



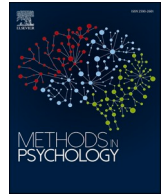
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A mixed method analysis of open ended interviews with mothers of young children: Combining psychoanalytic inquiry with reflective functioning

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<https://hdl.handle.net/10539/44131>
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A mixed methods analysis of open ended interviews with mothers of young children: Combining psychoanalytic inquiry with reflective functioning

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1. Introduction

Exploring complex, intrapsychic, and relational experiences is challenging for the researcher. This paper approached the exploration of what mothers experience when attempting to regulate their emotions for themselves and their children (aged 5 and under) by combining the theoretical frameworks of object relations and attachment theory with a mixed methods approach. This paper thoroughly examines the step-by-step process whereby two discrepant models are combined to present enriched and profound data on individual experience alongside established intrapsychic mechanisms. These frameworks, object relations, and attachment theory, delve into the intricate dynamics of human relationships and psychological development, areas that are rich in nuance and subjectivity. Quantitative methods, focusing on measurable, objective data, often struggle to capture the depth and subtlety inherent in these theories. Conversely, qualitative approaches excel in exploring the richness of individual experiences and the intricate patterns of interpersonal dynamics but may lack the generalizability and rigor typically sought in empirical research (see Figs. 1–7).

To explore the various aspects of these mothers' experiences, this research is grounded in Hermeneutic Phenomenology, which combines the rigorous examination of latent meanings in hermeneutics with phenomenology's focus on subjective, lived experience (Alsaigh and Coyne, 2021; Mooi, 2009; Sloan and Bowe, 2014). Additionally, the researcher has adopted a bricolage-like approach, allowing the data to guide the choice and application of different investigative tools (Berry, 2006; Denzin et al., 2006; Kincheloe and L., 2011; Mooi, 2009; Rogers, 2012). Bricolage accommodates multiple theoretical, methodological, and perspectival approaches as a research method. It is rooted in the understanding that 'there is no one correct telling of an event. Each telling, like light hitting a crystal, reflects a different perspective on an incident. The researcher understands that research is an interactive process, shaped by his or her own personal history, biography, gender, social class, race, and ethnicity, and by those of the people in the setting' (Denzin et al., 2006, P.g 6). This method aligns well with Hermeneutic

Phenomenology, particularly its circular approach to meaning-making, reflexivity, and exploration of experience over time and space. It allows for the balancing of different theoretical and research orientations and fosters a creative and flexible approach to the data. Consequently, it supports inductive and deductive reasoning, where meaning and understanding gradually deepen (Hatta et al., 2020; Kaplan and Gurven, 2008). Ultimately, this paper aims to illustrate the complex balancing act involved in conducting a mixed methods analysis, particularly in integrating qualitative and quantitative data to explore mothers' experiences cohesively (Eales et al., 2021; Fetters et al., 2013; Kaufman et al., 2019; Taherdoost, 2022). The challenge lies in ensuring that the qualitative insights not merely supplement the quantitative results but interact with them meaningfully, advancing our understanding (Fetters et al., 2013).

1.1. Context of main study

The central study examined the issue of what mothers of children under 5 may be experiencing, both intra-psychically and relationally, when they struggle to regulate their own and their children's emotions. The premise is that when mothers are emotionally uncontained, they may have reduced awareness of and difficulty in processing or containing their own and their child's mental states, a factor that would reflect in their Reflective Functioning (RF) scores. Furthermore, the research suggests that in such instances, various defense mechanisms may be triggered to shield the mother from challenging or painful emotions that she cannot process, a response that may be linked to unresolved experiences from her childhood. These defense mechanisms cannot be measured in the same way as reflective functioning but could be detected through the careful analysis of transference and counter-transference. As such, the research called for a combination of two orientations: one that focuses on observable and measurable markers of effective emotional management and one that gives a framework to intrapsychic and unobservable dynamics that are more difficult to detect and articulate.

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<https://doi.org/10.1016/j.metip.2024.100165>

Received 1 July 2024; Received in revised form 27 September 2024; Accepted 30 September 2024

Available online 3 October 2024

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The process of regulating one's own as well as a child's emotional state as a parent can be operationalized in different ways, but considering the question around intrapsychic dynamics and external markers of such, the study selected the psychodynamic concept of containment, rooted in object relations, and Reflective Functioning (RF) drawn from attachment theory.

1.2. Core concepts: attachment theory and reflective functioning

From a methodological perspective, attachment theory focuses on internal dynamics that manifest externally as observable patterns of attachment behaviours and how they relate to caregiving experiences (Ensink et al., 2014; Fonagy and Target, 1997; Lotzin et al., 2015). The focus is on the individual's experience in the present moment and how that relationship relates to past relational experiences. Reflective functioning (RF), within the context of attachment theory, is the

RF Score	Description
-1 or 0	Distinctively Bizarre or Absent
1	Absent but not repudiated
3	Questionable or Low RF
7	Marked

Fig. 2. Rf scoring.

