The experience of premature infancy within the mother-infant dyad in neo-natal high care unit: A psychoanalytic exploration.

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A thesis submitted to the Faculty of Humanities, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the degree of Doctor of Philosophy, including publication, in the field of Psychology.

November 2023

Abstract

The experience of prematurity is disruptive and traumatic for both mother and infant, potentially placing the parent-infant relationship at risk. Given the risks involved as well as the prevalence of premature births, this is an area that requires engagement and research. In an attempt to address the paucity of psychoanalytically oriented research endeavours into the topic of prematurity, this study explored the experience of premature birth for mothers and infants in a neonatal high care ward through the lens of psychoanalytic theory. A psychoanalytically oriented ethnographic approach was utilised integrating object relations and intersubjective psychoanalytic theory with developmental psychology. This implied a focus on the influence of the mothers' previous relational traumas on her experience of premature birth and use of dissociative defences. Maternal narratives from interviews as well as observational material from three premature mother-baby dyads allowed for in-depth exploration of maternal states of mind, intersubjectivity within mother-premature infant dyads, and infant responsivity. The study design required high levels of researcher reflexivity and the impact of the researcher's subjectivity was explored. Insights were also offered into the process of conducting psychoanalytically oriented research within this sensitive context. Key findings included the fact that the trauma of engaging with a premature infant appears to reactivate dissociated self-states associated with childhood experiences of loss and absence for mothers. The study suggested that although the vulnerability of the infant is relevant, maternal states of mind play a bigger role in either supporting or derailing the development of the parent-infant relationship. The study also demonstrated the premature infant's capacity, when appropriately supported, for communication and engagement.

Keywords:; premature birth; trauma; maternal states of mind; dissociative defences; mother-baby dyads; intersubjectivity; countertransference, reflexivity

Declaration

I declare that:

This is my own, unaided work. It is being submitted for the Degree of Doctor of Philosophy (Psychology) by publication at the University of the Witwatersrand, Johannesburg. It has not been submitted before for any degree or examination at any other university.

Signature: 

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Date: November 2023

Acknowledgements

I would like to thank and acknowledge the following people for their support:

To my supervisor, Professor Katherine Bain: You are extraordinary. Thank you for all the hours of academic (and emotional support) and guidance, as you helped me navigate this harrowing but meaningful journey.

To the study participants: Thank you for your bravery and generosity in sharing your stories and your experiences. I have endeavoured to honour the trust that you placed in me to represent your stories accurately and with respect.

To my mentor, Maggie Cohen: What a privilege to have been trained, guided and supported by you. Thank you for all the time you invested in me.

To my family and friends: Thank you for your support, patience, and encouragement.

To my children: Thank you for all your support and understanding. Thank you for making the adventure of life much more meaningful.

To my wonderful husband, Ryan: I could not have done this without you. Thank you for encouraging me, for calming me and taking over as I spent hours in front of my computer. Thank you for supporting me financially so that I could go on this crazy journey. Thank you for always believing in me. I love you madly.

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Chapter 1: Introduction

1.1 Introduction

Infant mental health has become the focus of extensive research and interest. An infant's early experiences have been shown to be central to their developmental trajectory (Fonagy, 2015; Sroufe, 2013; Zeanah et al.,2011). Early relational encounters, in particular, provide the foundation for innumerable psychological capacities (Fonagy, 2015). They are also believed to be instrumental in the setting up of important physiological systems including those that regulate stress as well as emerging brain architecture (Shonkoff et al., 2012; Siegel, 2015). Early experiences therefore have implications for both psychological and physical long-term health (Brazelton & Cramer, 1990; Nanni, et al., 2012; Shonkoff et al., 2012).

Premature birth occurs before 37 weeks gestation. Premature infants arrive early and therefore have underdeveloped physiological systems, often needing support with basic bodily functions. This usually takes place in neonatal intensive care units or neonatal high care units. In these hospital settings, infants typically receive nasogastric feeding, artificial breathing and monitoring of vital signs (Mello et al., 2011). Life-saving medical treatments are also commonplace and these are often invasive and painful (Botero & Sanders 2014; Cantle, 2013). Progress in technology has meant smaller and more fragile infants, some as young as 24 weeks, are becoming viable. This has resulted in a higher risk of organic pathology and neurodevelopmental impairment (Vanderveen et al., 2009). The earlier an infant is born and the smaller their birth weight, the more medically compromised they are likely to be (Anderson & Doyle, 2004).

Premature infants usually start their lives in incubators, separated from their parents for large periods of time. In normal, good-enough circumstances, an infant's distress is frequently soothed and the infant is comforted by a caregiver, primarily the mother. In the absence of this containment and maternal reverie, the premature infant is left unheld in an environment saturated with trauma. As such, difficult physical and emotional experiences often remain unmetabolised (Blessing, 2006; Castro, 2011; Ribeiro Batista Gerladini, 2016).

In this way, the hospital environment itself represents a risk factor for the premature infant's development (Browne & Talmi, 2005).

This disruptive beginning can have significant psychological implications (Brazelton & Cramer, 1990; Talmi & Harmon, 2003). For premature infants, immature psychological apparatus makes it harder to build an internal world (Geraldini, 2016). In addition, opportunities 'to learn adaptive skills in the context of social interactions with parents and peers' are limited (Cassiano et al., 2016, p.276). Subsequently, the premature infant's developing capacity to communicate and self-regulate may be compromised, both in the short and longer term (Browne & Talmi, 2005; Gorzilio et al., 2015; Vanderveen et al.,2009). Premature infants are reportedly often more fussy, less responsive, produce less clear behavioural signals and have lower stress thresholds (Trevarthen & Aitken, 2001). They also have a higher risk of developing behavioural problems, cognitive impairment, poor academic performance as well as diminished social capacity in childhood (Gorzilio et al., 2015).

Premature birth is also devastating and traumatic for parents who need to navigate unexpected stresses, ongoing separations and medical uncertainties (Porter et al., 2020). Parents often experience fears related to their infant's survival, as well as concerns regarding longer-term developmental implications (González-Serrano et al., 2012; Porter et al., 2020). They also witness their infants' suffering and pain (Anscombe, 2008). There is perhaps an added dimension to the experience of mothers who are in fact the focus of this study. Mothers undergo the "violent intrusion" (Vanier, 2015, p.1251) of a sudden and often unexpected ending to their pregnancy. For many mothers, their own lives are placed at risk during a traumatic birth (Mendelsohn, 2005).

The experience of prematurity is therefore described as a "psychic trauma" for mothers (Harris, 2005, p. 250); often eliciting intense emotions such as grief, anger, worry and confusion (Zelkowitz et al., 2007; Grunberg et al., 2020). Literature suggests that mothers of preterm infants are at risk for post-traumatic stress symptoms (Gangi et al., 2013; Shaw et al., 2006). Rates of depression have also been estimated as being as high as 40% (Harris et al., 2018; Vigod et al., 2010). These mental health issues impact the mother's ability to offer sensitive parenting (Boyce et al., 2015), which requires specific states of mind and mental capacities (Bruschweiler-Stern, 2009; Slade, 2005). In addition to impacting her maternal

capacity, mental health challenges have also been found to decrease the mother's quality of life (Brunson et al., 2021; Pierrehumbert et al., 2003).

Several articles explore how the premature infant and parent impact one another (Stephens et al., 2008; González-Serrano et al., 2012; Grunberg et al., 2020). Some highlight the impact of disturbed parental states of mind, perceptions and behaviors on the premature infant (Borghini et al., 2006; Bardin et al., 2007). Pierrehumbert et al. (2003) proposed that the intensity of parental post-traumatic reactions is an important predictor of perinatal problems. McManus (2015) suggested that the mother's behaviour with the infant is the most significant environmental modification that can be provided for high-risk infants. Conversely, the severity of the premature infant's perinatal risk has also been flagged as negatively influencing parental well-being (Geller, 2020). For example, Zelkowitz et al. (2007) found that maternal anxiety was greater with smaller, more vulnerable infants. Mendelsohn (2005) suggested that mothers tend to show less smiling and touching behaviours with sicker infants.

The experience of prematurity can therefore cause the disruption of self-regulatory and interactional skills for both parent and infant (Brazelton and Cramer, 1990; Browne & Talmi, 2005). This often results in unhelpful or poorly co-ordinated interactions which can derail the premature mother-infant relationship (Harris, 2005; Ribeiro Batista Geraldini, 2016). Once again, these interactive difficulties are problematic for the infant's development. Psychopathology in infancy is often attributed to repetitive abnormal interactive experiences (Beebe & Lachmann, 2003; Guedeney et al., 2010; Nugent et al., 2007).

The significance of this topic is further emphasised by the prevalence of premature births. Statistics suggest that 8 to 12% of all births happen prematurely (World Health Organization, 2018). An analysis of preterm birth in South Africa suggested that information regarding the prevalence of premature births in this country is imprecise and often unavailable (Ramokolo et al., 2019). Nevertheless, according to an informal analysis by North West University, approximately 15% of all infants are born prematurely (Lefafa, 2020).

Given the risks identified above, the topic of prematurity has been flagged as an important area of investigation (Bain et al., 2010; Herd et al. 2014; McManus, 2015). The existing research tends to have a medical focus and very little 'depth' literature on the topic exists (Lee et al., 2022; Wang et al., 2019). This thesis explores the experiences of premature

infants and their mothers within the context of a South African public hospital Neonatal High Care Unit. From its inception, the study established itself within a psychoanalytic conceptual framework. The first phase incorporated a scoping review of psychoanalytic journal-based articles addressing the topic of prematurity. This review highlighted the overall shortage of psychoanalytic articles focused on this topic as well as spotlighting gaps in the literature. In order to address these gaps comprehensively, literature and theory from the fields of infant research, attachment theory and intersubjectivity were incorporated into the study. Consequently, an intersubjective psychoanalytic lens was used to explore the experiences of three mother-infant dyads. In this way, the study was invested in documenting the experiences and learnings of the researcher having conducted research in this sensitive context. This lens necessitates a reflexive approach, allowing for constant scrutiny and reflection throughout the research endeavour. Reflexivity was therefore an important construct throughout the study. As such, it felt important to clarify my positionality. I am a White researcher from a middle-class socio-economic background. I am also the mother of two children, neither of whom were born prematurely. I did, however, experience a traumatic birth with my second child where my own life was placed at risk.

1.2 Further Rationale for the Study

Despite limited research, understandings of the psychological and developmental impact of prematurity has expanded over the last few years. So too has the recognition of its significance. For several decades, researchers have been concerned about the implications of premature birth for the psychological wellbeing of infants (Als, 1986; Caplan et al., 1965; Crnic et al., 1983; Minde, 1993). Notably, the research and focus is still considerably less than that given to full-term infancy. Perhaps as a result, there are significant gaps in the literature. Most of the research on prematurity, both internationally and in South Africa, appears to have been undertaken in medical, developmental and attachment-based journals involving quantitative investigations (Lee et al., 2022; Wang et al., 2019). Subjective, qualitative enquiry appears to be limited. The ontological assumption underlying qualitative research methods is that individual experiences are important sources of data, worthy of examination (Durrheim et al., 2006). This absence therefore represents a substantial void in the literature.

Psychoanalysis in particular, has more to offer the topic of prematurity than is currently available in the literature. Psychoanalytic journals have only engaged with this topic in a limited way. There is a substantial gap in the literature regarding the dynamics of interaction within premature parent-infant relationships, and the factors that might support or derail their progression. Only three books offering a psychoanalytic understanding of prematurity have been published in the last twenty years (Cohen, 2003; Negri, 2018; Vanier, 2015). These offer extremely valuable insights from skilled psychoanalytic clinicians based on their therapeutic experiences. Research endeavours utilising a psychoanalytic lens published in academic journals are unfortunately scarce. This thesis hopes to contribute to this gap through an exploration of the experience of prematurity for the mother-infant dyad, utilising a unique integration of various developmental theories, attachment theory, infant research and intersubjectivity, allowing for the comprehensive exploration of this topic.

Duschinsky et al. (2015) highlighted the importance of sensitivity and an awareness that "realities are far more complex and our thinking must encompass the full range of forces within which caregiver–child relationships are formed and embedded" (p. 182). This study takes place in a South African setting, and attention is paid to the influence of context on the mother-infant dyads and the research process itself. This exploration, undertaken within a South African governmental hospital context, also allows for a contribution to the literature that is different from the White, Eurocentric populations that tend to dominate studies on infancy (Tomlinson et al., 2014). The infant mental health literature is generally critiqued for its lack of focus on infants and parents in developing country settings. This is despite the fact that 90% of the world's infants are born in developing countries (Tomlinson et al., 2014). The utility of the 'Western' theories is often questioned in these contexts, and this study allows an opportunity to explore the relevance and applicability of an intersubjective psychoanalytic approach in a South African context.

An exploration of the experiential dimensions of prematurity would therefore enhance knowledge in an area that requires much attention globally as well as locally. Further, literature suggests that the more that can be understood about infant and maternal experiences, the more likely that contextually appropriate, effective therapeutic interventions can be designed and refined in the future (Melnyk et al., 2008). There is an absence of psychologists working with premature infants and mothers within South African

hospitals. As a result, there is a lack of skills in this area (Bain et al., 2010). Hence, this study may be important in order to guide future learning as well as intervention in the South African context as well as internationally.

1.3 Aims of the Study

The primary aim of this study was to investigate the in-hospital experiences of premature infants and their mothers, focusing on infant and maternal experience independently as well as exploring the intersubjective experiences of mother-infant dyad. The study aimed to engage mothers about their thoughts and feelings regarding their lived, subjective experience of prematurity, in addition to observation of the pairs. The purpose was to gain an in-depth knowledge of the intrapsychic processes involved in birthing and parenting a premature infant. The study was curious about the meanings mothers attributed to their birth experiences and the everyday care of their infants. In addition, it attempted to explore those aspects of the experience that might have been outside of conscious awareness, or that remained unspoken because they were difficult to articulate or even admit. The importance of the interplay between the mother and premature infant was also foregrounded in this study with a view to expanding knowledge about their developing relationship within the context of a neonatal high care unit. The study also attempted to explore the infants' experience by capturing infant communications and non-verbal interactions. These were located within the developing relationship with their mothers.

The study hoped to contribute to a psychoanalytically informed understanding of prematurity, attempting to fill some of the gaps in the literature, and addressing the paucity of psychoanalytic studies focusing on prematurity. It was anticipated that this knowledge may contribute to the practice of interventions with mother-baby dyads in hospital settings.

An additional aim of this thesis was to document the process of conducting research in the public health sector with premature infants and their mothers. Much research highlights the trauma inherent in this environment, which makes it a difficult setting in which to conduct research (Vanier, 2017; Mendelsohn, 2005). By sharing the researcher's developing reflexivity and reflection, as undertaken throughout the research process, the thesis aimed to offer insights from the perspective of a psychoanalytically oriented researcher that may guide and encourage future researchers to explore this challenging environment.

The research questions that this study aimed to answer were:

1) How is the experience of prematurity, for both infant and mother, understood currently in the psychoanalytic literature? Where are the gaps in this literature?

2) What can be understood about the experiences of premature infants and their mothers within the context of a South African neonatal high care ward that contributes to the above body of literature?

    2.1) How does the experience of prematurity influence maternal states of mind?

    2.2) How does prematurity influence processes of intersubjectivity between the mother and her premature infant and their ability to engage one another?

3) What is the experience of the researcher when investigating premature infant-mother relationships from a psychoanalytic perspective?

1.4 Contextualisation of the Study

It is important to elucidate the context of this study. The research was conducted in the neonatal high care ward at Rahima Moosa Mother and Child Hospital, located in Johannesburg, a city within Gauteng province in South Africa. This specialised hospital provides maternal and child healthcare services to surrounding communities. The hospital offers a range of services, including antenatal, obstetric, neonatal and paediatric care. The in-patient service is provided by four general paediatric wards as well as neonatal wards incorporating a Neonatal Intensive Care Unit (NICU) with 10 beds and a Neonatal High Care Ward (NHCW) which is referred to as 'unit 16B'. This unit should officially have 10 beds but usually accommodates 50 to 60 infants. There are also 12 kangaroo mother care beds (Dr E. Ho, personal communication, March 2023). 'Kangaroo care' is a technique of premature infant care involving close and continuous skin-to-skin contact between the mother and infant usually between the mothers' breast, thereby utilising mothers as 'living incubators,' (Botero & Sanders, 2014, p. 217). The benefits of kangaroo care include regulating the

baby's temperature, promoting bonding and improving overall wellbeing (Amez & Botero, 2000; Mello et al, 2011). This study took place in the NHCW.

Rahima Moosa Hospital serves a diverse and densely populated community. The hospital primarily caters to the residents of the surrounding areas of Coronationville, Newclare, Riverlea, and Industria. The community is predominantly working-class, with a mix of different ethnic and racial backgrounds, including Black African, Coloured, Indian, and White [1]. Many residents live in informal settlements, while others live in low-cost government housing or private homes. Various languages are spoken in the community such as isiZulu, isiXhosa, Afrikaans, English and Sepedi, among others (Klug, 2016).

The communities served by Rahima Moosa Hospital have faced numerous hardships over the years, some of which are rooted in the country's apartheid history. During apartheid, these communities were subjected to systemic racial discrimination, forced removals, and socio-economic marginalisation, resulting in a legacy of poverty, inequality, and poor health outcomes (Ngoma, 2016). In addition to the relic of apartheid, these communities continue to face numerous challenges today. One of the most significant challenges is high rates of unemployment and poverty, which contribute to poor health outcomes, malnutrition, and limited access to healthcare services. Research suggests that women in particular face unemployment, possibly due to a lack of skills training as well as childcare constraints (Klug, 2016). The community currently faces significant challenges with limited access to basic services such as clean water, sanitation and electricity. Gender-based violence and other forms of violence against women and children are prevalent, with many women and children facing daily abuse, harassment, and exploitation. Gang violence and crime are also significant problems with violence and drug trafficking leading to widespread social disruption (Bain et al., 2010).

South Africa has been found to be one of the most inequitable societies in the world, with a Gini coefficient of 63. (Statista Research Department, 2022). Accordingly, there are significant differences in accessibility to healthcare and the quality of this care between the private and public healthcare sectors (Yesilada & Direktör, 2010). In recent years, Rahima

[1] These are racial constructs in South Africa. I am aware that these terms are overly simplistic, not taking into account cultural variation. They are also loaded terms linked to South Africa's apartheid past. However, they were still felt to be necessary in order to clarify the demographics of the study.

Moosa Hospital, as a public or government facility, has faced several challenges. The hospital has experienced a shortage of healthcare workers including doctors, nurses and support staff. This has reportedly affected service delivery and patient care. Like many public healthcare institutions in South Africa, Rahima Moosa Hospital is facing funding constraints, resulting in limited resources for service delivery and healthcare. The hospital's infrastructure is aging. There have been reports of equipment and facilities that are in disrepair or malfunctioning, also impacting the quality of care provided. The hospital also serves a large and densely populated community. This places significant strain on the hospital's resources and staff, leading to long wait times and delays in treatment (Ndlovu, 2023). Despite all these challenges, during my research I was moved by the dedication of the team of doctors working in the neonatal high-care unit. They continually strive to provide the best possible care to newborns despite the limitations of their environment.

In South Africa, both private and public healthcare facilities offer neonatal intensive care units (NICUs) and neonatal high care wards (NHCWs) for the care of premature or critically ill infants. Neonatal intensive care units are designed for the care of critically ill newborns who require intensive medical interventions, including ventilator support, specialised monitoring, and other life-saving measures. Neonatal high care units are designed for newborns who require specialised care and monitoring, but do not require the same level of medical intervention as those in the NICU. I had initially intended to conduct my research in the NICU at Rahima Moosa. However, the doctors explained to me that the infants in their NICU were extremely ill, heavily sedated and as a result unresponsive (Dr E. Ho, personal communication, September 2020). Given the study's focus on infant communication, it was decided that the neonatal high care ward was better suited. In addition, unlike private South African hospitals, mothers in the unit were given much responsibility regarding the practical care of their infants such as feeding and changing of nappies. This allowed for a greater scope for exploring mother-baby interaction and engagement.

1.5 Structure and Process of the Study

This thesis used the 'PhD by publications' model and includes four standalone journal articles that have been published in peer-reviewed academic journals. These journal articles have been written to comply with the specific editorial requirements of various journals. Some overlap in the literature review and methodology sections of these papers is expected.

This, the first chapter, is the '**Introduction'**. Its aim is to orient the reader to the study and its relevance, introducing fundamental components including the rationale for the study, the study's aims, contextualisation of the neonatal high care unit, as well as an explanation of the structure of this document to allow for easier navigation.

Chapter two clarifies the **'Theoretical framework'** of the study. The key bodies of theory through which this study is conceptualised are highlighted, explaining how they correlate with one another.

Chapter three focuses on explaining and contextualising the '**Literature**' utilised in the study. The literature is complemented by the first journal article, which is included in this chapter:

> PAPER 1: 'Premature infancy: a 25-year scoping review of psychoanalytic journal articles' published in *Psychoanalytic Psychotherapy*

This paper offers a scoping review of psychoanalytic journal articles on prematurity over the last 25 years and answers the first research question posed by the study.

Chapter four, entitled '**Methodology'**, outlines the research questions in more detail and the subsequent study methodology utilised to answer these questions. This chapter includes an evaluation of the quality of the research as well as the ethical considerations required for the study.

Chapter five contains the **'Results'** of this study. These results have been written up in three journal articles, utilised to address research questions two and three.

> PAPER 2: 'The trauma of premature birth for mothers with infants in neonatal high care: The role of dissociation due to traumatic childhood experience' published in *The Journal of Applied Psychoanalytic Studies.*
> PAPER 3: 'Intersubjectivity in premature infant-mother dyads: Maternal states of mind and premature infant responsivity' published in *Psychoanalytic Social Work.*

PAPER 4: 'Exploring countertransference in psychoanalytic research: Reflecting on the journey of being a researcher, a psychotherapist, a mother and a human being in a neonatal high-care unit' in press in *Psychoanalytic Practice*.

Chapter six contains the '**Discussion'** section which explores the key themes and learnings that emerged from the study. The results of the study are situated in relation to the existing literature on prematurity and the research questions posed by the study are answered.

Chapter seven offers the **'Conclusion'** to the study, integrating the themes and arguments that developed throughout the preceding chapters. The limitations of the research as well as possible implications for future research are also outlined. This is followed by the study reference list.

Chapter 2: Theoretical Framework

2.1 Introduction

This research project has its roots in psychoanalysis. From the outset it was decided that the thesis hoped to contribute to a psychoanalytically informed understanding of prematurity. However, the field of developmental psychology, incorporating infant research as well as attachment theory, is considered useful to include in order to more fully capture developmental understandings of premature infants, maternal experience, and mother-infant intersubjectivity (Baradon, 2005). This study is therefore situated at the intersection of psychoanalysis and developmental psychology. The section below explains why each of these frameworks is relevant for exploring the topic of prematurity. Areas of similarity and divergence are highlighted. The integration of these theories is outlined and the utility of this integration for this research endeavour is highlighted. Psychoanalytic understandings of trauma and the defensive strategies utilised by mothers are also explained. Key constructs utilised in the study are then explored. These include concepts significant for maternal experiences in general such as maternal subjectivity, maternal states of mind, and maternal representations.

2.2. Psychoanalytic theory as a conceptual framework for research

Psychoanalytic theory offered an important foundation for this study. Each stage of the research, methodological as well as conceptual/theoretical, endeavoured to embed itself within a psychoanalytic orientation. Psychoanalytic principles guided the methodological approach of the study, underpinning both the interview process as well as the observational component. Interviews conducted with mothers were informed by Cartwright's (2004) psychoanalytic research interview in an attempt to collect both conscious and unconscious material, utilising triangulation of content, participant affect and behaviour, and researcher countertransference. Psychoanalytic conceptual tools were used as a guide for the interview format, data collection as well as the theoretical interpretation and analysis of the data (Cartwright, 2004).

The technique of infant observation was utilised to collect data on the infant's experience as well as interactions within the mother-baby dyad. This technique was pioneered by Ester Bick in 1964 (Shuttleworth, 1989). Infant observation involves paying close attention to infant behaviours, movements as well as interactions with the environment (usually including exchanges with the mother). This methodology was considered ideal for this study particularly because it "represents the coming together and application of ideas from psychoanalysis and developmental psychology" (McFadyen, 1995, p. 160). The mother's behaviour and responses towards her infant were also of interest. Here too, researcher countertransference responses offered an important window into both the infant and mother's psychic experience as well as their relationship (Boyer & Sorenson, 1999; Mendelsohn, 2005).

A psychoanalytic perspective also encompassed the writing up of the study's findings in published journal articles. While paper one offered a scoping review of all psychoanalytic journal-based literature on the topic of prematurity, papers two and three utilised a multiple case study approach informed by object relations theory and the concept of intersubjectivity. Paper four employed a psychoanalytically informed reflexive process to explore the subjective aspects of the research. These are presented in chapter five.

Perhaps most significantly, psychoanalytic literature provided a critical conceptual foundation for understanding prematurity. Psychoanalysis focuses on the impact of early experiences and unconscious processes (Freud, 1914; Elliott et al., 2012). This theory helpfully highlights the use of defence mechanisms, in infancy as well as adulthood, to protect oneself from emotional pain (Klein, 1946; Ogden 1994). Further, the impact of these defences on interpersonal relating is examined (Fraiberg et al., 1975; Bromberg, 2009). Psychoanalytic literature addresses the influence of trauma on psychic as well as relational functioning (Bromberg, 2009; Fraiberg et al., 1975; Garland, 1998; Lemma & Levy, 2004). Psychoanalysis is also one of the only theories that endeavours to explore the mind of the infant, illuminating infantile experience (Anzieu-Premmereur, 2019). Psychoanalytic theory therefore offers a rich and comprehensive framework with which to explore the phenomena of prematurity.

2.3 Object Relations Theory

Object Relations (OR) theory is a branch of psychoanalysis that focuses on interpersonal relationships with a particular focus on the importance of the mother-infant relationship. As a result of this early relationship, the infant is believed to internalise mental representations of others (referred to as "objects") as well as representations of the self (Waddell, 2018). These are believed to influence mental and emotional functioning as well as how one relates to others throughout life (Shuttleworth, 1989). OR is helpful in understanding both intrapsychic as well as relational dimensions of prematurity (Anzieu-Premmereur, 2019). Early, seminal OR theorists include Melanie Klein, Wilfred Bion, Donald Winnicott and Ester Bick.

Melanie Klein's theories have made an enormous contribution to understanding how early experiences and relationships shape an infant's internal world (Anzieu-Premmereur, 2019). She pioneered the idea that the infant develops ways of relating based on internalised figures or 'objects'. Klein built on Freud's idea of infantile phantasy, differentiating between practical reality and the mental images or fantasies that infants create in their minds to make sense of the world. Klein proposed that these phantasies play a central role in the formation of personality structure as well as influencing feelings and behaviours (Klein, 1946).

Much of Klein's theory explores the notion of infant states of mind or 'positions'. She described two different stages of development that infants experience as they develop. In the paranoid-schizoid position, the infant's experience of the world is fragmented and split into 'good' and 'bad' parts. This is the psychological construct of 'splitting' (Klein, 1946). Klein (1946) suggested that infants defend against frightening sensations by splitting and projecting them into the mother. This defence mechanism helps the infant cope with overwhelming anxiety. Klein's second position, the depressive position, is a more developed and integrated psychological position. Here, the infant become aware of the fact that 'good' and 'bad' can co-exist. This position allows for more complex emotions such as guilt and remorse as well as the possibility of mourning loss. It is important to highlight that these states of mind are not limited to infancy and can be experienced throughout one's life. They are also therefore relevant when attempting to explore maternal states of mind (Bain et al., 2010; Steiner, 1987). (For more information, refer to section 2.7.2)

There is a synergy between Bion's concept of 'containment' and Winnicott's theory of 'holding', despite being distinct processes. Bion's (1962) containment is described as follows: Infants attempt to cope with their unbearable feelings by projecting them into their primary caregiver (usually the mother). The mother needs to first receive the projections of distress, holding and mentally representing them within her mind. This process allows her to digest the infant's projections, returning them in a more manageable form. The mother's understanding also enables her to remove the source of distress and soothe the infant (Bion, 1962; Waddell 2018). Similarly, Winnicott (1986) explained how the mother offers her baby 'holding,' both physically and mentally, thereby allowing the infant to feel integrated. Ester Bick is another object relations theorist who has made an enormous contribution to the recognition within psychoanalysis of the importance of early mother-baby relationships (Anzieu-Premmereur, 2019). Bick's (1986) theory of 'second skin defences' highlights how, in the absence of containment, an infant might need to find independent ways of managing distress. This is particularly relevant for the premature infant.

This study recognises that psychoanalysis is not without its critiques. For example, certain academics have highlighted the dangers of relying on theories of the mind that are interpretively constructed, calling for the need to understand the mind in more empirical and accurate ways (Eagle, 2003). Klein's theory in particular has been criticised for the "'adultomorphisation' of … fictional and metaphorical infants" (Bain et al., 2010, p. 239). Despite this criticism, Klein's 'infant' is still regarded as being important for understanding infancy (Anzieu-Premmereur, 2019). This includes premature infants. Klein, Bion and Winnicott provide the foundation for much of the existing psychoanalytic literature on prematurity (Bain et al., 2010; Cohen, 2003; Riberio Batista Geraldini, 2016; Vanier, 2015). When addressing the topic of prematurity specifically, McFadyen (1995) suggested that "the 'looking back' through the minds of adults or children to infancy has provided a different kind of evidence about development, and in particular psychic development" (p. 159). Stern (1985) referred to this as the 'clinical infant'.

The inception of infant observation further addressed this criticism, offering psychoanalysis an 'observed infant' (Stern, 1985). Anzieu-Premmereur (2019) suggested that infant observation allows for the possibility of "empirical evidence of the development of the

psyche from very early on, complementing and expanding psychoanalytic developmental theories" (p.3). In fact, infant observation is now so entrenched in psychoanalysis that it has become mandatory in certain schools of psychoanalytic training like the Tavistock and Anna Freud Centre. Interestingly, Bick's (1968) technique of infant observation has been utilised in almost all the psychoanalytic papers exploring interactions within premature mother-infant dyads (Boyer & Sorenson, 1999; Castro, 2011; Lazar & Ermann, 1998; McFadyen, 1995; Mendelsohn, 2005; Miller, 2001; Ribeiro Batista Geraldini, 2016; Steibel et al., 2014).

Psychoanalytic theorists have also been criticised for being pre-occupied with the internal states of the infant (Beebe & Lachmann, 2003). The early psychoanalytic baby is accused of being predominantly "libidinal and driven by anxieties" (Anzieu-Premmereur, 2019, p. 2). This criticism is perhaps accurate within certain branches of psychoanalysis. However, object relation theorists have focused on mother-baby interactions, recognising the importance of the dyadic nature of this relationship (Beebe et al, 2003). In 1960, Winnicott proclaimed that "there is no such thing as a baby, there is a baby and someone"(p. 39). Despite this, the conceptualisation of the early object relations baby is regarded as having limitations. Perhaps the most glaring is the lack of acknowledgement of the infant's ability to actively participate in relationships (Beebe et al., 2003).

The field of developmental psychology is responsible for recognising the importance of the social and emotional abilities of infants (Beebe & Lachman, 2003). For this reason, it was considered to be an important theoretical framework to incorporate into the study, in particular the interrelated fields of attachment theory, infant research and intersubjectivity.

2.4 Attachment theory

Borghini et al. (2006) suggested that attachment theory provides an essential framework for both researchers and clinicians interested in the impact of premature birth. Attachment theory was established by John Bowlby (1980). It is suggested that his ideas were a reaction against Kleinian theory which focuses predominantly on the infant's constitution and fantasy life (Bain et al., 2010). By contrast, attachment theory emphasised the role of the environment, predominantly that of parents as well as the vulnerability of the infant after birth (Bowlby, 1980).

Bowlby (1988) described the infant's biological proclivity to form attachments and participate in social interaction. Bowlby introduced a 'spatial' theory which asserted that infants were more at ease when closer to the attachment figure. The impact of separations from attachment figures was also emphasised. Bowlby suggested that repeated interactions with caregivers result in the infant developing internal working models, i.e. non-conscious templates about what to expect in relationships. These models integrate "basic beliefs about the self, others, and the social world in general and … affect the formation and maintenance of close relationships for the remainder of an individual's life" (Diehl et al., 1998, p. 1656). In line with this, Bowlby developed the concept of secure versus insecure attachment (Bowlby, 1988). Secure attachment implied a representational system where the attachment figure was seen as accessible and responsive. Insecure attachment implied a dysfunctional system where the responsiveness of the caregiver could not be assumed and the child needed to adopt strategies for overcoming the perceived lack (Bowlby, 1980; Bowlby, 1988). Building on Bowlby's foundation, Ainsworth (1964) delineated various insecure attachment styles that result in specific parenting approaches, particularly during times of stress. Insecure attachment, particularly in the context of multiple biological and ecological risk factors, has been shown to predict maladaption (Dubois-Comtois et al., 2011).

Avoidant attachment is believed to result from parenting that is dismissive of the infant's distress signals (Ainsworth, 1964) or excessively controlling (Belsky et al., 1984). The avoidant child suppresses feelings of vulnerability and need, often struggling to recognise painful affects in themselves or others. Ambivalent attachment results from parenting that is inconsistently responsive during times of distress. Ambivalently attached children are often preoccupied and clingy, monitoring adults carefully as they are unable to predict their behaviours. As a result of this external focus, they are less able to regulate their own emotional needs (Ainsworth, 1964; Belsky, 2002; Levy et al., 2011). Main and Solomon (1986) identified disorganised attachment as a fourth attachment style, resulting from unreliable and traumatising parenting. In addition to abuse or neglect, disorganised attachment is believed to result from frightening or frightened parental conduct as well as dissociative or withdrawing behaviours. Infants who experience this kind of dysregulation from a parent are often unable to establish an effective strategy to deal with their frightening experiences. A disorganised attachment style has been found to have implications for psychopathology in both children and adults (Green & Goldwyn, 2002).

