In summary, our research consolidates previous research on mothers with BPD and provides support and potential modifications for MI-DBT.

Conclusion

This is the first qualitative study to explore the subjective experiences of mothers with BPD before and after a parenting-specific BPD treatment. Before MI-DBT, the women described a stress response during which their previously controlled thoughts and behaviours became automatic and defensive. These defence mechanisms impaired the women's ability to recognise and respond to their infants' cues, contributing to guilt, shame and fears of intergenerational transmission. After MI-DBT, the women adopted a habitual process of pausing, recognising their emotions and actively thinking about how to respond under interpersonal stress. The MI-DBT modules of mindfulness and distress tolerance were most commonly credited for these improvements in emotional literacy and regulation. Through modelling, the women also improved the emotional literacy and regulation of their children, addressing guilt and fears of intergenerational transmission. Shame was also addressed by MI-DBT, with most women feeling less obliged to sacrifice their needs and emotions for the sake of their relationships. Interacting with women who shared their experience and

engaging with specialised clinicians may have facilitated this improved self-esteem. As shame was still an issue for some women after MI-DBT, it may be a useful treatment target in future interventions. Further research could also consider the impact of continual 'check-ins' after therapy and a greater focus on coping with unsupportive family members. Ultimately, this study consolidates research on the unique risk factors and challenges faced by mothers with BPD, provides further support for MI-DBT in addressing these factors and suggests areas for modification.

References

- Agrawal, H., Gunderson, J., Holmes, B., & Lyons-Ruth, K. (2004). Attachment studies with borderline patients: A review. *Harvard Review of Psychiatry, 12*(2), 94-104.
- American Psychiatric Association. (2001). *Practice guideline for the treatment of patients with Borderline Personality Disorder*. Washington, D.C.: American Psychiatric Association.
- American Psychiatric Association. (2013). *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.). Arlington: American Psychiatric Association.
- Apter, G., & Williams, A. (2018). Infants of emotionally dysregulated or Borderline Personality Disordered mothers: Issues and management in primary care. *Australian Journal of General Practice, 47*(4), 200-203.
- Australian Bureau of Statistics. (2018). *2033.0.55.001 - Census of Population and Housing: Socio-Economic Indexes for Areas (SEIFA), Australia, 2016*. Retrieved 28 August 2020, from <https://www.abs.gov.au/ausstats/abs@.nsf/Lookup/by%20Subject/2033.0.55.001~2016~Main%20Features~IRSAD~20>
- Bagge, C., Nickell, A., Stepp, S., Durrett, C., Jackson, K., & Trull, T. (2004). Borderline Personality Disorder features predict negative outcomes 2 years later. *Journal of Abnormal Psychology, 113*(2), 279-288.
- Barrett, L., Gross, J., Christensen, T., & Benvenuto, M. (2001). Knowing what you're feeling and knowing what to do about it: Mapping the relation between emotion differentiation and emotion regulation. *Cognition & Emotion, 15*(6), 713-724.
- Bateman, A., & Fonagy, P. (2010). *Mentalization-Based Treatment for Personality Disorders: A Practical Guide*. Oxford: Oxford University Press.

- Bichescu-Burian, D. (2012). A trauma-related dissociation model may explain psychopathology of the difficult-to-treat BPD patients. *Procedia - Social and Behavioural Sciences*, 33, 95-99.
- Bowlby, J. (1973). Separation, Anxiety and Anger. *Attachment and Loss*.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Buchheim, A., Erk, S., George, C., Kächele, H., Kircher, T., & Martius, P. et al. (2008). Neural correlates of attachment trauma in Borderline Personality Disorder: A functional magnetic resonance imaging study. *Psychiatry Research: Neuroimaging*, 163(3), 223-235.
- Cassidy, J., & Shaver, P. (2016). *Handbook of Attachment* (3rd ed.). New York: The Guilford Press.
- Constantinou, C., Georgiou, M., & Perdikogianni, M. (2017). A comparative method for themes saturation (CoMeTS) in qualitative interviews. *Qualitative Research*, 17(5), 571-588.
- Coyne, L., & Murrell, A. (2009). *The Joy of Parenting: An Acceptance and Commitment Therapy Guide to Effective Parenting in the Early Years*. Oakland, CA: New Harbinger Publications.
- Crandell, L., Patrick, M., & Hobson, R. (2003). 'Still-face' interactions between mothers with Borderline Personality Disorder and their 2-month-old infants. *British Journal of Psychiatry*, 183(3), 239-247.
- Crittenden, P. (2005). Using the CARE-Index for screening, intervention and research. *Fruhforderung interdisziplinär (Early Interdisciplinary Intervention)*, 24, 99-106.
- Crowe, M. (2004). Never good enough - part 1: shame or Borderline Personality Disorder?. *Journal of Psychiatric and Mental Health Nursing*, 11(3), 327-334.
- Daros, A., Zakzanis, K., & Ruocco, A. (2013). Facial emotion recognition in Borderline Personality Disorder. *Psychological Medicine*, 43(9), 1953-1963.