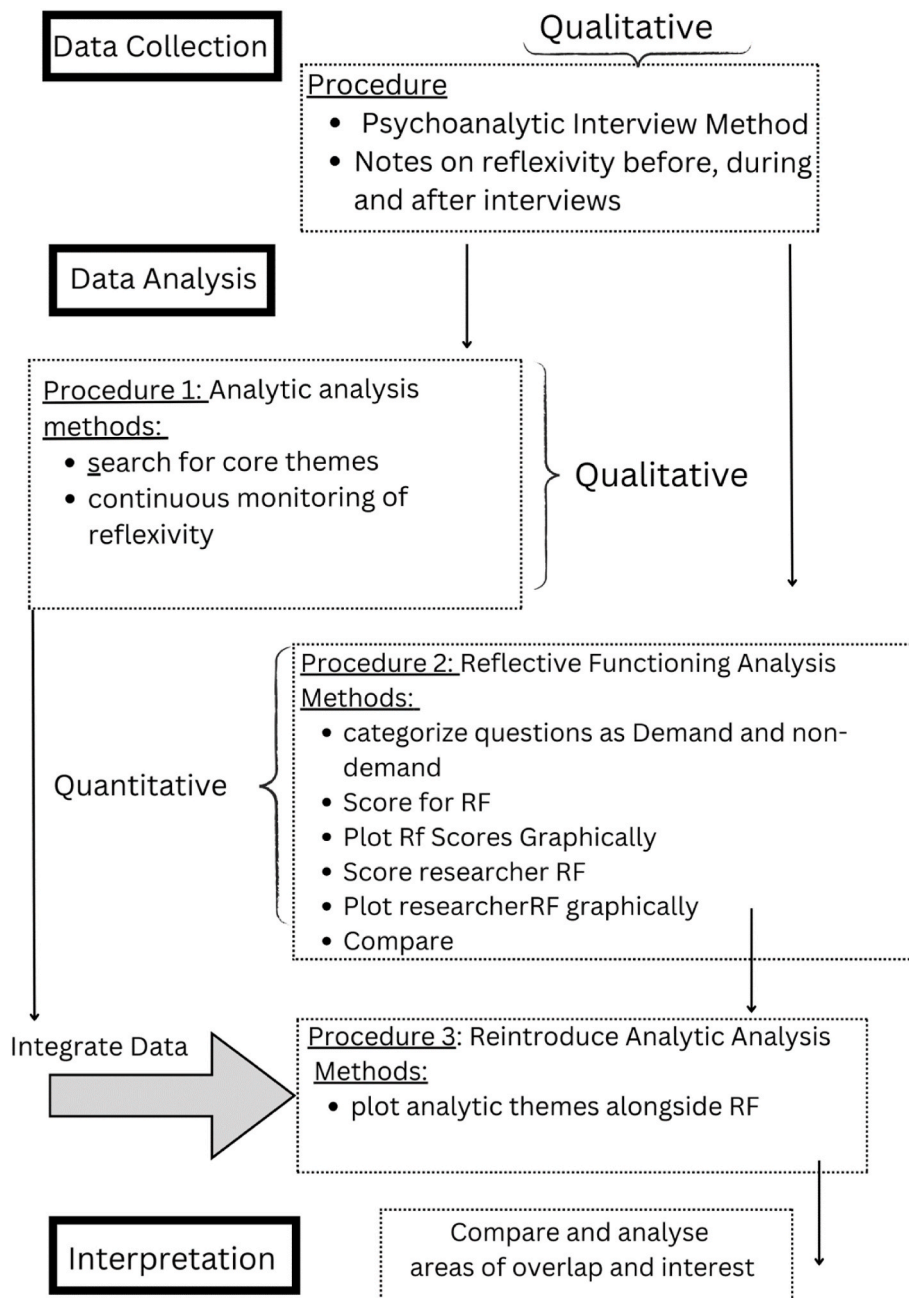


Fig. 1. Process of mixed methods data collection and analysis.

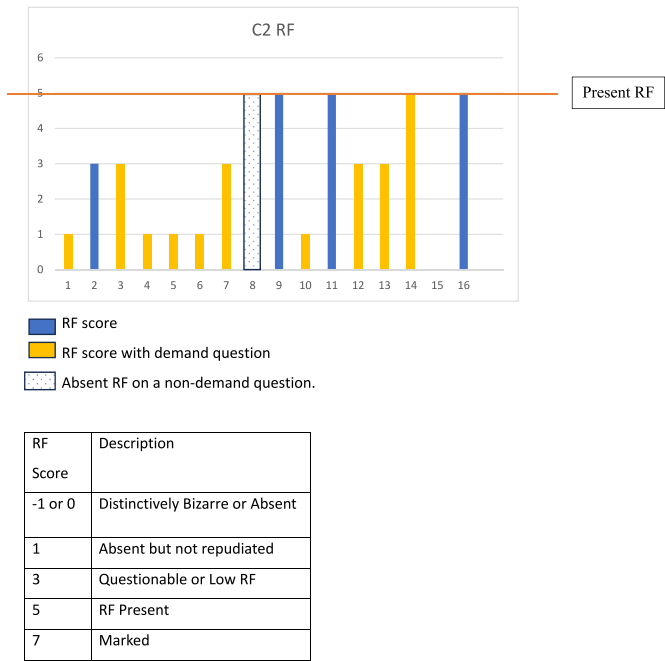


Fig. 3. Reflective functioning scoring per section of participant C2.

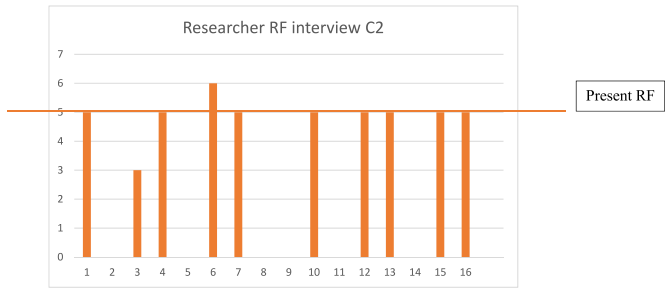


Fig. 4. Reflective Functioning Scoring per Section of interviewer with participant C2.