In this study, the theory pertaining to attachment styles is relevant for understanding the attachment behaviours and states of mind observed in the mothers of premature infants. A parent's mental representation of attachment is also believed to regulate their ability to be responsive to their infant's attachment signals. Securely attached adults are therefore more likely to be supportive, attuned parents (Jones et al., 2015). It is widely assumed that infant attachment styles dictate the development of one's adult attachment representations (Fraley & Roisman, 2019). The term 'adult attachment style' refers to the "expectations, and insecurities that people hold about themselves and their close relationships" (Fraley & Roisman, 2019, p. 26). Many attachment theorists and researchers believe that attachment styles are fairly stable, impacting one's ability to trust and relate to others throughout one's life (Roisman et al., 2005; Waters, et al., 2000; Weinfield et al., 1998). This view has been supported by several longitudinal studies (Chopik et al., 2014, Zayas et al., 2011). However, the stability of attachment styles throughout life has been debated in the literature (Fraley & Shaver, 2000). Fraley and Roisman (2019) argued that not all longitudinal research supports this notion, with variable findings with regard to the predictability of adult attachment styles. Even Bowlby (1988) suggested that the impact of early attachment styles can be shifted later in life through altered attachment experiences. By way of example, healthy experiences with a partner or therapist may repair insecure attachment representations. The experience of trauma and stress later in life is also believed to have the potential to disrupt attachment styles (Fraley, 2002; Zimmerman et al., 2002).

Main et al. (1985) found that rather than focusing on the mother's actual childhood experiences; what was more relevant was the mother's ability to remember her childhood and provide a coherent narrative of it. This includes both positive and negative experiences. Bain et al. (2010) explained the connection as follows, "it appears that the ability to access their own experience, process the emotion associated with it, and the capacity for insight is what enables a mother to respond with sensitivity to her child's attachment behaviour, so that her child is able to develop a secure attachment to her" (p. 239). Some of these memories will be consciously recalled by the mother, and others will be more implicit (Bain et al., 2010). This theory forms the basis of several instruments utilised to explore the subjective narrative patterns utilised when describing attachment relationships. For example, the Adult Attachment Interview is an instrument designed to measure adult attachment styles by analysing the coherence of a mother's narrative when describing childhood experiences (George et al., 1985). The Working Model of the Child

Interview was designed to explore the subjective perceptions that parents have of their child as well as their relationship with their child (Benoit et al., 1997).

Attachment theory has since developed and extended this focus on the mental states, representations and behaviours emerging within the developing parent-infant relationship. Ainsworth (1969) attempted to understand the caregiving capacities and behaviours that were linked to attachment security. She coined the term 'maternal sensitivity' which refers to the accurate interpretation (maternal capacity) of an infant's communications followed by swift and appropriate responsiveness (maternal behaviour) (Ainsworth et al., 1971). Maternal sensitivity is argued by some as being the main factor leading to the development of attachment security (Ainsworth et al., 1971; Pederson et al., 1990). Fonagy et al., (1991) developed another crucial concept linked to attachment, namely that of mentalisation (or reflective functioning). Mentalisation refers to the ability to reflect on and understand mental states of mind, incorporating feelings, beliefs, intentions and desires (Fonagy, 2015). Reflective functioning is the measurable expression of an individual's capacity to mentalise about their own mental states as well as the mental states of others (Fonagy et al., 1998; Fonagy et al., 2018). Reflective functioning thus includes a self-reflective as well as an interpersonal component, thereby facilitating the capacity to distinguish inner from outer reality (Fonagy et al, 1998). According to Slade (2005) this construct has had an enormous impact on developmental theory and clinical practice (Slade, 2005).

Slade (2005) further expanded on this work, introducing the concept of parental reflective functioning (PRF). PRF refers to a parent's ability to recognise her child as being a psychological being with feelings, desires and intentions, allowing the child their own internal experience. This capacity also requires the mother to understand her child's behaviour as a manifestation of these mental states. PRF also involves being able to recognise and acknowledge one's own mental states with regard to parenting (Slade, 2005). Parents who have a high PRF are believed to foster secure attachment in their infant, as the parents' ability to recognise the infant's mental states facilitates, over time, the infant's ability to perceive this in themselves (Fonagy, 2001). In other words, the representation of being an intentional, mentalising human being is internalised into the child's sense of self (Bain et al., 2010).

Attachment theory is important within the field of developmental psychology, having significantly impacted the work of contemporary developmental psychologists such as Crittenden, Fonagy, Mesman, Schore, Siegel, Stern and Van Ijzendoorn (Dawson, 2021).

Attachment theory has proven to be compelling in both clinical and research settings pertaining to development and infant mental health (Fonagy et al., 1991; Juffer et al., 2005; Zeanah et al., 2011). These insights have also been crucial when designing interventions to support mothers in their caregiving role (Fonagy, 2015; Sroufe, 2013; Zeanah et al., 2011). Further, key tenets of attachment theory have been corroborated by parallel research in the field of neuropsychology (Cozolino, 2014; Schore, 2001; Siegal, 2001). Given all these factors, attachment theory was considered to be important to include in this study. Attachment theory also raises particular questions regarding the potential risks for infants in the stressful and traumatic context of a hospital setting, where they may be neurodevelopmentally compromised as well as regularly deprived of their mothers.

Despite its utility, attachment theory has been criticised by sociologists and feminist scholars for allowing mothers to be blamed and held solely accountable for their infants' development (Contratto, 2002; Koffman, 2015). These criticisms perhaps have particular relevance for this study where research was conducted in a community where a myriad of external socio-economic factors need to also be taken into consideration. With this in mind, this study does not intend to assign blame but rather to explore and understand experience.

The incorporation of attachment theory into this study is in keeping with a school of thought that acknowledges the relationship between object relations and attachment theory (Eagle,1997; Fonagy, 2001, Holmes,1997). Both theories focus on the development of the self from infancy. They both acknowledge the mutual influence of self and object representations as well as describing the protective use of defences. With regard to maternal states of mind, the similarities between the dichotomy of paranoid-schizoid and depressive positions (states of mind) and the states of mind associated with adult attachment narratives is highlighted in the literature (Bain et al., 2010; Fonagy, 2001). There are, however, several points of deviation, particularly regarding the importance of real interactional experiences versus fantasies and the internal world (Fonagy, 2001). Despite deviations, however, these frameworks are believed to be complementary, offering the possibility of a more complex understanding of infants, mothers and their interactions (Eagle, 1997; Fonagy, 2001; Holmes, 1997). Fonagy and Target (2007) highlighted how attachment and psychoanalytic theory enrich one another particularly when exploring areas "concerned with human becoming and relationality" (p. 432).

2.5 Infant Research and Intersubjectivity

Infant research, a sector of developmental psychology, is a multi-disciplinary field that has utilised direct, scientific observations of infants to explore and understand their abilities and developmental trajectories. These observations have often been conducted in controlled laboratory settings or naturalistic environments (Anzieu-Premmereur, 2019).

It is important to note that this form of research has been acknowledged as often being controlled and therefore possibly unnatural. Conclusions are also often based on the infant's behaviour in a state of alert inactivity (McFadyen, 1995). Nevertheless, infant research has contributed to a "radically altered view of the infant's capabilities and the course of development" (McFadyen, 1995, p.159). Infant research from a developmental psychology perspective therefore offers this study a different dimension to understanding the premature infant.

The legitimacy of integrating infant research with psychoanalytic theory has historically been questioned in both academic and clinical settings (Bentovim, 1979). However, McFadyen (1995) suggested that from the 1980s, a sense of mutual respect developed between the two disciplines. Several authors have emphasised that the significance of infant research for psychoanalysis is in fact more substantial. Williams and Trentini (2022) claimed that the "main theoretical and clinical innovations in psychoanalysis" derive from crucial ideas originating in infant research (p. 2). Zang et al. (2022) also emphasised "the theoretical significance of infant research for psychoanalysis" (p. 1). They explained that as a result of evidence from infant research, psychoanalysis has embraced the infant's ability to engage with others from birth, referred to as 'primary intersubjectivity' (Zang et al., 2022). Subsequently, a theoretical shift has taken place in psychoanalytic thinking away from intra-psychic experience focused solely on drives, conflicts and object representations towards an interpersonal focus (Bohleber, 2018; Boticelli, 2004).

Psychoanalysis has become increasingly interested in how the infant develops in the context of relational processes (Beebe & Lachmann, 2003, p. 381). Thus, a dyadic model of development has been adopted (Mucci, 2021) which emphasises shared experiences, interaction and reciprocity otherwise known as 'intersubjectivity' (Bohleber, 2018). 'Intersubjectivity' has become one of the main theories of interpersonal interaction in

developmental as well as psychoanalytic literature (Beebe et al, 2003). This shift, termed 'the relational turn' (Beebe & Lachmann, 2003) or 'intersubjective turn' (Boheleber, 2018) has given the interpersonal skills of the infant and the reciprocal nature of the primary relationship more centrality (Balbernie, 2007; Benjamin, 1990; Bohleber, 2018). Beebe and Lachmann (2003) suggested that "the dialogue between systems views in infant and child development research and relational points of view in psychoanalysis is one of the most creative and fertile interdisciplinary exchanges in the history of psychoanalysis" (p. 385).

Although significantly overlapping, it is important to note that the term 'intersubjectivity' is used slightly differently in the developmental infant research literature and the broader psychoanalytic literature. Within psychoanalysis 'intersubjectivity' is often used to describe shared subjective experiences between adults, usually within the therapist-patient relationship (Beebe et al., 2003). The traditional assumption of analyst neutrality has subsequently been challenged. Rather, the patient analyst relationship is viewed as being co-created. Aron (1991) suggested that "a communication process is established between patient and analyst in which influence flows in both directions" (p.33). On the other hand, in the developmental literature, intersubjectivity refers to the shared affective experience between an infant and caregiver, taking into account the caregiver's capacity for attunement as well as the infant's ability to engage (Balbernie, 2007; Beebe et al., 2003). Key developmental proponents of intersubjectivity include Meltzoff and Moore (1998), Stern (2005) and Trevarthen and Aitken (2001). The developmental conceptualisation of intersubjectivity is therefore pertinent for this thesis, highlighting interaction, communication and engagement initiated by both mother and infant (Balbernie, 2007). Notably, as identified in paper one, within the psychoanalytic prematurity literature, the intersubjectivity and reciprocity between premature infant and mother are not sufficiently addressed (Canin, 2023).

The psychoanalytic conceptualisation of intersubjectivity was found to be relevant in a different way, namely through focus on the analyst's (or in this case, the researcher's) subjectivity. This is viewed as an important source of information, accessible through the vehicle of countertransference (Bohleber, 2018). Concepts such as 'projective identification' and 'enactment' have been foregrounded in understandings of the unconscious and mutually reciprocal processes that determine the treatment relationship, and which are key to understanding the patient (Bohleber, 2018). Projection is a psychological defence mechanism where an individual unconsciously attributes their own thoughts, feelings or

qualities to another person. Projective identification takes this one step further. It describes the process in which an individual unconsciously stirs up aspects of themselves, such as disturbing states of mind or negative feelings, in another such that the other person becomes flooded with these feelings (Stromme et al., 2010). These processes are useful in the analytic situation but have also been found to be helpful in the research context. Feeling states referred to as 'countertransference' are believed to be evoked in the interviewer during the interview process, offering an additional source of data (Hollway, 2016). Eliezer and Peled (2023) suggested that "psychoanalytic intersubjective ideas have not received sufficient recognition for their inspiring influence on qualitative methodology"(p. 425). This study has utilised these crucial intersubjective concepts in the collection and analysis of data.

The utilisation of both psychoanalytic theory and developmental psychology, including infant research and attachment theory, was therefore felt to be appropriate, offering a more comprehensive lens with which to explore the topic of prematurity and within this, the experience of trauma. While psychoanalytic theory offers the possibility of exploring the unconscious, the inclusion of developmental psychology addressed some of the limitations of object relations theory regarding understanding infant agency as well as intersubjectivity and interaction within mother-infant dyads. This combination supported an exploration of both real, interactional experiences as well as unconscious representations.

2.6 Trauma Literature

In the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), trauma is conceptualised in terms of trauma related disorders, where the focus is on defining the criteria for diagnosing these conditions. What is relevant is the fact that something traumatic in the individual's history appears to be responsible, to some extent, for the development of specific symptoms. For example, Post Traumatic Stress Disorder (PTSD) can be diagnosed at least one month after a severely traumatic event, defined by symptoms such as hyperarousal, avoidance, irritability, difficulty concentrating, insomnia, or an intensified startle response. Symptoms may also include reliving the event through nightmares or disturbing mental images or flashbacks. Some individuals describe persistent negative affect, often describing feeling detached, numb or losing interest in external activities. Acute stress disorder (ASD) encompasses essentially the same symptoms

required for the diagnosis of PTSD, however, the criterion for duration is different. Symptoms take place from 3 days after the event up until one month (American Psychiatric Association, 2013).

Bohleber (2018) suggested that engaging with trauma has become prominent in psychoanalytic theory and debate. The initial psychoanalytic trauma model is based on object relations theory. This theory highlights the breakdown of internal object relations and dialogue preventing the integration of trauma (Bohleber, 2018). However, in the last decade convergent findings in the fields of affective neuroscience, attachment theory, psychoanalysis and infant research have resulted in a developmental model of trauma. This model, whilst building on earlier understandings, foregrounds early relational trauma and defences against threatening experiences in the structuring of the psyche (Bromberg, 1994). Within this theoretical model, failures of integration of experience, multiple self-states as well as dissociation are emphasised (Bailey & Brand, 2017; Bromberg, 2009; Mucci, 2021; Schimmenti & Caretti, 2016). (These will be explained in more detail in the next section). This conceptualisation of trauma was therefore incorporated into the study. Notably, the point of convergence for all the theoretical perspectives in this study was the concept of trauma. It has also taken a central place within relational psychoanalysis where dissociation is considered as inherent and "as basic as repression to human mental functioning" (Bromberg, 1994, p. 517). Harris (2011) highlighted how dissociative processes and the resultant fluctuating states of identity are central to dyadic analytic endeavours.

2.6.1 Psychoanalytic Understandings of Trauma

Given the extent to which trauma features in the maternal experience of prematurity, an exploration of the psychoanalytic theory on trauma was felt to be important. This literature was found to have a richer explanation of the internal experience of trauma than the developmental theory. Therefore, whilst developmental findings on the experience of trauma and stress for mothers of premature infants has been addressed in this literature review, it was felt that the psychoanalytic literature needed to be expanded. Psychoanalytic theory on trauma is anchored in the work of Freud. According to Garland (1998) all later theorists built on this structure without much contradiction. Other theorists offering contributions to the field of trauma include Abraham (1907), Ferenczi (1933), Balint (1969) and Khan (1963). More recently, Garland (1998) and Lemma and Levy (2004) have offered

seminal books addressing the understanding and treatment of trauma from a psychoanalytic perspective. Intersubjective psychoanalytic theorists have recently extended these understandings, focusing on dissociative defences against trauma and their impact on subsequent capacities to process trauma (Bromberg, 1994; Bromberg & Schore, 2012; Stolorow, 1997).

Freud (1893) proposed that trauma results from the impact of an event on the mind. Any experience that causes intense emotions such as fear, anxiety or shame can therefore result in trauma. Freud suggested that physical pain can also induce trauma (Freud, 1893). Freud (1920) described a protective 'mental sheath' which prevents unmanageable stimuli (both external and internal) from entering consciousness. He suggested that trauma ruptures this shield, and as a result the mind is flooded, potentially shattering the ego, and disrupting psychic functioning. This leaves the individual vulnerable to overwhelming anxieties originating from one's internal world as well as from external events (Freud, 1920).

Rustin and Shuttleworth (1989) described the deliberate breakdown of the ability to make connections between thinking, feeling and actions. There is a consequent collapse of symbolic functioning and the ability to represent experiences, thoughts and feelings psychologically (Lemma & Levy; 2004). In this way, the ability to integrate traumatic experiences (Harris, 2005), construct coherent narratives or even remember details may be impaired (Lemma & Levy; 2004). It was understood that this might have implications regarding the capacity of traumatised mothers to coherently answer interview questions.

The literature also highlights that the experience of trauma is not objective, but rather "is taken inside the mind and worked on in a way that makes the experience specific and personal to the individual" (Lemma & Levy; 2004, p. 25). Freud viewed trauma through the lens of unconscious phantasy, suggesting that the phantasies and meaning attributed to the trauma are more relevant that the practical reality of the event (Freud, 1893). Harris (2005) proposed that trauma is particularly devastating when it confirms an individual's unconscious phantasy. The experience of trauma is also believed to be affected by factors such as personality or pre-existing defensive structures (Garland, 1998). Garland (1998) suggested that trauma can activate pre-existing 'fault lines' within the personality, fostering the development of previously hidden pathological processes. Those individuals with less developed depressive capacities are also believed to be more susceptible (Lemma & Levy; 2004).

Once again, literature suggests that in order to fully understand the impact of a traumatic event, one needs to consider the individual's childhood and developmental history (Garland, 1998). Lemma and Levy (2004) described how the meaning associated with a particular trauma is often linked to the nature of one's relationship to internal objects. Berthelot et al. (2015) also suggested that one's capacity to be resilient in the face of a traumatic onslaught is directly related to the nature and quality of their early relationships. This was reiterated by Garland (1998) who indicated "these early experiences …will inevitably influence the nature of the severe psychic wounding that may be received in the traumatic collision with the external world" (Garland, 1998, p. 4). Khan (1963) described the concept of 'cumulative trauma'. He suggested that rather than being caused by a single event or experience, trauma can be the result of repeated or ongoing negative experiences such as neglect, abuse or persistent stress (Khan, 1963).

Much theory suggests that for mothers in particular, the experience of previous traumas can place maternal states of mind at risk (Baradon, 2009; Fraiberg et al., 1975; Lieberman & Van Horn, 2011). This may include relational trauma as well as traumas linked to childbirth such as stillbirths, miscarriages or other preterm infants who may have passed away. The extent to which mothers have mourned these traumas is also relevant (Vanier, 2017). In particular, mothers whose needs for love and safety were not met in childhood might have the greatest difficulty in recovering from trauma (Berthelot et al., 2014). With regard to prematurity specifically, the impact of a mother's history (taking into account prior traumas) is an area that needs to be developed in the literature. This has important implications for identifying at-risk mothers who may need more intensive support or intervention.

As mentioned previously, trauma is also capable of transferring across generations. Freud (1920) introduced the concept of repetition compulsion explaining how traumatic ways of relating could be passed from one generation to the next (Freud, 1920). Fraiberg's (1975) concept, 'ghosts in the nursery' is particularly relevant in the context of trauma (Fraiberg et al., 1975). This phenomenon needs to be taken into consideration when reflecting on how premature infants might be impacted by their mothers' previous as well as current experience of trauma. This is not explored sufficiently in the prematurity literature.

2.6.2 Defensive Structures and Dissociative Processes

According to Freud (1920), the mind requires defensive structures and strategies in order to cope with an influx of overwhelming or traumatic stimuli. For example, the concept of avoidance is introduced as a defence mechanism that can be utilised to escape psychic pain. Mothers of premature infants may disconnect emotionally or avoid visiting or holding their infants in order to avoid reminders of their vulnerability or helplessness (Mendelsohn, 2005). This defence mechanism can also manifest as detachment or numbing (Kraemer & Steinberg, 2006). When an individual's defensive structure is overwhelmed by the trauma, dissociation is also possible (Negri, 2018). Whilst these defences are mentioned, they are not explored in more depth in the psychoanalytic prematurity literature. Dissociation, in particular, appears to be worthy of closer examination. Stern (2022) referred to dissociation as "one of the most significant components of a psychoanalytic model of mind" (p. 11). Gurevich (2014) suggested that dissociation has returned as a "cornerstone of recent trauma theories" (p. 313). It was therefore felt important to explore this symptom/defence in more detail.

The term 'dissociation' lacks a coherent definition that all relevant mental health fields acknowledge (Cardefia, 1994). For example, psychiatric and psychoanalytic literature understand the concept in slightly different ways, despite areas of overlap. The psychiatric literature engages with dissociation as clinical symptoms which feature in several mental health diagnoses. Dissociation is the central feature of the dissociative disorders, often involving depersonalisation, amnesia, and derealisation. It forms part of the diagnostic criteria for acute stress disorder, PTSD and borderline personality disorder. It has also been associated with certain personality disorders (Spitzer, 2006). Psychoanalytic literature, however, has historically understood dissociation as a protective response functioning to keep mental contents such as painful emotions, thoughts and perceptions out of awareness. Freud referred to the "splitting" of the ego," an expression that many psychoanalysts still use interchangeably with dissociation" (Tarnopolsky, 2003, p. 9).

The developmental model of trauma suggests that the psychological tendency to dissociate results from traumas usually experienced in the context of early, caregiving relationships. This theory is in keeping with developmental literature explored in the previous section. Schimmenti and Caretti (2016) explained the process as follows:

> When infants experience significant stressors, they first produce signals manifesting hyperarousal (such as crying); later, if they receive no response and the distress becomes overwhelming, they usually fall asleep. This is a normal self-regulation response of conservation-withdrawal, a metabolic shutdown mediated by primitive brain regions which allow the infants to protect themselves from stressful situations through a passive disengagement aimed at conserving energy and fostering survival. (p. 111).

This can result from more extreme traumas such as abuse and neglect. However, milder dissociative processes can also result from the repeated experience of affective dysregulation in infancy or childhood where caregivers fail to respond sensitively and synchronously to their child's needs, and where is a lack of interactive repair (Bromberg, 1994; Schimmenti & Caretti, 2016).

Dissociation is therefore believed to be triggered by intolerable self-experiences which are then prevented from being integrated into consciousness in order to protect the child from being overwhelmed (Schimmenti & Caretti, 2016). Where these hardships are severe and sustained over long periods of time, they can result in the development of more extreme dissociation disorders (Schimmenti & Caretti, 2016).

This results in multiple disconnections in the self (unintegrated mental states) occurring at both psychological and physical levels(Gurevich, 2014; Schimmenti & Caretti, 2016). Where dissociative defences are used frequently, consciousness can become fragmented (Gurevich, 2014). Later in life, trauma can re-evoke previously dissociated self-states or dissociative defences (Bromberg, 1994). This can result in multiple, possibly contradictory self-states. One can also attempt to defend against this pain by discharging it in the form of projections (Amez & Botero, 2000; Harris, 2005). It is clear that the experience of having a premature infant who may not survive could re-evoke prior traumas as well as experiences of absence and loss for a mother. This research was interested in understanding the extent to which the mothers in the study were utilising dissociative defences as well as the extent to which they exhibited multiple self-states. This theory is also interesting when considering the possibly unmediated traumatic experiences that is so prevalent for premature infants.

2.7 Key Constructs regarding maternal experience utilised in the study

This study was interested in how the psychoanalytic and infant research (developmental) literature conceptualised mothering in general as well as the psychological experiences specific to the mothers of premature infants.

2.7.1 Maternal Subjectivity

Maternal subjectivity refers to the feelings, thoughts and beliefs that a mother develops in relation to motherhood. It encompasses her psychological experience of the maternal role, as well as her idiosyncratic sense of maternal identity (Hollway, 2001). Harvey (2015) suggested that maternal subjectivity includes the demands placed on the mother as well as her feelings about these demands and her capacity to manage them. Benjamin (1995) highlighted the importance of promoting a focus on maternal subjectivity, suggesting that understanding and supporting the mother's psychological experience facilitates her ability to meet the emotional needs of her children. Understanding the subjective experiences of mothers with premature infants was a key focus of this research.

Traditional psychoanalysis has been criticised for neglecting the issue of maternal subjectivity (Benjamin, 1988; Harvey, 2015; Raphael-Leff, 2010). Hollway (2001) proposed that the focus has not historically been on the impact of child-rearing for the mother. Rather, mothers are only regarded through the lens of their 'containing' function (Stone, 2014), rather than acknowledging the mother's independent perspective. In keeping with these feminist critiques, Raphael-Leff (2010) suggests that "the mother as a person in her own right has been largely absent, as are the subjective meanings a woman gives to moment to moment lived experience of mothering a young child" (p. 1).

Despite these criticisms, Harvey (2015) suggested that psychoanalysis has much to offer the construct of subjectivity. Several psychoanalytic authors have supported a theoretical shift towards emphasising maternal development and subjectivity (Baraitser, 2009; Harvey, 2015; Parker, 1996; Kruger, 2006; Raphael-Leff, 2010). In the prematurity literature, the experience of mothers is addressed to some extent in the three seminal books as well as the journal-based literature. Very few articles explore the mother's independent experience (for exceptions see Harris, 2005; Steinberg, 2006).

With regard to developmental literature, McFadyen (1995) proposed that "the focus of child-development research can be seen as having moved away from the study of the impact of the caretaker on infant to the study of the effect of the infant on the caretaker" (p. 158). When exploring the developmental literature on prematurity, quantitative studies could be found exploring the impact of prematurity on specific maternal variables such as stress levels and depressive symptoms (Alkozei et al., 2014; Gray et al., 2012), PTSD symptoms (Kim et al., 2015) and general psychological health (Davis et al., 2003). Very few studies were found to qualitatively address the subjective experiences of mothers with premature infants (for exceptions see Aagaard & Hall, 2008; Lau & Morse, 2003; Loewenstein et al., 2019; Reid, 2000).

Interestingly, Porter et al. (2020) suggested that meaning making for mothers of premature infants is seen as emerging from a dyadic framework (i.e. in relation to her infant) rather than from her individual experience. They attribute this to the fact that the mother-infant separation is often the main variable causing maternal distress (Porter et al, 2020). It is interesting to consider whether, in the face of separation and the potential loss of the infant, mothers feel emotionally safe enough to reflect on their subjective, maternal experience. This is something that was considered in the current study. It was also important to take into account potential cultural factors, given that maternal subjectivity is influenced by personal, historical, social and cultural factors (Hollway, 2001). For example, in her description of the impoverished mothers in Khayelitsha that she worked with, Berg (2003) explained:

> …mothers, who are the main caregivers … are often depressed and suffer in silence. They have a helplessness that is real and in a way adaptive in the sense that the great majority of women have no choice, but to cope and make do with what they have. They bear their fate stoically and will not spontaneously open up…then there are cultural factors in that one does not easily share with strangers one's intimate family problems (p. 268).

2.7.2 Maternal States of Mind

The transition to motherhood is understood as being an important developmental period of psychic transformation. Both psychoanalytic and developmental bodies of literature describe states of mind as well as mental capacities that are essential for sensitive mothering (Bruschweiler-Stern, 2009; Slade, 2005; Stern, 1995; Winnicott, 1992). Maternal states of mind refer to the emotional and cognitive states a mother experiences while interacting with her child (Slade et al. 2009; Raphael-Leff, 2010a). A number of theorists have written either directly, or indirectly, about maternal states of mind. These ideas are introduced below.

Psychoanalytic literature highlights various mental shifts necessary for becoming a 'mother' psychologically. Object relations theorists such as Bion (1962) and Winnicott (1964) emphasised the states of mind that mothers need in order to 'contain' and 'hold' their infant when they are stressed. This requires the emotional capacity to experience undigested projections without becoming overwhelmed. The mother also needs to utilise her mind in the service of understanding the cause of the infant's distress. Winnicott (1992) introduced the concept of 'primary maternal pre-occupation', a state of mind following birth where the mother develops a heightened sensitivity and psychological proclivity towards her infant. This state of mind fosters an identification with the infant, allowing her to be in touch with the infant's primitive needs.

However, Mahler et al. (1975) suggested that it is not sufficient for the mother to identify with her baby, she also needs to be able to differentiate psychologically between herself and her baby. Baradon (2005) elaborated Winnicott's (1964) concept of "maternal failure" as being linked to certain states of mind, referring to the "intrapsychic processes in the mother which violate the infant's state of going-on being, such as projection and attribution resulting in distortion of the self, failure to protect the infant from impingements, and an inability to contain the infant through 'maternal reverie'" (p. 47). Bain et al. (2010) highlighted how mothers who have experienced loss or trauma may temporarily regress into a paranoid-schizoid position where they become reliant on defence mechanisms like splitting. Klein's (1946) two positions are also helpful in understanding the impact of trauma on maternal states of mind and what mothers may

need to achieve psychologically in order to mourn loss and make sense of their trauma (Bain et al., 2010).

Stern (1995) highlighted a unique 'psychic organisation' ushered in by motherhood which he termed 'the Motherhood Constellation'. This constellation is believed to be the dominant psychic organisation through which a mother experiences her baby as well as the external world. During this phase, the mother's psychic energy centres around several main themes. These include the mother's developing relationship with her infant, including physical and psychological aspects of care, the re-organisation of her own identity to include being a 'mother', and her relationship with her own mother (Bruschweiler-Stern, 2009; Stern, 1995). Mothers in this constellation also exhibit a "desire to be valued, supported, aided, taught and appreciated by a maternal figure" (Stern, 1995, p. 186).

Developmental literature also focuses on the emotional and cognitive capacities required by mothers. This literature builds upon Bion (1962) and Winnicott's (1964) theories suggesting that in addition to recognising the infant's need for comfort, mothers must appreciate their infant's personhood, i.e. see the infant as being capable of deliberate communication and active engagement (Balbernie, 2007; Fonagy et al, 1991, Slade, 2005). These combined abilities culminate in the mother being able to offer emotionally attuned, sensitive caregiving.

Attachment literature links maternal states of mind to the mother's own history and attachment style. Main (1996) suggested that the experience of being parented herself, together with how the mother internalised these experiences, determines her maternal state of mind as well as her feelings and behaviour towards the infant. Further, Main et al. (1985) found that rather than focusing on the mother's actual childhood experiences; what was more relevant was the mother's ability to remember her childhood and provide a coherent narrative of it. This includes both positive and negative experiences. Some of these memories will be consciously recalled by the mother, and others will be more implicit, nevertheless, this is believed to be the mechanism by which unhealthy parenting patterns transfer from generation to generation (Bouchard et al., 2008; Davis, 2001).

Attachment theorists therefore highlight the impact of states of mind on a mother's sensitivity levels as well as her ability to perceive her infant's emotional signals and

respond appropriately (Fonagy, 2015; Sroufe, et al., 1999, Sroufe et al., 1990). Slade (2005) developed this idea with her concept of parental reflective functioning. She suggested that impaired maternal mentalisation results in more restricted ways of experiencing the mother-baby relationship. Mothers may then struggle to understand infant behaviour in terms of psychological intentions (Slade, 2005).

Most of the psychoanalytic journal-based literature exploring this topic highlights the fact that prematurity disrupts maternal states of mind. This view is promulgated by psychoanalytic clinicians drawing on their clinical experience and observations (Cohen, 2005; Mendelsohn, 2005, Vanier, 2017). For example, Kraemer and Steinberg (2006) highlighted the paranoid-schizoid anxieties and states of mind that often dominate "in this extreme environment of heightened feeling states" (p. 178). The importance of acknowledging and addressing the states of mind of 'premature' mothers is also emphasised in the developmental literature. Several studies highlight the impact of prematurity on maternal states of mind including the development of stress (Carter et al., 2007; Gray et al., 2013), trauma and post-traumatic stress disorder (PTSD) (Kim et al., 2015; Lasiuk et al., 2013), depression (Alkozei et al., 2014; Vigod et al., 2010) and anxiety (Melnyk et al., 2008; Yurdakul et al., 2009). It is important to note that certain mothers may be more at risk than others with regard to their mental health and their relationships with their infants. For example, Hawes et al. (2016) proposed that a history of mental illness poses increased threat to the mental state of mothers with premature infants. Interestingly, Lau and Morse (2003) found that parents of premature infants do not show elevated biochemical markers of stress. This research finding is, however, in the minority.

Conversely, Benoit et al. (1997) highlighted the influence of maternal states of mind on a mother's thoughts, feelings and behaviours towards her premature infant. Borghini et al., (2006) found that mothers of premature infants often exhibit an overprotective parenting style, often resulting from concern over their infant's potentially life-threatening position. In keeping with the psychoanalytic literature, Feldman et al. (2009) suggested that the experience of prematurity diminishes the mother's ability to invest emotionally in her baby. Premature birth has also been associated with low warmth and limited involvement in child rearing (Brandon et al., 2011). Mothers of high-risk premature infants have been found to show less smiling and touching behaviours (Minde et al., 1983) and to be more controlling or intrusive at times (Browne & Talmi, 2005; Mendelsohn 2005).

This study is interested in exploring both the impact of prematurity on maternal states of mind as well as the influence of these maternal states of mind on the premature infant and the intersubjectivity between mother and infant. A psychoanalytically informed qualitative exploration of this kind could not be found in the literature.

2.7.3 Maternal Representations

The term 'maternal representation of the infant' encompasses the mental picture that a mother develops in relation to a specific infant. Maternal representations also include notions that mothers have of themselves in the maternal role as well as the mother-baby relationship (Stern-Bruschweiler & Stern, 1989). This concept is utilised by clinicians and researchers in both psychoanalytic and developmental literature (Stern, 1991). Stern (1991) suggested that psychoanalytic terms such as "projections" or "maternal phantasies" are analogous to the term "representations" the preferred word for attachment theorists. Psychoanalytic writing tends to focus on a deeper exploration of the unconscious internal aspects of these representations. Psychoanalytic literature suggests that maternal representations incorporate both accurate perceptions of the 'real' infant as well as distortions and fantasies often rooted in unresolved childhood traumas (Fraiberg et al., 1975; Sandler & Sandler, 1978). Fraiberg et al. (1975) coined the term, 'ghosts in the nursery' alluding to how parents may unknowingly project into their baby repressed experiences and feelings, or aspects of their own personalities that need to be disowned (Fraiberg et al., 1975). Similarly, attachment-based literature includes the impact of 'internal working models' that mothers develop as a result of their early developmental experiences (Bowlby, 1969; Sameroff & Emde, 1989). Benoit et al. (1997) claimed that maternal representations are relatively stable.

Both psychoanalytic and attachment orientations highlight the influence of the mother's early experiences on her maternal representations. Both highlight how maternal representations colour the meaning the infant has for their mother as well as the mother's perceptions of who their infant is and why they behave in particular ways (Zeanah & Barton, 1989; Zeanah & Benoit, 1995). Subsequently, maternal representations impact the way mothers interact with their infants as well as affecting the infants' attachment development (Borghini, 2009). The clinical and research implications of understanding

maternal representations are highlighted in the literature (Benoit et al., 1997). Stern-Bruschweiler and Stern (1989) proposed that maternal representations need to be explored in conjunction with overt interactive behaviours in order to fully understand the parent-infant relationship.

The importance of exploring the maternal representations of the mothers of premature infants specifically has been highlighted in the literature (Borghini et al., 2006), with different studies emphasising various ways in which maternal representations play a role in the experience. Some studies emphasised the impact of maternal representations on the parent-infant relationship and the developing attachment process, suggesting that the experience of prematurity may negatively alter maternal representations (Korja et al., 2009). Forcada-Guex et al. (2011) highlighted the influence of attachment representations on the mother's psychological experience of prematurity. Regardless of the mechanism, several studies suggested that mothers of premature infants have more negative representations particularly with regard to regulatory functions such as feeding and sleeping (Borghini et al., 2006; Korja et al., 2009; Leonard et al., 1992; Levy-Shiff et al., 1989). Borghini et al. (2006) also suggested that preterm mothers show lower coherence in their representations of their infants, less rich perceptions and less openness to changing their representations.