- Davies, B., & Allen, D. (2007). Integrating 'mental illness' and 'motherhood': The positive use of surveillance by health professionals. A qualitative study. *International Journal of Nursing Studies*, 44(3), 365-376.
- Dolman, C., Jones, I., & Howard, L. (2013). Pre-conception to parenting: a systematic review and meta-synthesis of the qualitative literature on motherhood for women with severe mental illness. *Archives of Women's Mental Health*, 16(3), 173-196.
- Donegan, N., Sanislow, C., Blumberg, H., Fulbright, R., Lacadie, C., & Skudlarski, P. et al. (2003). Amygdala hyperreactivity in Borderline Personality Disorder: implications for emotional dysregulation. *Biological Psychiatry*, 54(11), 1284-1293.
- Eyden, J., Winsper, C., Wolke, D., Broome, M., & MacCallum, F. (2016). A systematic review of the parenting and outcomes experienced by offspring of mothers with borderline personality pathology: Potential mechanisms and clinical implications. *Clinical Psychology Review*, 47, 85-105.
- Fadyl, J., Channon, A., Theadom, A., & McPherson, K. (2016). Optimising qualitative longitudinal analysis: Insights from a study of traumatic brain injury recovery and adaptation. *Nursing Inquiry*, 24(2), 1-8.
- Finzi-Dottan, R., & Karu, T. (2006). From emotional abuse in childhood to psychopathology in adulthood. *The Journal of Nervous and Mental Disease*, 194(8), 616-621.
- Fonagy, P., & Luyten, P. (2009). A developmental, mentalization-based approach to the understanding and treatment of Borderline Personality Disorder. *Development and Psychopathology*, 21(4), 1355-1381.
- Fonagy, P., & Target, M. (1997). Attachment and reflective function: Their role in self-organization. *Development and Psychopathology*, 9(4), 679-700.

- Fonagy, P., Leigh, T., Steele, M., Steele, H., Kennedy, R., & Mattoon, G. et al. (1996). The relation of attachment status, psychiatric classification, and response to psychotherapy. *Journal of Consulting and Clinical Psychology, 64*(1), 22-31.
- Forman, D., O'Hara, M., Stuart, S., Gorman, L., Larsen, K., & Coy, K. (2007). Effective treatment for postpartum depression is not sufficient to improve the developing mother–child relationship. *Development and Psychopathology, 19*(2), 585-602.
- Fruzzetti, A., Shenk, C., & Hoffman, P. (2005). Family interaction and the development of Borderline Personality Disorder: A transactional model. *Development and Psychopathology, 17*(4), 1007-1030.
- Geerling, I., Roberts, R., & Sved Williams, A. (2019). Impact of infant crying on mothers with a diagnosis of Borderline Personality Disorder: A qualitative study. *Infant Mental Health Journal, 40*(3), 405-421.
- Genet, M., Valérie, G., Emmanuel, D., Marina, V., Annick, L., & Apter, G. (2015). Motherhood of women with Borderline Personality Disorder and interaction with their children: Longitudinal perspectives in motherhood, mother-baby's interaction, attachment and emotional regulation of the children. *European Child & Adolescent Psychiatry, 24*(1).
- Helfer, R. (1987). The perinatal period, a window of opportunity for enhancing parent-infant communication: An approach to prevention. *Child Abuse & Neglect, 11*(4), 565-579.
- Henshaw, E., Fried, R., Teeters, J., & Siskind, E. (2014). Maternal expectations and postpartum emotional adjustment in first-time mothers: results of a questionnaire survey. *Journal of Psychosomatic Obstetrics & Gynaecology, 35*(3), 69-75.
- Hobson, R., Patrick, M., Crandell, L., García-Pérez, R., & Lee, A. (2005). Personal relatedness and attachment in infants of mothers with Borderline Personality Disorder. *Development and Psychopathology, 17*(2).