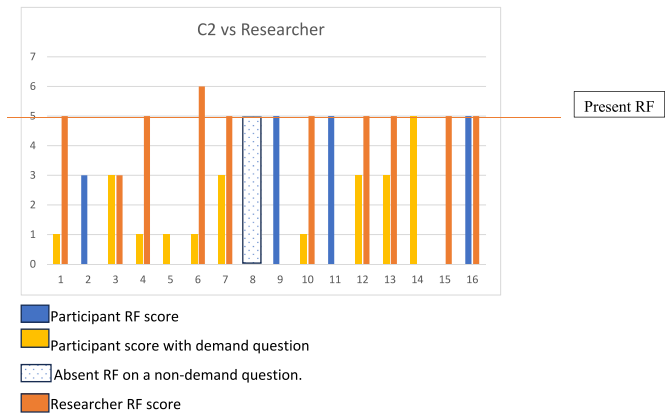


Fig. 5. Comparative graph of reflective functioning of participant vs researcher In interview C2.

operationalisation of mentalization. It refers to an individual’s capacity to understand and interpret their mental states and those of others. This includes recognizing emotions, thoughts, intentions, and desires that underlie behaviours. Reflective functioning enables a person to make sense of their own and others’ actions by understanding that these

Mother A2.

SECTION SUMMARY

Section	RF	Core themes
1	5	INTRO
2	5	How she and her child relate to one another: typically bouncing of emotion off of one another; ability to regulate or trigger each other’s emotional states
3	6	How she relates to her mother in the present tense
4	7	Her feelings of shame around her ability to emotionally regulate and maintain control.
5	5	How she sees herself as a mother now.
6	5	Her ever present anxiety and its iterations.
7	5	How she experiences her emotional regulation at present
8	5	How she relates to her mother in the present tense
9	5	How she and her child relate to one another: typically bouncing of emotion off of one another; ability to regulate or trigger each other’s emotional states
10	5	Activities During Lockdown
11	6	Activities During Lockdown
12	7	How she sees herself as a mother now.
13	1	How she and her child relate to one another: typically bouncing of emotion off of one another; ability to regulate or trigger each other’s emotional states
14	5	How she experiences her emotional regulation at present
15	7	How she experiences her anger and its historical roots
16	5	How she experiences her anger and its historical roots
17	6	How she experiences her anger and its historical roots

Fig. 6. Summary of themes in interview A2 per section.

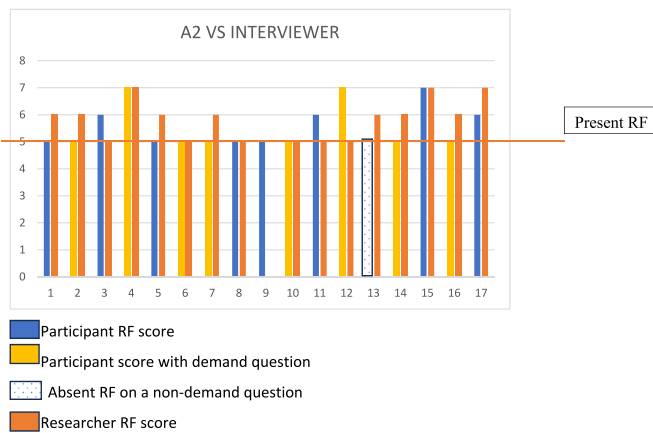


Fig. 7. Comparative graph of reflective functioning of participant vs. Researcher In interview A2.

actions are driven by internal mental states (Fonagy, M et al., 1998; Fonagy and Target, 1997). RF is beneficial in this context because of its significant role in transmitting attachment styles from parent to child and how well it has been operationalized in attachment research. Caregivers with good RF better understand their child's emotional states and respond appropriately (Ensink et al., 2019; Kelly et al., 2005). RF provides a wonderfully observable measure of effective mental modeling and can even be tracked within interactions. However, the intrapsychic dynamics of what is happening for the mother, as well as what allows for higher and more sophisticated RF, or even failures thereof, are challenging to understand.

1.3. Core concepts: object relations, containment and transference

In contrast, object relations theory is psychoanalytically based, emphasizing unconscious internal mental representations of self and others (called objects) that develop through early experiences with caretakers. Containment speaks to a predominantly intrapsychic experience whereby, in short, a mother can connect with and process a child's emotional state, helping the child to do the same over time (Cartwright, 2010, 2013). Psychological transference is when a person unconsciously redirects feelings, desires, or expectations from one person or an internal object to another (Bion, 1956, 1963).

Using these psychodynamic theories and concepts within an interview allows the researcher to access deeper, unconscious processes that may typically not be available to them. The incorporation of psychoanalytic techniques in mixed methods research has gained significant traction over the past decade and has been further validated and strengthened through the articulation of researcher reflexivity and the triangulation with additional data sources (Békés et al., 2017; Simmons et al., 2017; J. G. Tillman et al., 2022; J. Tillman G. et al., 2011). Concepts such as transference and countertransference, defence mechanisms and projection have been incorporated into research to expand on issues of researcher subjectivity and to explore difficult-to-access intrapsychic experiences.

Both attachment and object relations theories provide critical insights into our internal models of relationships, emphasizing the internalization of caregivers, the role of defence mechanisms, and the connections between failures in these areas and psychopathology. The integration of these theories within the methodological framework generates diverse types of data that require careful analysis. However, the use of different methodologies and theoretical perspectives introduces inherent tensions into the research. These tensions manifest in the well-known challenges of balancing qualitative and quantitative data, reconciling objectivity with subjectivity, and determining whether researcher subjectivity should be managed or embraced.

1.4. Aim of this Article

This paper explores how attachment theory and object relations can be practically integrated and layered using unstructured interviews and what insights may emerge from the data. Through a step-by-step methodological process of analysing interview transcripts using these two different theoretical orientations, the author seeks to demonstrate how the strengths and particular focus of each approach, object relations, and RF, can be combined to enrich the data. Furthermore, in connection with the primary research objectives, the researcher aims to utilize these two theoretically distinct orientations to investigate what occurs for mothers during highly emotionally charged interactions with their children on an intrapsychic level. The study will also assess the mothers' capacity for reflectiveness and explore the correlations between these aspects.