Possible reasons for the negative impact on maternal representations are suggested in both sets of literature. For example, in the developmental literature, the early arrival of the infant is believed to interrupt the development of the "representation process" (Korja et al., 2009, p. 307). Mintzer et al. (1984) referred to prematurity as an 'intrapsychic assault', which limits the amount of energy devoted to the task of parenting until the loss of the 'wished for' baby has been sufficiently mourned. The infant may then become a repository for projections of negative or defective parts of the self (Mintzer, 1984). Mothers also reportedly suffer the disappointment of not having their wished-for infant or the wished-for relationship (Vanier, 2015).

2.8 Cross-cultural considerations

It needs to be acknowledged that psychoanalysis and attachment theory, and indeed much of the field of developmental psychology have been criticised for being Eurocentric, having been founded on research with participants from Western and well-resourced contexts (Keller, 2018; Keller, 2016; Seshadri-Crooks,1998). Ethnocentrism is understood as the

promotion of a particular cultural perspective with the consequent portraying of others, regardless of their cultural background, from that viewpoint. Its applicability for that culture is then brought into question (Rosado, 1994; Tilley, 2001). Ethnocentrism is also criticised for dismissing or depreciating the cultural values or understandings of other communities (Rosado, 1994; Serpell, 2017). This was particularly pertinent to this research as it was undertaken with a multi-cultural population of mothers from a lower socio-economic bracket. Researcher reflexivity as part of the method allowed for reflection on how theory was applied and how my theoretical frame of reference influenced my reactions and understandings.

However, despite a clear need for cultural sensitivity and room for cultural and contextual nuance, substantial evidence has been found with regards to the cross-cultural applicability of grief and trauma reactions (Hinton & Lewis- Fernández, 2011; Klass, 1999; Marques, et al., 2011). Nevertheless, it is acknowledged that while symptoms appear to be universal, the meanings attributed to them are influenced by culture and context (Hinton & Lewis-Fernández, 2011; Klass, 1999; Marques, et al., 2011). The cross-cultural relevance of attachment theory has been explored in studies highlighting that various dimensions of attachment theory have been shown to be universal (McMahan True et al., 2001; Tronick et al., 1992; Van Ijzendoorn & Sagi-Schwartz; 2008). In particular, the proclivity for infants to become attached is emphasised, regardless of their specific cultural background (Mesman et al., 2016; Morelli et al., 2017). However, certain attachment theorists have highlighted that the way in which attachment is explored and researched needs to be culturally sensitive. For example, Minde et al. (2006) suggested that maternal narratives alone may not be sufficient to investigate maternal attachment styles within certain cultures. Given the variations in child-care approaches, particularly in non-Eurocentric populations, Morelli et al. (2017) emphasised the importance of observational approaches when attempting to capture attachment features within these populations. In a South African context, the fact that "the mechanisms operating in indigent communities in the developed and developing world…may be different" is also highlighted (Tomlinson et al, 2005, p.1045) . Nevertheless, the applicability and usefulness of attachment theory within the local South African context is emphasised (Tomlinson et al., 2005; Monde et al, 2006).

Debates around the utility of psychoanalytic thinking in the South African context have critiqued classical psychoanalysis for reducing all distress to intrapsychic conflict, disregarding the realities of contextual and cultural influences. However, application of the

theory in ways that allows space for thinking about the effect of the social has been found to be effective in both individual and community intervention (Kruger, 2014; Smith et al., 2013).

Chapter 3: Literature Review

3.1 Introduction

The literature review is divided into two sections. Firstly, the study is briefly contextualised. Concepts specific to prematurity are addressed and prematurity in South Africa is discussed. The experiences and behaviours of the premature infant as well as the premature mother-infant dyad are explored.

A thorough 25-year scoping review of all psychoanalytic journal-based literature on the topic of prematurity is then presented in the form of Paper one. The scoping review identifies trends in the articles, summarising the range and nature of this research as well as gaps in the literature. It is acknowledged that most of these articles were written in Western Educated Industrialized Rich Democratic (WEIRD) countries, and as such some of the ideas and findings may not be applicable to my research (Henrich et al., 2010). It is also important to note that the references of this publication are not included following the article but can be found at the end of the thesis. This is the case for four articles included in the thesis.

3.2 Prematurity in South Africa

In a study entitled, 'A landscape analysis of preterm birth in South Africa: systemic gaps and solutions', Ramokolo et al. (2019) elucidated the challenges in South Africa regarding establishing accurate representations of the prevalence of premature birth. Consequently, our grasp of the epidemiology of premature births is imprecise, limiting the extent to which health services can appreciate the needs or challenges related to premature births in a local context. Further, this report also highlighted the lack of local studies exploring the medium and long-term implications of premature birth in South Africa. These factors all have implications for the health systems ability to respond effectively, impacting prevention as well as treatment strategies (Ramokolo, 2019). Shortage of appropriately trained medical personnel, challenges with the availability of neonatal intensive care beds as well as shortages of additional medical equipment and supplies required for the intensive

specialised care of these infants also compromise the survival rates of premature infants, particularly in rural areas (South African National Department of Health, 2017).

Most of the available studies on prematurity have been undertaken by the medical community (Wilkinson et al., 1999). Research exploring the experiences of premature mother-baby dyads in hospital settings is scarce. The few that have been conducted were undertaken by the nursing community (Ntswane-Lebang & Khosa, 2010; Maree, et al., 2017). These included qualitative explorations of the difficulties experienced by mothers with children in a neonatal unit (Ntswane-Lebang & Khosa, 2010) as well as a quantitative evaluation of family-centred care (Maree et al., 2017). South African psychological studies on prematurity appear to have focused on the importance of 'Kangaroo Care' (Bain et al., 2010; Chi Luong et al., 2015).

3.3 The Experiences and Behaviours of the Premature Infant

This study was interested in the experiences and behaviours of the premature infant, including infant communications and non-verbal attempts at engagement. Infant capacities and vulnerabilities were also of interest. It was therefore important to explore psychoanalytic and developmental literature on premature infants specifically, taking into account how their developmental capacities might compare with that of full-term infants.

Psychoanalytic understandings regarding the premature infant originate mainly from the "observed infant" where clinicians working in hospital settings have utilised their countertransference responses to gain insight (Negri, 2018; Mendelsohn, 2005; Riberio Batista Geraldini, 2016). This is based on the psychoanalytic assumption that the primitive mechanisms of projection and projective identification are the most potent forms of communication for this fragile, non-verbal infant. Perhaps it is unsurprising that health workers and observers in hospital settings report feeling saturated with powerful countertransference reactions such as confusion, overwhelm and feelings of disintegration (Hardy, 2005; Lazar & Ermann, 1998). These experiences suggest that the premature infant suffers a particularly fragmented internal world. Riberio Batista Geraldini (2016) referred to their compromised ability to "perceive the external world, show their needs and to build their internal world" (p. 45). It is postulated that this results from their underdeveloped mental apparatus as well as their chaotic environment (Ribeiro Batista Gerladini, 2016).

Klein's description of the paranoid-schizoid position is useful when trying to conceptualise this experience. Ester Bick's theory is also helpful in explaining how premature infants might cope with their frightening experiences (Botero & Sanders, 2014; Mendelsohn, 2005; Noel, 1998).

Developmental literature highlights the broad range of behavioural competencies, cognitive abilities and social skills that full-term infants display (Farroni et al., 2004; Field et al.,1982; Tronick, 2003). Further, the analysis of real mother-infant 'proto-conversations' revealed an infant that is motivated to engage and actively establish relationships with caregivers (Beebe et al., 2003; Trevarthen & Aitken, 2001). In various studies, infants in fact demonstrate this capacity from birth, as well as the ability to learn the codes of social behaviour (Brazelton & Cramer, 1990). Infants also demonstrate agency, with even "newborn infants … perfectly designed to elicit from the environment all the support they need for their survival and successful adaptation" (Als, 1986, p. 23.).

However, infant research suggests that infants are born with varying developmental capacities, vulnerabilities and abilities to self-regulate. This influences the way in which they interact with the world and what they can manage in their environment (Nugent et al, 2007). These have a profound effect on the newborn infant's ability to accomplish main task of early infancy which is to become organised and integrated (Nugent et al., 2007; Tronick, 2003). For example, when the infant's central nervous system is sensitive or immature, the infant may not acclimatise easily to certain sensations, and the infant's tolerance levels for stimulation may be lower, resulting in an infant who becomes overwhelmed more quickly or possibly cries more frequently (Miller et al., 2001). Regardless of their strengths and vulnerabilities, most infants have periods when they cope with their environment and can achieve a state of integration. They will also, at times, become disorganised, having surpassed their specific threshold for self-regulation. This is when they need support from caregivers to return to a state of integration. These states are recognisable through observations of the infant's behaviour which provide insights into their capacity to self-regulate (McFadyen, 1995; Nugent et al., 2007). Observations of phenomena such as eye gaze behaviour, changes in skin colour, breathing patterns and muscle tone as well as crying therefore offer crucial information regarding the infant's stress levels and their ability to cope with their surroundings.

There is also literature, although significantly less, that addresses the abilities as well as the limitations of premature infants (Trevarthen & Aitken, 2001; Tropiano et al., 2017). As a result of growing interest and research in this area, knowledge is increasing. Premature infants have been shown to have many of the developmental capacities of term infants. For example, many can locate sounds, visually track objects, as well as showing preferences for visual or auditory stimulation support (Farroni et al., 2004). However, these abilities have been shown to be immature and susceptible to disruption (Nugent et al, 2007). In addition, premature infants may be somewhat impaired in their ability to send clear messages about their states or their needs. Their difficult early experiences can also negatively interfere with their developing capacity to communicate and self-regulate (Browne & Talmi, 2005; Gorzilio et al., 2015; Vanderveen et al., 2009).

In keeping with the literature mentioned above, this study attempts to make interpretations based on observations of premature infant behaviour. The researcher acknowledges that attempting to interpret the experiences of infants, given their primitive, preverbal nature, requires caution. However, there is an established precedent of attempting to infer the meaning of an infant's behaviour on the basis of in-depth observation in both psychoanalytic and developmental literature (Cohen, 2003; Mendelson, 2005, Nugent et al., 2007). The use of infant observation to explore the possible meaning of infant behaviour and communication has been used specifically in the context of a hospital setting (Boyer & Sorenson, 1999; Caron et al., 2014; Castro, 2011; Cohen, 2003; Mendelson, 2005; Ribeiro Bastista Geraldini, 2016). This will be elucidated further in the methodology section. However, the focus on the premature infant is considered to be essential for this study. Several psychoanalytic clinicians have argued for the practice of addressing the premature baby as a subject in his/her own right (Kraemer & Steinberg, 2006; McFadyen, 1995; Vanier, 2015). This is especially true given the societal resistance to regarding premature infants as having a mind and the capacity for sentience (Cohen 1995; Ribeiro Batista Geraldini, 2016). However, according to Vanier (2015), "in order for a human being to become a subject, an 'other' needs to suppose the subject in the baby" (p.33). This study argues that documenting these communications supports the fundamental tenet of infant-mental health that infant communications have meaning and need to be taken seriously (Baradon, 2009).

It is important to highlight that infant communications and behaviours were, however, predominantly examined in the context of mother-baby relating as it is understood that the (premature) "baby's sense of self develops in the context of the mother-child relationship" (McFadyen, 1995, p. 165) (for developmental references refer to Als, 1986; Brazelton & Cramer, 1990; Nugent et al., 2007). These observations were also found to be valuable as part of understanding the developing relationship between mother and infant. It should be noted that this was mainly possible because of the level of involvement and responsibility that mothers assumed in taking care of their infants at the particular hospital utilised for this study, Rahima Moosa Mother and Child Hospital. This is often not the case in hospital settings.

3.4 The Premature Mother-infant Dyad

In both the psychoanalytic and developmental literature, the importance of the parent-infant relationship is constantly highlighted, with particular emphasis on the mother's role. Winnicott conceptualised mother and baby as being a union in the first days of the baby's life (Winnicott, 1964). Developmental literature also regards the mother-infant pair as a "mutually coordinated" system (Tronick, 2003, p.36). Guedeney et al. (2013) stressed the importance of "close and continuous interactions between parent and infant" (p. 516). Given the limits of their self-organising capacities, all infants require attuned responses to their communications if they are to thrive (Beebe & Lachman, 2003; Bronson, 2000; Tronick, 2003; Trevarthen & Aitken, 2001). Beebe and Lachman (2003) referred to a "dyadic systems view" where regulation is accomplished through a communication structure in which the infant communicates it's regulatory status to the caregiver, who then responds appropriately and contingently (p.380).

In the developmental literature, 'intersubjectivity' is the term used to describe the bi-directional, reciprocal attempts at communication by both caregiver and infant (Beebe, 1982; Beebe et al., 2010; Meltzoff & Moore, 1998; Trevarthen & Aitken, 2001; Stern, 2005). Intersubjectivity takes into account both the caregiver's capacity for attunement as well as the infant's ability to engage (Trevarthen & Aitken, 2001). It explores the creation of shared experiences through intentional efforts by both parties at interacting and developing connection (Beebe et al, 2003). This conceptualisation of intersubjectivity was therefore deemed helpful and appropriate for this research study. This explanation has also been

taken up by several developmentally oriented psychoanalytic authors (Balbernie, 2007; Benjamin, 1990).

The importance of supporting the premature mother- newborn relationship is also established in the literature. In the psychoanalytic literature, Cantle (2013) suggested that supporting the premature parent-infant relationship was critical in helping a premature infant in dealing with trauma of their experience. In the infant research literature, the importance of the parent-infant relationship is constantly emphasised (Minde et al., 1989; Porter et al., 2020; Udry-Jørgensen et al., 2011). However, in both orientations this emphasis does not seem to be followed by in-depth analysis or focus. This area is one of the main gaps in the premature literature needing to be addressed, particularly in the psychoanalytic literature. While some literature has addressed this topic, there are still gaps that have been identified.

The psychoanalytic literature engages with the unconscious mental states occurring separately in the mother and infant as a result of their premature experience. To some extent, it also describes with how premature mother and baby impact one another. As explained in the previous section, the disturbed container-contained function is central throughout this literature with a particular focus on the implications of this for the infant (Blessing, 2006; Botero & Sanders, 2014; Castro, 2011; McDonald, 2015). Referring to premature birth, Botero and Sanders (2014) alluded to "a mother-baby couple's shared mental state" highlighting that "emotional survival is in danger as is the container-contained function"(p. 216). This literature highlights how the combination of a traumatised, fragile infant and a mother whose maternal capacity is diminished strains the establishment of a healthy relationship.

Psychoanalytic literature also explores, to some extent, the impact of psychological processes, such as projections, transference and projective identification, within the mother-baby relationship. This is mainly the result of infant observations undertaken in hospital settings (Amez & Botero, 2000; Anscombe, 2008; Botero & Sanders, 2014; Boyer & Sorenson, 1999; Castro, 2011; Demby, 2010; Hardy, 2005; Harris, 2005; Lazar & Ermann, 1998; Mendelsohn, 2005; Noel, 1998; Ribeiro Batista Gerladini, 2016; Steibel et al., 2014). However, in most of these papers, the relationship itself is not the main focus. Nevertheless, this literature is helpful in illuminating some of the dynamics within the relationship as well

as emphasising that positive relating is possible when maternal capacity and confidence is supported (Amez & Botero, 2000; Hardy 2005). For example, Hardy (2005) shared a moving vignette where a depressed mother is helped to 'claim' her premature baby and establish their relationship. Hardy described how "the small movements of vitality blossomed into the communication of reciprocity" (p. 175). The notion of reciprocal interaction is mentioned but not explored further. This is highlighted below in paper one (Canin, 2023), where it is suggested that the reciprocal impact of maternal states of mind and infant responsivity are not addressed sufficiently in the psychoanalytic literature. Nevertheless, despite being limited in its depth of focus, the available psychoanalytic literature on this relationship was found to be helpful within this study.

In keeping with the psychoanalytic literature, developmental research demonstrates why it is more challenging for mothers to interpret their premature infant's needs (Park et al., 2016). As a result of immature neurobehavioral development, preterm infants are often less alert and responsive. They also offer less eye contact and clarity of cues (Korja, et al., 2009; Borghini et al., 2006). The risk of non-contingent and non-rewarding behaviours for both parties is identified (Browne & Talmi, 2005). However, despite the emphasis of the dyadic nature of the relationship, most papers explore how the parent and infant affect one another rather than focusing on the relationship itself.

There are also studies which address the overall styles of interaction within premature mother-baby dyads and how this differs from term dyads (Borghini et al., 2006; Zelkowitz et al., 2007; Goldberg et al., 1986; O'Donovan and Nixon, 2019). Parental behaviour with premature infants is described in the literature as being less sensitive (Borghini et al., 2006; Zelkowitz et al., 2007), more controlling, as well as offering less warmth and flexibility (Bardin et al., 2007). These behaviours are believed to result from parental anxiety, stress, trauma and emotional disorganization (Borghini et al., 2006; Bardin et al., 2007). There is, however, disagreement on the implications of this difference. Some theorists have suggested that these differences highlight greater stress in the preterm dyad, with negative consequences for parent-infant relationship (Muller-Nix, 2004). For example, Forcada-Guex et al. (2011) found that preterm mothers suffering from PTSD symptoms were more likely to be controlling with distorted representations. Borghini et al. (2006) suggested that stressful beginnings to the relationship, such as that experienced in hospital settings, may compromise the parent infant relationship fostering the possibility of interactive difficulties

moving forward. Nugent et al. (2007) advised that if the premature infant's ability to communicate is compromised, the parent may be left feeling confused and overwhelmed. A difficult beginning may result in noncontingent and nonrewarding behaviours for both parties and is often not conducive to optimal parent–infant interaction (Browne & Talmi, 2005; Mendelsohn, 2005). Goldberg et al. (1986) suggested that a unique style of interacting might develop with preterm dyads, representing an appropriate adaptation to the special needs of the preterm infant. Proponents of this view suggest that mothers adjust their parenting to compensate for the infant's lack of responsivity and need for increased stimulation (O'Donovan and Nixon, 2019). This is allegedly evidenced by the fact that many authors have not found higher proportions of insecure attachment patterns amongst premature infants (Brisch et al., 2003; Easterbrooks, 1989; Goldberg et al., 1995). Whist this literature is important to consider, interactional dynamics within premature parent-infant dyads is only addressed in a few articles.

In the developmental literature, the emphasis seems to be on developmental risk and the impact of disturbed parental states of mind, perceptions and behaviors on the infant (Borghini et al., 2006; Zelkowitz et al., 2007). By contrast, the mediating role that parenting can play for infant development is highlighted but not to the same extent. Mello et al. (2011) explored the impact of maternal presence for premature infants in the hospital; incubator babies were found to have higher cortisol levels than infants who had received consistent skin to skin contact. Positive parenting and healthy parent-child relationships have also been shown to be protective and foster resilience in children that have experienced significant risk through prematurity (Poehlmann et al., 2014; D'Agata et al., 2017). However, the dynamics of the actual relationship are only addressed in a limited way in this literature.

Some developmental literature has highlighted the fact that, despite their limitations, premature infants do still communicate their experience through their behaviour and require responses to these attempts (Cohen, 2003; McFadyen 1995; Trevarthen & Aitken, 2001). Infant research has also established that premature infants are capable of mutually rewarding interaction with the caregiver (Trevarthen, 1979). Trevarthen and Aitken (2001) suggested that "even an infant born two months before term can begin to share dynamic proto-conversational motives … by exchanging facial expressions, vocalisations and gestures of the hands with a sympathetic partner" (p. 7). However, these interactions need to be sensitive and appropriate. This involves focusing on the infant's cues, being

cognisant of organised and disorganised behaviours as well as mediating interactions and environmental influences in order to prevent the infant becoming overwhelmed (Nugent, 2015; Park et al., 2016). The implications of this have not, however, been sufficiently addressed in the literature.

3.5 Paper 1: Premature infancy: a 25-year scoping review of psychoanalytic journal articles

Canin, N. (2023). Premature infancy: a 25-year scoping review of psychoanalytic journal articles. *Psychoanalytic Psychotherapy*, 37(1), 4-40.

Abstract

This paper offers a 25-year scoping review of psychoanalytic journal articles on premature birth from 1997 to 2021. Given the prevalence of prematurity and its impact on infant development and parenting, this is an area which requires engagement and research. 28 papers were found in psychoanalytic journals. This review summarizes the extent, range and nature of this research, identifying trends in theorizing about premature infancy and gaps in the literature. The overall lack of articles on the topic of prematurity is highlighted and possible reasons for this are suggested. These include the practical challenges as well as the intensity of emotional pain inherent in working with prematurity. The findings highlight the trauma experienced by both premature infants and their parents. Prematurity may also place the parent-infant relationship at risk. The therapeutic imperative of interacting with the infant as a person is strongly emphasised. Research suggests working in the NICU is emotionally evocative. However, a case is made for the critical role that psychoanalytic practitioners can play in supporting those impacted by premature infancy. The need for exposure to this topic is highlighted. Gaps in the literature appear in relation to sibling experience, experiences of fathers of premature infants, and the intersubjective processes occurring between premature infants and their parents.

Introduction

'We would like to share with you both the excitement and the pain, the curiosity and the fear, which we have found to be inevitable components of the observation of premature babies' (Lazer & Ermann, 1998, p. 21).

Over one in ten births across the globe are premature, accounting for approximately fifteen million births per year (World Health Organization, 2018). By definition, premature birth occurs before 37 weeks' gestation. However, progress in technology has meant babies born as early as 24 weeks can now be viable (D'Agata et al., 2017). Premature infants usually require intense medical treatment to support underdeveloped physiological systems. Neonatal intensive care units (NICUs) offer predominantly incubator care for premature infants, supporting them with nasogastric feeding, artificial breathing and monitoring of vital signs (Mello et al., 2011). Being born prematurely disrupts the infant's early environment and in doing so often disturbs the normal course of development (Brazelton & Cramer, 1990; Davis et al., 2014; Talmi & Harmon, 2003). Premature birth has been associated with various childhood risks including behavioral problems, cognitive impairments, poor academic achievement and diminished social ability (D'Agata et al., 2017; Gorzilio et al., 2015; Porter et al., 2020). The quality of an infant's early experiences and relationships has been shown to be fundamental to their developmental trajectory (Sroufe, 2013; Zeanah et al., 2011), providing the foundation for psychological capacities and risk factors (Shonkoff et al., 2012; Siegel, 2020). Given this prevalence and the potential implications, the experience and psychological impact of prematurity has been flagged as an important area of investigation (Bain, Gericke, & Harvey, 2010; Herd et al., 2014; McManus, 2015). Psychoanalysis is one of the only theories that attempts to understand the mind of the infant, offering a rich framework for thinking about infantile experience (Anzieu-Premmereur, 2019). Object relations theory has foregrounded the importance of interpersonal relationships and focuses on the infant's experience of bodily and emotional states within the context of early mother-baby relationships (Shuttleworth, 1989). Within this framework, the reciprocal interaction between mother and baby is central. Perhaps as a result of this relational focus, object relations has guided developmental psychoanalytic theory (Anzieu- Premmereur, 2019) as well as underpinning the field of psychoanalytic infant observation (Shuttleworth, 1989).

Three books within the psychoanalytic milieu have been published on the topic of prematurity. All three are written by psychoanalytic clinicians who share insights, observations and vignettes based on their therapeutic experiences with premature infants, parents and staff within the NICU. The authors all highlight object relations theorists as being central to their understanding of these experiences (Cohen, 2003; Negri, 2018; Vanier, 2015). These theorists include Melanie Klein, Wilfred Bion and Donald Winnicott.

Much of the theory utilised by these authors involves the psychoanalytic understanding of ordinary (non-premature) primitive experiences and relationships. Cohen (2003) suggests that Klein's theories helped her to reflect on how infants experience their mothers, 'their outsides, but also about their insides and fantasies about what is going on in there.' (p. xix). Negri (2018) quotes Klein when explaining the premature infants' use of projections and projective identification. Klein (1946) proposes that the baby manages frightening sensations by splitting and projecting them into the mother. Vanier (2015) references Klein's idea that ambivalence is a feature in all relationships, highlighting the co-existence of love, hate and envy from the beginning. This notion is used when exploring the complex feelings mothers may have towards their premature infants (Cohen, 2003; Negri, 2018; Vanier, 2015).

Object relations theory is also used to understand what the premature infant may not experience in the context of the NICU. Bion (1962) describes how the mother digests the infant's unbearable experiences and returns them in a way that feels tolerable. Bion (1962) termed this capacity 'reverie' which allows the infant an experience of 'containment.' Similarly, Winnicott (1992) suggests the mother offers her baby 'holding,' both physically and mentally, which allows the infant to develop emotionally. However, the premature infant is often separated from the mother. In addition, Vanier (2015) and Negri (2018) highlight why mothers of premature infants may struggle to enter into the psychological state identified by Winnicott as 'primary maternal pre-occupation,' a state of mind that supports reverie.

The experience of containment is therefore often not possible for the premature infant with important psychological implications. McFadyen (1995) in her paper entitled, 'Reflections on special-care babies and their early experience' highlights the usefulness of Esther Bick's concept of 'second-skin' defences, where the infant needs to find independent ways of

holding himself together. This theory helpfully explains observations of 'premature babies . . . staring at one particular object or pushing their limbs . . . against the side of the incubator (so) that they turn white . . . in the service of holding on' (McFadyen, 1995, p. 164). It is clear how valuable a psychoanalytic approach is in understanding the unique and often compromised early relational experiences of premature infants.

Thus, this study was driven by an interest in understanding, in more detail, the extent to which psychoanalytic practitioners and researchers have engaged with this critical topic, how psychoanalytic theory has been used to understand the various facets of premature infancy, and how these understandings are being reported in academic journals. Whilst the published books mentioned above are seminal, it is likely that these texts would only be discovered by those with an active interest in prematurity. For other more generalist practitioners, exposure to the topic of prematurity might only occur through the information that has been disseminated in psychoanalytic journals.

An exhaustive systematic review of psychoanalytic journal literature on premature birth has not been attempted. Rather, a scoping review was undertaken, as these reviews are considered sufficient and as being of value for complex areas which have not been reviewed comprehensively (Arksey & O'Malley, 2005). This review has included all English-medium psychoanalytic journal articles focusing on premature birth over the last 25 years, summarising the extent and nature of journal-based research in the area as well as identifying trends and gaps. Although this study has utilised object relations theory as the most relevant psychoanalytic framework in which to embed and understand prematurity, the scoping review has included all English-medium psychoanalytic journals irrespective of theoretical orientation.

Method

The methodology for the scoping review was based on guidelines by Arksey and O'Malley (2005). The following five stages were followed: (1) identifying the research question, (2) identifying relevant studies, (3) selection of studies, (4) charting the data, and (5) collation, summarisation and reporting of results.

Research question

The guiding question for this review was 'How has premature infancy been investigated and conceptualized in psychoanalytic journals over the last 25 years?'

In order to answer this question, several secondary questions were identified:

(1)To what extent has the topic of premature infancy appeared in psychoanalytic journals over the last 25 years?
(2)How has premature infancy been investigated in psychoanalytic journals over the last 25 years? What kinds of papers have been published and what sources of data have been used?
(3)How has premature infancy been conceptualized in psychoanalytic journals over the last 25 years? What are the key themes in the literature?

Identifying relevant studies

Evaluation of literature was limited to psychoanalytic and psychodynamic journals. A list of all journal titles incorporating the terms 'psychoanalytic' and 'psychodynamic' was compiled. This included peer-reviewed and non- accredited journals. Journals with a psychoanalytic/dynamic emphasis in their scope were also included. In order to answer the research question and agenda, the selection was deliberately limited to these journals because of their focus and target audience. It is acknowledged that there might be articles utilising a psychoanalytic theoretical framework published in other journals that have not been included in this review. In addition, grey literature was not included. Exposure to these sources by psychoanalytically minded practitioners was assumed to be more limited.

Overall, 24 journals were included. A list of these is provided below. Each journal was manually examined for articles that met the inclusion criteria. The search function of each journal was then utilized to ensure articles had not been missed, using key search terms identified in the literature, namely 'premature,' 'prematurity,' 'preterm,' 'preemie,' 'NICU,' 'neonatal intensive care' and 'kangaroo care.' (The term 'kangaroo care' was added as this is a technique of premature infant care that is commonly used in developing countries where incubators are not available. The technique involves using mothers as 'living incubators,' wrapping up infants between their mothers' breasts ensuring skin-to -skin contact (Botero

& Sanders, 2014, p. 217). (The benefits of kangaroo care in preventing prolonged separation between mother and infant (Amez & Botero, 2000) has resulted in this technique being utilised to varying extents within the NICU as well).

As a secondary back up, the above-mentioned search terms were applied to Google Scholar (https://scholar.google.com) and the first ten pages of each search were examined. This limit was implemented for practical reasons. Despite these efforts, it is acknowledged that potentially relevant articles could have been missed.

Study selection

Potentially relevant papers identified in the previous step were then examined against the study's inclusion criteria. Given the exploratory focus of the review, quality of papers was not assessed. The following inclusion criteria were used:

(1)Articles published in psychoanalytic journals between 1997 and 2021. The time frame of 25 years was chosen in an attempt to balance recency, relevance and comprehensiveness.
(2)Texts available in English (due to the complexity and costs of translations)
(3)The main focus of the article needed to center around an aspect of prematurity or premature birth.

All study designs in the relevant journals were eligible. After screening for relevance and removing duplicates, the full text of each article was obtained. Articles were published in six out of the 24 journals and 28 studies in total were included.

The seminal psychoanalytic books on prematurity (Cohen, 2003; Negri, 2018; Vanier, 2015) provided a theoretical basis for thematic categories. These categories included the 'premature infant's experience,' 'the parent's experience,' 'the parent-infant relationship,' 'the therapist or observer's experience,' 'observer or therapist role' and 'the experience of staff working within the NICU.' The articles were then closely read in order to find emergent themes within each of these categories. The articles were also examined to see if other categories emerged (Table 1). The additional category of 'sibling experience' was added. With the research questions in mind, the key themes were charted (Refer to Table 2 below) and then analysed using thematic analysis.