- Hobson, R., Patrick, M., Hobson, J., Crandell, L., Bronfman, E., & Lyons-Ruth, K. (2009). How mothers with Borderline Personality Disorder relate to their year-old infants. *British Journal of Psychiatry, 195*(4), 325-330.
- Holm, A., Bégat, I., & Severinsson, E. (2009). Emotional pain: surviving mental health problems related to childhood experiences. *Journal of Psychiatric and Mental Health Nursing, 16*(7), 636-645.
- Jahangard, L., Haghghi, M., Bajoghli, H., Ahmadpanah, M., Ghaleiha, A., Zarrabian, M., & Brand, S. (2012). Training emotional intelligence improves both emotional intelligence and depressive symptoms in inpatients with Borderline Personality Disorder and depression. *International Journal of Psychiatry in Clinical Practice, 16*(3), 197-204.
- Jogems-Kosterman, B., de Knijff, D., Kusters, R., & van Hoof, J. (2007). Basal cortisol and DHEA levels in women with Borderline Personality Disorder. *Journal of Psychiatric Research, 41*(12), 1019-1026.
- Jorm, A. (2011). Mental health literacy: Empowering the community to take action for better mental health. *American Psychologist, 67*(3), 231-243.
- Kang, S., & Shaver, P. (2004). Individual differences in emotional complexity: Their psychological implications. *Journal of Personality, 72*(4), 687-726.
- Katsakou, C., Marougka, S., Barnicot, K., Savill, M., White, H., Lockwood, K., & Priebe, S. (2012). Recovery in Borderline Personality Disorder (BPD): A qualitative study of service users' perspectives. *PLOS ONE, 7*(5), 1-8.
- Kiel, E., Gratz, K., Moore, S., Litzman, R., & Tull, M. (2011). The impact of borderline personality pathology on mothers' responses to infant distress. *Journal of Family Psychology, 25*(6), 907-918.

- Laporte, L., & Guttman, H. (1996). Traumatic Childhood Experiences as Risk Factors for Borderline and other Personality Disorders. *Journal of Personality Disorders, 10*(3), 247-259.
- Lewis, H. (1971). *Shame and Guilt in Neurosis*. New York: International Universities Press.
- Linehan, M. (1993). *Cognitive-Behavioral Treatment of Borderline Personality Disorder*. New York: The Guildford Press.
- Linehan, M. (2015). *DBT Skills Training, Handouts and Worksheets*. New York: The Guilford Press.
- Linehan, M. (2017). *DBT Skills Training Manual (2nd ed.)*. New York: Guilford Publications.
- Lotzin, A., Lu, X., Kriston, L., Schiborr, J., Musal, T., Romer, G., & Ramsauer, B. (2015). Observational tools for measuring parent–infant interaction: A systematic review. *Clinical Child and Family Psychology Review, 18*(2), 99-132.
- Lyons-Ruth, K., Bureau, J., Holmes, B., Easterbrooks, A., & Brooks, N. (2013). Borderline symptoms and suicidality/self-injury in late adolescence: Prospectively observed relationship correlates in infancy and childhood. *Psychiatry Research, 206*(2-3), 273-281.
- Lyons-Ruth, K., Yellin, C., Melnick, S., & Atwood, G. (2005). Childhood experiences of trauma and loss have different relations to maternal unresolved and Hostile-Helpless states of mind on the AAI. *Attachment & Human Development, 5*(4), 330-352.
- Main, M., & Soloman, J. (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth Strange Situation. In M. Greenberg, D. Cicchetti & C. Cummings, *Attachment in the Preschool Years: Theory, Research, and Intervention* (pp. 121-160). Chicago: University of Chicago Press.
- Maliken, A., & Katz, L. (2013). Exploring the impact of parental psychopathology and emotion regulation on evidence-based parenting interventions: A transdiagnostic approach to o-