The step by step process of conducting this research is explained here along with the mixed methods analysis used. The data analysis is described in detail; following that, some suggestions of what results can be pursued with this analytic approach are outlined.

2. Methodology

Adopting a bricoleur approach in this research entails several vital aspects. Firstly, two sets of in-depth interviews were conducted for data collection, complemented by the researcher's process notes. This approach also involved the researcher independently conducting the interviews and performing the subsequent analysis. While this method presents certain limitations, which will be discussed later, it offers significant advantages. The researcher's direct engagement with the data allowed for an intimate understanding of the material and the flexibility to select and trial different analytical tools that would yield the most insightful results. Cost effectiveness should also be considered in an exploratory study. Additionally, it is important to note that Reflective Functioning (RF) was later subjected to inter-rater reliability testing to ensure the robustness of the findings.

2.1. Reflexivity

As discussed, researcher subjectivity is an inherent part of this research, and the self-awareness of the researcher is core to discerning their influence on the interview and analysis process. The researcher remains a central tool in extracting mental states, defense mechanisms and other intrapsychic mechanisms in the interview and the data. Their subjectivity must be constantly monitored through journaling and personal investigation throughout the research.

In line with Hermeneutic Phenomenology, there is an understanding that together, the participant and researcher create "an intersubjective understanding, co-constituted meaning, and a fusion of horizons regarding perceived lived experience" (Mooi, 2009, pg 21).

As such, it must be noted that the researcher is a mother of children under 5yo, which was the initial motivator for embarking on this topic. Many of the issues discussed in the interviews were, at times, either deeply relatable or, at others, extremely unrelatable. In the interviews, as in life, many parents choose different parenting journeys for reasons that are valid and important, and divergent opinions can be challenging. In conducting the interviews, there was an additional constant pull between relating as a mother vs. as a therapist vs. as a researcher. The researcher, as an identity, has a distant interest that perhaps both the mother and therapist identities lack, while on the other hand, these other two identities greatly assist with rapport and the kind of empathic confrontation that may be required when challenging inconsistencies or handling defense mechanisms.

Of course, researcher subjectivity can come with some limitations, which shall be discussed further in the next section.

2.2. Data collection

14 mothers were each interviewed on 2 occasions about their difficulties in their experiences of mothering and occasions on which they felt overwhelmed with their infants' and their own emotions. 3 of the mothers were South African but living overseas (in the UK, Israel, and the US). 11 Mothers were living in South Africa, of middle socio-economic status. They had one or more children aged between 0 and 5 years. 9 mothers were white of mixed cultural and religious backgrounds, and 2 mothers were Indian. Mothers were aged between 35 and 45. Most mothers had full-time careers, save for 2 who were stay-at-home mothers and also home-schooled their children. The mothers had a variety of forms of assistance from nannies and grandparents. All mothers were heterosexual, and most were married to husbands who were employed full-time. All mothers demonstrated adequate RF when scored. See Data Analysis for further information on this. Ethical clearance to conduct the interviews was granted by the Human Research Ethics Committee of the University X. Important to note is that all the mothers volunteered to be interviewed in response to an advert asking mothers about how they manage their child's difficult emotions. Therefore, the fact that the mothers were open and willing to engage in this discussion and that all the mothers were *primed* to discuss difficulties is important to note later in the results, where most mothers demonstrated adequate RF in their interviews and very little negative RF.

The study was advertised on social media, and mothers volunteered to be interviewed. During the data collection phase, in the face of an expanding outbreak of SARS-CoV-2 in 2019, President Cyril Ramaphosa announced a 21-day lockdown in South Africa, starting on 27 March, with considerable restrictions on human movement. Individuals were not allowed to leave their homes except to buy essential items. Only shops selling essential goods remained open, and essential workers were allowed to go to work. Schools were closed. The National Defence Force was deployed (Ravelo and Jerving, 2022). Due to this, all interviews were conducted online. There were 2 sets of interviews for each mother. The first interview occurred during the Level 5 lockdown in South Africa, the most severe lockdown. During this time, the participants were working from home and did not have access to their usual support and resources, such as grandparents, nannies, schools, and creches. The second interview took place a few weeks later under Level 4 lockdown in South Africa when some restrictions had been lifted. Schools were not yet open, and many parents were still working from home, yet services had been resumed in a limited manner.

2.2.1. Method: the psychoanalytic interview method

The psychoanalytic interview, as conceptualized by Cartwright (2004), serves as a research tool designed to explore unconscious meaning within the context of an interview using psychoanalytic processes. Cartwright's primary objective is to adapt psychoanalytic tools and methods for application in research, ensuring they are both reliable and accessible.

2.2.1.1. Purpose and theoretical framework. The psychodynamic interview is structured to gain an understanding of the psychodynamics and unconscious meanings that underpin various behaviours, psychological processes, social actions, and life situations (Cartwright, 2004, p. 3). The focus of this method is not merely on the content of the participants' narratives but on how these narratives are constructed and expressed during the interview process. This "how" reveals underlying unconscious processes, which are analysed using psychoanalytic concepts such as transference and counter-transference (T and CT), object relations, and defence mechanisms.

2.2.1.2. Interview techniques and Distinctions from psychotherapy. In this approach, the interviewer may employ therapeutic techniques such as

interpretation, free association, and clarification. However, it is essential to distinguish the psychoanalytic interview from a psychotherapy session. The interview occurs in a research context, with a pre-determined topic and specific expectations for both the researcher and the participant, which fundamentally alters the dynamic and tone compared to a therapeutic setting.

Cartwright emphasizes that the psychoanalytic interview is particularly concerned with transference and counter-transference, which he defines as the emotional states evoked during the interview. These states are viewed as the primary means through which unconscious processes—such as defences, object relations, and self-representations—are communicated within the interpersonal relationship between the interviewer and the interviewee.