Results

Table 1. Summary of Results

Journal	**No of papers**	**Article Type**	**No of papers**	**Data Used** (More than one form of data possible per paper)	**No of Papers**
Infant Observation	19	Infant observation paper	8	Observational material from hospital setting	13
International Forum of Psychoanalysis	1	Case study paper	11	Observational material from home setting	1
Psychoanalytic Dialogues	4	Retrospective case study paper	5	Countertransference	18
Psychoanalytic Inquiry	1	Theory/methodology paper	3	Clinical material from therapeutic work with premature infant and/or parent within hospital setting	9
Psychoanalytic Psychotherapy	1	Theoretical paper	1	Clinical material from therapeutic work with premature infant and/or parent outside hospital setting	1
Journal of Child Psychology	2			Clinical material from traditional psychoanalytic therapies	6
Total	28			Clinical discussion seminar	5

Table 2. Key themes for each paper

Author and Title	Key Themes	Article Type and Main Focus	Data Used
Infant Observation 1) Lazar & Ermann: Learning to be: On the observation of a premature baby (1998)	**Infant Experience** Ill equipped for external environment, in need of physical and psychological support **Observer Experience** -Countertransference: Intruder, confusion, pain, fear, relief, excitement, terror, guilt challenges remembering and feeling, -Gathering data from primitive proto-experiences, -Finding emerging patterns, holding boundaries, -Importance of support from seminar group	Infant Observation Paper	Observational material from NICU Countertransference Clinical seminar discussion
2) Noel: An observation of loss in the neonatal intensive care unit (1998)	**Infant Experience** Loss of protection of uterus, integrity, being seen as human **Parental Experience** Pain, Need to mourn loss of 'ideal baby' to embrace 'real baby' **Observer Experience** Guilt, pain, identification with baby **Staff Experience** Protective defences, detachment, inability to see baby as person	Infant Observation Paper	Observational material from premature infants with feeding difficulties in NICU Countertransference
3) Amez & Botero: The mother, the baby, the pouch and the observer. Feeding difficulties of an infant on the kangaroo mother programme (2000)	**Infant Experience** Breast is intrusive and demanding; Nipple becomes persecutory Defences used: Primitive mechanisms: falling asleep, hiccoughs, body as barrier **Parental Experience** Premature mother, Guilt over 'damaging' baby, need for reparation, Anxiety impacts ability to read cues, impaired reverie and containment, Impact of mother's history, As mother becomes contained she offers containment and tolerates closeness **Observer Role** Containing, validating pain and persecutory fantasies, Improving maternal states of mind, Supporting maternal capacity to keep baby alive **Parent-Infant Relationship** Lack of co-ordination and misattuned interactions, Difficulty picking up baby's signals, Baby's awareness of maternal states	Case Study Paper	Clinical and observational material from mother-baby dyad utilizing Kangaroo Mother Programme in home environment

	of mind and impact this has on emotional state and ability to feed, Shifts observed in relationship as maternal state of mind improves **Staff Experience** High levels anxiety, focus not on containing mothers KMC Intervention Opportunity for intimacy, Allowing reparation for fantasies of having damaged baby		
4) Miller: 'Sharing the thought:' Work in a neo-natal unit (2001)	**Parental Experience** Sorrow, Fear, Anger, Guilt, Inadequacy, Shifting states of mind, Inability to reflect on relationships, Impact on maternal reverie **Sibling Experience** Sibling feelings complicated by premature birth, Separation from parents, Parental preoccupation, Feelings of distress, May result in disruptive behavior **Therapist Experience** Tolerating and digesting projections from baby, parents and siblings, Bearing pain, Offering maternal reverie, Offering talk and play to siblings	Case Study Paper	Clinical material from therapeutic work with parents and siblings of premature infants in NICU Countertransference Clinical seminar discussion
5) Loose & Foster: The use of film observation in clinical work with parents and infants in a neonatal unit (2002)	Description of clinical intervention in the NICU utilising film	Theory/Methodology Paper	None
6) Camhi: Siblings of premature babies: Thinking about their experience (2005)	**Parental Experience** Worry, trauma, anxiety, denial Increased arousal or numbness Can dismiss sibling feelings, need for one child to be okay Paternal role Important for supporting siblings, continuity of maternal functions, Help sibling to separate from mother Challenges for Fathers Forgotten members of family, frustration and anger, regress when identify with sibling **Sibling Experience** Break in predictability, inability of parents to contain feelings, may carry projections. Premature birth may confirm primitive anxieties, destructiveness of phantasies. Results in taking responsibility Defences mainly 'paranoid schizoid:' Avoidance of separation or loss, Splitting and projection, Manic reparative attempts,	Case Study Paper	Clinical material from therapeutic work with siblings of premature infants in NICU Countertransference

	Excessive use of defences can inhibit mental development **Therapist Experience** Tedium and invisibility, Need to adjust therapeutic technique, Less defined boundaries, Need for support to be in contact with difficult feelings **Therapist Role** Validate child's emotional experience, Respect defences **Staff Experience** Project unprocessed experiences, relate to illness rather than person, defences against connecting and relating		
7)Hardy: A premature view: Observations in a SCBU (2005)	**Parental Experience** Challenges offering containment, Inadequacy, diminished role, Insensitivity of staff, Temptation to not 'see' baby, Struggle for 'ownership,' Ability to actively claim babies **Observer Experience** Impact of possible disability/death, Presence of observer facilitates thinking Countertransference Pain, persecutory anxiety, unbearable emotions Challenges Retain focus on baby, Desire to avoid motherless babies, Need for reflection and support **Staff Experience** Impact of permeable boundaries	Infant Observation Paper	Infant observation material from NICU Countertransference
8) Mendelsohn & Phillips: Introduction to working in the NICU: Our work in context (2005)	Practical description of therapeutic work done in NICU	Theory/Methodology Paper	None
9) Mendelsohn: Recovering reverie: Using infant observation in interventions with traumatised mothers and their p0remature babies (2005)	**Infant Experience** Unprepared, incoherent 'proto-experiences', Seeking out responses **Parental Experience** Heightened state of arousal, PTSD with avoidance/hypervigilance Unprepared, self-blame and guilt, Decreased capacity for containment Dismantled capacity to think or connect with baby, Struggle to understand baby's cues, Maternal role needs support **Parent-Infant Relationship** Maternal state of mind impacts on vulnerable baby, Traumatised mother may fail to recognise baby's individuality, Traumatised	Case Study Paper	Infant observation material from NICU Clinical case material from therapeutic work in NICU

	infant may send confusing signals, Out-of-sync interactions **Therapist Experience** Challenges Finding ways to think about babies, Finding language to articulate experience **Therapist Role** Offering 'psychological nest' of containment, Helping mother understand, engage and reclaim baby, Supporting emerging parent-infant relationship		
10)Harris: Critically ill babies in hospital – Considering the experience of mothers (2005)	**Infant Experience** Requires nurturing environment, Prematurity can result in irritability and passivity, Defences in response to maternal projections **Parental Experience** **'**Chronic sorrow', feelings of inadequacy, loss, failure, guilt, fear of holding baby, Anticipation of future loss of baby, 'Narcissistic wound', Distortions in perception, Lack of privacy, Trauma, Challenges with mourning, Need to protect from pain **Parent Infant Relationship** Parental and infant challenges interfere with developing relationship, Quality of interaction influenced severity of baby's illness, Difficulties in separating baby's experience from own **Therapist Role** Early intervention in relationship, Emotional support for mothers, Infant Observation can assist with distorted perceptions of baby	Case Study Paper	Observational material with mothers and critically ill babies Clinical material from therapeutic work with mothers and critically ill babies Countertransference
11)Blessing: Shall I dare to come alive: Long term effects of painful beginnings. (2006)	**Infant Experience** Lack of maternal containment, Primitive anxieties unsymbolized, Lack of psychic skin, Psychic pain experienced in body, Inability to introject containing object, Invasion and trespassing, Emotional wounds remain unhealed. Defences: Second skin pseudo-independence **Therapist Experience** Challenge to keep looking and thinking, Difficult bearing pain	Retrospective Case Study Paper	Clinical material from therapeutic work with young adult with an eating disorder
12)Anscombe: The dichotomy of containing trauma amidst joy: New life and a neonatal death; the experience of	**Infant Experience** Baby needs to cope with own feelings and parental response to loss **Parent Experience** Uncertainty, stress, trauma, Intrusions in getting to know baby, Impact on mourning	Case Study Paper	Observational and clinical material from therapeutic work in NICU with parents of twins, where one twin

working with the parents of twins on the NICU (2008)	(loss of child) and reverie (with child that survived) **Therapist Experience** Challenges Keep feelings and thinking alive, Adapting style for vulnerable setting **Therapist Role** Communicating observations to parents, Bearing unprocessed anxieties, Offering containment and strengthening reverie between infant and parents		had died Countertransference
13)Simon: The ogre and little thumb. Love, hate and survival in neonatology: an application of Ester Bick's method of infant observation.	**Infant Experience** Loneliness, Emotional and bodily suffering **Observer Role** Facilitating connection, Impact of 'thinking' on staff, parents and babies **Staff Experience** Unaware of their mistreatment of parents and babies, can be oblivious to anxiety and violence, who is traumatizing who?	Infant Observation Paper	Observational material from one baby in NICU Countertransference
14)Demby: Observation as an adjunct to psychotherapy -when a patient delivers prematurely (2010)	**Infant Experience** Absence of containing object **Parent Experience** Absence of containing object. Impact of mother's history on adaptation to trauma. **Therapist Experience** Addition of observation deepened therapeutic process. Presence of premature infant helped parent and therapist explore primitive parts. Therapist's observational stance allowed access to earlier failures in containment.	Case Study Paper	Observational material in NICU Clinical case material from a therapeutic process outside hospital Countertransference
15)Castro: Observing a premature baby: the case of Eliecer (2011)	**Infant Experience** Transitional space between uterus and external world incubator as severely lacking psychological experience, Fragmentation, Lack of containment, Link between psyche and soma. Defences: Autistic-type defence, Dismantling relationship to external reality, 'Forced splitting', Closeness with mother results in defences being used less.	Infant Observation Paper	Observational material from one baby in NICU Countertransference Clinical seminar discussion
16)Cantle: Alleviating the impact of stress and trauma in the neonatal unit and beyond (2013)	**Infant Experience** Detrimental effects of trauma biologically and psychologically **Parent Experience** Trauma and disorientation, Loss of phantasy birth and baby, Anxiety, persecuted state of mind, Unrewarding maternal experiences, Painful separation, Unsure of maternal role, Interferes with capacity for reverie and containment, Can misinterpret infant behavior	Case Study Paper	Clinical material from therapeutic work with parents of twins, where one twin had died from therapeutic work with families in NICU and after discharged. Countertransference

	Therapist Experience Supporting parent-infant relationship, Mindful of parents' vulnerability. Offer containment. Powerful Countertransference. _		
17) Steibel, Caron & Lopes An observer's intense and challenging journey observing the short life of an extremely premature baby in Neonatal Intensive Care (2014)	**Infant Experience** Impingements from environment can include maternal presence, Environmental failures, Physical and psychic skin, Suffering, Infant's experience floods those physically and emotionally close **Observer Experience** Intense countertransference, Challenge of being receptive to primitive emotional experience, Unprepared for impact, Identification with baby, Hard to remember, Overwhelmed and physically exhausted, Physical reaction to observations, Pain of witnessing suffering and death, Support needed to tolerate anxieties, digest experience and make meaning	Infant Observation Paper	Observational material from from a dying premature baby Countertransference Clinical seminar discussion
18) Botero & Sanders Mother-baby relationship: a loving nest for mental health-observing 'kangaroo' infants (2014)	**Infant Experience** Physical and emotional survival at risk, Trauma, threat of death, Primitive life manifested in bodily processes, Failure of containment, Disruption of communication abilities, Impact of maternal depression **Parental Experience** Premature Mother, Needs maternal role confirmed and strengthened, Importance of containment **Parent-Infant Relationship** Shared mental state suffers, Emotional survival and container- contained function in danger **Kangaroo Care Intervention** Can contain catastrophe, Mother offers physical contact and 'containing mental skin' Opportunity to build secure attachment	Infant Observation Paper	Observational material in Kangaroo Care Ward
19)Ribeiro Batista Geraldini: Becoming a person? Learning from observing premature babies and their mothers (2016)	**Infant Experience** Harder to perceive external world and build internal world, Stress and trauma, Can be helped to recover and develop psychologically, Need to connect **Parent-Infant Relationship** Fragile infant with limited perceptual abilities and challenges with maternal reverie put developing relationship at risk **Observer Experience**	Infant Observation Paper	Observational material of two premature babies in NICU Countertransference

	Emotional impact, Overwhelming vulnerability **Therapist Role** Containing mothers rather than interacting directly with babies		
International Forum of Psychoanalysis <u>1)Vanier</u> The relationship between the parents and the premature infant (2017)	**Infant Experience** Emotional survival at risk, Importance of 'supposing a subject', Need to be brought into existence, Importance of human voice, Possible identification with inanimate machine **Parent Experience** Trauma from violent delivery, urgent hospitalisation, early separation, worry about prognosis, Prematurity of motherhood, Need to shift from 'fantasy baby' to 'real baby', Suspended ability to invest libidinally, 'Narcissistic Injury', Challenge taking up parental role, Challenge with primary maternal preoccupation, Paternal defences, Impact on states of mind	Theoretical paper based on clinical experience within the NICU	None
Journal of Child Psychology <u>1)Urwin:</u> Psychic links and traumatic events: Some implications of premature birth (1998)	**Infant Experience** Haven't developed psychic structures to manage trauma. Impact of cumulative trauma on 'protective barrier'	Retrospective Case Study Paper	Clinical material from therapeutic work with an 8 year old
<u>2)Carling:</u> "Thomas looking for George", a premature twin emerging from the effects of early trauma	**Infant Experience** Impact of trauma of prematurity, Need for containment and omnipotent control, Punctured psychic membrane, Relives infantile state of terror	Retrospective Case Study Paper	Clinical material from therapeutic work with an 3 year old
Psychoanalytic Dialogues <u>1)Steinberg:</u> Pandora meets the NICU parent or whither hope? (2006)	**Parent Experience** Intrusion and violation, Loss of hope and pleasure, Impact on maternal states of mind, primary maternal preoccupation, maternal sensitivity, Guilt, anxiety, depression and PTSD, Shame, disbelief, anger, helplessness, Stress and trauma linked to: Appearance of baby, fear for survival, parental role, separation from baby **Therapist Experience** Trespasser, overwhelmed, de-skilled, 'deep anxiety,' fleeting hope **Therapist Role** Increase primary maternal preoccupation, Holding and metabolizing trauma, Helping	Case Study Paper	Clinical case material based on therapeutic work in the NICU Countertransference

	staff and parents to see baby as 'person,' Supporting the parent-infant relationship **Staff Experience** Burden as information carriers and life-sustainers, communication incompetence.		
2)Kraemer & Steinberg: It's rarely cold in the NICU: the permeability of psychic space (2006)	**Parent Experience** Inadequacy, disappointment, shame, ambivalence, terror about baby's viability, fear of holding and caring for baby, trauma, dissociation **Therapist Experience** Paralysis, intrusion, uncertainty, Challenges managing unbearable states, Finding ways to reflectand collaborate, Need for support and debriefing **Role of therapist** Containing unberable states, Creating hope in the fact of trauma, Containing parents' and NICU staff's projections, Balancing subjectivity of parent and the baby	Case Study Paper	Clinical case material based on therapeutic work in the NICU Countertransference
3)Kraemer: So the cradle won't fall: Holding the staff who hold the parents in the NICU (2006)	**Therapist Experience** Keeping feeling and thinking alive, Support and collaboration needed **Role of Therapist** Containment, Helping staff manage primitive defences employed for survival, Meaning makers/translators of psychic experience **Staff Experience** Setting does not allow for reflection, insufficient training in communication/psychological complexities	Case Study Paper	Clinical case material based on therapeutic work in the NICU Countertransference
4)Willock: Psychoanalysis of prematurity (2015)	**Infant Experience** Disruptions of sensory continuity of womb, terror for survival, Absence of mother/breast left void- unsatisfied by incubator. Feelings of disintegration/psychic leaking. Later inability to be satisfied, Defences as a result of prematurity: Self-generated stimulation, 'hallucinates the breast', temporary pseudo-independence, tics.	Retrospective Case Study Paper	Clinical case material based on therapy with older child Countertransference
Psychoanalytic Inquiry 1)Boyer & Sorenson: Adapting the Tavistock model of infant observation to work in the neonatal intensive care unit (1999)	**Infant Experience** Conflation of good and bad objects, Lack of protective physical skin, Vulnerability Breaching of boundaries: Failed uterus boundary, Violation of bodily boundaries, Disturbed family boundary, Life and death boundary **Staff Experience**	Infant Observation Paper/ Methodology Paper	Infant Observation Material in NICU Clinical seminar discussion

	Nurses' experience of clinical seminar, Difficulty sharing fear of judgement, pain, self as judgemental, hostility towards parents, feelings of moral superiority, reflection not possible at work, emotions intertwined with family emotions, seminar contains feelings, provides links and clarifies work		
Psychoanalytic Psychotherapy 1)McDonald: The Incubator Psyche (2015)	**Infant Experience** Intra-uterine consciousness, Lack of containment, Absence of mother, Feelings of disintegration/psychic leaking, Role of the skin, Link between soma and psyche, Impact of incubator and introjection of non-human 'skin', Defences as a result of prematurity: Second skin pseudo-independance	Retrospective Case Study Paper	Clinical case material from therapy with older child Countertransference

*Journals reviewed with no papers on prematurity: American Journal of Psychoanalysis, Contemporary Psychoanalysis, International Journal of Applied Psychoanalytic Studies, International Journal of Psychoanalysis, Journal of the American Psychoanalytic Association, Language and Psychoanalysis, Psychoanalysis and History, Psychoanalysis Culture and Society, Psychoanalysis Self and Context, Psychoanalytic Practice (previously Psycho-Analytic Psychotherapy in South Africa), Psychoanalytic Psychology, Psychoanalytic Quarterly, Psychoanalytic Review, Psychoanalytic Social Work, Psychoanalytic Study of the Child, Psychodynamic Practice, Psychodynamic Psychiatry, Scandinavian Psychoanalytic Review

Discussion

To what extent has the topic of premature infancy appeared in psychoanalytic journals over the last 25 years?

When examining the extent to which premature birth has appeared in the 24 psychoanalytically-oriented journals, the paucity of papers is evident. Only 28 papers have been published over the last 25 years and the majority of these have been published in specialist journals, such as Infant Observation. The reasons are important to explore and are likely multi-faceted.

In response to what might be avoidance of the topic, several psychoanalytic authors have commented on the societal resistance to the idea that premature infants have a mind and experience physical as well as psychological pain (Cohen, 2003; McFadyen, 1995). Bain (2020) highlights a phenomenon whereby 'in settings characterized by . . . collective trauma, and high infant mortality rates . . . .infants are regarded as having less sentience and emotional awareness' (p. 212). Might the lack of engagement with the area of prematurity

be partially defensive against the pain of thinking about babies who might not survive, who endure 'unthinkable' medical intrusion and separation? And yet, the topic is written about extensively in other types of journals. A search for the terms, 'premature birth psychological effects' in Google Scholar over the same time frame delivers 39,600 results. A superficial examination suggests these are predominantly medical and developmental journals. It is possible that the 'scientific approach' taken in these journals, which bases understanding on physical and developmental outcome measures, affords some distance and protection from emotional pain? Perhaps the deliberate openness to emotional experience within psychoanalysis paradoxically makes the need for defences more potent. In the NICU, observers working from a psychoanalytic orientation describe feeling flooded by intense emotion (Steibel et al., 2014), often finding themselves in states of identification with the infant (Noel, 1998; Steibel et al., 2014). The existing literature also emphasises the challenges inherent in finding a language to convey the confusing and incoherent experiences of the premature baby (Cohen, 2003; Lazar & Ermann, 1998). Working with as well as writing about premature infants is clearly very challenging and requires intensive sup- port and supervision (Hardy, 2005; Kraemer & Steinberg, 2006; Lazar & Ermann, 1998; Miller, 2001). There is also the fact that these resources might not always be available. One needs to consider the practical challenges of gaining access to this vulnerable population in the protected environment of the NICU, where health personnel tend to be limited to doctors and nurses.

It is important to emphasise that whilst the review did not find any papers published on prematurity within the last five years, there are currently teams of brave and determined professionals working with premature infants and their families with a psychoanalytic lens (M. Cohen, personal communication, August 13th, 2021). In several countries, there are also robust support structures in place for clinicians such as specialised supervision, reading and infant observation groups (M. Cohen, personal communication, August 13th, 2021).

It is also fairly recent that psychoanalytic therapies have extended to include infants, let alone premature infants. Despite Fraiberg et al. (1975) pioneering work that advocated for the inclusion of the infant in the psychotherapeutic process in order to interrupt the intergenerational transmission of trauma, parent- infant psychotherapy has only really gained momentum in the last 20 years (Acquarone, 2004; Baradon et al., 2005; Barlow et al., 2016). Perhaps a greater focus on premature infancy is yet to come.

The lack of papers in this area also raises the issue of exposure. With few papers published on the topic of premature infancy, could there be a lack of theoretical exposure for clinicians regarding the impact of prematurity on their patients' psychological development? It is noteworthy that the article by Willock (2015) involved a reformulation of a previously published case study, where the experience of prematurity had not been considered. How many other published clinical cases might be missing this dimension?

There is a clear gap in the broader psychoanalytic literature. Further research and publishing of articles in psychoanalytically oriented journals on the topic of prematurity is critical. It is possible that furthering our knowledge about the experiences of the arguably most vulnerable infants could enhance our broader understandings of all our patients. Vanier (2015) describes the value of using the insights gained from premature infants, suggesting that 'for psychoanalysts, premature babies cast an essential light on the metapsychology of the earliest days of life . . . the contribution from working with very premature babies, which is essential for child analysis, is even more so when we work with children who are psychotic or autistic, it is also a very rich source of learning about the archaic phase of our work with adult analysands' (p. 136). Further publications will spread this knowledge within the psychoanalytic community, as well as possibly supplementing the literature with additional insights. More papers will also legitimise this area as an important one for psychoanalytic consideration. This may also potentially help to de-stigmatize the trauma of the experience, creating platforms for dialogue. Given the risks involved for both infant and parent, early intervention for this dyad is crucial. If clinicians are not exposed to this work in psychoanalytic journals, they may not be aware of the possibility of learning how to offer support to premature infants and their parents.

How has premature infancy been investigated in psychoanalytic journals over the last 25 years?

The premature infant's experience is perhaps the most challenging to investigate and portray. Several methodologies are used in the literature to understand the experience of the premature infant. These are relevant as they highlight the ways in which psychoanalytic practitioners have engaged with both the 'clinical infant' as well as the 'observed infant' (Stern, 1985).

The ‘clinical infant’ is jointly constructed by the therapist and the older patient based on transferential enactments, patient memories as well as theoretically driven interpretations. In this review, five papers extrapolate from therapies with older children or adults with a history of premature birth, drawing on object relations theorists such as Bion, Bick, Ogden and Winnicott (Blessing, 2006; Carling, 2003; MacDonald, 2015; Urwin, 1998; Willock, 2015).

Discussing the ‘observed infant’ requires subjective experiences with the actual premature infant. The technique of infant observation has been utilised in thirteen papers by both observers and therapists working in the NICU (Amez & Botero, 2000; Anscombe, 2008; Botero & Sanders, 2014; Boyer & Sorenson, 1999; Castro, 2011; Demby, 2010; Hardy, 2005; Harris, 2005; Lazar & Ermann,1998; Mendelsohn, 2005; Noel, 1998; Ribeiro Batista Gerladini, 2016; Simon, 2010; Steibel et al., 2014). This involves paying close attention to infant behaviours, movements and interactions as well as the observer’s own countertransference reactions (Boyer & Sorenson, 1999; Mendelsohn, 2005). As with the papers discussing the clinical infant, any inferences made regarding the mind of the infant require a theoretical framework, and once again the infant is seen through the lens of object relations theory.

In the literature, the impact of prematurity on the parents’ experience as well as the siblings’ experience is described by both observers and therapists based on their observations and experiences with families in the NICU (Amez & Botero, 2000; Anscombe, 2008; Botero & Sanders, 2014; Camhi, 2005; Cantle, 2013; Demby, 2010; Hardy, 2005; Harris, 2005; Kraemer & Steinberg, 2006; Mendelsohn, 2005; Miller, 2001; Noel, 1998; Steinberg, 2006; Vanier, 2017). Authors also discuss their personal experiences (Anscombe, 2008; Blessing, 2006; Camhi, 2005; Cantle, 2013; Demby, 2010; Hardy, 2005; Kraemer & Steinberg, 2006; Kraemer, 2006; Lazar & Ermann, 1998; Mendelsohn, 2005; Miller, 2001; Noel, 1998; Ribeiro Batista Gerladini, 2016; Steibel et al., 2014; Steinberg, 2006) as well as their perceptions of the NICU staff’s experience on this basis (Amez & Botero, 2000; Boyer & Sorenson, 1999; Camhi, 2005; Hardy, 2005; Kraemer, 2006; Noel, 1998; Simon, 2010; Steinberg, 2006). Three methodological papers explain the practical experience of infant observation and therapeutic work in the NICU as well as the use of film in this context (Boyer & Sorenson, 1999; Loose & Foster, 2002; Mendelsohn & Philips, 2005).

The source materials used include clinical case material, infant observation material and countertransference reactions. Five infant observation papers also referred to discussions that were held in clinical seminars (Boyer & Sorenson, 1999; Castro, 2011; Lazar & Ermann, 1998; Miller, 2001; Steibel et al., 2014). These seminars are an established part of the psychoanalytic infant observation process whereby the observer presents detailed observations as well as countertransference reactions and then makes use of insights from an experienced facilitator as well as group discussion to better understand the infant's experience (Boyer & Sorenson, 1999).

How has premature infancy been conceptualised in psychoanalytic journals over the last 25 years?

The premature infant's experience

The literature emphasizes how unprepared (Mendelsohn, 2005) and ill-equipped both physically and psychologically (Castro, 2011; Lazar & Ermann, 1998; Noel, 1998; Urwin, 1998) the premature infant is for existence outside the womb. Willock (2015) suggests that the sudden disappearance of the womb evokes persecutory anxiety and terror of annihilation. However, physical pain and the threat of death is also real (Botero & Sanders, 2014). Even life-saving treatments are described as being intrusive and violating (Botero & Sanders, 2014; Cantle, 2013; Ribeiro Batista Gerladini, 2016). Ongoing separation from the mother is also described as being a traumatic loss (Castro, 2011; Lazar & Ermann, 1998; Mendelsohn, 2005; Noel, 1998).

Countertransference reactions are used in the literature as an additional window into the infant's experience. Correspondingly, infant observation in the NICU is described as being extremely painful (Hardy, 2005; Lazar & Ermann, 1998; Noel, 1998), often requiring observers to survive intense and unbearable emotions (Hardy, 2005; Kraemer & Steinberg, 2006; Steibel et al., 2014). Observers describe experiencing fear and terror (Lazar & Ermann, 1998), debilitating anxiety (Hardy, 2005; Steibel et al., 2014; Steinberg, 2006), paralysis (Kraemer & Steinberg, 2006) and feelings of overwhelm (Ribeiro Batista Gerladini, 2016; Steibel et al., 2014; Steinberg, 2006). Consequently, the journal literature

highlights the intense suffering, including psychological and physical pain, that the premature infant experiences.

The term 'proto-experience' is used to describe the premature infant's unintegrated, embryonic ability to experience the world. Ribeiro Batista Gerladini (2016) suggests that the premature infant finds it harder to 'perceive the external world and build an internal world' (p. 45). This is a difficult idea to comprehend but is perhaps best conveyed through the experiences of observers who describe feeling confused, finding it difficult to make mental connections (Lazar & Ermann, 1998). Several observers describe difficulties in remembering as well as keeping their own feeling and thinking alive (Anscombe, 2008; Blessing, 2006; Kraemer, 2006; Steibel et al., 2014). These experiences are believed to be counter-transferential identifications which reveal the infant's fragmented psychological experience (Castro, 2011).

The link between soma (bodily experience) and psyche is identified in several papers (Blessing, 2006; Botero & Sanders, 2014; Castro, 2011; MacDonald, 2015). Given the physical and psychological suffering that the infant experiences in the NICU, the relationship between mind and body is perhaps central to understanding the premature infant's experiences. The literature refers to the detrimental effects that bodily trauma has on the developing psychological world (Cantle, 2013; Simon, 2010). Conversely, psychic pain is believed to be experienced in the infant's body (Blessing, 2006; Castro, 2011).

The literature describes how primitive psychological life reveals itself in bodily processes (Botero & Sanders, 2014; Lazar & Ermann, 1998). The concept of a punctured psychic membrane is explained (Carling, 2003; Urwin, 1998). The theme of the infant's skin is explored as both the physical body part, which is constantly pierced and abused, as well as the metaphoric 'psychic skin' (Blessing, 2006; Steibel et al., 2014; Castro, 2011; MacDonald, 2015). The term 'psychic skin' or 'skin-ego' refers to the way in which the ego mirrors the functionality of the skin, holding and containing the infant's internal world as well as offering a screen and barrier (Anzieu-Premmereur, 2018). This 'skin-ego' is internalized as a result of maternal care and is compromised when the mother is absent (Castro, 2011).

The above-mentioned challenges in the premature infants' early experiences are believed to interfere with their ability to communicate and self-regulate, often making the premature

infant difficult to read and at times soothe (Mendelsohn, 2005; Vanier, 2017). Nevertheless, premature infants attempt to communicate with those taking care of them, seeking out responses from the environment (Mendelsohn, 2005), They are believed to experience loneliness when these attempts at connection are not understood or reciprocated (Simon, 2010). Noel (1998) describes the loss of integrity that comes from not being seen as a person. There are also concerns about the impact of an incubator as a possible non-human connection (MacDonald, 2015) with which the infant might identify in the absence of human interaction (Vanier, 2017).

One of the most prominent themes in the literature is the lack of 'containment' the premature infant experiences in the NICU (Blessing, 2006; Botero & Sanders, 2014; Castro, 2011; MacDonald, 2015). Two papers refer to the void created by the transitional space between the safety of the uterus and the holding (physical and psychological) usually provided by the mother (Castro, 2011; Willock, 2015). Without maternal reverie, the intense emotional experiences described above remain unmetabolized and uncontained (Blessing, 2006; Castro, 2011; Ribeiro Batista Gerladini, 2016). Further, in addition to needing to manage their own primitive anxieties without maternal containment, the literature also describes how premature infants may be subjected to intrusive parental projections (Amez & Botero, 2000; Anscombe, 2008; Botero & Sanders, 2014; Harris, 2005). These then become additional environmental impingements which need to be endured alone (Steibel et al., 2014).

Steinberg (2006) suggests that 'hope resides' where the 'whole baby' is able to be kept in mind (p. 145). The premature infant clearly needs to be nurtured and supported both physically and psychologically (Harris, 2005; Lazar & Ermann, 1998). By engaging and communicating with the infant as a person and by receiving and responding to their communications, the baby is believed to be brought into existence (Anscombe, 2008; Ribeiro Batista Gerladini, 2016; Steibel et al., 2014; Vanier, 2017). However, where this is not prioritized, the premature infant's emotional survival is described as being at risk (Botero & Sanders, 2014; Steibel et al., 2014).

As a result of the above-mentioned psychological experiences, several articles describe the defences that premature infants need to employ (Blessing, 2006; Castro, 2011; MacDonald, 2015; Willock, 2015). These include attempts at self-generated stimulation (Willock, 2015),

the development of 'second-skin' pseudo-independence (Blessing, 2006; MacDonald, 2015); and dismantling a connection with external reality (Castro, 2011). Amez and Botero (2000) describe primitive bodily mechanisms like falling asleep, hiccoughing or using one's body as a barrier. However, once again Castro (2011) highlights that closeness with the mother may result in a lessening of infant defences.

The journal literature provides a comprehensive account of the premature infant's experience that is vivid and at times painful to read. However, the literature is centered on the risks and dangers inherent in this experience. Perhaps, possible resilience factors within infants are a gap in the literature worth exploring. This includes factors such as temperament or the ability to engage or enliven the people taking care of them, the utility of defences against trauma, and the internal, psychic pathways to healthy reconnection post NICU admission.

The experience of parents and siblings

The literature describes premature birth as being stressful, emotionally taxing and traumatic for parents (Anscombe, 2008; Cantle, 2013; Kraemer & Steinberg, 2006; Steinberg, 2006; Vanier, 2017). Vanier (2017) describes the 'violence' inherent in urgent hospitalization and early separation from the infant (p. 30). Parents then endure the overwhelming experiences of daily visits, continued separations and bearing witness to their infant's painful medical procedures (Anscombe, 2008).

A heightened state of arousal, resembling post-traumatic stress disorder, is described (Mendelsohn, 2005). For some parents, themes of terror, anxiety and hypervigilance are prevalent and parents are portrayed as being trapped in a persecuted state of 'not-knowing' (Anscombe, 2008; Cantle, 2013; Steinberg, 2006). For others, symptoms involve the avoidance of pain (Camhi, 2005; Harris, 2005; Mendelsohn, 2005). Parental reactions such as detachment, dissociation (Kraemer & Steinberg, 2006) as well as disorientation (Cantle, 2013) are highlighted.

Negative emotionality such as disappointment (Kraemer & Steinberg, 2006), loss of hope and 'chronic sorrow' (Harris, 2005, p. 247) are described. Steinberg (2006) suggests that parents may struggle to take pleasure in their baby. Noel (1998) describes how parents

need to mourn the loss of their 'ideal' baby in order to embrace their real baby. However, trauma can interfere with the parental process of mourning (Anscombe, 2008; Camhi, 2005; Harris, 2005). Parents often experience self-blame and guilt, feeling accountable for having 'damaged' their baby (Amez & Botero, 2000; Mendelsohn, 2005). Harris (2005) suggests that the premature birth can be experienced as a narcissistic wound, making parents question their parental capacity.

Pregnancy is a time of psychological preparation for parents. The early arrival of the infant means that the parent is also 'premature' and may therefore be psychologically unready to become a parent (Amez & Botero, 2000; Botero & Sanders, 2014; Cantle, 2013; Mendelsohn, 2005; Vanier, 2017). Separation from the infant means that parents are often unable to perform ordinary parental duties. They can therefore miss out on the opportunity to practice and become confident with their parental role (Hardy, 2005; Steinberg, 2006). Feelings of inadequacy are described throughout the literature (Hardy, 2005; Harris, 2005; Miller, 2001). In addition, some parents report feeling afraid of holding or taking care of their fragile infants (Harris, 2005). All these factors undermine parental confidence (Cantle, 2013; Kraemer & Steinberg, 2006), hindering parental capacity (Vanier, 2015) and disrupting the much-needed state of primary maternal preoccupation (Amez & Botero, 2000; Cantle, 2013; Miller, 2001; Steinberg, 2006). This interferes with the mother's capacity for offering her infant reverie even when they are together (Cantle, 2013; Demby, 2010; Hardy, 2005).

Much of the literature describes the difficulties that mothers have in getting to know their premature infants (Anscombe, 2008; Harris, 2005; Mendelsohn, 2005). It is often challenging to decipher their cues and behavior (Amez & Botero, 2000; Cantle, 2013; Mendelsohn, 2005). Fears regarding the infant's possible death may prevent the parent from acknowledging the baby as a person (Hardy, 2005). In this way, the mother's ability to 'invest libidinally' in her infant is interrupted (Vanier, 2017, p. 30). The importance of supporting and strengthening mothers in their role is therefore emphasized in the literature (Botero & Sanders, 2014; Mendelsohn, 2005).

Within psychoanalysis, Fraiberg et al. (1975) coined the term, 'ghosts in the nursery.' This concept describes how a parent may unknowingly project into their baby repressed experiences and feelings, or aspects of their own personalities that need to be disowned

(Fraiberg et al., 1975). It needs to be acknowledged that a mother's history is likely to play a role in the way in which she responds to her premature infant. This concept is referenced briefly by Amez and Botero (2000) and Demby (2010). This review reveals that the impact of a mother's prior experiences with relationships and trauma on her ability to parent and interact with her premature infant is an area that needs to be developed. Given the cumulative effects of trauma (Lemma & Levy, 2004), it feels critical to explore how parents with a history of trauma might be triggered by the experience of prematurity in their infant. This may have important implications for identifying at-risk parents who may need more intensive intervention.

Another gap in the literature involves understanding the experience of prematurity for fathers specifically. Camhi (2005) briefly explores the role of fathers following premature birth as well as the challenges they face. However, most of the literature focuses on maternal experience. This is in keeping with the trends highlighted in the literature about the inadequate exploration of the experience of fatherhood as well as the paternal function (Davies, 2014; Freeman, 2008). Freeman (2008)) refers to 'the deep-seated reticence for parenting to be conceptualized as a significant dimension of male experience' (Freeman, 2008, p. 117).

The sibling experience is addressed in only two papers highlighting the psychological implications of having a premature sibling (Camhi, 2005; Miller, 2001) as well as the defences that might need to be utilized as a result (Camhi, 2005). This is an area that would also benefit from further investigation (Camhi, 2005; Miller, 2001).

The parent-child relationship

Because of the overlap in parent-child experience, it is, at times, difficult to delineate experiential (experiences of the infant or parent) versus relational (those belonging to the parent-infant relationship) themes. Most of the literature focuses on the impact that parent and infant have on one another. What is documented about the mother-child relationship seems to center around the container-contained function (Blessing, 2006; Botero & Sanders, 2014; Castro, 2011; MacDonald, 2015) and how prematurity places this at risk (Botero & Sanders, 2014; Ribeiro Batista Gerladini, 2016). The infant observation papers attempt to highlight interactions between parent (usually mother) and baby, exploring the meaning

these might have for each participant. Implications for the intersubjectivity between them are not addressed.

Five papers addressed the topic of the relationship between premature infant and parent directly (Amez & Botero, 2000; Botero & Sanders, 2014; Harris, 2005; Mendelsohn, 2005; Ribeiro Batista Gerladini, 2016). All five highlight the impact of the combination of a traumatised, fragile infant with limited abilities and a parent whose mental state and capacity for reverie are compromised. This often results in poorly co-ordinated, mis-attuned interactions which can derail the development of the parent-infant relationship (Amez & Botero, 2000; Botero & Sanders, 2014; Harris, 2005; Ribeiro Batista Gerladini, 2016). However, possibilities for positive relating in the parent-infant relationship are also highlighted. This appeared more possible when maternal states of mind are supported, along with the mother's ability to read and understand her infant (Amez & Botero, 2000; Hardy, 2005)

Amez and Botero (2000), Botero and Sanders (2014) and Mendelsohn (2005) are the only papers that highlight the reciprocal impact of states of mind between the premature infant and mother. Anxiety is the only state of mind that is dealt with specifically, highlighting the impact the mother's anxiety had on the infant's emotional state and ability to feed (Amez & Botero, 2000). Thus, this is another area that could be researched further and developed. For example, while the literature does explore the impact of maternal states of mind on the infant, it does not take this a step further and engage with how this may impact infant responsivity to the mother, and the contributions this may then make to the reciprocal process of relating between them. Other maternal states of mind such as hyper-arousal or dissociation need to be explored regarding the impact they may have on the infant's state of mind and how the infant then responds to the mother.