- improving treatment effectiveness. *Clinical Child and Family Psychology Review*, 16(2), 173-186.
- Marco, J., Pérez, S., García-Alandete, J., & Moliner, R. (2015). Meaning in life in people with Borderline Personality Disorder. *Clinical Psychology & Psychotherapy*, 24(1), 162-170.
- Marcoux, A., Bernier, A., Séguin, J., Boike Armerding, J., & Lyons-Ruth, K. (2017). How do mothers with Borderline Personality Disorder mentalize when interacting with their infants?. *Personality and Mental Health*, 11(1), 14-22.
- Marvin, R., Cooper, G., Hoffman, K., & Powell, B. (2002). The Circle of Security project: Attachment-based intervention with caregiver-pre-school child dyads. *Attachment & Human Development*, 4(1), 107-124.
- McCarthy, K., Lewis, K., Bourke, M., & Grenyer, B. (2016). A new intervention for people with Borderline Personality Disorder who are also parents: a pilot study of clinician acceptability. *Borderline Personality Disorder and Emotion Dysregulation*, 3(1).
- Mikulincer, M., Shaver, P., & Pereg, D. (2003). Attachment theory and affect regulation: The dynamics, development, and cognitive consequences of attachment-related strategies. *Motivation and Emotion*, 27(2), 77-102.
- Murray, L. (2014). *The Psychology of Babies: How Relationships Support Development from Birth to Two*. London: Constable and Robinson.
- Nelson, J. (2017). Using conceptual depth criteria: addressing the challenge of reaching saturation in qualitative research. *Qualitative Research*, 17(5), 554-570.
- Newman, L., Stevenson, C., Bergman, L., & Boyce, P. (2007). Borderline Personality Disorder, mother–infant interaction and parenting perceptions: Preliminary findings. *Australian & New Zealand Journal of Psychiatry*, 41(7), 598-605.

- Oyserman, D., Mowbray, C., Meares, P., & Firminger, K. (2000). Parenting among mothers with a serious mental illness. *American Journal of Orthopsychiatry*, 70(3), 296-315.
- Rees, C. (2007). Childhood Attachment. *British Journal of General Practice*, 57(544), 920-922.
- Renneberg, B., & Rosenbach, C. (2016). "There is not much help for mothers like me": Parenting skills for mothers with Borderline Personality Disorder – a newly developed group training program. *Borderline Personality Disorder and Emotion Dysregulation*, 3(1).
- Ring, D., & Lawn, S. (2019). Stigma perpetuation at the interface of mental health care: a review to compare patient and clinician perspectives of stigma and Borderline Personality Disorder. *Journal of Mental Health*, 12, 1-21.
- Rothenberg, W., Weinstein, A., Dandes, E., & Jent, J. (2018). Improving child emotion regulation: effects of parent–child interaction-therapy and emotion socialization strategies. *Journal of Child and Family Studies*, 28(3), 720-731.
- Saldaña, J. (2003). *Longitudinal qualitative research*. Walnut Creek: AltaMira Press.
- Sansone, R., & Sansone, L. (2012). Employment in Borderline Personality Disorder. *Innovations in Clinical Neuroscience*, 9(9), 25-29.
- Steele, H., & Siever, L. (2010). An attachment perspective on Borderline Personality Disorder: Advances in gene–environment considerations. *Current Psychiatry Reports*, 12(1), 61-67.
- Stepp, S., Whalen, D., Pilkonis, P., Hipwell, A., & Levine, M. (2011). Children of mothers with Borderline Personality Disorder: Identifying parenting behaviours as potential targets for intervention. *Personality Disorders: Theory, Research, And Treatment*, 3(1), 76-91.
- Sved Williams, A. (2017). Helping mothers with the emotional dysregulation of Borderline Personality Disorder and their infants in primary care settings. *Australian Family Physician*, 46(9), 669-672.

- Sved Williams, A., Yelland, C., Hollamby, S., Wigley, M., & Aylward, P. (2018). A new therapeutic group to help women with Borderline Personality Disorder and their infants. *Journal of Psychiatric Practice, 24*(5), 331-340.
- Teper, R., Segal, Z., & Inzlicht, M. (2013). Inside the mindful mind: How mindfulness enhances emotion regulation through improvements in executive control. *Current Directions in Psychological Science, 22*(6), 449-454.
- White, H., Flanagan, T., Martin, A., & Silvermann, D. (2011). Mother–infant interactions in women with Borderline Personality Disorder, major depressive disorder, their co-occurrence, and healthy controls. *Journal of Reproductive and Infant Psychology, 29*(3), 223-235.
- Yelland, C., Girke, T., Tottman, C., & Sved Williams, A. (2015). Clinical characteristics and mental health outcomes for women admitted to an Australian Mother–Baby Unit: a focus on Borderline Personality Disorder and emotional dysregulation?. *Australasian Psychiatry, 23*(6), 683-687.
- Zaki, L., Coifman, K., Rafaeli, E., Berenson, K., & Downey, G. (2013). Emotion differentiation as a protective factor against nonsuicidal self-injury in Borderline Personality Disorder. *Behaviour Therapy, 44*(3), 529-540.
- Zalewski, M., Stepp, S., Whalen, D., & Scott, L. (2015). A qualitative assessment of the parenting challenges and treatment needs of mothers with Borderline Personality Disorder. *Journal of Psychotherapy Integration, 25*(2), 71-89.
- Zeigler–Hill, V., & Abraham, J. (2006). Borderline Personality features: Instability of self–esteem and affect. *Journal of Social and Clinical Psychology, 25*(6), 668-687.