2.2.1.3. Structure and process of the interview. The interview process consists of two key components: the interview itself and the detailed, rigorous documentation of the researcher's self-reflection throughout the process. The self-reflection is crucial as it helps distinguish between observer bias and the transference-countertransference (T and CT) dynamics that are integral to the psychoanalytic method. This reflection occurs before, during, and after the interviews, providing a comprehensive understanding of the evolving dynamics between the researcher and the participant.

The interviews were conducted over two sessions, allowing the interaction to unfold organically. The unstructured nature of the interview encouraged a reflective, thoughtful, and curious approach by the interviewer. Despite the unstructured format, participants had responded to a research advertisement and were therefore aware of the general purpose of the interview, giving it a clear context and intention.

In alignment with Cartwright's methodology, subsequent interviews began with the participants' reflections on the initial session. These follow-up interviews were used to seek clarification, address any inconsistencies, and explore topics previously discussed. This iterative process not only deepened the exploration of unconscious processes but also strengthened the reliability of the data collected.

2.2.1.4. Interviewer training. Although no specific training is offered in conducting the Psychoanalytic Interview Method, the interview style is grounded in the therapeutic styles and techniques used in a therapeutic setting and session. For example, building rapport, allowing the participant to take the lead, and making reflections and interpretations. The researcher has been a therapist, initially trained in psychodynamic technique and in practice for over a decade, meaning that the skills required above are well established.

2.3. Data analysis

The psychoanalytic interview process resulted in 28 interviews, each approximately 1 h in duration. In the context of qualitative analysis, particularly the psychoanalytically-oriented approach outlined by Cartwright's method, this represents a substantial volume of data for detailed analysis. Although scoring the interviews using Reflective Functioning (RF) analysis produces quantitative data, this data is not conventionally considered in a 'more is better' context. Instead, the data generated offers a different lens through which to view the interview transcripts, emphasizing the quality of information rather than the quantity of data required for validation.

The researcher was also faced with whether to complete the psychoanalytic analysis or score for RF first. The concern was whether one may influence the other. It was decided that as scoring for RF is an objective and formulaic process that will be verified, it was left for last as it is less likely to be influenced by the C and CT in the interviews.

The data analysis steps are as follows:

These steps are explained in further detail using illustrations from the interview material.

2.3.1. Procedure 1: Psychoanalytic analysis

Transcripts were coded with a letter of the alphabet for anonymity and either a 1 or a 2 for the first or second interview.

The psychoanalytic interview method (Cartwright, 2004) relies on understanding the narrative constructed during the interview and how it has taken form. This depends on the concept that language is a metaphor for parts of the self, i.e., how we see ourselves dictates how we construct narratives about ourselves. In this instance, the *how* accounts for what is said, what is left out, change of tone, topic, etc.

Initially, there is a search for core narratives - these are storylines associated with the interview topic. A search for core narratives is comparable to a thematic analysis. However, a thematic analysis traditionally may summarize large amounts of data and detail into overarching categories (Braun and Clarke, 2006). The psychoanalytic interview is very interested in the detail, so a process of backward and forwards between the details of the *how* and the core narrative must ensue.

This is a process of psychoanalytic analysis in which the researcher takes a deep dive into the interview with their process notes alongside them. The content of the interview is read through and any overt and covert emotional states in the participant and/or the interviewer are noted. Furthermore, the ebb and flow of the conversation is observed, and moments of interest are analysed. For example, why did the researcher change topic then and not follow up with an obvious question. Or perhaps the participant gave a defensive or an evasive answer to a question. The prevailing question is ultimately 'what was happening in that moment for the researcher/participant?'

In this fashion, the transference and counter-transferences are exposed, which in turn begins to reveal a picture of meanings for the participant, self-constructs, their object relations, and defenses. Imperative in this section of the analysis is for the researcher to be aware of their own defenses and object relations. Firstly, this allows for knowing 'what belongs where,' in other words, whose defenses are being demonstrated in the interview, and secondly, even when the researcher's defenses are activated, as they are bound to be, this is more information.

2.3.2. Procedure 2: Reflective functioning analysis

Traditionally, the RF interview coding for the Adult Attachment Interview (AAI) involves interviewing clients using a semi-structured interview with a combination of permit and demand questions. 'Permit' questions allow the interviewee a non-specific opportunity to demonstrate their reflective functioning, e.g., what did you do when you were upset as a child, while demand questions specifically require the interviewee to demonstrate their RF, for example, why did your parents behave as they did during your childhood? (Fonagy et al., 1998). Interviews are recorded and transcribed. The text is then coded as per the manual for the level and category of RF, initially per passage and then overall. The RF coding can be applied to other interview methods as long as 'Demand' questions are present (Fonagy, M et al., 1998; Katznelson, 2014). As this study applies the RF scoring system to an open-ended, unstructured interview, the mechanics of how best to do this must be resolved. As such, the interview was divided into sections to assist with RF scoring, thus mimicking the set questions of the AAI. Through trial and error, it was decided that sections should be approximately 50 lines long. This allows for approximately one topic per section. If line 50 occurs in the middle of a paragraph, the count can be adjusted up or down to not cut the participants' narrative in the middle.

Now, RF scoring is applied in the first paragraph. Following this, an overall score is considered for the interview, and the narrative is reviewed.

The levels of RF, as laid out in the manual, are as follows:

Inter-rater reliability was completed for the RF coding and is an essential strategy for determining reliability within the data. This can be done through comparing the results between a first and second coder of a random sample of 10% of the data. In previous studies, the Reflective

Functioning Scale has shown good interrater reliability after training, and some studies have demonstrated a Pearson correlation between .86 and .91 (Bouchard et al., 1993; Fonagy and Steele, 1991.) The inter-rater reliability in this study was excellent, with a Cohen's Kappa coefficient of .90. This signifies a high level of agreement among the raters in their assessments, indicating a consistent and reliable application of the evaluation criteria.