Balbernie (2007) describes the shift in object relations to incorporating the concept of intersubjectivity when exploring the parent-infant relationship. He defines this as "when parent and child actively join each other's emotional experiences' (p.309). Intersubjectivity builds on the ideas of containment and holding which focus on the responsiveness (or lack thereof) of the mother to the infant's projections. Intersubjectivity takes into account proactive attempts by both parent and child at communication and engagement. While the need and ability of premature infants to seek out contact is clear in the literature, the

processes that occur between premature infant and parent appear to require more attention. Hardy (2005) offers a touching description of interactions between mother and infant where the mother demonstrates the ability to actively 'claim' her baby. Hardy describes how 'the small movements of vitality blossomed into the communication of reciprocity' (p. 175). Hardy's (2005) description of the interaction between mother and infant highlights the importance of addressing intersubjectivity and reciprocity. Further research in this area could assist in mitigating many of the risks associated with prematurity.

The experience of the staff and the therapist/observer

The experience of working in the NICU is presented as being intense and emotionally evocative for all involved. This includes NICU staff as well as therapists and observers, whose countertransference reactions have been highlighted throughout this paper. Several papers highlight the importance of ongoing supervision and support in order to remain emotionally receptive and available (Camhi, 2005; Hardy, 2005; Kraemer & Steinberg, 2006; Kraemer, 2006; Lazar & Ermann, 1998; Miller, 2001; Steibel et al., 2014). This is a privilege that is not generally available for the NICU staff. Two papers make reference to the fact that the NICU setting does not allow for reflection for the staff members (Boyer & Sorenson, 1999; Kraemer, 2006). This results in protective defences such as detachment (Noel, 1998), projecting unprocessed experiences as well as defences against connecting (Steinberg, 2006) and empathising (Boyer & Sorenson, 1999; Noel, 1998; Simon, 2010) with premature infants and their parents.

Eight papers included in this review involved the observation of premature infants and their parents (Botero & Sanders, 2014; Castro, 2011; Hardy, 2005; Lazar & Ermann, 1998; Noel, 1998; Ribeiro Batista Gerladini, 2016; Simon, 2010; Steibel et al., 2014). There is minimal active intervention described in these papers. However, they highlight the impact of the observer as a result of their thoughtful and perceptive presence. Observers are described as having a containing effect on mothers (Ribeiro Batista Gerladini, 2016), stimulating their curiosity towards their infants (Simon, 2010) as well as facilitating thinking for parents as well as staff in the NICU (Hardy, 2005; Simon, 2010). This technique is incorporated into many of the therapeutic interventions. Nine papers involved active therapeutic intervention with the premature mother-baby dyad (Amez & Botero, 2000; Anscombe, 2008; Cantle, 2013; Demby, 2010; Harris, 2005; Kraemer & Steinberg, 2006;

Kraemer, 2006; Mendelsohn, 2005; Steinberg, 2006). (Two papers involved therapeutic intervention with siblings). The over-arching aim of therapeutic interventions in this context is to support infants, parents as well as the parent-infant relationship (Harris, 2005; Mendelsohn, 2005; Steinberg, 2006). In addition, the importance of offering containment and reflection to the NICU staff is also highlighted (Vanier, 2017). The role of a psychotherapist working in the NICU is therefore complex and multi-faceted (Botero & Sanders, 2014; Steinberg, 2006; Vanier, 2017). Interestingly, various 'ports of entry' (Stern, 1995) are described in the reviewed literature. Some highlight the importance of interacting with the baby directly (Vanier, 2017). Others advocate for containing the mother as the entry point to improving the infant's experience of containment (Ribeiro Batista Gerladini, 2016). Kraemer and Steinberg (2006) highlight the difficulty of balancing the needs of both parent and baby. Regardless of the intervention, the over-arching responsibility of the therapist or observer appears to be offering oneself as a container for unbearable emotions, and to find ways to make space for the subjective experiences and needs of all involved. Whilst all of the papers speak positively about the impact that their intervention/observation, three papers explicitly focus on the perceived efficacy of their intervention, highlighting improved mother-infant interactions as well as improved maternal states of mind which they linked directly to their presence (Amez & Botero, 2000; Botero & Sanders, 2014; Hardy, 2005).

Conclusion

This 25-year scoping review provides an overview of how the field of psychoanalysis has engaged with the topic of prematurity, summarizing the extent, range and nature of research in this area and identifying trends and gaps in the research.

While there is some, albeit limited, engagement with the topic of premature infancy in a few psychoanalytic journals, this tends to be focused in specialist infant observation journals. Those psychoanalytic clinicians who are not actively working with infants or interested in this area of work are unlikely to be seeking out these journals. Such practitioners may therefore have minimal exposure to these important ideas. Given that prematurity is highly prevalent, affecting over one in 10 infants, and that the evidence from the review suggests that premature infancy has significant impacts on both the infant and the parents' experiences of parenting, this is an area that requires much greater engagement and research. This could inform both preventative interventions in infancy, as well as contribute

meaningfully to formulations about adult patients with a history of premature birth themselves or experiences of parenting a premature infant.

While the review has revealed the intense countertransference inherent in psychoanalytic work with premature infants and their parents, it has also revealed clear value and need for the work. Parents who are supported by psychoanalytically-oriented practitioners appear to be able to process the trauma of the experience, engaging productively with their own mental states and creating space for thinking about those of their infant, and the relationship between them. The work appears to allow for more recognition of the infant as a person, despite the risk of loss present in the NICU. The uncertainty and emotional pain of premature infancy has implications for the developing parent- child relationships, and support structures that can acknowledge and tolerate this ambivalence are required. Psychoanalytically-oriented clinicians are perfectly placed to do this.

Gaps revealed through this scoping review include focus on the experiences of siblings of premature infants, the experiences of fathers of premature infants and a focus on the impact of premature infancy on the developing intersubjectivity between these infants and their parents. While object relations theories have provided an excellent framework through which to understand the experiences of these infants and their parents, developments in intersubjective psychoanalytic theory may allow for further understanding of the experiences and needs of these families.

Chapter 4: Methodology

4.1. Introduction

This chapter provides an outline of the methodological approach utilised in this research endeavour. The research questions are highlighted as well as the research design and methodological techniques used to address them. A description of the participants and sampling strategy is provided, as well as an account of the data collection and analysis. This chapter argues for the integrity of the research as well as considering the ethical considerations pertinent to this study.

4.2 Research Questions

Research questions have been formulated broadly, with specific foci highlighted beneath each question.

1. How is the experience of prematurity, for both infant and mother, understood currently in the psychoanalytic literature? Where are the gaps in this literature?

- How has prematurity been explored in psychoanalytic books?
- To what extent has the topic of premature infancy appeared in psychoanalytic journals over the last 25 years?
- How has premature infancy been investigated in psychoanalytic journals over the last 25 years?
- What kinds of papers have been published and what sources of data have been used?
- How has premature infancy been conceptualized in psychoanalytic journals over the last 25 years? What are the key themes in the literature?
- What does the literature suggest about the consequences of prematurity for infants and mothers?
- What are the gaps in the literature?

2. What can be understood about the experiences of premature infants and their mothers within the context of a South African neonatal high care ward that contributes to the above body of literature?

2.1 What can be understood about the experiences of the mothers of premature infants within the context of a South African neonatal high care ward?

- How does the experience of prematurity influence maternal states of mind?
- How do the mother's earlier relational experiences and traumas influence her states of mind following a premature birth?
- How does the experience of prematurity influence maternal representations of the infant?
-

2.2 How does prematurity influence processes of intersubjectivity between the mother and her premature infant and their ability to engage one another?

- What can be observed regarding interactions between premature infant and mother?
- How does the mother's state of mind influence her infant's ability to be responsive?
- What can be observed regarding premature infants' attempts at communication and engagement in a South African neonatal high care unit?

3. What is the experience of the researcher when investigating premature infant-mother relationships from a psychoanalytic perspective?

4.3 Research Design

The overarching research design in this study can be categorised as being qualitative and interpretative. Qualitative research is regarded as the ideal research approach for understanding human experiential phenomena (Levitt et al., 2018). Qualitative studies facilitate in-depth exploration of complex phenomena as well as personal experiences with layers of meaning (Denzin & Lincoln, 1998; Durrheim et al., 2006). Interpretative research aims to make sense of the subjective meanings and perspectives that people assign significant experiences in their lives (Terre Blanche et al., 2006). An interpretative approach embraces qualitative methods such as interaction and listening to uncover diverse insights

and interpretations (Fossey et al., 2002). These paradigms were therefore felt to be well-suited to the current study and its research questions.

Within this umbrella categorisation, the research questions of this study can be divided into two groups, each requiring a distinct research methodology. The first research question endeavoured to understand how the phenomenon of prematurity is captured in the psychoanalytic literature. In order to answer this question, a scoping review was utilised. A scoping review is considered a useful tool for mapping out the existing literature on a particular topic. Scoping reviews identify the extent, range, and nature of available literature, highlighting knowledge gaps or inconsistencies (Arksey & O'Malley, 2005; Peterson et al., 2017). The procedure used for the scoping review is explained in more detail in section 4.6.

Research question two endeavoured to understand the lived experience, as well as the conscious and unconscious psychological experience, of prematurity for premature infant-mother dyads within the context of a neonatal high care ward. The research design chosen to address this question was a psychoanalytically informed ethnographic investigation into prematurity. This meant that the research incorporated ideas from both psychoanalytic and ethnographic theories. The final research question aimed to understand the experience of this kind of research for the researcher.

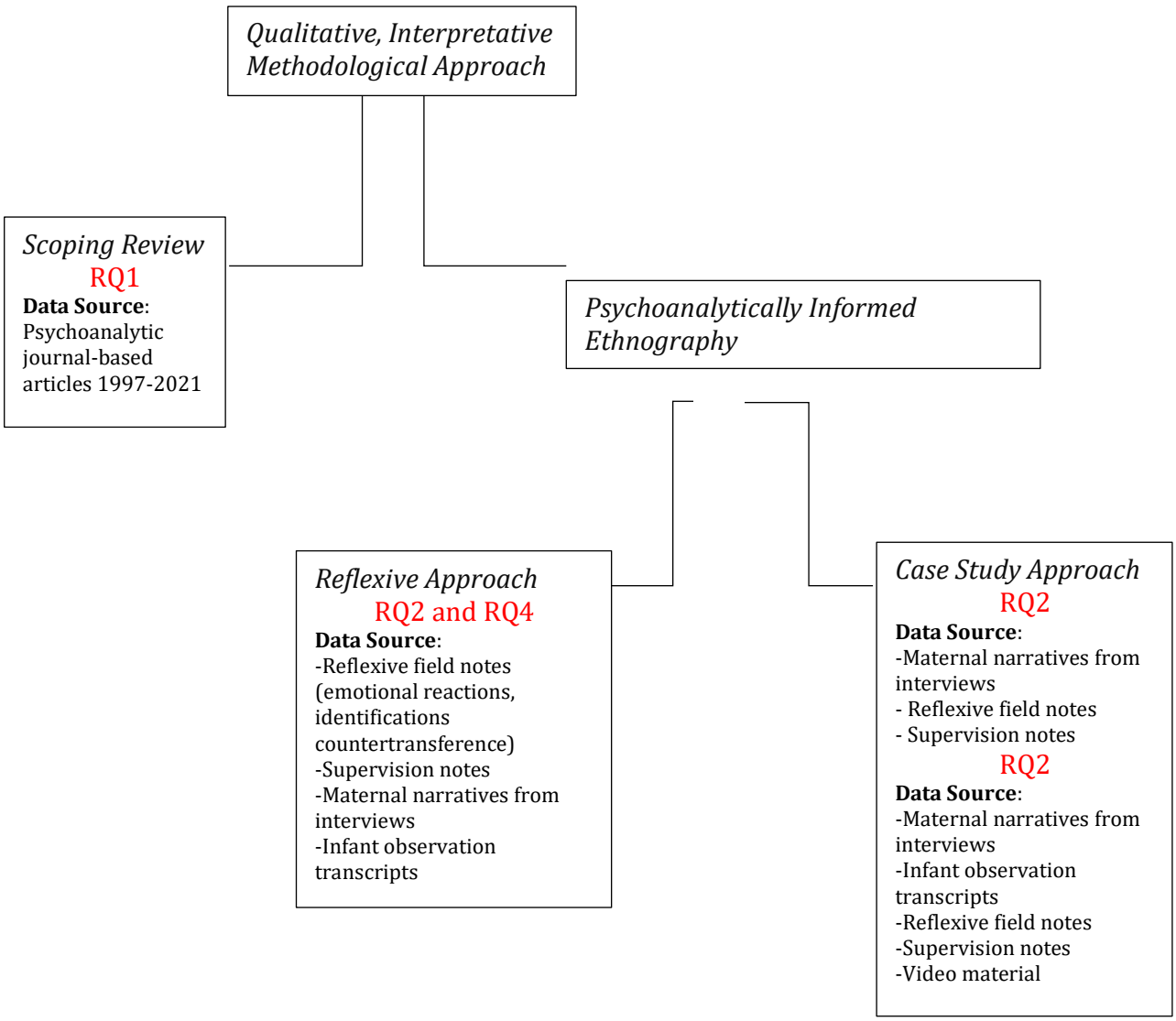
Ethnography is a research methodology that involves the intensive study of specific groups or communities with the aim of gaining a deep and nuanced understanding of their perspective (Hammersley, 2006). This approach involves immersing oneself in the lives of the communities being studied to gain a 'first hand' account of their experiences. It is a personal and collaborative form of research, involving 'shared subjectivity'. According to Ellis and Bochner (1996) "ethnography should broaden our horizons, awaken our capacity to care about people different from us, help us to know how to converse with them, feel connected" (p. 26). The objective of the current study was to remain as close as possible to the lived experiences of the participants. Ethnography supported these aims. The fieldwork for this study was conducted utilising semi-structured, in-depth interviews with mothers as well as infant observations of mother-baby dyads in the high-care unit, parts of which were video-recorded.

A psychoanalytically informed ethnographic approach adds the dimension of exploring aspects of experience that are "unspoken or unavailable to consciousness" thereby augmenting and deepening the research (Elliott et al., 2012, p. 433). This approach also supports the use of the researcher as a primary tool for data collection and analysis. The use of psychoanalytic concepts such as projective identification and countertransference are believed to have enriched the research as "unconscious forces and motivations adds another level of analysis to sociological research providing us with a deeper understanding of both individual experience and the social psychodynamics" (Clarke, 2002, p. 173).

A psychoanalytically informed ethnographic methodology was utilised for both data collection and analysis. Once the data was analysed, the information gleaned was then employed in two principal ways to address research question two. Firstly, a multiple case study approach was used. Case studies are commonly used in qualitative research to explore detailed or comprehensive data (Simons, 2020). This methodology involves selecting a limited number of specific cases, often with unique or interesting features, and examining them in detail. In my study, information from maternal narratives as well as the observations were used. My countertransferential responses were also considered.

The second research question was understood as seeking new understandings regarding the experience of prematurity. A reflexive approach was undertaken in order to scrutinise my emotional responses, identifications, and countertransferences, which had been documented during the data collection process. These are believed to potentially illuminate unconscious feelings, conflicts or relational dynamics originating in the participants through the mechanism of projective identification (Hollway, 2013; Marks & Monnich-Marks, 2003). Novel insights regarding the experience of prematurity were gleaned in this way. This process of reflexivity was also documented by the researcher and used to answer the fourth research question. The case-study approach as well as the reflexive approach will be explained further in sections 4.9 and 4.10.

A brief overview of the methodological processes utilised in the study is provided below:



4.4 Theoretical underpinnings of psychoanalytic research

Psychoanalytic research utilises specific conceptual tools including countertransference, defences and resistance as well as the relationship between researcher and participant.

4.4.1 Countertransference

The concept of countertransference was first introduced by Freud in 1910 as a dynamic occurring within the therapeutic relationship. Countertransference in therapy has been defined as 'all the feelings which the analyst experiences towards his patient' (Heimann, 1950, p. 83). These feelings are believed to be suggestive of the patient's internal world as well as their internalised representations of relationships i.e. 'object relations' (Hayes, 2004).

Within the research paradigm, countertransference refers to the feeling states evoked in the researcher during the research process. Clarke (2002) described the projective identifications or 'feeling states' induced in the researcher while conducting interviews. Cartwright (2004) stressed that paying close attention to one's feelings and thoughts also assists in the interpretation of data, as it contextualises and highlights the emotional impact of what is being discussed (Cartwright, 2004). With the Psychoanalytic Research Interview, Cartwright (2004) suggested a shift from the strictly clinical definition of countertransference towards "inchoate feeling-state responses" (p. 226). He advocated for careful attention to the discrete but fluctuating feeling states that occur during various segments of interview.

In this study, an attempt was made to collect the narratives of 'premature' mothers as well as utilising my own emotional responses in order to provide potential insights into the mothers' unconscious feelings or conflicts that would otherwise have been less available (Holmes, 2014). This allowed for a deeper understanding of the mothers' experiences.

It is important to note that modern psychoanalysts have broadened the definition of countertransference to incorporate the clinician's own emotional response towards the patient, influenced by the therapist's emotional life and representations (Hayes, 2004). So too, with research, the influence of the interviewer's personal conflicts on the interview process needs to be considered. Cartwright (2004) used the term 'observer bias', which can interfere with the interview process and interpretation. He highlighted the importance of the researcher meaningfully reflecting on their motivations for studying a particular phenomenon, as well as the feeling states associated with the topic. Researchers also need to take responsibility for identifying their own emotional reactions (Cartwright, 2004, Holmes, 2014). The importance of psychotherapy and clinical and research supervision are critical in this regard and will be discussed further in sections 4.10 and 4.12.

4.4.2 The Relationship between Interviewer and Interviewee

The importance of the relationship between interviewer and interviewee is emphasised in psychoanalytic research, taking into account all aspects of interaction and behaviour within

research (Strømme et al., 2010). In this regard, several key ideas need to be taken into consideration.

1) The development of trust and rapport

The researcher is required to provide an experience for participants that allows them to feel sufficiently comfortable and secure to share personal thoughts and emotions, whilst at the same time not feeling overly exposed or vulnerable (Kelly, 2006). Several authors have advocated for the researcher's personal involvement and authentic interest in the participants in order to enhance rapport (Gemignani, 2011, Holmes, 2014). However, others have cautioned about the importance of creating a balance with regard to levels of intimacy (Dickson-Swift et al., 2007). Gair (2012) cautioned against excessive use of empathy potentially leading to a breach of interpersonal boundaries. When dealing with vulnerable populations, these considerations are particularly relevant. Fahie (2014) warned of the sensitivity required to elicit sensitive content whilst shielding susceptible participants from harm. Harvey (2017) suggested that researchers who have also been trained as psychotherapists are perfectly positioned to manage this delicate balance. However, Long and Eagle (2009) highlighted that paradoxically this background may make it harder for researchers to gauge the levels of empathy required. Further, the dangers of promoting a psychotherapeutic expectancy is highlighted in the literature (Kvale, 1999, Swartz, 2015). It was clear that the development of trust and rapport as well as the accompanying levels of intimacy and empathy offered within the research relationships of this study required much thinking and consideration.

2) Knowledge co-constructed

The psychoanalytic research process is based on the notion that knowledge is constructed within human relationships. Kvale (1996) used the term "human emotional interaction" (p. 96). Modern psychoanalysis emphasises the importance of recognising how relationships are co-created, taking into account mutual influences and shared experiences (Aron, 1991). The researcher–participant relationship is also a working alliance determined by an "ongoing resonance within and between the conscious, preconscious and unconscious levels of both participant and researcher" (Harvey, 2017, p.314). The notion of intersubjective researcher-participant encounters is therefore integral to the study. As such,

the importance acknowledging the impact of my own subjectivity was an essential part of the research.

3) Relational patterns as data

Gabbard and Hobday (2012) explained the phenomenon whereby patients unconsciously recreate their internal object relations in the transference-countertransference relationship with their analyst. So too, in psychoanalytic research, Cartwright (2004) viewed the relational patterns observed within research as being suggestive of the intrapsychic object relations of the participants. These aspects of the relationship are therefore seen as potential data sources, accessible through observation as well as reflections on the researcher's countertransference (Bohleber, 2018). Concepts such as projection and projective identification are key to understanding these unconscious and reciprocal relationship patterns. It is important to recognise that within a short-term research process, the transference relationship has far less time to develop (Long & Eagle, 2009). Nevertheless for psychoanalytically-oriented researchers, countertransference is regarded as a valid and important part of data collection (Clarke, 2002; Gemignani, 2011; Marks & Monnich-Marks, 2003)

4) Scenic knowledge

In addition to the participants individual transference, there is also the notion the environments may carry a collective unconscious experience that shapes the emotional atmosphere of that particular context, being transferred to everyone in the environment (Froggett & Hollway, 2010). This concept was termed 'scenic understanding' by the German cultural analyst Alfred Lorenzer in 1986. Scenic understanding reportedly needs to be experienced in order to be understood. Exploring the scenic understanding of a certain setting allows researchers to access "unsymbolized socio-cultural knowledge" (Hollway, 2013, p. 22).

5) Contextual Considerations

Swartz (2007) highlighted the importance of recognising the socio-political climate in which research relationships are constructed, taking into account issues of power, class, gender

and race. This may be particularly important in a South African context taking into account the brutality of our apartheid history (Esprey, 2017). Bain et al. (2010) portrayed how the impact of racial and socio-economic marginalisation is still felt in many black and coloured communities. Esprey (2017) argued that "the potency of white supremacy…evident both in economic and racial disparity and in the social currency which whiteness continues to command…" (p. 21) This is the backdrop against which South Africans interact with one another. An intersubjective, psychoanalytically oriented research endeavour therefore needed to consider the impact of racial, socio-economic and power differences between researchers and their participants (Brickman, 2018; Guralnik, 2016).

4.4.3 Defences and Resistance

The psychoanalytic approach takes into account the anxieties and defence mechanisms of both the participant and the researcher (Hollway & Jefferson, 2000; Midgley, 2006). Within the psychoanalytic tradition, the subjective account of every person is viewed as being potentially distorted by defensive processes, particularly when discussing emotionally charged topics (Strømme et al., 2010). Holloway and Jefferson (2008) suggested that all individuals mobilise psychic defences to some extent in anxiety provoking situations (Hollway & Jefferson, 2008). These defences are discussed at length in the literature review. Examples of psychoanalytic defences include denial, splitting, projection and dissociation.

This defensiveness colours the way in which feelings and meanings are experienced and conveyed. Cartwright therefore highlighted that any initial defensiveness or resistance observed in the participants is another key factor to be considered when later analysing the transcripts (Cartwright, 2004). A process of reflexivity (explained in section 4.10) allows for the possible defences or resistances against pain, conflict and/or trauma originating within the researcher to be explored as well.

4.4.4 Critique of Psychoanalytic Concepts in Research

There are authors who have critiqued the use of psychoanalytic concepts for research purposes (Frosh & Baraitser, 2008; Parker, 2010). For example, regarding the use of 'countertransference', several authors have suggested that attributing the researcher's feelings and emotional responses to the interviewee is questionable (Frosh & Baraitser,

2008; Frosh & Emerson, 2005; Parker, 2010). Zepf (2009) highlighted how the agenda of the researcher complicates the elicitation and interpretation of unconscious material. The ability to accurately interpret latent meaning in the context of a short-lived interviewer-interviewee relationship has also been brought into question (Long & Eagle, 2009). Consequently, the use of countertransference needs to be tentative with countertransference responses seen as supporting other sources information (Cartwright, 2009; Gemignani, 2011; Holmes, 2014; Heimann, 1950). The importance of researchers being reflective and taking ownership of their own emotional reactions has also been stressed (Cartwright, 2004, Holmes, 2014). These critiques were considered in the study and will be addressed in the sections that follow.

Some researchers (Jervis, 2009; Strømme et al, 2010) suggested that the ability to work effectively with projections and countertransference rests on having completed a psychoanalytic training or personal analysis. Fromm (1994) and Holmes (2014) highlighted required skills rather than trainings. These include the ability to think reflexively, to be attuned, observant, and to examine potential links between observed changes in feeling states and other aspects of the research situation (Holmes, 2014; Fromm, 1994). The steps that were taken to ensure that I had adequate training as well as the requisite skills will also be explained in the sections below.

4.5 Research Stages

The research began with an extensive review of the psychoanalytic journal-based literature on prematurity. This literature review resulted in the first paper whilst also informing the research process. Data collection (explained in section 4.7) then commenced at Rahima Moosa Hospital, incorporating interviews, infant observation as well as video clips of mother-baby interaction. Reflexive notes were taken throughout the process documenting heightened emotional responses, countertransference reactions, identifications etc. Once the process of data collection was complete, the data analysis began as outlined in section 4.8. This culminated in the writing of the second and third papers. A process of reflexive evaluation of the entire research process was then undertaken. On the basis of this evaluation, paper four was written.

The research stages are summarised below:

Stage One: **Scoping Review of Psychoanalytic Journal-Based Literature on Prematurity**

Conducted Scoping Review.

Wrote-up first paper: Premature infancy: a 25-year scoping review of psychoanalytic journal articles addressing Research Question One.

Stage Two: **Data Collection**

Conducted semi-structured interviews and infant observation with three mother-baby dyads at Rahima Moosa Hospital. Short video clips of mother-baby interaction were also taken.

Stage Three: **Data Analysis**

Transcribed the interviews.

Wrote up the infant observations.

Explored themes in supervision.

Analysed the data set.

Stage Four: **Writing up utilising a Multiple Case-Study Approach**

Wrote-up second paper: 'The trauma of premature birth for mothers with infants in neonatal high care: The role of dissociation due to traumatic childhood experience.' addressing Research Question Two

Wrote up third paper: 'Intersubjectivity in premature infant-mother dyads: Maternal states of mind and premature infant responsivity' addressing Research Question Two

Stage Five: **Reflexive Evaluation of Study**

Conducted Reflexive Process

Wrote up the fourth paper: 'Being a researcher, a clinician, a mother and a human being in a paediatric high-care unit: A reflexive journey' addressing Research Question Four.

Stage Six: **Integration**

Integrated the four papers into a final thesis document.

4.6 Scoping Review

In order to understand how the experience of prematurity is understood theoretically in the psychoanalytic literature, a scoping review was undertaken. These reviews are considered appropriate for exploring complex areas which have not yet been reviewed extensively, as is the case with the topic of prematurity (Arksey & O'Malley, 2005). They offer an effective

methodology for gaining an overview of a research area, examining the breadth of literature on a particular topic, rather than offering a comprehensive review. This is believed to be helpful for the identification of the key concepts, theories and methodologies utilised in previous research, providing insight into how phenomena have been conceptualised and captured in the literature (Peterson et al., 2017). Scoping reviews are regarded as being a qualitative research methodology, although they may incorporate some quantitative elements. They typically involve a rigorous and systematic process of summarising and synthesising qualitative data from a range of sources (Pham et al., 2014).

Prior to beginning the scoping review, I oriented myself to the nature of psychoanalytic literature on prematurity by reading the three books considered to be seminal within the psychoanalytic milieu. The books 'Sent before my time'(Cohen, 2005), 'Premature Birth: The baby, the doctor and the psychoanalyst' (Vanier, 2015) and 'The newborn in the intensive care unit: a neuropsychoanalytic prevention model' (Negri, 2018) were written by psychoanalytic clinicians who offer insights and observations on prematurity. Once I felt I had some understanding of the central psychoanalytic themes, I began the scoping review.

The review incorporated all English-medium psychoanalytic journal articles from 1997 to 2021 (25 years), summarising the extent and nature of journal-based research in the area as well as identifying trends and gaps. The methodology for the scoping review was based on guidelines by Arksey and O'Malley (2005). The following five stages were followed: (1) identifying the research question, (2) identifying relevant studies, (3) selection of studies, (4) charting the data, and (5) collation, summarization and reporting of results.

4.6.1. Identifying the scoping review research question

The guiding question for this review had already been established, namely 'How has premature infancy been investigated and conceptualised in psychoanalytic journals over the last 25 years?' In order to answer this question, several secondary questions were identified:

(1) To what extent has the topic of premature infancy appeared in psychoanalytic journals over the last 25 years?

(2) How has premature infancy been investigated in psychoanalytic journals over the last 25 years? What kinds of papers have been published and what sources of data have been used?
(3) How has premature infancy been conceptualized in psychoanalytic journals over the last 25 years? What are the key themes in the literature?

4.6.2 Identifying relevant studies

The evaluation of literature was limited to psychoanalytic and psychodynamic journals. A list of all journal titles incorporating the terms 'psychoanalytic' and 'psychodynamic' was compiled. This included accredited and non-accredited but peer-reviewed journals. Journals without 'psychoanalytic' or 'psychodynamic' in the title, but with a psychoanalytic/dynamic emphasis in their scope were also included. The selection was deliberately limited to these journals because of their focus and target audience. It is acknowledged that there may be articles utilising a psychoanalytic theoretical framework published in other journals that have not been included in this review. In addition, grey literature was not included.

Overall, 24 journals were included. These included the American Journal of Psychoanalysis, Contemporary Psychoanalysis, Infant Observation, International Journal of Applied Psychoanalytic Studies, International Forum of Psychoanalysis, International Journal of Psychoanalysis, Journal of the American Psychoanalytic Association, Journal of Child Psychology; Language and Psychoanalysis, Psychoanalysis and History, Psychoanalysis Culture and Society, Psychoanalysis, Self and Context, Psychoanalytic Practice (previously Psycho-Analytic Psychotherapy in South Africa), Psychoanalytic Dialogues, Psychoanalytic Inquiry, Psychoanalytic Psychology, Psychoanalytic Psychotherapy, Psychoanalytic Quarterly, Psychoanalytic Review, Psychoanalytic Social Work, Psychoanalytic Study of the Child, Psychodynamic Practice, Psychodynamic Psychiatry, Scandinavian Psychoanalytic Review.

Each journal was manually examined for articles that met the inclusion criteria. The search function of each journal was then utilised to ensure articles had not been missed, using key search terms identified in the literature, namely 'premature,' 'prematurity,' 'preterm,' 'preemie,' 'NICU,' 'neonatal intensive care' and 'kangaroo care.' (The term 'kangaroo care' was added as this is a technique of premature infant care that is commonly used in developing countries where incubators are not available).

As a secondary back up, the above-mentioned search terms were applied to Google Scholar (https://scholar.google.com) and the first ten pages of each search were examined. This limit was implemented for practical reasons. Despite these efforts, it is acknowledged that potentially relevant articles could have been missed. All study designs in the relevant journals were eligible. After screening for relevance and removing duplicates, the full text of each article was obtained. Articles were published in six out of the 24 journals and 28 studies in total were included.

The seminal psychoanalytic books on prematurity (Cohen, 2003; Negri, 2018; Vanier, 2015) provided a theoretical basis for thematic categories. These categories included the 'premature infant's experience,' 'the parent's experience,' 'the parent-infant relationship,' 'the therapist or observer's experience,' 'observer or therapist role' and 'the experience of staff working within the NICU.' The articles were then closely read to find emergent themes within each of these categories. The articles were also examined to see if other categories emerged. The additional category of 'sibling experience' was added. With the research questions in mind, the key themes were charted and then analysed using thematic analysis. In this way, a descriptive and interpretive approach was applied to the data analysis in order to identify themes and patterns in the literature.

4.7 Psychoanalytic ethnography

4.7.1 Preparatory Stage

There were several governing institutions that needed to be consulted before the research could commence. The proposal for the research was presented to the Department of Psychology and the Faculty of Humanities and approval was obtained. Ethical clearance was also approved by the Human Research Ethics Committee (Medical) of the University of the Witwatersrand (Refer to Appendix F). The Rahima Moosa Mother and Child Hospital had been identified as the site where the data collection would take place. The nature and aims of the study were discussed with the heads of paediatrics and psychology at Rahima Moosa. Formal approval was also sought from the hospital and written consent obtained (Refer to Appendix G). Consent was also sought from the hospital for filming, with the reassurance

that I was not interested in any of the happenings within the hospital. They were reassured that my sole focus was observing each mother-infant dyad.

Once these approvals were in place, contact was made with the head paediatrician in the 16B unit at Rahima Moosa Hospital. She offered to help identify mothers who could potentially be appropriate for the study.

4.7.2 Sourcing Participants and Sampling Strategy

Participants in the study comprised mother-baby dyads where infants were receiving in-hospital treatment in the high care ward at Rahima Moosa, and the mothers had consented for themselves and their infants to be part of the study. An attempt was made to utilise a random sampling methodology, whereby each member of the population (i.e. mother-infant dyads receiving in hospital treatment in the high card ward at Rahima Moosa) had an equal chance of being included in the sample (Ritchie et al., 2003). The head paediatrician was asked not to try and identify particular cases but rather to approach mothers randomly until the quota required for the study had been filled. An attempt was made to coach the doctor in order to avoid the possibility that she attempt to choose mother-infant dyads based on extraneous variables such as severity of medical concerns or perceptions of the mother's mental state.

Exclusionary criteria were discussed with the head paediatrician based on the needs of the study as well as practical issues pertaining to the study or the hospital. Exclusionary criteria comprised the following factors:

The study required mothers that came regularly to visit their infants. In addition, mothers needed to be proficient in English. It was decided that this would be determined by the mother having completed primary school. This requirement was necessary given the need for the interviews to take place in English, as there were not funds for a translator. The implications of excluding mothers who did not meet the criteria will be highlighted as one of the limitations in the study. Regarding the infants, participants were limited to those that had been hospitalised since birth. Multiples were excluded as well as those that required palliative care.

The paediatrician handed prospective mothers a document with information about the study (Refer to Appendix A). This included the nature of the research, as well as its purpose. She was also asked to explain verbally what the study was about and find out whether mothers were willing to participate. Depending on their preference, those that agreed to be contacted were either called or approached at the hospital shortly thereafter by me. I asked if I could have a short meeting with them to explain in detail what the study entailed.

During the first meeting with the mother, the study was once again explained. Participants were then asked to sign three separate consent forms to be interviewed, audio-recorded (refer to Appendix B and C) as well as observed together with their infants (refer to Appendix B). Written consent was also sought for the possibility of taking one or two small video clips during the observation (refer to Appendix D). It was explained that mothers could take part in the study without consenting to be videoed. A time and location for each participant's first interview was then arranged. A private room was provided by the hospital within the neonatal unit.

Three mothers volunteered themselves and their premature infants as participants in this study. Given that the aims of the study required a qualitative in-depth investigation, a small sample size was deemed appropriate (Elliott et al., 1999; Crouch, 2006).

The table below provides an outline of the participants in this study.