Appendix

Pre-Group Interview Questions

- 1) What emotions are you currently struggling with? (For each emotion) How often do you struggle with this, and what does this emotion lead you to do? How do you try to manage or 'fix' this emotion? How successful is this? (emotions to question about if not offered spontaneously are sadness/depression, anger/frustration; anxiety/fear; guilt/shame)
- 2) Are you having difficulties with other people? Which people and what kind of difficulties? What do they do that causes you difficulties? How do you respond? What usually happens?
- 3) Are you experiencing any specific difficulties in your relationship with your infant? If so, what difficulties are you experiencing? When do you experience these difficulties (e.g. at certain times like settling to sleep or when they are distressed)? At these times how do you feel? What do you do (for yourself and how do you respond to your infant)? What helps at these times? How do you feel about your infant?
- 4) What things have you tried so far in terms of getting help for managing your emotions? How helpful have these things been?
- 5) What are you hoping to get out of attending the MI-DBT group? What are you hoping will change for you (in terms of your emotions, relationships with others and relationship with your infant in particular)? What situations are you hoping you will be able to manage more easily?
- 6) Are you hoping that being in the MI-DBT group may lead to any changes in your infant's behaviour? If so, what sort of changes?
- 7) Are you currently connected with any family/children support services in your community (e.g. playgroup, children's centres)?

Post-Group Interview Questions

- 1) Before starting the group, you indicated that you were struggling with (each emotion identified). Are you still struggling with that emotion? Has it changed and if so, how? Before when you were experiencing this emotion, you would (describe behaviour). Does this still occur, and how has it changed since starting the group? What do you do now to try to manage it, and how successful is this?
- 2) Prior to the group you identified that you were having difficulties with (each person), particularly in regard to (the kind of difficulties they described). Are you still having these difficulties? Before the group you said that you would respond to these difficulties by (describe what they indicated they would do). Are you still responding in that way or do you respond differently? What usually happens when you do this?
- 3) Prior to the group you identified that you were experiencing (each specific difficulty) with your infant. Are you still experiencing these difficulties? How have they changed? Before the group you said that you felt (each specific feeling) when you were experiencing these difficulties. Do you still feel like this now? How has that changed? You said that you would (describe what they did) when you were experiencing this difficulty. Do you still respond in that way or do you respond differently now? What usually happens when you do this? How do you feel toward your infant and has this changed during MI-DBT?
- 4) Before starting the group, we asked what you were hoping to get out of attending MI-DBT. You said that you were hoping to (describe identified goals – including goals related to their emotions, relationships and issues with their infants, as well as the situations they indicated they were hoping to be able to manage more easily). (For each) Do you think this goal was achieved? In what way? Are there things that you would still like to be able to manage better or that you are still struggling with?

- 5) You also indicated that you were hoping that coming to MI-DBT would lead to changes in how (describe identified infant's behaviour). Do you think these changes have occurred? Are there still things that your infant does that you would like to be different?
- 6) Overall, do you think MI-DBT has helped you? If so, how?
- 7) Was there anything more that you think MI-DBT could have helped you with in being able to manage your emotions and relationships, particularly with your infant, more effectively?
- 8) What will you do now in terms of keeping on top of your emotions? Are you still using your MI-DBT skills? Are you seeking therapy from somewhere else or are you linked into other supports?

Follow-Up Interview Questions

- 1) How have things been going for you since you finished MI-DBT?
- 2) How have things been going for your infant since you finished MI-DBT?
- 3) Are you still using the skills you learnt in MI-DBT to manage your emotions and relationships more successfully? If so which skills, and what difference is it making in your life?
- 4) Are you using your skills with your infant? Again, which skills are you using and how well are they working for you and your infant?
- 5) What gets in the way of using the skills you learnt in MI-DBT?
- 6) What other supports do you think would have been helpful for you to have access to after you finished MI-DBT?
- 7) Have you sought out other therapies since finishing MI-DBT?
- 8) Do you have any other ideas about how the group could have been more helpful for you in the long term?