2.3.3. Interviewer training

Training for the Reflective Functioning scoring of the Adult Attachment Interview was completed over 3 days at the Anna Freud Centre in the UK. Those supplying inter-rater reliability have also completed the course through the Anna Freud.

2.3.4. Categorizing sections as demand and non-demand

Firstly, questions asked by the researcher were categorized as demand or non-demand questions. Demand questions specifically as the participant to use their RF.

Some examples of this in the text include:

Interview (J1):

Interviewer: can you say more about how you think that's been for her since everything changed?

This would be classified as a demand question because the researcher asks the participant to reflect on her child's state of mind.

Another example of a demand question is:

Interview (I2)

Interviewer: what do you think was going on for you?

In this question, the interviewer asks the participant to reflect on their state of mind.

There are many examples of non-demand questions, such as 'What do you do for work?' or 'have you been very busy during lockdown?'. These questions do not ask the participant to reflect on their mental states or the mental state of anyone else. A reflection may naturally occur during a non-demand answer, which is then scored according to the RF scale. However, the participant was not penalized if no reflection occurred in a non-demand question.

As per the manual, demand questions were scored for positive or negative RF. For example, if an individual was asked how they felt about something and then demonstrated a failure in RF, they were given an appropriate score.

It is crucial to consider the interview context when categorizing questions, as open-ended, psychoanalytic interviews may include sections of dialogue where the researcher reflects upon what the participant is saying rather than asking specific questions.

2.3.5. Scoring for RF

RF is analysed line by line and is assigned a code based on the type and level of RF demonstrated. This process is done separately for both the researcher and the participant. The entire section for each (researcher or participant) is then given an overall RF score based on what was found. Finally, the whole transcript is given an overall RF score based on the levels of RF found throughout the transcript. To do this, the researcher must consider the presence and frequency of the RF scores for the various paragraphs.

2.3.6. Plotting RF Scores

The participant's RF was then plotted on a bar graph demonstrating the level of RF per each section. This allows for a snapshot overview of the levels of RF demonstrated in the interview. The graph looks as follows:

Here we can see that the X axis presents the interview sections, and the Y axis demonstrates the level of RF, from -1 to 8. The patterned bar demonstrates absent RF on a non-demand question. Participant C2 has

only 3 incidents of present RF in her interview. Section 15 demonstrates absent RF in response to a demand question, and section 8 demonstrates absent RF, but there was no demand question; therefore, she was not 'penalized'.

2.3.7. Researcher RF

After analysing the participant's RF, the researcher's RF was also analysed and plotted on a similar graph. This analysis focused only on the RF that occurred during the interview and not in the before or after reflections of the interviewer. This was done to investigate the relationship between transference and RF in the "here and now" of the interview and opens up avenues for query into the interplay of RF relationally and what effects these scores.

The graph below is a summary of researcher RF during the interview with participant C2.

2.3.8. Comparing graphs

After this, the graphs were combined to compare the participant's and the researcher's RF.

The graph may look like so:

These graphs illustrate the wealth of data available for analysis for this participant. It's intriguing to compare and contrast the RF levels and identify instances where RF appeared similar or different in researcher and participant. It is not new insight that the RF of a therapist and, in this case, a psychologist researcher is effected by the person they are interviewing and vice versa (Katznelson, 2014). However, the mechanisms through which this occurs is what is interesting. Is this a conscious effort of the psychologist to meet the client/participant where they are at to enable scaffolding of higher RF? Or is this an unconscious process? These questions, again, speak to intrapsychic mechanisms that are difficult to perceive. Hence, the layering of psychoanalytic analysis. Through a deep analysis of what is occurring in each interview and even in particular moments of each interview, insight into the vicissitudes of RF happening between two people can be developed.

2.4. Process 3. Re-introducing psychoanalytic analysis

At this point in the data analysis, the data has undergone a psychoanalytic analysis as described in Procedure 1, and the RF has been scored as described in Procedure 2. The question for the researcher was how to effectively layer the qualitative information over the RF scoring in a meaningful way.

2.4.1. Aligning RF with psychoanalytic themes

As the interviews had been divided into sections to facilitate the RF scoring, it was decided to see what core narratives fall into each section and what the RF score was per section.

This appeared as so:

This data layering gives an interesting overview of what is happening for the participant in each section but loses the more detailed analysis of the *how*. The benefit of this initial layering of data is that one may begin to look at the participant's patterns of RF and make some deductions about where her strengths and defenses lie, if a higher score in RF means the participant is more resolved and thoughtful about one topic. In contrast, a lower or negative score suggests some unresolved conflicts.

The data is now primed for a deeper analysis of each section, taking both the *how* and the RF into account.

2.5. Interpretation

In the interpretation section of this paper, I will be using the first-person pronoun "I" to discuss my reflections and subjective experiences during the research process. This approach aligns with the principles of reflexivity. By doing this, I aim to provide a transparent account of how my own insights, biases, and reflections have influenced the findings. This also allows for a deeper engagement with the

psychoanalytic concepts under investigation, as it integrates the interplay between researcher and data into the overall analysis.

In the second summary tables provided above (Mother A2), we can see that Mother A demonstrates present RF and has many instances of high RF. These occur mainly when she discusses the interplay between herself and her child, how their emotions feed off one another, and when talking about herself as a mother. For example, in section 4, she scores a significantly high Rf while discussing her childhood and how that affects her mothering in the present. What cannot be captured in the table, or the core narrative is that during this section of the interview Mother A was very distressed and crying as she connected with some harrowing emotions and memories. Her ability to reflect through her distress, the reflection backwards and forwards through time, and an element of freshness to her understanding of herself make this an area of highly significant RF. This was a noteworthy and very tender moment in the interview where mother A realized that she had been replicating patterns from her childhood with her son through her attempts to manage her anxiety with rigidity and control.