Table 2: Participants in the study

Mother's Pseudonym	**Age**	**Marital Status**	**Infant's Pseudonym**	**Birth weight**	**Gestation at birth**	**Ethnicity**
Charity	33	Married	Nono (F)	830g	30 wks	Black
Betty	31	Engaged	Ryan (M)	1250g	33 wks	White
Khanyi	27	Boyfriend	Vincent (M)	1030g	28 wks	Black

4.7.3 The Data Collection Process

Three in-depth, open-ended interviews were carried out with the mothers. These were each audio-recorded. It was hoped that repetitive interviews would facilitate a relationship between researcher and interviewee, resulting in more open communication over time. The

interview times ranged from 60 to 90 minutes each. Undertaking the study within the hospital setting was practical and made it easier for mothers to participate. Given the nature of the hospital setting and the possible speed with which infants could get discharged, the researcher endeavoured to complete the interview process within one to two weeks.

Two observations of each mother-baby dyad were also undertaken within the neonatal high care ward. These were conducted on two separate occasions for sixty minutes each, in between the interviews. During the observations, attempts were made to take at least one video clip, lasting one to two minutes each (all of the mothers had consented to be filmed).

Notes were taken during each interview and observation session. In addition, immediately following each session detailed notes were made of any countertransferences, impressions, thoughts or feelings that had not been recorded during the session. This documentation focused on fluctuating feeling states as well as non-verbal material possibly associated with particular segments of a session. Note was also taken of interactional dynamics. This process was considered essential for enhancing the contextual and emotional understanding of each session (Cartwright, 2004; Strømme et al., 2010).

The structure of the data collection process was as follows:

1) The first interview with the mother was conducted. Following the interview, the date for the first observation was scheduled.

2) The first observation was conducted for one hour. The aim was to observe the infant in the hospital ward with a particular focus on mother-baby interactions.

3) The second interview was conducted.

4) The second observation was conducted.

5) The third interview was conducted.

4.7.4 The Interview Process and Schedule

The research made use of a semi-structured interview schedule to guide the interview process. This outline was a guide that was followed loosely as the interview progressed. Tracking the participant's narrating of thoughts, feelings and experiences was considered most important. The first interview schedule was mostly unstructured. The second and third interviews incorporated a more carefully formulated sequence of specific questions. However, these too were only used as a guide (Hollway & Jefferson, 2000).

The schedule consisted of three parts, divided up per interview (Refer to Appendix E for the full psychoanalytic research interview outline). The interview schedule was constructed in collaboration with my research supervisor. The formulation of the questions was guided by psychoanalytic literature on prematurity whilst attempting to not be leading in anyway. For example, the inclusion of questions regarding the possibility of other traumatic experiences was based on literature suggesting that the experience of prematurity might be more challenging for mothers who have experienced previous traumas, childhood or otherwise (Vanier, 2017).

The first interview began with obtaining biographical details such as the mother's age, ethnicity, relationship status as well as details about her infant. These included the infant's sex, birthweight, and gestational age at birth. The interview which followed was unstructured and flexible. It began with the following statement, 'I am interested in learning about premature babies, what they experience and how they communicate. I am also interested in the experience of mothers here in the neonatal ICU. I would love to hear about your baby's journey since s/he was born. What has s/he been through here in the hospital? I would also like to hear about your experience since his/her birth, in as much detail as you would like to give. You can be as honest and open as feels comfortable for you. Please feel free to tell me anything that comes to mind; or that you may wish to share, however small or irrelevant you may feel it is'. Participants were encouraged to start where they felt comfortable, allowing for loose associations and thoughts related to the topic to emerge. This mode of interview style is in keeping with Cartwright's (2004) technique for psychoanalytic interviewing. It is based on the psychoanalytic principle of free association (Cartwright, 2004; Hollway & Jefferson, 2000). An outline of probing questions had been

developed as a guide for when participants struggled to free-associate around the topic. However, this was not found to be problematic during the interviews.

At the end of this interview, reflective questions were asked about the mother's experience of the interview. The researcher also attempted to explore whether the mother felt distressed or traumatised at any stage during the interview. The observation which was to follow was then discussed. Questions or concerns in this regard were then addressed, with the aim of putting the mother at ease about the process and clarifying what the observation would entail.

The second interview began by inquiring about the mother's thoughts regarding the previous interview and observation. This gave participants a chance to reflect on what they had experienced in the first interview as well as the observation. This interview was slightly more structured. This is in keeping with Cartwright's (2004) suggestion that a more direct approach is possible after an unstructured beginning. This interview explored the mother's experience of her pregnancy and birth more directly. The mother's feelings towards her infant as well as descriptions of their interactions and experiences were also explored. In keeping with Cartwright (2004), the second interview was also used to clarify possible contradictions, expand on relevant themes or fill in gaps from information gathered in the previous interview. At the end of this interview, reflective questions were asked regarding the mother's experience of the interview. Attempts were made to explore whether the mother was distressed or traumatised in any way.

The third interview began by reflecting on the second interview and observation. This interview was also semi- structured and attempted to gain information regarding the mother's childhood experiences and relationships with parents and family members. Life histories were an important component of the interview. This allowed for the contextualisation of maternal narratives as well as possible unconscious processes that may have emerged in the interview (Clarke, 2006). Cartwright (2004) suggested that this is also important for exploring object relational patterns. Mothers were also asked a little more about previous traumas and losses. As this was the final session, the interview then explored the mother's experience of the research process. Questions were asked regarding possible changes in perceptions or feelings during the process, particularly in relation to her infant. Care was taken not to imply they should have. The mother's experience of the

researcher and her identity was also explored. The interview culminated with questions regarding the mother's possible experience of trauma or distress at any stage throughout the research process.

4.7.5 The Use of Psychoanalytically Informed Semi Structured Interviews

Research interviews involve "an interpersonal situation, a conversation between two partners about a theme of mutual interest" (Kvale & Brinkmann, 2009, p. 123). Much literature highlights the importance of understanding 'premature' mothers by creating space to hear their personal feelings and thoughts (Cohen, 2003; Mendelsohn, 2005). In this study, a psychoanalytically informed semi-structured research interview was utilised (Cartwright, 2004; Hollway & Jefferson, 2000; Kvale, 1996). This style of data collection fits the exploratory nature and aims of the study.

The semi-structured format involves the use of open-ended questions that allow for further probing (Reja et al., 2003). This creates an open-ended process permitting the researcher to create a bi-directional verbal interaction between herself and the participant around a particular topic (Kvale, 1996). According to Kvale and Brinkmann (2009), in order to conduct a successful semi-structured interview, the researcher needs to be sufficiently knowledgeable about the topic being investigated. I felt that I needed to be equipped with knowledge about prematurity, maternal states of mind, the impact of trauma and developmental histories. This allowed me to ask follow-up questions in a manner which supported the eliciting of nuanced and meaningful information. Kvale (1996) also suggested that the researcher needs to have adequate understanding of human interaction in order to pick up on subtle non-verbal cues, pace the interview appropriately and encourage mothers to talk openly. I believe that my training and experience as a psychodynamically oriented psychotherapist was helpful in this regard.

The interview was also influenced by psychoanalytic principles, as explored previously in section 4.4. The interview format as well as the interview technique was guided by the 'Psychoanalytic Research Interview' developed by Duncan Cartwright (2004). This data collection method makes use of psychoanalytic theoretical concepts and techniques in an attempt to collect both conscious and unconscious material (Cartwright, 2004). A psychoanalytically-informed approach to interviewing also encourages the use of a largely

unstructured approach which allows for free association (Hollway, 2012; Hollway & Jefferson, 2000). The use of open-ended questions encourages participants to phrase answers in spontaneous and idiosyncratic ways (Hollway & Jefferson, 2000; Midgley, 2006). This supports the accessing of unconscious ideas, motivations and anxieties.

4.7.6 Observations of Infants and their Interactions

The use of observation has been identified in the literature as being a valid and useful means of data collection in qualitative research (Merriam & Tisdell, 2015; Creswell, 2013). Infant observation was developed into a formal technique in 1964 and has since become widely used as a training tool worldwide. Infant observation has traditionally been undertaken in a private home environment (Shallcross, 2012). However, more recently, the technique has been adapted for use in various other settings (Datler et al., 2010; Datler et al., 2009; Elfer, 2012; Monticelli, 2014).

Several researchers and clinicians have adapted the technique specifically for use in a neonatal intensive care unit (Boyer & Sorenson, 1999; Caron et al., 2014; Castro, 2011; Cohen, 2003; Mendelson, 2005; Ribeiro Bastista Geraldini, 2016). Mendelsohn (2005) highlighted the value of using infant observation to elucidate patterns of meaning in the baby's behaviour within a hospital setting. It is considered ideal for the detailed exploration of pre-verbal, bodily experiences (Holloway, 2012; Rustin, 1997). In addition, Rhode (2004) suggested that the use of infant observation in precarious environments, such as a hospital, provides the possibility of sharing the psychological burden of the mother and baby.

Given the theoretical framework as well as the focus of the study, psychoanalytically informed infant observation has been chosen as the second method of data collection.

4.7.7 The Technique of Infant Observation

Infant observation concerns the 'naturalistic' observation of an infant in a particular setting, usually within interaction with the mother. Castro (2011) highlights that the first step involved in infant observation is the taking in of sensory information (seeing, hearing, etc.) from the infant as well as the mother. Rustin (2006) describes the "sustained attention

given to the state of being" (p. 42) of an infant, and "states of mind and feelings which permeate and shape the relationships of babies and caregivers" (p. 39). Infant observation involves focusing on the detail and sequences of this information, including observable behaviours, movements and interactions (Boyer & Sorenson, 1999).

It is acknowledged that the way in which these details are observed and recorded is dependent upon a receptive and reflective state of mind in the observer. Being with an infant in this way also gives rise to 'feeling' experiences in observers (Rustin, 2006). Infant observation includes a conscious effort to be aware of one's own identifications and countertransference (Rustin, 2006). These are seen as being critical pathways to understanding the infant (and mother's) psychic experience. Elfer (2012) highlighted the usefulness of infant observation in giving infants a 'voice' by allowing for an exploration of their internal emotional states. Once again reflexivity is required when attempting to make sense of any counter-transferential responses. The impact of the researcher's presence on the observation itself also needs to be considered (Rhode, 2004).

Given the complexity of the process, Rustin (2011) advocated for the use of experienced observers for research purposes. Further, Mendelsohn (2005) and Ribeiro Batista Geraldini (2016) commented on the sensitivity required to watch premature infants in hospital settings, given the subtlety of their communications. Franchi and Toth (2014) highlighted the importance of knowledge as well as technique in this regard. The importance of technical competence was taken seriously in this study. I had completed a two-year supervised training in infant observation. In addition, I also embarked on a six-month infant observation training with premature infants in a hospital setting. This training was supervised by Margaret Cohen, a child psychotherapist trained at the Tavistock. Margaret later offered input and supervision regarding the analysis of the research observations. Margaret is considered a doyen in this field, with many years of experience as a clinician, observer and supervisor. She also authored the seminal book on prematurity, entitled 'Sent before my time' (Cohen, 2005).

Within the proposed study, two infant observations were undertaken for each mother-baby dyad. These observations lasted for one hour each. The observations were always scheduled with the mother present. Observations also included a deliberate effort to be aware of my affective responses as well as my identifications (Rustin, 2006). Traditionally,

infant observations are conducted without a recording device or taking of notes (Elfer 2012). However, Margaret Cohen (2003) advocated the taking of notes within the NICU context, given the subtlety of the infant's communications as well as the overwhelming environment in which the observations take place. In keeping with this advice, notes were taken during each observation.

Attempting to interpret the experiences of infants, given their primitive, preverbal nature, requires caution. However, there is an established precedent of attempting to infer the meaning of an infant's behaviour based on in-depth observation (Cohen, 2003; Mendelson, 2005). Yorke (1971) also cautioned against attempts to use Kleinian theory to 'adultomorphise' infants. This criticism was acknowledged in the research. However, within the study, object relations concepts were not applied in a prescriptive way (Rustin, 2011). This study attempted to consider the infant's experience as well as mother-baby interaction in an exploratory and tentative way, in keeping with the principles of psychoanalytic thinking.

4.7.8 Mother-baby interaction videos

As part of the data collection, I also filmed one to two short clips of mother-infant interaction occurring during the observations. Woodhead et al. (2006) highlighted the usefulness of video as a technical means to observe the interactional processes that occur between mother and infant in earliest infancy. Rustin (2006) emphasised the fact that video technology has made it possible to investigate minute subtleties of mother-baby interaction. The incorporation of video also allowed for mothers to comment on the interactions in later interviews, supporting the focus on the mother–infant relationship. Woodhead et al. (2006) suggested that if mothers experience the researcher as empathic, non-judgemental and unthreatening, they are far more likely to view the use of the camera as an extension of the interview experience. I also utilised my cellphone in order to be as unobtrusive as possible.

4.8 Data Analysis

Once the interviews and observations were completed, they were prepared for analysis. Interviews, which had been audio-recorded, were transcribed. Following each observation, a full transcript of what had been observed was written up immediately based on the notes

taken during the observation. Notes that had been taken during and after the interviews were also collated. Additional notes were also made upon viewing the video material. Participants were given pseudonyms and identifying details were omitted or disguised during this process to protect participant confidentiality. At that point, all the above-mentioned data was analysed.

4.8.1 Step 1: The Process of Data Analysis of Interviews

The first step in the process of analysis involved the scrutinising of maternal narratives from interviews. These were analysed using psychoanalytic narrative analysis as described by Cartwright (2004). Cartwright (2004) suggested that the analysis of the psychoanalytic research interview should involve several steps. These are not necessarily linear.

1. Careful attention to feeling states and corresponding thoughts or perceptions

Cartwright (2004) suggested that analysis begins prior to the interviews even being conducted. The first step is the researcher's exploration of their motivations for conducting the research. Cartwright (2004) proposed that these insights support accurate analysis of the data, helping to contextualise interpretations (Cartwright, 2004). Data analysis therefore started as I began to explore my personal motivation for researching the topic of this project. This was supported by supervision, consultation and personal therapy. This evaluation continued throughout the interviews and was then taken up more formally once the data analysis officially began (Cartwright, 2004).

During the interviews, close attention was paid to my own feeling states and associated perceptions. I attempted to remain vigilant, observing my emotional responses with the knowledge that they might provide valuable information. I then documented my emotional reactions in a free-associative writing process after each interview. I carefully recorded non-verbal cues and strong countertransference responses towards the participants. The timing of their occurrence was also considered relevant, potentially contextualising narratives in the final analysis of the transcribed text (Cartwright, 2004). I scrutinised this countertransference data during the analysis, attempting to establish if they provided valuable information regarding the participants' relationships with their internal and external objects.

The feeling states of the participants were also noted. This included affect laden themes which repeated or affects that didn't match the content being discussed. At a later stage, I compared this with my own transference and countertransference reactions. In this way, feeling state responses were used as corroborative sources of information rather than independent evidence (Cartwright, 2004).

2) The search for core narratives

This involved searching for story lines in the interview texts. I interrogated the interview text in its entirety searching for coherent story lines or emerging core narratives (Cartwright, 2004). I also carried out this narrative analysis at the 'latent level' to uncover the underlying ideas, feelings and thoughts within participant words.

Another feature of the narrative analysis, as described by Cartwright (2004), was the process of revisiting the data to review the themes and understand their context. The text was read repeatedly in a circular manner. The aim was to perpetually correct and refine the narratives, deriving more information with each reading. In this way, I attempted to enhance prior understandings, culminating in a more accurate and complex analysis with as few contradictions or gaps in meaning as possible. This step was only considered complete once all coherent core narratives had been constructed and then aligned with transference and countertransference impressions (Cartwright, 2004).

3) Tracking key identifications and object relations within dominant narratives

In this step, I attempted to establish the object relations and identifications as extrapolated from the narratives. This step relied on the assumption that core narratives are in fact metaphorical representations of aspects of the interviewee's internal world. According to Cartwright (2004), all interviews contain numerous references to 'the self' and its relation to object representations. When approached in this way, "the interview begins to read like a script with different versions of the self and its object representing different actors, some being more prominent" (Cartwright, 2004, p. 230). I was interested in how participants, consciously and unconsciously, placed themselves within the narratives in relation to external objects in their life. This included their family members, their infants, hospital staff

and me. I found that themes suggestive of the participants' intrapsychic organisations began to appear and repeat themselves. In this way, I began to gain an understanding of the participant's objects, fantasies, and defensive organisations (Cartwright, 2004). The feeling states and countertransference identified in step 1 supported this process. As suggested previously, care was taken to ensure that feelings used in the analysis that were the product of my own psychological processes were identified, so that the significance of these, if any, in relation to the participants' experiences, could be understood. Lastly, information regarding the participants' early childhood and relational experiences was also taken into consideration. Cartwright (2004) suggested that historical details are helpful in offering clues to the developmental origins of intrapsychic objects and defences.

This methodology allowed me to develop an account of each mother's objects, fantasy life and related defensive organisations. In this way, the participants' internal sense of themselves and their objects was gleaned.

4) Within versus across narrative analysis

Braun and Clarke's (2006) thematic analysis is a method used to identify and analyse themes by discovering the patterns and links between them, resulting in a rich and detailed account of the data source. A 'theme' is defined as something that captures an important area in the data relating to the topic of study (Braun & Clarke, 2006). After the narrative analysis had been completed, a thematic analysis utilising this methodology was performed on the interview texts. This also allowed for the identification of common themes amongst participants. Once again, a circular approach was undertaken. The data was repeatedly revisited to review the themes, exploring how they might correspond with other themes as well as the rest of the data. Constant revisiting of the data resulted in a more comprehensive analysis (Braun & Clarke, 2006). One of the main advantages of thematic analysis is its theoretical flexibility, and thus it was appropriate for this psychoanalytically oriented study.

4.8.2 Step 2: The Process of Data Analysis of Observations and Video Material

Observational and video material were analysed within a supervision process with Margaret Cohen. This process relied on her extensive experience with infant observation to analyse themes regarding infant and maternal behaviours within the context of the mother-

baby relationship. This is in keeping with traditional methods of infant observation analysis (Rustin, 2011). According to Nugent et al. (2007) 'meticulous observation' of an infant's behaviours offers insights into the way in which the infant is coping with their environment. Observations of phenomena such as eye gaze behaviour or changes in skin colour, breathing patterns and muscle tone were analysed to ascertain the infant's stress levels and the way in which the infant was experiencing maternal interaction. Details were analysed regarding the infant's interactions with the mother as well as the inanimate environment in which the baby existed. This information was used to explore the experience of the infants through the lens of the mother-infant relationship.

4.8.3 Step 3 Triangulation

The analysis of the interview data was triangulated with the analysis of the observational transcripts and video material, taking into account all of the counter-transferential and process notes taken during and after both processes. The incorporation of various data sets was believed to add richness and depth to the study (Heale & Forbes, 2013). The use of triangulation is an acknowledged and well-established methodology offering the possibility of a more comprehensive analysis process (Bekhet, & Zauszniewski, 2012). The triangulation process involved comparing and cross-referencing the data from the various sources (Heale & Forbes, 2013). For example, themes and patterns emerging from the interviews were compared with observed behaviours from the infant observations. This was then referenced against my countertransference responses. Areas of convergence and divergence were examined to identify whether the data sources provided consistent or contrasting insights. If there was alignment among the data sets, this lent greater credibility to my findings and interpretations. On the other hand, inconsistencies prompted further exploration and analysis in order to understand the reasons behind them (Flick, 2004). This process was most evident in paper three, where interviews, observations as well as countertransferential responses were triangulated in order to explore and explain the intersubjective dynamics between the premature infants and their mothers.

4.9 Case Study Approach

Once the overarching data analysis had been completed, the analysed data was scrutinised once again with research questions two and three in mind. This examination attempted to identify relevant case material that might answer the above-mentioned research questions.

A case study approach offers rich, in-depth information about the participants being studied. The purpose of case study research is to refine specific areas of focus, selecting those cases that highlight underlying dynamics and factors within the research (Ivey, 2009). Cases were selected based on their relevance to the research questions.

For the second paper, on maternal states of mind, three vignettes were chosen that described and represented the mothers' experience of trauma as a result of prematurity. This paper utilised maternal narratives from the analysed interviews. A case study approach allowed for each mother's state of mind and defensive processes to be illustrated as manifested in the interviews. The vignettes were also discussed in relation to the mothers' histories, illustrating the influence of previous traumatic relational history on their current experience of trauma. For the third article, on mother-infant intersubjectivity, two cases were used to highlight the relational experiences of two particular mothers and their premature infants. These two cases were intentionally selected as they allowed for the clear comparison of the impact of maternal states of mind on intersubjectivity. For this paper, maternal narratives as well as analysed observation material was utilised. In both instances, my subjective emotional responses and countertransferences were included to corroborate findings.

It is acknowledged though that case material of this nature, whilst offering knowledge regarding aspects of the lived experience of a phenomenon, may require further exploration in order to be considered generalisable (Edwards, 1998; Widlöcher, 1994). This will be discussed further in the limitations of the study in the conclusion chapter to this thesis.

4.10 Reflexivity

Much literature challenges the possibility that researchers can remain neutral throughout a qualitative research process. Hollway and Jefferson (2000) warned of the researcher's

inevitable influence on the research process. The researcher's subjectivity, incorporating their emotional reactions, personal conflicts, motivations and even the researcher's identity, is constantly evoked (Elliott et al., 2012; Gemignani, 2011; Hayes, 2004; Hollway & Jefferson, 2000). As a result, a lack of self-awareness can detract from the researcher's capacity to arrive at meaningful and reliable data collection, analysis and interpretation (Hollway & Jefferson, 2000). Researchers need to be mindful of their subjective position and the ways in which this might impede or sway the research process. Long and Eagle (2009) offered examples of this occurrence which includes situations where the researcher is unaware of the impact they are having on participants or where the researcher unconsciously avoids painful material.

In light of this, the importance of constant introspection on the part of the researcher is emphasised in both ethnographic (Berger, 2001; Finlay, 2002; Pillow, 2003) and psychoanalytic literature (Frosh & Baraitser, 2008; Hollway & Jefferson, 2005; Saville Young, 2009). Reflexivity is widely used as a resource in qualitative research (Harvey, 2017; Finlay, 2002; Pillow, 2003) "to produce research that questions its owns interpretations and is reflexive about its own knowledge production" (Pillow, 2003, p.178). The aim of reflexivity is to produce research that is responsible by uncovering any biases or assumptions that could alter the research process (Brown, 2006). Psychoanalytic reflexivity extends the focus to include unconscious elements (Elliott et al., 2012). Saville Young (2011) suggested that "there can be no psychoanalytic theorising of the other without open involvement and discussion of the self" (p. 20).

Reflexivity can serve another function. As discussed in section 4.4.1, the researcher's emotional responses can also provide clues as to the mental states, unconscious feelings or conflicts of the participants (Clarke, 2002; Hollway, 2016; Marks & Monnich-Marks, 2003). These are transferred to the researcher through 'projective identification' thereby offering a portal into the unconscious processes in the participant (Strømme et al., 2010). Marks and Monnich-Marks (2003) proposed that unbearable feelings, in particular, are often unconsciously projected into the researcher. Strømme et al. (2010) suggested that paying attention to countertransference reactions and non-verbal communications allow researchers to draw conclusions about the relational attitude and defensive processes of participants.

Elliott et al. (2012) highlighted that countertransference responses are co-created, comprising both the researcher's conscious and unconscious reactions as well as those evoked by the participant. Both the fields of psychoanalytic and ethnographic research recognise that feeling states engendered in the researcher are intersubjectively created by researcher and participant. A reflexive process is necessary in order to tease out what might be helpful to the research and what the researcher needs to take ownership of (Gemignani, 2011).

The second research question asks, 'What can be understood about the experiences of premature infants and their mothers within the context of a neonatal high care ward that contributes to the above (psychoanalytic) literature?'. It was felt that a reflexive ethnographic approach could be utilised to scrutinise the countertransference data for new understandings of the experience of prematurity. This also necessitated a self-reflective evaluation of my impact on the research. Paper four explores the process of teasing out of these two dimensions of the research.

In order to achieve this aim, I relied heavily on the process notes that I had made through the research endeavour. I had kept a diary throughout the research process, making notes immediately during as well as after each interview and observation. These notes included personal impressions, thoughts and feeling states that had arisen during interactions with participants (Cartwright, 2004). In this way, countertransference data was constantly recorded. The notes also incorporated observed non-verbal cues and transference responses from the participants. For example, noticing when a participant shifted positions, or became quiet.

Several authors have cautioned against the potential challenges of using countertransference as a source of data, raising a number of methodological issues (Frosh & Baraitser, 2008; Parker, 2010). Long and Eagle (2009) questioned the researcher's ability to interpret hidden content within such a short-lived relationship. The importance of making tentative inferences was emphasised by Frosch and Baraister (2008). Various authors have also stressed the importance of not using countertransference responses as independent evidence but rather as a corroborative source of information (Cartwright, 2004; Holmes, 2014; Heimann, 1950). These guidelines were taken seriously during the writing-up of paper four.

There were several additional factors which supported the use of countertransference in this way. As an experienced psychoanalytic psychotherapist, I had had much experience grappling with the meaning of my emotional responses. Harvey (2017) suggested that psychoanalytically trained researchers are at an advantage for this reason. Throughout the process, I was also committed to ongoing self-reflection, personal therapy and supervision with two separate supervisors. In this way, the feelings and emotional responses evoked during the interviews, observations and analysis were constantly evaluated (Elliott et al., 2010).

4.11 Integrity of the Research Project

Qualitative research has been criticised as being too subjective (Durrheim et al., 2006). The use of interviewing and interpretation presents the issue of researcher subjectivity. Smaller sample sizes introduce concerns regarding validity and replicability (Fusch & Ness, 2015). Psychoanalytic research, in particular, has been accused of lacking the objectivity of quantitative studies (Midgley, 2006). In order to counter these criticisms, various steps were taken as outlined below. Demonstrating the credibility of interpretations, findings and conclusions of the study is essential for ensuring the integrity of the research process (Lincoln and Guba, 1985).

The 'trustworthiness criteria' outlined by Lincoln and Guba (1985) has been utilised to demonstrate methodological 'trustworthiness". According to Schwandt et al. (2007), these criteria are an established standard for evaluating qualitative research. 'Trustworthiness' is outlined in the literature as including credibility, transferability, dependability and neutrality. These are analogous to the scientific concepts of internal validity, external validity, reliability and objectivity respectively (Lincoln & Guba, 1990). It is important, however, to emphasise that these concepts are not identical as the subjective nature of this research study suggests that the criteria for assessing the quality of qualitative research relies on the depth of exploration rather than the generalisability of the findings (Varvin, 2011).

The issue of credibility involves demonstrating that sufficient measures have been taken to accurately reflect the 'truths' of the participants (Lewis & Ritchie, 2003; Lincoln & Guba,

1985). Within the research, the credibility of interpretations was safeguarded by ensuring that prolonged, lengthy engagement took place with each participant in order to achieve a detailed understanding of each individual (Lincoln & Guba, 1985). This included three in-depth interviews as well as two separate observations. Any contradictions within the data could then be followed up in subsequent sessions. This also allowed me to verify with participants what they had recounted, constantly attempting to clarify possible misunderstandings. The use of audio-recordings of the interviews was useful in this regard as well. In addition, triangulation of data as well as clear evidencing of findings and interpretations was considered an important part of the analysis process (Tuckett, 1998). The guidance of two experienced supervisors also supported this process. Input from PhD students as well as senior members of staff of the University of the Witwatersrand also reinforced the data analysis process through group discussions.

Transferability of findings addresses the extent to which findings can be applied to other contexts or settings (Lincoln & Guba, 1985). To address this, I attempted to provide rich and detailed descriptions of the participants, the context of the research (Rahima Moosa Mother and Child Hospital) as well as explaining the research methods and procedures. Verbatim quotations as well as contextualised interpretations were also used in both the writing up of the papers as well as the discussion section of this thesis. These thick descriptions allow readers to come to their own conclusions regarding the transferability of the findings (Kelly, 2006).

Establishing 'neutrality' requires highlighting the safeguards that are put in place to prevent the influence of the researcher's biases and perspectives (Lincoln & Guba, 1985; Renik, 1998). This particular definition of this criterion is dated, however, as recent consensus with regards to qualitative research has established that neutrality and lack of bias is impossible, and what is preferred is the use of a reflexive approach that allows for transparency (Pillow, 2003). The influence of the researcher's subjectivity is regarded as inevitable; neutrality in the form of transparency and reflexivity is encouraged in order to account for the influence of the researcher on the study's findings. The potential impact of researcher subjectivity has been addressed at length in the thesis. As described in section 4.10, the impact of my subjectivity was continually considered through a carefully structured process of reflexivity in order to achieve a greater degree of neutrality. Reflexive consideration of all aspects of the research process, including the impact of my role, is

necessary for the generation of trustworthy data. This was supported by my two supervision processes as well as personal psychotherapy.

Dependability focuses on the consistency and stability of the research findings over time. Researchers achieve dependability through documenting their research processes thoroughly (Lincoln & Guba, 1985). This methodology section has attempted to carefully document every aspect of the data collection and analysis. This ensures the possibility of consistency regarding data collection and analysis procedures, should anyone attempt to replicate the process. However, it is acknowledged that given the unique, intersubjective nature of this kind of qualitative research process, replicability is never possible. Nevertheless, outlining these processes to give readers a sense of context and process that increases the credibility of the study resulting in greater trustworthiness of the research (Levitt et al., 2018).

4.12 Ethical Considerations

A study of this nature requires several ethical considerations. In order to promote an understanding of prematurity, it is acknowledged that the study engaged vulnerable mothers regarding their personal and often traumatic experiences of becoming a mother to a premature infant. Mouton (2001) highlighted that this is the nature of qualitative research. However, strict ethical guidelines needed to be considered in order to protect participants from harm whilst attempting to collect rich, meaningful data (Fahie, 2014; Koller et al., 2012; Komaromy, 2020).

4.12.1 Adhering to Protocol

Prior to commencing the study, ethical clearance was obtained from the Medical Human Research Ethics Committee (Protocol Number: M1811108). Throughout the research, I also made sure to abide by the University of the Witwatersrand's Code of Ethics for Research on Human Subjects. Further, all necessary processes were followed regarding gaining permissions from Rahima Moosa Hospital.

4.12.2 Confidentiality

The intimate, face-to-face nature of the interviews and observations prevented the participants from remaining anonymous. However, several steps were taken to ensure that their identities were protected throughout the research process, thereby ensuring confidentiality. Pseudonyms were used throughout the process and all identifying information was removed from the data or disguised. Case-study data provided by the participants was treated with the utmost sensitivity and respect. Care was taken to omit all identifying information from the published papers as well as the final report. All aspects of interviews and observations, including notes taken by hand, were transcribed and transferred to my password-protected computer. Transcribed data has been archived, with the participants' permission, into my and my supervisor's password-protected cloud storage. Video material was transferred into password-protected files immediately after observations and then deleted from my cellphone.

4.12.3 Informed Consent

The issue of informed consent was taken seriously in the study. I ensured that participants were informed about the requirements of the study. A participant information sheet was given to all participants documenting the nature of the research as well as the expected level of involvement (Refer to Appendix A). The form highlighted that there were no direct benefits or risks associated with participating. The form further explained the voluntary nature of the participation. Participants could refuse to answer any of questions. They could also withdraw from the study at any time prior to the publication of the data. It was ethically important for all participants to read this information sheet, and this was ensured before beginning the data collection process. Participants were also given the opportunity to ask clarifying questions. These forms did not need to be translated as all the participants were fluent in English and literate. Information about each stage of the research was also given verbally.

Participants were then required to give signed consent for several aspects of the study in order to participate. This included consenting to be interviewed, observed as well as consenting to have the interviews audio-recorded. Additional consent was given for the video-recording during observations (Refer to Appendices B, C and D). Mothers were able

to decide whether they consented for the video-data to be kept confidential or whether it could be used for conference/training purposes, with the knowledge that this would limit confidentiality. Mothers were informed that they were under no obligation to offer consent for this and further, that they maintained the right to withdraw consent for the videos to be used for purposes other than the study at any time. All of the mothers gave explicit informed consent for their videos to be used for conference/presentation purposes, understanding that this would leave both the mother and her infant identifiable.

It is acknowledged that the issue of informed consent is complex in a study which deliberately explores unconscious content. This makes it likely that unexpected information or content may surface that is beyond participant awareness. Long and Eagle (2009) argued that the possibility of unintentional or unconscious content is always present in all forms of interviewing. They questioned whether participants can ever fully understand what they are consenting to in this regard. They proposed that even the researcher cannot anticipate what will be elicited. In order to manage this concern, the writing up of findings was done thoughtfully, with care to consider how mothers may feel if they were to read the published papers or the completed thesis, beyond the summary of findings offered to them. The literature also suggests that when unstructured, interactive interviews are conducted with sensitivity and guided by ethics, they provide participants considerable control over the interview process, thereby minimising the risk of distress (Corbin & Morse, 2003, Kavanaugh, & Ayres, 1998). Participants were treated with a sense of concern and respect at all times. I continually attempted to reflect on how their involvement the research study could possibly have any negative effects on them and how these effects might be mitigated.

4.12.4 The Role of the Interviewer

It is important for the clinician researcher to remain in the role of interviewer and data collector and not present as a therapist. The researcher should always listen and respond with the research agenda in mind (Kvale, 1996; Swartz, 2015). The researcher should therefore establish a different type of relationship with their participant than is established between a psychotherapist and patient (Long & Eagle, 2009). Consequently, the research participant should have different expectations to the psychotherapy patient. Within this research, the role of the researcher was carefully considered through a process of reflexivity.

Attempts were made not to cross the boundary from academic to therapeutic interactions (Kvale, 2009; Saville-Young & Frosch, 2009). For example, care was taken not to interpret or analyse any aspect of the participant's story with the participant. Kvale (1996) warned interviewers against making interpretations that participants are not psychologically ready to hear. In this study, I attempted to use my clinical judgement to avoid making interpretations that may have elicited internal conflict for the participant. Rather, I attempted to use psychoanalytic concepts and practices as a way of eliciting and understanding the participants' narrative (Long & Eagle, 2009). At any point, if the role of the researcher did become blurred, this was given serious consideration with the support of my supervisor. A process of reflexivity was utilised to interrogate any potential boundary violations or blurring of the role of researcher.

It was therefore hoped that the tendency for participants to use me as a therapist, namely as someone to talk to about unrelated personal struggles and gain insight, would be reduced. However, given the fragile nature of the participants as well as the potentially traumatic nature of the topics being discussed, one dimension of a therapeutic encounter was believed to be appropriate – namely that of offering containment. I was also aware that the process of sharing stories with me may have offered therapeutic benefits, despite the fact that this was not the overt intention of the process (Corbin & Morse, 2003).