In the quotes below, although these are only examples of statements made by mothers, RF is scored for the entire paragraph in which the comment occurs, not for the statement alone. That being said, the statements anchoring the RF scoring in the paragraph often have the most impact in analytic terms because they are laden with emotion. This is not surprising because RF is the communication of effective mental states, and mental states, both expressed and latent, are the cornerstones of intra and interpsychic states. Psychoanalytic concepts such as T and CT, defenses and containment are all based on emotional states.

Mother A said:

'I'm very harsh on myself. I would put it on myself that I had made the mistake and that wasn't acceptable. I think I would punish myself to a degree. I'm realizing now that how I'm enacting the same thing on my son that I would do to myself, and I don't think that was there. So I think in this exercise I've gotten a lot of perspective ...' (mother A2 section 4).

In this section I responded with:

'...you were quite harsh on yourself as a little girl, and there's something heartbreaking about a little girl punishing herself for having made a mistake. I wondered if when your mom did that, um, express her disappointment, if it made you feel ashamed, I guess. If there was shame involved, you know, like, umm, you know, I'm bad. How could I have done this?'

This section of the interview was emotionally heavy but also gentle. I noted feeling deeply connected to the participant in this moment and compassion for the young child that mother A used to be. In this section, both Mother A and I are in touch with the vulnerable child object inside Mother A and this validates her experience.

This recognition and validation allowed Mother A to link her interactions to her child more authentically-without the defenses- and something new was created for her.

In contrast, in section 13, mother A(2) demonstrates an RF score of 1 in response to a demand question. This indicates that there was an absence of RF. In this section, A described how her child would 'misbehave' after bath-time by hugging her when she was wet while she was trying to get him dressed.

The demand question was:

"and then what ... what kind of reaction do you think he was wanting, or why did he want a reaction from you? I'm not sure if you've thought that far.."

Mother A went on to speak about how she was trying to get through the bath-time process and get things ticked off the list, and perhaps Child A was trying to get her attention. However, she struggled to get beyond that to a description and her answer was firmly rooted in the behavioral realm. What made it so tricky for mother A to connect to her own or her child's mental state in this section while in other sections she showed

such profound RF? I felt a little frustrated with mother A (2) in this section as if the answer to the demand question was obvious. This is interesting because, in general, Mother A2 and I had been entirely in sync, and the general T and CT of the interview was one of compassion and care, with some exceptions. I was curious about my irritation and wondered if it reflected mother A's occasional disconnected state, which made her relatively rigid and inaccessible. I wondered to myself if perhaps this is what her child might feel when he was trying to reach her by acting silly and 'misbehaving'.

Furthermore, through the overall analysis of Mother A (2), one might speculate that mother A often disconnects and turns to rigid control as a form of defense against her anxiety. We may also surmise that her anxiety arises out of an unresolved childhood experience of not being allowed to make mistakes or be herself and a belief that she was 'bad'. Said differently, to ward off this awful feeling of 'badness', she often switches off her emotions and turns to control, which means she doesn't have to experience herself but also that she can avoid mistakes. However, it also means that she is emotionally inaccessible to herself and her child and therefore cannot assist him in regulating or processing his own emotions. It is also interesting to note that in this moment of her child's silliness, she is disconnected, a moment that calls for playfulness, flexibility, and an engagement in 'as-if-ness', which is the antithesis of rigidity.

What is truly fascinating and of value in this section is the side-by-side analysis of the RF, T and CT, which has the effect of moving forward and backward between a behavioral and observable component and a deeper, unconscious nonverbal component, thus giving insight into mother's experiences of trying to regulate difficult emotions.

This will be discussed further in the discussion.

3. Discussion

This paper adopts a dual focus, primarily conducting a methodological review of a mixed-methods analysis while secondarily addressing the original research on maternal experiences during emotionally charged interactions with children. The central objective is to demonstrate the effective integration of qualitative and quantitative data within a mixed-methods framework. Through a comprehensive sequential breakdown, the research explores the synthesis of diverse data orientations using a hermeneutic phenomenological approach and bricolage methodology. The paper details the iterative process of determining the optimal analysis sequence, ultimately settling on a psychoanalytic analysis followed by Reflective Functioning analysis of interviews to manage researcher bias. This approach reveals the value of overlapping qualitative and quantitative data, enhancing the richness of both. The paper's core contribution lies in its demonstration of how disparate data types can be successfully layered in a step-by-step process, rather than in presenting the findings of the original research. By detailing this methodological approach, it is the hope that other researchers may find a clear roadmap for navigating the complexities of mixed-methods studies, particularly when dealing with multifaceted psychological phenomena such as maternal emotional regulation and reflective functioning.

The challenge inherent in this data lies in the vast array of information that must be analysed both within and between different orientations and configurations, all while ensuring that no single orientation is unduly foregrounded. The goal is to present the data in a synthesized manner that is both comprehensible to the reader and conducive to a deeper understanding of the complex components involved.

The complexity of the data does not arise solely from the application of RF scoring to open-ended psychoanalytic interviews; rather, it stems from the fact that the interviews themselves reveal unconscious dynamics and defences. This data, therefore, serves not only as a supplement to the understanding of RF but also as a rich source of information about the internal experiences of these mothers. The crucial question

then becomes how best to integrate psychoanalytic analysis with RF data in a way that faithfully represents these intricate dynamics.

This integration must also account for researcher subjectivity, which inevitably introduces a specific lens and focus to each interview and analysis. The transcripts were initially analysed using a psychoanalytic approach, chosen deliberately to avoid the potential influence that prior RF scoring might have had on the researcher's perceptions of specific interview sections or participants. For instance, had the researcher known the RF scores beforehand, a deep emotional connection to a participant in one section might have been undermined by discovering negative RF results. Thus, the researcher prioritized preserving and documenting the emotional experience of each interview before introducing the knowledge of participants' reflective abilities.

Following this initial analysis, the decision was made to approach the data synthesis with a focus on increasing the complexity of the analysis. This was achieved by first presenting an overview and then selectively expanding on areas of interest using increasingly detailed psychoanalytic analysis. The RF scores, due to their structured nature, lend themselves well to graphical representation, offering a condensed overview of the information while highlighting key findings. From this foundation, the analysis could then progress through various layers, examining the interactions between the researcher and participant during the interview, comparing data between the first and second interviews, and conducting a psychoanalytic analysis of emerging themes and points of interest.

The overlapping application of these two orientations—quantitative RF scoring and qualitative psychoanalytic analysis—yields fascinating results. As demonstrated in the brief exploration of the analysis of mother A(2), the data allows for a dynamic movement between observable behaviours (as reflected in her RF) and deeper unconscious dynamics (as revealed through psychoanalytic analysis). Each movement between these data types enriches the understanding provided by the other. For example, in the excerpts provided in section 13, the low RF score signals a disconnect between mother and child, which is further illuminated by the counter-transference experienced by the researcher. The psychoanalytic analysis suggests that defence mechanisms and object relations within mother A(2) may be contributing to this disconnection, while the RF score of 1 further validates the researcher's counter-transference experience as indicative of the mother's reflective difficulties.

This discussion highlights the unique methodological contributions of this study, demonstrating how Hermeneutic Phenomenology and bricolage have been employed to navigate the complex, multifaceted nature of the data. The method outlined in this paper allows for a nuanced analysis that not only addresses the surface-level behaviours of the participants but also delves into the deeper, often unconscious, processes at play. The hermeneutic phenomenological approach proved invaluable in this study, allowing for a deep, interpretative exploration of mothers' lived experiences while acknowledging the researcher's role in meaning-making. This approach facilitated a nuanced understanding of the complex interplay between conscious and unconscious processes in maternal emotional regulation. Complementing this, the bricolage methodology offered the flexibility to creatively combine and adapt various analytical tools, enabling a more holistic and multi-dimensional examination of the data. By employing bricolage, the researcher was able to navigate the inherent complexity of the subject matter, drawing connections between disparate data types and uncovering insights that might have been overlooked using more rigid methodological frameworks. By embracing the flexibility and creative potential of bricolage, and grounding the analysis in the interpretative framework of Hermeneutic Phenomenology, this research offers a sophisticated exploration of the intrapsychic and relational dynamics experienced by mothers as they struggle to process and regulate their emotional states.

Ultimately, this study illustrates how mixed methods can be effectively utilized to explore the relational and internal dimensions of such complex phenomena. It suggests that the processes influencing these

emotional states are not only rooted in the mothers' past experiences but are also activated in the present, triggered by the immediate challenges of motherhood. The methodological approach taken here—combining qualitative and quantitative analyses through a reflexive, iterative process—has the potential to offer significant insights into how these processes interact and manifest in the lived experiences of mothers.

3.1. Limitations of the study

Several limitations warrant discussion.

Firstly, while researcher subjectivity has been acknowledged as both unavoidable and a potential analytical tool, there remains the risk of researcher biases. The researcher's feelings and perspectives inevitably influence the data to some extent, which can positively or negatively impact the findings. This subjectivity introduces challenges when overlapping qualitative and quantitative data, particularly concerning validity. Additionally, as the sole researcher responsible for data collection and analysis, there is a possibility that different researchers might arrive at different results under similar conditions.

To address these concerns, this study aimed to ensure validity through several strategies, including constant reflection on subjectivity, triangulation of data, inter-rater reliability checks, thick description, and other qualitative tools. Nevertheless, future research on this topic could benefit from involving multiple researchers to collect different aspects of the data. For instance, having one researcher conduct interviews while another scores for Reflective Functioning (RF), followed by a collaborative collation of notes, could enhance the objectivity of RF scoring.

Finally, while the sample size is substantial for qualitative analysis, it remains relatively small for a quantitative study. As exploratory research focused on understanding the intrapsychic processes of mothers during moments of containment failure, this research successfully navigated the 'how' of the phenomenon. However, future studies aiming to investigate the relationship between observable and intrapsychic markers of containment failure may require larger sample sizes to draw more generalizable conclusions.

4. Conclusion

This paper began by addressing how mothers process and navigate their own and their children's complex emotions. To explore this, the study was grounded in Hermeneutic Phenomenology, which provided a robust framework for examining the complexities of human experience, particularly within specific spatial, temporal, and reflexive contexts. This approach facilitated the integration of both qualitative and quantitative methods in the analysis.

By incorporating a bricolage approach, the research allowed for a creative and flexible engagement with the data, leading to an increasingly deep and layered understanding of the mothers' experiences. The methodological process was carefully documented, detailing each step, the order in which they were applied, and the thoughtful consideration of how qualitative and quantitative data could be meaningfully intertwined without prioritizing one over the other. Additionally, the researcher's reflexivity was actively employed as an analytical tool, enriching the interpretative process.

The findings provide a profound insight into the intrapsychic mechanisms of mothers, explored through the analysis of psychoanalytic concepts such as Counter-transference (CT), Containment, and defence mechanisms, as well as the assessment of Reflective Functioning (RF) markers in their discourse, which signal their capacity for mentalization. This research will guide insights into future studies in effectively layering qualitative and quantitative data, and in considering the application of these orientations both in research and therapeutic settings, particularly concerning mothers' experiences in motherhood.

CRedit authorship contribution statement

Alexa Young: Tanya Graham, Supervision.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Data availability

Data will be made available on request.

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