4.12.5 Managing Distress

The researcher constantly held in mind the ethical responsibility to cause no harm to participants. This was particularly pertinent in this study given the sensitive topics that arose during the interviews. I needed to consider that the due to the nature of the study, participants will likely experience distress in the interviews. However, ensuring that the research process did not intensify the distress they were already experiencing due to their current situations was paramount. The vulnerability of mothers of premature infants has been identified in the literature, as discussed previously. Mothers in the context of the hospital are still experiencing active trauma, and would most likely not have had time to make psychological adaptations to their trauma. It was therefore necessary to attempt to identify distress and risk, offering containment and management throughout the process.

There were several ways in which I attempted to anticipate and ethically manage participant distress.

I endeavoured to create a safe environment in which participants could share their thoughts and feelings without feeling exposed or uncontained. I constantly strove to be respectful of participant boundaries. Throughout each interview, I was alert for verbal and non-verbal signs of distress. I am a trained psychoanalytic psychotherapist with the requisite skills for managing distress. During the process, when participants disclosed private, unexpected or unconscious material, I utilised my training and skills with regard to empathic listening and containment. I attempted to ensure that participants felt heard and supported, being given the opportunity to process any emotions that emerged from the interviews.

It was also important for formal debriefing to be built into the research process. Kvale and Brinkmann (2009) suggested that it is important to conduct a debriefing session with each participant immediately after every interview. Consequently, after each interview, I attempted to explore whether participants had experienced any distress. Participants were asked the following questions:

1. Are you okay to stop for today?
2. How are you feeling now?
3. Do you have any questions for me?

In addition, a distress protocol had been decided upon before research commenced. If there was any concern that participants were experiencing unanticipated distress or trauma at any stage in the research process, the interview, observation or video recording would have been stopped immediately and the focus would have shifted to containing the mother. While this was not necessary with any of the participants, I believe that my training would have allowed me to recognise if this had happened and I would have offered the necessary containment.

If it had been deemed necessary, mothers would have been referred to a psychologist at the Ububele Educational and Psychotherapy Trust or Emthonjeni Centre for psychotherapy. The details for these organisations were made available on the participant information

sheet (Appendix A). However, none of the three participants reported feeling distressed or took up the offer to receive counselling after the interviews.

Subsequent to completing the research process, it was discovered that one of the participants had suffered a loss. This mother was offered telephonic containment and she was asked if she wanted to be referred for counselling. She refused the offer and informed me of her intention to go to London to be with her own mother.

4.12.6 Managing the depth of exploration and interpretation

As a researcher, I was aware of wanting to elicit meaningful material through the research process. My need for rich data may have been at odds with what the participants could manage psychologically. This represents a common ethical dilemma, where the best interests of the participants are possibly not aligned with the best interests of data collection (Long & Eagle, 2009). Throughout my research, I recognised the potential for this dilemma, given the sensitive nature of the topic. I was however clear that my commitment to not cause harm needed to take precedence. The ethical responsibility to cause no harm to the participants was constantly borne in mind. I attempted to remain sensitive and aware, in order to strike a balance between eliciting in-depth information and ensuring that participants felt safe. I was committed to the decision that any overt or covert communication that a topic was not comfortable or was eliciting distressing emotion would be respected, and that I would not probe further, rather working to contain the distress. This became particularly pertinent with one participant who shared information about previous abuse. While her narrative around this was often confusing, I did not press for details in order to clarify events, as the incoherence suggested unresolved trauma. Rather, I used the incoherence to evidence the existence of this trauma.

I was also aware that I needed to be aware of the limitations of how much intrapsychic or unconscious material I could reliably interpret from a short interview process (Long & Eagle, 2009). I was committed to the quality of my data analysis and attempted to avoid over-interpreting by constantly returning to the data in a circular manner, clarifying contradictions or gaps in the narratives. I also endeavoured to utilise quotations to convey participants' wording in an attempt to promote accuracy. The utilisation of two supervision

processes also supported this endeavour. The process of reflexivity was also used to examine the influence of my own psychological processes.

4.12.7 Feedback and Reporting of Findings

The findings of the research have been reported in published papers as well as in this final PhD document. If mothers had expressed interest in receiving a summary of the research findings, they would have been emailed a summary. However, no mother expressed such interest.

Chapter 5: Results

5.1 Introduction

This chapter comprises three published journal articles constituting the results of this study. Paper one, which involved a 25-year scoping review of psychoanalytic journal-based articles answered the first research question, 'How is the experience of prematurity, for both infant and mother, understood currently in the psychoanalytic literature?' However, given its focus on the literature underpinning this study, it was decided to include it in the literature review section.

The first paper presented in this section is Paper Two (Canin & Bain, 2023a), which explores the experience of premature birth as a trauma for mothers, highlighting the impact on maternal states of mind and the use of dissociative processes. This paper addresses the first part of the second research question, namely 'how does the experience of prematurity influence maternal states of mind?'

Paper 3 (Canin & Bain, 2023b) investigates intersubjectivity within premature infant-mother dyads. It highlights the relationship between maternal states of mind and infant responsivity. This paper addresses the second part of the second research question, namely 'How does prematurity influence processes of intersubjectivity between the mother and her premature infant and their ability to engage one another?'

Paper 4, the final journal article presented in this thesis, explores the use of countertransference in psychoanalytic research. It is a reflexive piece offering insights into the process of conducting psychoanalytically oriented research in a neonatal high-care unit with premature infants and their mothers. This paper addresses the final research question, namely 'What is the experience of the researcher when investigating premature infant-mother relationships from a psychoanalytic perspective?'

5.2 Paper 2: The trauma of premature birth for mothers with infants in neonatal high care: The role of dissociation due to traumatic childhood experience

Canin, N., & Bain, K. (2023). The trauma of premature birth for mothers with infants in neonatal high care: The role of dissociation due to traumatic childhood experience. *International Journal of Applied Psychoanalytic Studies*, 20(1), 106-119.

Abstract

Recent studies have identified a history of anxiety as playing a crucial role in the development of trauma responses in mothers of premature neonates. This paper explores this link in more depth, examining how previous relational experience appears to influence mothers' experiences of premature birth and their infants in the context of a neonatal high care ward. Utilising case study methodology, the narratives of three mothers are analysed in order to better understand their experiences and their mental states. The trauma of engaging with a premature infant appears to reactivate dissociated self-states associated with childhood experiences of loss and absence for mothers, manifesting in fragmented narratives of their own and their infant's experience.

KEYWORDS
dissociation, dissociative defences, maternal trauma, prematurity

Introduction

Premature birth, by definition, occurs before 37 weeks' gestation (D'Agata et al., 2017). Given their underdeveloped physiological systems, premature infants usually require intense and invasive medical treatment. Urgent hospitalisation and intervention is often needed for the infant and at times for the mother too (Anscombe, 2008). In cases of premature birth mothers suffer the abrupt and often unexpected rupture of their pregnancy (Mendelsohn, 2005). The experience for mothers is described as being a “psychic trauma” (Harris, 2005, p. 250) and a “violent intrusion”(Vanier, 2015, p. 1251). Literature suggests that mothers of preterm infants are much more likely to have mental health issues than those of full-term babies, and symptoms of depression and post-traumatic stress are common (Brunson et al., 2021; Gangi et al., 2013; Jubinville et al., 2012; Karatzias et al.,

2007; Kim et al., 2015; Shaw et al., 2006). This is of concern as post-traumatic stress reactions and depression impair the mother's quality of life, are associated with interactional difficulties in the mother-infant dyad, and have been implicated in adverse outcomes for the infant (Brunson et al., 2021; Pierrehumbert et al., 2003). In addition, recognition of maternal trauma by health care providers is inconsistent (Mortimer et al., 2021). In the literature, preventive screening, both immediate and delayed, is strongly recommended to assist at-risk mothers to access appropriate psychological support (Brunson et al., 2021; Pierrehumbert et al., 2003).

Recent studies have identified a personal history of anxiety as playing a crucial role in the development of trauma responses in mothers of premature neonates (Gangi et al., 2013). In addition, mothers report dissociation and anxiety as the most common symptoms associated with mental health difficulties while dealing with premature infants (Jubinville et al., 2012). This paper offers an exploration of defensive dissociative processes associated with previous traumatic relational experience, in three mothers' narratives of their experiences of premature birth and their infants in the context of a neonatal high care ward. A multiple case study methodology is used and narratives are examined through psychoanalytic understandings of trauma, allowing for the identification of subtle processes of dissociation in relation to self-states associated with childhood experiences of loss and absence specifically.

The traumatic impact of premature birth

Feelings of helplessness are common as mothers are thrust into the mechanical world of the neonatal intensive care unit (NICU) (Vanier, 2015), which researchers have found to be "overwhelming, daunting and frightening for parents" (Lau & Morse, 2003, p. 69). Mothers in these environments often bear witness to painful medical procedures conducted on their infants (Anscombe, 2008), and even the sight of their small, vulnerable, and at times strange looking infant, can be frightening (Negri, 2018). Mothers are described as being trapped in a state of not-knowing (Anscombe, 2008; Vanier, 2015) or "nameless dread" (Steinberg, 2006, p. 139) regarding their infants' health and future prognosis. Early separation from the infant as well as the loss of maternal role and being unable to "claim" their babies is also traumatic (Cohen, 2003, p. 7). Disorientation may develop as mothers are no longer pregnant yet perplexingly have no baby in their arms or at home (Cantle, 2013). All of these

traumatic experiences and intimate moments of personal grief over shattered maternal expectations that should be private, are survived in the communal space of the NICU (Cantle, 2013; Cohen, 2003; Yaari et al., 2017).

The literature on prematurity describes the terror, anxiety (Anscombe, 2008; Cantle, 2013; Steinberg, 2006) and anguish (Vanier, 2015) experienced by the mothers of premature infants. Cantle (2013) suggests that this can lead to the development of a persecuted state of mind. This response is documented in the trauma literature where the devastating and potentially enduring impact of this kind of trauma is associated with the creation of an "internal violence" which disrupts psychic functioning (Garland, 1998; Lemma & Levy, 2004). In response to trauma, psychic defences are necessarily activated. These can be protective, but when excessive or enduring, these can complicate symptom presentation, diagnosis and the capacity to process trauma.

Defensive dissociative processes

Responses to trauma commonly involve hyper-vigilance or conversely the avoidance of pain (Harris, 2005; Mendelsohn, 2005). In the case of mothers of premature infants, the need to remain vigilant, fueled by fear of the baby's death, may propel a hypervigilant preoccupation with the infant's health which does not allow the mother to remove herself from the incubator or to relax into the process of getting to know her baby (Mendelsohn, 2005). Conversely, the literature describes how defence mechanisms can be used in order to protect the mind and avoid psychic pain. The more unmanageable the experience or reality, the more powerful the defence mechanism might need to be (Garland, 1998). Mothers may attempt to escape any reminder linked to their hurt or helplessness (Lemma & Levy, 2004). Such mothers may find it difficult to be physically present with their baby and they may disconnect emotionally (Mendelsohn, 2005). This may result in detachment, numbing, avoidance or dissociation (Kraemer & Steinberg, 2006). Dissociation as a concept has returned as a "cornerstone of recent trauma theories" (Gurevich, 2014, p. 313) and is understood to function as a protective response to traumatic or overwhelming experience which keeps particular emotions and perceptions of the self and other out of awareness. While there is overlap, differences in understandings of dissociation exist between the psychiatric and psychoanalytic literature. The DSM-5 definition of dissociation is the "disruption, interruption, and/or discontinuity of the normal, subjective integration of

behaviour, memory, identity, consciousness, emotion, perception, body representation, and motor control" that often involves amnesia, depersonalization and derealization (Loewenstein, 2018, p. 229). While the trauma literature has historically regarded dissociation as linked to the specific group of dissociative disorders, in the past decade clinical neuroscience and psychoanalysis have made an argument for the broadening of this definition of dissociation to include less catastrophic failures of integration of present experience and have linked dissociative processes to states of affective dysregulation (Bailey & Brand, 2017; Bromberg, 2009; Mucci, 2021; Schimmenti & Caretti, 2016). Dissociative presentations are commonly conceptualised as falling on "a continuum from normal to pathological" (Loewenstein, 2018, p. 230). From a relational psychoanalytic perspective, dissociation is considered as inherent and "as basic as repression to human mental functioning", resulting from experiences of disrupted communication with caregiving figures during childhood, including at the more severe end, experiences of abuse and neglect (Bromberg, 1994, p. 517).

Dissociation is activated in instances of unbearable self-experiences and prevents integration of these experiences into consciousness (Schimmenti & Caretti, 2016). While dissociation may protect the traumatised child from overwhelm, multiple disconnections in the self that occur as a result, at both mental and bodily levels, can result in a lack of integration between self-states (Gurevich, 2014; Schimmenti & Caretti, 2016). In healthier personality structures the various self-states are more readily available to consciousness and "more actively arranged to cope with perceived threats derived from procedural memories of the caregivers' specific failures to respond" (Schimmenti & Caretti, 2016, p. 106).

When trauma overwhelms an individual's defensive structure dissociative processes may be activated. Depending on the degree to which dissociative defences are used, consciousness can become fragmented, as the individual is not able to engage fully with their experience (Gurevich, 2014). This defensive process in response to trauma can be understood as a severing of connections between thinking, feeling and actions, thus impairing symbolic functioning (Rustin & Shuttleworth, 1989). Traumatized mothers may, for example, shift to more robotic, less reflective states of mind (Berthelot et al., 2015) in which the capacity for dialogue, with oneself as well as others, is diminished (Lemma &

Levy, 2004). Mothers may then struggle to put their traumatic experiences into words or represent their thoughts and feelings psychologically (Lemma & Levy, 2004). This also means that it is harder to share one's pain with others and the traumatic experience may then not be integrated or worked through (Vanier, 2015). In addition, previously dissociated self-states or aspects of experience designated as "not-me" (Bromberg, 1994) can be re-evoked by trauma. This can include previously dissociated states that involve configurations of different selves in relation to multiple perceptions of others (Bromberg, 2009). In these instances, the mother may experience her baby or hospital staff or family members in ways that are reminiscent of previous traumatic relational experiences. Some mothers may defend against this pain by mentally expelling, denying or discharging it. This may result in powerful projections often aimed at either the infant or those around her (Amez & Botero, 2000; Harris, 2005).

The trauma of premature birth as highly individualised

It is important to note that not all mothers experience prematurity in the same way. Garland (1998) suggests that personality structure and characteristics of the internal world play a role in the way in which trauma is experienced, as trauma can activate "fault lines" that are already present within the personality (p. 11). Previous unresolved traumas and losses, childhood or otherwise, are reawakened (Baradon, 2009; Lemma & Levy, 2004; Lieberman et al., 2011). Early relationship history risk factors for mothers of premature infants have been highlighted. Those whose needs for love and safety were not met as well as those who "have a particular type of history…with their own mothers" (Vanier, 2015, p. 1036) might have the greatest difficulty in recovering from premature birth. This "particular type of history with their own mothers" involves the concept of "absence" and is captured in terms such as failure, non-recognition, impingement and neglect (Gurevich, 2008). Gurevich (2008) describes the automatic survival response in relation to such mothering absences as "an inner absence, an intrapsychic absence, a dissociation of parts of the self… [that] portrays the non-responded-to needs of the self" (p. 561). It is evident that the experience of having an infant in high care who may not survive, whom she cannot hold or mother in warm, safe, present ways, could re-evoke experiences of failure, absence and loss for a mother. Previous traumas such as miscarriages, stillbirths and other preterm infants who may have died, are also considered risk factors (Negri, 2018). Vanier (2015)

suggests that much depends on how these traumas were handled and the extent to which they have been mourned. Lemma and Levy (2004) suggest that “when external reality mirrors an internal catastrophe, chances of severe traumatic injury are high” (Lemma & Levy, 2004, p. 6). For these mothers, self-states, including memories and painful emotions, associated with unresolved traumatic experiences may be reactivated by a premature infant who is utterly vulnerable and powerless - constantly subjected to painful and upsetting experiences, and whose precarity of existence may represent a threat of abandonment through death or maternal failure.

Vanier (2015) highlights the fact that a traumatic delivery embeds itself within the mother's fantasy life. The birth may be particularly traumatic when it confirms a mother's unconscious phantasies (Harris, 2005) or primitive anxieties (Negri, 2018). For example, mothers who have been questioning their ability to be maternal may have the image of themselves as inadequate confirmed by not having carried their pregnancy to full-term or by seeing that the baby they produced may be too fragile to survive; or a mother who carried ambivalent or hateful feelings toward her baby during the pregnancy, may find it particularly traumatic when her baby's existence is in fact under threat (Vanier, 2015). In these instances, where the trauma of previous relational experiences is tied up with the dynamics of aggression, mothers may find themselves moving between positions of abandoned-abandoner and victim-aggressor. The internalisation of a victim-persecutor dyad within the self is most common in survivors of childhood maltreatment (Mucci, 2021).

Method

A multiple case study approach was utilised and mothers of premature infants who were hospitalised at a local Johannesburg hospital were invited to participate in a set of interviews. The three mothers who volunteered were each interviewed on three occasions using a semi-structured research interview format guided by the principles of Cartwright's (2004) psychoanalytic research interview (Cartwright, 2004; Hollway & Jefferson, 2000). The interviews were conducted at the hospital and the interviewer, Nicole (also the first author), spent time in the ward observing the mothers with their infants. Mothers were invited to talk about their experiences of pregnancy, birth and in the high-care unit in an open-ended way in order to obtain subjective descriptions of the mothers' perceptions and experiences, as well as their interpretations of meaning. The

psychoanalytic research interview emphasises the contextual nature of meaning, and makes use of psychoanalytic theoretical concepts and techniques in an attempt to collect both conscious and unconscious material (Cartwright, 2004). This is achieved through the interviewer paying close attention to moments of heightened affect, avoidance of affect, and the dynamics of transference and countertransference during and between interviews, all of which can emerge as "inchoate feeling-state responses" (Cartwright, 2004, p. 226).

Within the psychoanalytic research paradigm adopted here, countertransference refers to the feeling states evoked in the interviewer during the interview process. These projective identifications or the "feeling state or role" induced in the researcher when conducting interviews are believed to provide some access to unconscious processes in the participant (Holmes, 2014; Stromme et al., 2010). Paying close attention to one's feelings and thoughts also assists in the interpretation of data, as it contextualises and highlights the emotional impact of what is being discussed (Cartwright, 2004; Hollway & Jefferson, 2000). Marks and Mönnich-Marks (2003) highlight that unbearable feelings, in particular, may be unconsciously projected into the researcher, allowing for a deeper understanding of maternal mental states. For this reason, the interviewer's own feelings and countertransference responses have been included in the material described below.

The psychoanalytic research interview (Cartwright, 2004) guided both the interview technique as well as the analysis of the interviews. The analysis involved triangulating the content of each mother's narrative with her reported history and the emotional dynamics of the interview process itself to identify the mother's mental states, defensive processes and various self-states. The process of using this information in interpretations involves the researchers interrogating their own subjective influences and contributions to interactions and responses, alongside the mothers' possible contributions. Researcher reflexivity took account of the fact that the researchers in this study are both white women, and also both mothers. Impacts of racial, cultural and gender dynamics were considered in light of the fact that the researchers and the participants are subject to varied pressures, both internal and external, with regards to what it means to be a "good mother". Aware of these pressures, the interviewer made an effort to create a space in which all of the mothers' feelings were acceptable. However, despite this, mothers likely felt pressure, at times, to give a narrative that they thought would be viewed more favourably. This appeared in the narratives in the form of a slightly forced positivity and hopefulness.

Below, three vignettes are presented that describe each of the three mothers. These are written from the first-person perspective of the interviewer, and include direct quotes from the interviews. They illustrate each mother's state of mind and defensive processes as these manifested in the interviews. The vignettes are each discussed in relation to the mothers' histories where the utility of psychoanalytic understandings of trauma with regards to the influence of previous traumatic relational history appears to be evident.

"You're gonna be fine baby": Khanyi and Vincent

Khanyi is a 27-year-old black, Zimbabwean mother who went into premature labour at 28 weeks. She is as an accountant by profession. Her pregnancy was unplanned, but she and her long-term South African partner were excited about the baby. From birth, her son Vincent had struggled with immature lungs as well as digestion problems. Doctors were also concerned about a possible infection. Khanyi presented as a warm and consistently calm presence. She was accommodating of the research process. I felt that she was dedicated to the role of taking care of her infant. However, she often seemed to struggle to connect to Vincent or to think about what he was experiencing. At times, she was experienced as being detached and misinterpreting his distress signals.

I was surprised at how much mutual laughter had occurred in the first interview, as Khanyi spoke about her traumatic birth and time spent in hospital with Vincent. Laughter appeared to be a defence against pain and trauma. Many of Khanyi's stories minimised the negative aspects of her experience. She made comments like, *"…that's the thing with life, just about everything is a phase… it will come to pass too and then the next phase is gonna come and he is gonna be home"*. Khanyi's experience of distress felt gently "smoothed over" rather than outright dismissed. It seemed particularly hard for her to acknowledge needing support. She emphasised that all her decisions had been made independently. Khanyi subtly changed the topic when asked about her possibly feeling lonely in the hospital.

However, she had some awareness that there might be feelings she was avoiding: *"I felt really tired although from nothing (laughing) because I wasn't doing anything but maybe internally of course, yah stuff was happening…"*. Khanyi was aware that she didn't want to be in touch with Vincent's pain: *"When he cries I don't want to feel it too much, so…I will*

take the stance of 'oh, no, he's going to be fine, babies cry and being pricked hurts, so rightfully he should be crying, but you're gonna be fine baby". When describing Vincent's birth, she explained avoiding thinking about what she had been feeling, but when reflecting on it, her sadness was apparent: *"I sort of just umm accepted that ok so this is happening. I didn't really get stressed…Got to deal with it and I don't know if I avoided feeling it…I haven't quite sat down and thought oh this is sad…".*

The moments where Khanyi could be reflective about her feelings were conspicuous. Describing her pregnancy, Khanyi admitted: *"I was spending almost all day in bed. I felt so powerless and everything, it got really worse during that last week …".* In these moments, Khanyi was able to recognise and reflect on Vincent's distress and vulnerability. The researcher was intensely moved on one poignant occasion when Khanyi reflected on Vincent's experience: *"And just him lying there and thinking 'is he going through a lot of pain? What's going on in there? Is he ok?' You know and he can't talk for himself…".* Despite these reflections, however, and her self-reported fierce independence, Khanyi appeared to feel powerless to help Vincent in the context of the ward: *"So really, I can't argue with the nurses and be like my baby needs more, give me more".*

She explained how it had felt to see her son with an intravenous drip in his head. *"I won't lie, it's hard…I have never seen that before and so when they had to do it on him, it was 'oh my god' whereas now… you know it's really hard seeing your tiny baby go through that, and the pricks and everything".* Even as she shared this painful moment where she felt overwhelmed and afraid, however, it felt as if she was pushing the memory from her mind and designating this to the past – her words *"…whereas now…"* felt like a shift away from a frightening memory to a space of coping from which she could reflect on her difficulty.

It also felt as if Khanyi was preparing herself for the possibility of Vincent's death. *"I hoped that he would make it but … was kind of preparing myself to say you know what if he doesn't, you have got to be prepared, you have got to be prepared".* She described an experience of arriving at the hospital and not being able to find him. The implications of this could be dire, as many mothers arrive at the hospital to discover their babies had died overnight. Khanyi reported calmly searching for him: *"Well, I just thought okay so maybe they moved him. Which… you never know…it might be a good thing and also might not be a good thing".* Although seemingly pragmatic, Khanyi's fear of losing Vincent and the pain this may cause

her, was apparent in her attempts to "prepare" herself and her inability to say what felt unthinkable: *"… they moved him…might not be a good thing…".* Vincent's death was the terrible unnamed *"what if…?".*

At the end of the second interview, when asked if there was anything she wanted to add, she responded, *"no I've emptied"*. Even though conversations with Khanyi had felt at times to be "empty" of pain and negative emotions such as anger, frustration or resentment, her feeling of having "emptied" suggested that she had felt full of difficult emotion. Talking about it had allowed for some release perhaps, or alternatively, left her drained and in touch with an absence within.

Growing up, Khanyi was the oldest of seven siblings. Two siblings had been the result of her father's extra-marital affair. When Khanyi was 10-years-old, her mother left the family to work as a nurse in the United Kingdom. She described her father as being warm and loving during this time. However, he had expected her to care for her siblings much of the time: *"As I grew older I had to take on, um, the responsibility of well, I don't want to say, caretaker, or whatever, but a little bit like that"*. At the age of 13, Khanyi was sent to boarding school. She was able to describe her sense of loneliness at being sent away. *"I didn't want to go but my dad was like 'no, go'. I remember when he left, I was so sad. I was miserable…I was writing letters to him, telling him I want to come home…".* Khanyi's wish had not been granted. Rather she experienced her father as having high expectations of her, particularly with regards to academics. Over the years, their relationship had suffered.

Khanyi's loss of her parents was the backdrop against which she was experiencing the excruciating possibility of the loss of her infant son. While her capacity to question and reflect on her mental states and comfort herself, suggests some attuned parenting experiences in her early childhood, the reported lack of parental mentalising around her separations from both mother and father suggest these as sites of traumatic loss. It seemed that there had not been opportunities for her feelings of fear, abandonment and loneliness to be acknowledged after these losses, and dissociative processes may have resulted leaving her with contradictory self-states: one an overwhelmed, frightened, sad young girl, unprepared to assume a "caretaker" role, and the other an independent woman who expects and prepares for loss. After her mother left, she was expected to assume maternal responsibilities. Her attempts to express her feelings when first sent to

boarding school were ignored and she was left to manage her distress alone. This voiceless state appeared re-evoked in the high care ward, where she seemed to feel that she did not have a voice that would be heard by others – she "can't argue with the nurses and be like my baby needs more, give me more". However, a more detached state that expected and prepared for loss was also evident. Her narrative suggested oscillations between a state of mind in which she identified with her infant son's vulnerability and voicelessness *("he can't talk for himself"*), where she could briefly engage with his experiences of pain and helplessness; and a state of mind in which she was "prepared", "not feel[ing] too much", ready to "deal with it", and distanced from him and the situation. Interestingly, at points in the interviews, Khanyi had referred to herself as Vincent's "caretaker" rather than owning her role as his mother. This is also the word she used to describe her role with her siblings. This defensively avoidant stance is noted by Mendelsohn (2005) who reported on mothers of premature infants who visit their baby regularly but seem distant or vague. This mental avoidance is suggestive of these mothers' fear of fluctuations in their mental states, the intensity of their feelings and the fears and phantasies that these evoke.

"If I can't offer him what he needs…why do I have to make a baby not to survive in the end": Betty and Ryan

Betty is a 31-year-old white, South African mother with two teenage children from a previous marriage. She works as a teacher. Betty looks much older than she is; her face is lined and drawn, as if it had its own story to tell. Betty's pregnancy with Ryan had been a shock for her and her fiancé. She explained that they been using contraceptives and her partner had believed he couldn't have children. Despite this, she suggested Ryan had been wanted. Betty delivered at 33 weeks following a complicated pregnancy which placed her life and her baby at risk. Subsequent to the birth, however, there had been no further medical complications for either of them. Doctors were now waiting for Ryan to grow and put on weight. Betty's interactions with Ryan were observed to be intrusive and she struggled to attune to him and find his rhythms.

Interviewing Betty had felt chaotic, confusing and exhausting. I found it hard to hold onto my mind while trying to make sense of what Betty was sharing. This countertransference response was in keeping with the impression that Betty's birthing experience had overwhelmed and traumatised her. Betty made comments like, *"I was like very*

emotional. I cried my eyes out the whole week" and *"It's when I'm on my own and then…I've got all these things are going through your mind…Sometimes I'm not eating right because of …I'm not hungry because I'm still having these up and downs because of the pregnancy things"*. Despite her evident trauma, I had a strange and uncharacteristic response of annoyance after meeting Betty for the first time. I expected Betty to be unreliable as a research participant, but she was in fact punctual and helpful in all the encounters.

Throughout the interviews, it felt as if Betty was constantly trying to dismiss or disown her feelings, but that they would bubble up and confuse and overwhelm her. Her dismissive armour felt as if it was leaking, but then she would quickly refute or contradict any emotion that had been shared. *"I was like what am I gonna do if something happens to this baby or me either…I was also scared about that. So yah but I just keep on believing that everything will be fine yah".* When describing her feelings about becoming a mother again, she awkwardly explained: *"It's exciting and it's scary… I wasn't plan to like have a baby again… Will I be able to cope with that and then the baby also. I'm sure I will because of…my kids will help and stuff like that because it's been given to me, I can do it and I know I will be able to do it"*. Her narrative was full of contradiction and although chaotic, constantly returned to the mantra of *"it will all be fine"*, although it was apparent that she didn't believe this.

When describing the possibility of losing Ryan, she spoke about how this would feel for her fiancé: *"I was scared of losing the baby and that he's [her fiancé] gonna go through it…cause I dunno if he's gonna cope with that"*. Betty appeared to attribute intolerable or unacceptable feelings to others – her fear of her own emotional collapse was not mentioned. It seemed particularly difficult for her to admit to worries that she had about herself – these were expressed and denied simultaneously: *"it was like… will I be fine? will the baby be fine? Will we both be fine and stuff like that so, but I didn't worry about myself. I was worried about the baby and I was just praying nonstop but so I know that it will be ok. God is good, definitely."* While Betty appeared to turn to religion for comfort, her words *"God is good, definitely"* did feel more like an attempt to convince herself, as if she couldn't be sure.

When she did speak about what losing Ryan would mean for her, she focused on the responsibility she would need to take for his death: *"[being in the ward is] you know, better than being at home and you can't look after him and then you don't know what to do with the baby and then he will be like not survive and then you gonna have that guilt on you*

for…like forever". While this response indicated feelings of inadequacy and shame, the guilt she expressed was also suggestive of unconscious aggression. Notably, she slipped into referring to herself as "you", likely in an attempt to distance herself from difficult emotion. Underlying Betty's narrative was a sense of anger about Ryan's prematurity and how it seemed to expose her perceived inadequacy. When speaking about having future babies she had revealed: *"You must have a lot of everything to make that new person grow inside of you and if I can't offer him what he needs then I mean why do I have to make a baby not to survive in the end, I would rather not so yah"*. Her comment made me wonder if she felt empty of goodness inside. Her anger was also revealed in her decision to have a sterilisation at the time of Ryan's birth: *"I ask them to fix me and that I don't want any more kids because of… not because of I don't want to have any more kids it's just you getting older and all that stuff that you go through, I don't want to go through it again. I mean it's not because of myself, it's because of baby's sake"*. While protective of future children in light of her concerns that she might be inadequate and not good-enough, this decision also felt protective of herself. A part of Betty felt aware of the trauma and dysregulation that was (re)evoked by Ryan's birth.

Her narrative also revealed that Betty didn't feel particularly emotionally supported by others. When describing interactions with her fiancé and mother, she acknowledged that she had tried to protect them because they had been upset by the birth. Betty seemed to have a limited support system: *"I don't have other families like really we don't communicate but my sister, she is also kind of like supportive you know, we don't see each other but we do call and then yah that's it"*. It also seemed as if Betty didn't trust anyone to be able to support her, but she felt uncomfortable to vocalise her mistrust: *"Because when you speak to someone you know you just don't wanna share everything…because they will think that you're not…, it's not easy to speak to someone about your situation but yah I felt comfortable to speak about it"*. At times Betty would admit mistrusting the doctors, *"are they not hiding some stuff from you?"* Later in the interview, however, she contradicted that idea with: *"They don't hide anything from you and if you ask them a question they immediately answer your question"*. This inability to trust appeared pervasive, and I remembered her doubtful comment: *"God is good, definitely".* This clearly highly evocative theme of distrust emerged in the interviewer-interviewee relationship too. The unusual distrust that had been experienced upon first meeting Betty may in fact be suggestive of a disowned, projected self-state in which Betty's early self-other configurations (Bromberg, 2009) have been re-evoked and were being

repeated. I had a feeling that Betty revealed more than she consciously intended to, and wondered if Betty felt angry and distrustful of me. This discomfort with her own vulnerability and her need to use dissociative defences became evident when Betty's history emerged.

Betty grew up with an alcoholic father who had physically abused her mother. Her mother would often move out of the home, taking Betty and her sister to sleep on friends' couches, but they would always return. The distress of this kind of childhood, however, was minimised by Betty: *"Well my family was like a very lovable family until like my sister reached to go out of school and then my dad started being a drinker, so since then today he still drinks a lot"*. Incidentally, the chronological confusion evident in her explanation of her childhood (her father was clearly drinking and abusive long before her sister moved out) is also suggestive of dissociative defences, as the disconnects between various self-experiences makes the construction of a coherent narrative impossible. At the age of 17 Betty married a man who later also became alcohol dependent and abusive. She describes staying in the marriage until he left her when she confronted him about his infidelity. She had subsequently met another man, to whom she was now engaged.

Betty had clearly experienced significant relational trauma prior to Ryan's birth. Her report of a loving family was contradicted by stories of clear abuse and instability, suggestive of an experience with parental figures characterised by fear and a lack of emotional regulation. Glimpses of Betty's dissociated self-states of fear, dependency and mistrust emerged in her narratives, however, the consequence of these dissociative processes was her limited capacity for symbolic functioning (Lemma & Levy, 2004). This difficulty integrating her experience was apparent in her struggle to give a detailed, coherent history, as her capacity to remember events appeared impaired (Harris, 2005). Lemma and Levy (2004) describe that when the capacity for symbolic functioning is limited, emotional states cannot be contained through meaningful narratives.

With a long history of dyregulated relational experience, it isn't surprising that Betty appeared to have been highly traumatised by the life-threatening, premature birth of her son. Her intense psychological distress – a week of uncontrolled weeping – after Ryan's birth suggests that this experience somehow symbolised or resembled aspects of her traumatic history (Harris, 2005). Implicit memories of being vulnerable and surrounded by

people who cannot protect her from harm seemed to have been triggered and she was reliving aspects of her initial trauma. She was re-experiencing overwhelming feeling states with no internal resources to cope with those feelings, or trust that anyone else could help her with them. Lemma and Levy (2004) state that the more catastrophic the trauma, the more likely that aggressive and damaging aspects of internal relationships will come to life. In this state of confusing fragmentation, there did not seem to be much space for Ryan's experience to be thought about by Betty. Rather, he seemed to represent a threatening figure for Betty: someone she may not be enough for, as expressed through her anxiety of taking him home where there would be no nurses and doctors to help her, or even someone who may die and collapse both her and her fiancé.

"We had a lot of love…it still covers me today": Charity and Nono

Charity is a 33-year-old black, South African married mother with a 10-year-old son. She is employed in a corporate position. Her baby girl, Nono, was born prematurely at 30 weeks gestation, weighing only 830g. Charity delivered early because of high blood pressure. The birth placed both their lives at risk. It was sudden and traumatic. Doctors had reportedly felt anxious about Nono's survival, given her birth weight and subsequent medical complications. There were several times, some during the research process, when the situation had felt precarious. It was surprising that despite this, Charity had agreed to take part in the interviews. I was struck by her fearless dedication to her baby, and the respect she seemed to command within the unit from the other mothers as well as the doctors and nurses. This meant that she was given a lot of freedom in taking care of her baby, and she was always knowledgeable about what was happening medically. Despite Nono being the smallest, most at-risk baby of the three, Charity's gentle touch and quiet speaking to Nono allowed for the two of them to find each other, with Nono observed to be highly responsive to Charity.

From the beginning I was aware of the intensity of my positive countertransference toward Charity and Nono. I often felt moved, emotional and surprisingly protective during, as well as after, interviews. When I left the hospital, it was Charity and Nono whom I found myself thinking about. Initially, in the first interview, despite her warmth, Charity was a little hesitant and reserved when answering questions. The second interview had needed to be postponed because of a worrying medical challenge with Nono's stomach. Nono had been

taken off any food for 2 days and Charity had been devastated. During this time, the dyad occupied my mind and I messaged Charity to see how they were doing. In the next meeting Charity's hesitancy had fallen away and from this time she spoke openly and connected well for the remainder of the research process. She seemed to want to share and commented on several occasions what it had meant for her to speak so openly about her experiences and feelings: *"I think especially in our African culture, we are not taught to be out there, to be open to talk about things, and I think that is why more often times we carry a lot of baggage, because we never talk about it. So, I was like, 'No, talking about it makes it easier, makes it normal'"*.

Charity was able to reflect on her traumatic experiences which she shared in a clear and coherent way. She was able to express a variety of feelings in interviews including anger, fear, vulnerability and sadness. When describing the medical emergency of Nono's birth, and the realisation that her baby might not survive, she said: *"I was still crying and screaming cause I thought that my baby was too young…I was willing to lose my life for that baby. So I didn't want to lose the baby".* Nevertheless, she acknowledged her fears about dying: *"I was so scared that you know what maybe something is going to go wrong. Maybe I'm not going to wake up"*. Charity also described her fears about the kind of baby she was going to deliver: *"I was just scared that I was going to give birth maybe to a disfigured baby, an incomplete baby you know and the baby will die soon after or the baby will come out dead anyway".*

I found Charity's descriptions of what she faced every day when coming to see her baby in the hospital very painful: *"It's hard like every day is hard you don't know what to expect…You want to be here but now you have to go because you can't sleep here. And then in the morning you like, 'God I hope she is still here'. Until you get here… it's the hardest part of the morning until you get here and go to that incubator and see her moving… nothing matters".*

Charity was able to speak about times when she struggled to convey her feelings: *"I don't know how to express myself when I am hurt."* She was also reflective about when she felt she hadn't behaved well: *"To go back…to the moment before I gave birth…I felt like, you know what, I gave the doctors a hard time."* Despite Charity's openness about her pain and trauma, she also clung to positivity and hope. However, this did not feel avoidant or suggestive of dissociative defences. Her hope was not dismissive of pain, rather existing alongside it. She

was aware that there were no guarantees about her baby's survival. Religion and faith also seemed to play an important role for her: *"I was like, okay, I don't know what's happening but I'm like, 'ok trust God' even though the process is hard, but just believe that there is a reason for that, so I'm like "I'm okay""*. Her ability to care for Nono and be part of her growth and recovery also seemed to be crucial: *"that's the hectic part, but then when you get here nothing matters as well. You are happy to see your baby. Your baby is still alive. Your baby is kicking. Your baby is eating well and the fact that the doctor comes and says, yoh, your baby is doing well, it makes your heart melt and you are like I think I'm doing something good somewhere somehow".*

Charity described a loving, supportive relationship with both her parents growing up. She explained, *"The only thing I remember, we didn't have much…but we had a lot of love. And I think that's what I want to give to my kids because…yah it still covers me today."* Her father suffered a brain aneurism and died shortly after when she was 10 years old. Subsequently, her mother needed to work full-time. However, Charity experienced the support of her family and community through this challenging time: *"So that's the kind of love, the kind of support I grew up with…life was rough… like crime and everything but we were protected."* The death of her mother when she was 23 is still described by Charity as a trauma. She became tearful when talking about it during the interview: *"My mom was my everything…when she passed the first thought…was 'I can't take it anymore…so you might as well kill me'…but…my son was only 2 years old so I was like, '…if she survived all that pain just for me to be kept safe, then I have to survive for my son'".* Her reference to unbearable pain and wishes to die alongside her mother, seemed to have been made bearable through identification with her mother's love and strength.

Thus, despite also experiencing the trauma of a premature birth against a backdrop of loss, Charity's narrative was qualitatively different to those of Khanyi and Betty. In her ability to tolerate and reflect on the myriad of emotions she was enduring, Charity's narrative was coherent and made space for both her own and Nono's experience. Her authenticity appeared to recruit those around her into empathic and compassionate supporters of her and Nono's cause. Self-states associated with previous losses had clearly been re-evoked for Charity, but these were accompanied by self-other configurations of love and support, which enabled her to regulate her emotion sufficiently for her to be a loving, supportive presence for Nono.

Discussion

It is acknowledged that a limitation of using a multiple case study approach is that depth and detail in each case may be sacrificed in order to cover greater breadth. However, the identification of potential patterns across cases can also reveal important factors for consideration. The three case studies presented above demonstrate some of the range of, and the subtleties of dissociation associated with the trauma of premature birth for mothers with previous experiences of relational trauma or loss. The extent to which each of the mothers was traumatised by the experience of the premature birth of her infant appeared to depend on the intensity of her previous relational trauma and the extent to which dissociative defences were activated, both in her past and in her current situation. The re-activation of previously dissociated self-states associated with loss and trauma in their histories was apparent (Bromberg, 2009). Possibly due to the prolonged nature of the trauma associated with having an infant in neonatal high care, the mothers described above appeared to move in and out of dissociated states. Multiple, often contradictory self-states were evident in the narratives in the oscillations between mental states in which they could acknowledge their pain and fear and states of "cut-off coping". While Charity's interviews demonstrated the least dissociation, the use of dissociative defences was visible in Khanyi's interviews. Khanyi's dissociated self-states, however, were qualitatively different to Betty's. Khanyi's dissociated self-states did not appear to be as imbued with fear and aggression as Betty's, and she was able to, in moments, reflect upon her detachment. The use of dissociative defences, common in survivors of childhood abuse and maltreatment (Mucci, 2021), was clearest in Betty's narrative and rendered it the least coherent.

The fragmentation of consciousness associated with the activation of dissociative processes, in turn, appeared to influence the extent to which each mother could engage with the painful reality and possibilities posed by having a premature infant in a high care unit, the extent to which she could make meaning of her experience, and the extent to which she could narrate her experiences in a coherent way (Lemma & Levy, 2004). While this likely influenced the mothers' abilities to access support in the unit, also of significance was how the re-activation of "self-other configurations" (Bromberg, 2009) based on previous traumatic relational experiences coloured the mothers' interactions with the interviewer and the staff in the high care unit. How the mothers had experienced caregiving figures in

the past influenced their ability to mobilise support internally and from those around them. While Charity, with her experiences of loving parents in her early childhood, was able to elicit empathy and support, Betty's reactive mental states left her impulsively mentally inhibiting, distorting and expelling her emotions, unable to make links to memories that had been activated (Bouchard et al., 2008). Betty's experience of her parents as sources of both comfort and fright seemed to colour her expectations of hospital staff, perceiving them as withholding and "hiding" information at times, and at other times, idealised others who could keep her baby alive.

It was notable that the mothers' traumatic responses were more closely aligned to the extent of their previous relational trauma rather than to the objective risk status of their infants. While Betty's infant, Ryan, was the least at risk, her experience appeared the most distorted by the reactivation of states associated with her unstable and frightening childhood. On the other hand, Charity's infant Nono was most at risk, yet Charity appeared to be processing her trauma the most constructively. While it is clear in the literature that post-traumatic stress reactions and maternal depression are associated with interactional difficulties in the mother-infant dyad (Brunson et al., 2021; Pierrehumbert et al., 2003), the observations made in this paper suggest that the mother's use of dissociative defences and the re-emergence of dissociated self-states tied to previous losses and traumas may mediate this disruption of the mother-infant relationship. Depending on the extent to which dissociative defences are used, impairments in the mother's ability to make meaning of her internal experiences without becoming overwhelmed and shutting down, are observed. This, in turn, interferes with her capacity to engage emotionally with her infant (Cohen, 2003). Thus, mothers with any history of trauma or loss appear to be more at risk when it comes to managing the experience of premature birth.

Conclusion

This paper highlights the need to screen for previous experiences of loss and absence in order to identify mothers at risk of the development of trauma responses after premature birth. While trauma-focused interventions have shown to be beneficial to mothers of premature infants (Shaw et al., 2014), this study suggests that beyond the immediate

trauma of premature birth, the exploration of dissociated self-states associated with previous trauma, loss or absence that might be re-evoked by the experience of prematurity in their infant, would be useful.

Mothers who have, as part of their internal worlds, a good internal object that is thoughtful and can accept her potential for both love and hate, appear to use less dissociative defences, and this seems to allow for greater awareness and integration of the intense oscillations of emotion associated with having an infant in a high care unit, where the infant's existence is precarious. These mothers' ability to tolerate painful states of mind, regardless of how unsettling, unacceptable or frightening they might feel, engenders hope that these challenging times can be survived (Lemma & Levy, 2004). However, for those mothers with less benevolent internal objects due to previous trauma,who are not able to engage with the multiplicity of self-states evoked by the trauma of the premature birth of their infant, dissociative defences appear more evident. In these instances, more intensive treatment may be required, alongside more thoughtfulness from ward staff as to how they may be implicitly complicit in perpetuating structures of impediment to theses mothers' capacity to negotiate trauma.

Psychotherapeutic intervention would thus involve assisting both mothers and staff. Through psychotherapy mothers could be helped to identify dissociated self-states, or “not-me” experiences as they emerge in the therapeutic relationship or in her interactions with staff in the unit, or with her infant, and to link these states to previous traumatic experience in order to make them “thinkable” and “linguistically communicable” (Bromberg, 1994, p. 517). Through acknowledging the various, often contradictory self-states that these mothers experience, therapists can assist mothers to develop a more coherent self that can mourn their losses and engage more openly and closely with their infants.

5.3 Paper 3: Intersubjectivity in Premature Infant-Mother Dyads: Maternal Satets of Mind and Premature Infant Responsivity.

Canin, N., & Bain, K. (2023). Intersubjectivity in Premature Infant-Mother Dyads: Maternal States of Mind and Premature Infant Responsivity. *Psychoanalytic Social Work*, 1-23.

Abstract

Premature birth is implicated in the potential derailment of parent-infant relationships. Using a comparative case study methodology, this paper offers an exploration of developing and disrupted intersubjectivity in two mother-premature infant dyads in the context of a neonatal high care ward in a South African public hospital. Maternal narratives from interviews as well as observational material are used to understand infant responsivity and communication in relation to maternal states of mind. The potential for reciprocity is explored, along with the factors that disrupt this potential.

Keywords: Premature Infancy, intersubjectivity, traumatized maternal states of mind, disrupted reciprocity.

Introduction

Premature birth occurs, by definition, before 37 weeks' gestation (D'Agata et al, 2017). As a result, premature infants have immature physiological systems and often require intensive, in-hospital medical treatment which can be painful and violating. They usually begin their lives in incubators, separated for large periods of time from their mothers (Mello et al, 2011). Progress in technology has meant that even younger, smaller and more medically compromised infants are viable (Vanderveen, Bassler, Robertson, & Kirpalani, 2009). This difficult beginning is often traumatic and dysregulating for both mother and infant (Brazelton & Cramer, 1990; Borghini et al., 2006; Browne & Talmi, 2005) and can derail optimal parent-infant relationships (Harris, 2005; Ribeiro Batista Geraldini, 2016).The quality of an infant's early experiences and relationships has been shown to have implications for both psychological (Shonkoff et al, 2012; Sroufe, 2013) and physiological (Danese et al, 2011; Fonagy, 2015) development. Aligned with this, the risk factors associated with prematurity are significant and include behavioural, cognitive and social

impairments (Cassiano et al., 2016; D'Agata et al, 2017; Gorzilio et al, 2015). Consequently, the relationship between premature infant and mother, including their ability to interact and connect, is an important area of investigation.

However, a 25-year scoping review on psychoanalytic journal-based articles revealed that remarkably few psychoanalytic papers explore this relationship (Canin, 2023). Nevertheless, the available psychoanalytic literature on prematurity offers a rich framework for thinking about infantile experience, centering around 'the container-contained function and how prematurity places this at risk'(Canin, 2023, p.35). Within this OR model, the new-born infant is portrayed as being frequently overwhelmed by bodily sensations and powerful feelings. These unbearable experiences are managed by projecting them into the mother (Klein, 1946). In order for the infant to feel 'contained', (held and integrated), the mother needs to mentally digest these primitive projections as well as the accompanying distress (Bion, 1964; Winnicott, 1965). Psychoanalytic articles on prematurity emphasize the importance of mothers offering this kind of support within the hospital setting, highlighting the psychological risks for premature infants trying to manage overwhelming or traumatic experiences on their own (Blessing, 2006; Botero & Sanders, 2014; Castro, 2011; MacDonald, 2015; Ribeiro Batista Geraldini, 2016).

Psychoanalytic practitioners have attempted to understand the premature infant by exploring the 'clinical infant' as well as the 'observed infant', terms coined by Stern (1985). The 'clinical infant' is theoretical, having been constructed through the analysis of older patients. Thus, the 'observed infant' is best placed to offer an understanding of the premature infant's early emotional life, relationships and interactions (McFadyen, 1995). Perhaps it is not surprising that the few psychoanalytic papers which explore interactions within premature mother-infant dyads almost all utilise the psychoanalytic technique of infant observation (Boyer & Sorenson, 1999; Castro, 2011; Lazar & Ermann, 1998; McFadyen, 1995; Mendelsohn, 2005; Miller, 2001; Ribeiro Batista Geraldini, 2016; Steibel, Caron & Lopes, 2014). Infant observation has the advantage of incorporating developmental understandings of infant development with the lens of object relations theory, and so offers a deeper exploration of premature mother-infant interaction (McFadyen, 1995).

Despite this, very few psychoanalytic papers spotlight the infant's ability to actively participate in this relationship. Empirical infant research has uncovered an infant that is

not only “oriented toward the outside world” (Fonagy, 2015, p. 356), but motivated to establish relationships from birth (Beebe et al., 2003; Trevarthen & Aitken, 2001). Within the field of developmental psychology, analysis of mother-infant ‘proto-conversations’ suggest that infants are driven to actively engage with their caregivers (Beebe et al., 2003; Trevarthen & Aitken, 2001). In keeping with these advances, there has been a theoretical shift within certain developmentally and relational focused branches of psychoanalysis to include the “innate interpersonal skills of the baby” (Balbernie, 2007, p.310).

The concept of “intersubjectivity” has become one of the leading theories of relational interaction in both psychoanalytic and developmental literature (Beebe, Rustin, Sorter & Knoblauch, 2003). Within developmental literature, it refers to the dyadic interaction as well as the psychological overlap between an infant and caregiver. It describes a process of shared experience and meaning-making that is concerned with both the caregiver's emotional attunement as well as the infant's capacity for shared affective experience (Balbernie, 2007; Beebe, Rustin, Sorter & Knoblauch, 2003). This conceptualisation differs somewhat from the more traditional psychoanalytic use of the term intersubjectivity, utilized in the context of shared subjective experiences amongst adults. The term is used, predominantly to describe experiences within the therapist-patient relationship. Within this framework, intersubjectivity often denotes a highly specific treatment modality that focuses on the co-creation of processes and transferences occurring between analyst and patient (Beebe, Rustin, Sorter & Knoblauch, 2003).

The developmental conceptualization of intersubjectivity is therefore pertinent for this particular paper, highlighting the reciprocal nature of communication within the mother-infant dyad (Beebe, 1982; Beebe et al, 2010; Meltzoff & Moore, 1998; Trevarthen & Aitken, 2001; Stern, 1985; Stern, 2005). In this context, other similar terms are used to describe this bi-directional interaction, including synchronization (Stern, 1985) and reciprocity (Brazelton et al., 1975). They all refer to deliberate efforts at engagement by both mother and infant (Balbernie, 2007). However, this dimension represents a gap in the psychoanalytic literature on prematurity as very few papers explore the premature infant’s capacity for intersubjectivity and reciprocity (Canin, 2023).

The reasons for this lack of research are likely multi-faceted, highlighting once again divergent theoretical focuses, but perhaps also reflect the complexity of the intersubjective potential of premature infants. Premature infants have been found to be capable of

reciprocal communication and interaction (Trevarthen & Aitken, 2001; Tropiano, Fiamenghi-Jr & Blascovi-Assis, 2017). However, this can be impacted by the premature infant's medical challenges as well as their initial birth weight. Premature infants are categorised as being low birth weight (weighing less than 2500g) very low birth weight (weighing less than 1500 g at birth) and extremely low birth weight (weighing less than 1000g at birth) (Moster, Lie & Markestad, 2008). The lower the birth weight, the greater the likelihood of long-term medical complications, prolonged physical developmental delays, as well as their ability to focus and sustain attention (Anderson & Doyle, 2004). However, neurodevelopmentally all premature infants are described as having a compromised ability to "perceive the external world, show their needs and to build their internal world" (Riberio Batista Geraldini, 2016, p.45). In addition, their difficult early experiences can negatively interfere with their developing capacity to communicate and self-regulate (Browne & Talmi, 2005; Gorzilio et al, 2015; Vanderveen et al, 2009).

What is known from developmental research is that interaction comes at an increased cost to their physiological and regulatory systems and therefore needs to be thoughtful and appropriate (Nugent et al, 2015). Trevarthen and Aitken (2001) suggest that "even an infant born two months before term can begin to share dynamic proto-conversational motives … by exchanging facial expressions, vocalisations and gestures of the hands with a sympathetic partner" (p. 7). This suggests that the premature infant's capacity to interact is related to the sensitivity of their companion, in most cases the mother. The impact of the mother's parenting on the premature infant's intersubjectivity is therefore an important to consider.

The ability to offer supportive mothering requires specific states of mind and mental capacities (Bruschweiler-Stern, 2009; Slade, 2005; Stern, 1995; Winnicott, 1956). Offering containment requires the emotional capacity to fully experience the infant's projected emotions without becoming overwhelmed. In addition, mothers need to utilise cognition and insight to reflect what might be causing the infant distress (Shuttleworth, 1989). The ability to see an infant as intentional builds on the notion of offering containment, demanding an individualized recognition of not only infant needs but infant personhood (Fonagy et al, 1991, Slade, 2005) and communication (Balbernie, 2007). The combination of these factors then guides the mother's response to the infant, leading to a shared emotional experience and synchrony within the mother-infant dyad. Stern (1985) referred

to this as an 'attuned' response. The presence of attunement allows for the infant to become more regulated and subsequently promotes infant responsivity (Feldman, 2006; Field, 1994). A lack of attunement, however, challenges infant development, with negative implications for regulation, self-control and cognition (Feldman, 2006; Feldman, Greenbaum, & Yirmiya, 1999).

Raphael-Leff (2018) describes how maternal capacities are often disrupted when mothers are unable to complete the crucial psychological preparation of the last trimester of pregnancy. The experience of giving birth prematurely and the ensuing in-hospital experience is also portrayed as being overwhelming, emotionally taxing and traumatic for mothers (Anscombe, 2008; Cantle, 2013; Steinberg, 2006, Vanier, 2017). Some mothers become preoccupied, anxious and hyper-vigilant (Harris, 2005; Mendelsohn, 2005). Others utilize defence mechanisms such as detachment or even dissociation to avoid feeling pain (Camhi, 2005; Mendelsohn, 2005). Traumatized mothers are more likely to misinterpret or cut off from the infant's distress signals (Cohen, 2003; Mendelsohn, 2005). This is amplified by the fact that the infant's suffering is often the main trigger for dissociated states of mind (Berthelot et al, 2015). Premature infants are also less alert and responsive, offering minimal eye contact and clarity of cues (Trevarthen & Aitken, 2001). In this way mothers may be prevented from getting to know their infants and offering attuned responses. Those mothers with a history of unresolved trauma or loss are believed to be even more at-risk (Lemma & Levy; 2004; Vanier, 2015). Cohen (2003) explains how previous unresolved traumas, and their associated memories and feelings, can be reactivated by a premature birth, further dismantling a mother's capacity to be open to receiving her infant's communications and reflective about them.

Psychoanalytic literature on prematurity provides helpful explanations of why premature birth may prevent mothers from entering into states of mind that are conducive to sensitive mothering (Negri, 2018; Vanier, 2015). However, most of these papers rely on the clinician or observers' perceptions of maternal states of mind, rather than accessing maternal narratives in order to gain a more detailed understanding of a mother's reflections about herself, her trauma and her premature infant - for exceptions, see Keren et al. (2003) and Wijnroks (1999). Further research is required as the more that can be understood about premature dyads, the more likely that effective therapeutic interventions can be developed to support this potentially compromised relationship (Melnyk et al, 2008).

This paper offers an exploration of the developing reciprocity between mothers and their premature infants in the context of a neonatal high care ward in a South African governmental hospital. Maternal narratives from interviews as well as observational material are used in a comparative case study methodology. In this way intersubjectivity and bi-directional interactions between mothers and premature infants are explored, taking into account maternal states of mind as well as infant responsivity and communication.

Methodology

Case study methodology is an in-depth exploration that aims to capture complexity and uniqueness within a 'real-life' context (Simons, 2020). This paper investigates two cases that document the relational experiences of two particular mothers and their premature infants. These two cases were purposively selected as they allow for clear comparison of the potential impacts of maternal states of mind on intersubjectivity. Participation was voluntary and ethics clearance for the study was granted through the University of the Witwatersrand's Human Research Ethics Committee. The researcher ensured that the participants were informed verbally and in writing about the nature of the study. The participants provided signed consent to participate in all aspects of the study. Pseudonyms are used to respect the mothers' and infants' rights to confidentiality.

The participants in this study were sourced from a local Johannesburg Mother and Child Hospital. This hospital services an ethnically diverse population from the surrounding lower socio-economic areas that have been racked with violence, poverty, gangs and drug abuse for decades. It is important to acknowledge that there were cultural differences between the researcher and the participants which may have influenced the comfort and trust levels established as well as openness to sharing intimate information. In order to address this, much effort was made to establish rapport, being mindful to ensure that the relationship was not felt to be disempowering in anyway. The participants seemed to be comforted by the knowledge that the researcher was also a mother, which seemed to create a shared identity. Nevertheless, it is acknowledged that cultural differences may have influenced what the participants felt they could reveal.

Within the hospital setting itself, there is a lack of human and medical resources, and a limited availability of hospital beds. Despite these challenges, the doctors working in the neonatal high-care unit where the research was conducted are dedicated to their patients. Within the unit, mothers were given much responsibility regarding the practical care of their infants such as feeding and changing of nappies.

Each mother was interviewed on three separate occasions using a semi-structured interview format based on the principles of Cartwright's (2004) psychoanalytic research interview. They were invited to speak in an open-ended way in order to obtain subjective narratives. Topics such as their experience of the pregnancy and birth, as well as their time in the unit; their perceptions of their infants, and their family histories were explored. Close attention was paid to emotional responses in the participants and in the interviewer during and between interviews. These affective responses are believed to provide insights into aspects of the participant's experience that are less available to narration (Holmes, 2014; Stromme et al., 2010). Moments of heightened affect or conversely the avoidance of affect were noted (Cartwright, 2004, p. 226). In addition to interviews, the technique of infant observation was used to collect data on interactions and intersubjectivity within the mother-baby dyads. Two observations were conducted for sixty minutes each, on two separate occasions, in between interviews. Note was taken of maternal behaviour and attunement towards the infants, as well as infant responsivity. Particular attention was given to moment-to-moment changes in each infant's movements and physiological responses including eye gaze behaviour, changes in skin color, breathing patterns and muscle tone. This was believed to provide valuable insights into the infant's experience, ability to cope and regulation (Cohen, 2003; Mendelsohn, 2005). This methodology has been adapted specifically for use within hospital settings (Cantle, 2013; Castro, 2011; Cohen, 2003). As with the interviews, the observations included a conscious effort to be aware of the observer's emotional responses and identifications from moment to moment, as this information, when reflected upon and triangulated with other sources of information, can often illuminate non-conscious dynamic interpersonal processes (Cartwright, 2004; Rustin, 2006). It is acknowledged that attempting to interpret the experiences of premature infants, given their primitive, preverbal nature, requires caution. However, there is an established precedent of attempting to infer the meaning of a premature infant's behaviour on the basis of in-depth observation (Cohen, 2003;

Mendelson, 2005). This study will therefore attempt to consider the infant's experience in an exploratory and tentative way.

Analysis of the interviews followed Cartwright's (2004) guidelines. The content of each mother's narrative was triangulated with the observational material, and the emotional dynamics of the process, including the interviewer/observer's responses. Close attention to the interviewer/observer's feelings and thoughts can aid in contextualizing and highlighting the emotional impact of interviews and the observational material (Cartwright, 2004). For this reason, the emotional responses of the participants and the interviewer/observer have been included in the material described in the two vignettes presented below. These case studies have been written from the first-person perspective of the interviewer/observer, and include direct quotes from the interviews as well as notes taken during the observations.

Betty and Ryan: 'I ask myself, will I be able to manage with it?'

Betty is a 31-year-old mother who delivered her baby Ryan at 33 weeks, weighing 1250g. Ryan was considered a very low birth weight baby. The pregnancy was described by Betty as unplanned but wanted. It had been a complicated pregnancy which placed both their lives at risk. However, from birth, Ryan had been medically stable and was considered healthy and robust by the doctors. Betty had been told that Ryan would be discharged upon reaching the necessary weight. Ryan was no longer connected to any equipment or tubing. His body was thin, but I thought he seemed more substantial than many of the other babies around him. He had thin wisps of black hair and was dressed only in nappy. My first impression of Betty was that she looked older than her years. Her face was lined, with sunken cheeks and a pasty complexion. Betty had been in a long-term relationship with Ryan's father and they were now engaged. I experienced the interviews with Betty chaotic and exhausting. It felt difficult to hold onto my mind while attempting to make sense of what she was sharing.

My impression was that Betty's birthing experience had overwhelmed and traumatized her. She would say things like, *'It's when I'm on my own and then…I've got all these things going through your mind …'.* Throughout the interview, painful feelings seemed to continually bubble up and overwhelm her. However, she appeared to constantly try to dismiss, distort

or inhibit what she was feeling. She made comments like '*Will I be fine? Will the baby be fine? Will we both be fine and stuff like that so, but I didn't worry about myself. I was worried about the baby and I was just praying nonstop, but so I know that it will be okay. God is good, definitely'.* Betty's narrative was confusing and full of contradiction. It felt as if she was not able to engage fully with her experience. This kind of chaotic narrative is suggestive of the use of dissociative defences, one of the most common symptoms in mothers of premature infants (Jubinville et al., 2012). Developmental psychoanalysis understands dissociation as a psychic defence in response to trauma that results in failures of integration (Bailey & Brand, 2017; Bromberg, 2009) making the capacity for dialogue as well as the construction of a coherent narrative difficult (Gurevich, 2014; Lemma & Levy; 2004). Schimmenti and Caretti (2016) suggest that dissociation is activated during childhood trauma in order to prevent the child from being overwhelmed by unbearable experience; later in life, these dissociative processes may be re-activated when trauma overwhelms one's defences. Prior to Ryan's birth, Betty had experienced significant relational trauma. She had grown up with an alcoholic father who had physically abused her mother. She explained, *'It was hard because my dad started being an abusive person, so he was hitting my mom and I was always in between when my mom has to run away…'.* From the age of 17 Betty was also married to a man who became alcohol dependent and abusive. It took many years for that relationship to end.

Throughout the interviews and the observations, Betty appeared to move in and out of dissociated states which, in turn, seemed to interfere with her ability to reflect on and engage emotionally with Ryan. At times, she empathised with the distress he experienced in hospital. She had said, *'when he was on the drip it kept on coming out and I know how it felt because I was on drips the whole time, so, and then that was breaking my heart'.* At other times, Betty minimized the challenges he had experienced, emphasising what a 'good' and 'happy' baby he was: *'He is not crying too much, not at all. I hardly hear him crying. He only cries like when they like hurt him with needles'.* The blunted tone she used when describing these experiences highlighted how disconnected she was with the trauma of this experience for him.

It is notable that Betty appeared preoccupied with her own trauma, with descriptions of Ryan's experience often becoming tied up with or lost in narrations of her own experience *("…Will the baby be fine? Will we both be fine…"; "…he was on the drip… I was on drips the*

whole time"). Perhaps this contributed to that fact that Betty was not always able to recognise Ryan as a separate person. When she described being able to hold him for the first time, she said *'it was like a big part of me being back into my body again'*. The inability to see an infant as separate has been linked in the literature to parental self-blame and guilt. Where parents feel accountable for having 'damaged' their baby, the infant may become a representation of the parent's inadequacies (Amez & Botero, 2000; Mendelsohn, 2005). Betty described her guilt regarding her role in Ryan's premature birth, *'you know that is it my fault that the baby didn't grow properly and stuff like that'.* Betty also spoke about her fears that Ryan might die because she feared she was not competent enough to take care of him, *'[being in the ward is] you know, better than being at home and you can't look after him and then you don't know what to do with the baby and then he will be, like, not survive and then you gonna have that guilt on you for…like forever'.* Likely as a result of her traumatized state of mind as well as her difficulty with appreciating Ryan's personhood, Betty also hadn't been able to recognize Ryan's subtle attempts at engaging with her. During the interview, she had suggested: *'He doesn't even give me a sign like that he knows that I'm there because he is sleeping most of the time so I had to like kiss him and cuddle him to make sure he knows I'm there'.*

Observation: Betty and Ryan

Ryan (R) was lying on his side in mom's left arm, wearing only a nappy. She was rubbing his back. She then placed a tissue on her shoulder and placed R on the tissue. She began to pat his back. She adjusted the position of his head and rubbed his back again. R moaned and then fussed a little. Mom put him on his back in her arms again. She lifted his head slightly and then with her right hand lifted the feeding cup to his mouth. She poured the milk slowly into his mouth. R's eyes were closed. Mom watched him for a few seconds. He arched his body and lifted himself back a little. He moaned. Mom turned him onto his side. Colour flushed his face and he turned red. He made a grunting sound. R opened his mouth, stretching as he did so and then cried a little. Mom lifted him back up on her shoulder and rubbed his back and then over his nappy. She looked down at him. He raised his left hand and took hold of the tissue. He lifted his head and grunted. R shifted his body into his mom, as if snuggling into her. Mom looked up and away from him. She rubbed up and patted with her right hand, looking around the room. I thought to myself her expression seemed vacant.

After a few minutes, mom looked down and spoke softly to him. She placed him on his back again, facing her, and murmured, 'Hey'. She tried to feed him with the cup again. R's body shook, and his hands came up interfering with the cup. Mom pulled the cup away, watched for a few seconds and then brought it back down again to his mouth. R moved his hands and kicked his legs. He sucked gently on the cup. Mom looked down at him. R pushed his head back away from the cup. His body shuddered and shook. I felt myself becoming anxious. Mom brought the cup back to his lips. R pushed it away with his hands. 'Wait, don't push it away' she said in a serious but gentle voice. After a few seconds she said, 'Now we're finished'. I felt overwhelmed at this point, and I became aware that my body felt 'over-heated'. It felt hard to concentrate. I forced myself to focus again on mom and R. R's eyes opened and he vomited a little. He then surprised me by snuggling into her and putting his hands into her top. I was very touched by this connecting gesture, despite what had felt like an intrusive feed. Mom's phone rang and she answered it. R cried a little and while speaking she began to pat his back distractedly. Mom sighed and R closed his eyes. He moved his hand further into mom's shirt, and I found this gesture touching and painful because I didn't think mom had noticed it. Mom ended the call and placed the phone back in R's incubator. R opened his eyes. Mom re-swaddled him tucking in his hands. I felt desperately sad, noticing his hands moving under the blankets.

Mom spoke softly to him. He turned his head to face her. His left hand crept out of the blanket and fisted. Mom lifted him up. She patted him quite vigorously and then brought him towards herself and kissed him. She pushed into his cheeks with her finger and continued to speak to him. My countertransference was one of discomfort, despite the gentleness of mom's interaction. R's face turned a red colour. He moaned which then developed into a cry. She re-swaddled him and then rubbed his back again. R moved his tongue out and back in his mouth. She spoke softly to him. R wrapped his left hand around her finger, which was near to his hand. Mom didn't seem to notice this gesture as she didn't respond in any way. She then shook him quite vigorously, and moved him up on her arm.

In keeping with Betty's narrative, I experienced her as being anxious and pre-occupied in this observation. She was repeatedly unable to recognise or contain Ryan's distress. It seemed that Betty's traumatised state of mind meant that she was unable to regulate herself or Ryan. Mendelsohn (2005) explains how the "nature of such a trauma provokes fearful and disabling interpretations of the baby's behaviour" (p.196) In the observation, Betty

seemed to find it hard to observe crucial information about Ryan's experience or his needs. My impression was of a baby who was forced to 'survive' his feed rather than enjoying it. In my notes I wrote, '*my thoughts were that he was being fed quickly without having time to recover…'.* My emotional response during the observation was one of alarm and I experienced it emotionally as well as physically. Betty did not recognize Ryan's signs of physiological distress, which he conveyed throughout the observation. These included colour changes, moaning, grunting, arching his body, tremors and ultimately vomiting (Nugent et al, 2014). While Betty may not have known that these particular behaviours signal distress, R's discomfort was evident. While Gorski (1983) highlights that premature infants offer subtle cues which are harder to read, Betty did not respond contingently to his more obvious communications. Even when she acknowledged Ryan's explicit pushing away of the cup, she did not allow this to guide her feeding behaviour. Sadly, Betty's misattuned parenting seemed to dysregulate Ryan further. Nugent et al (2014) suggests that preterm infants are hypersensitive to being 'over-handled', and I had wondered if Betty's constant shifting of his position, most likely a way of managing her own anxiety, was difficult for Ryan.

Betty also struggled to recognise Ryan's attempts at engagement and communication, as she had in the interviews. Once again, I wondered if this wasn't defensive. Betty's capacity for intersubjectivity and her ability to attempt to connect with him shifted throughout the observation. At times, Betty seemed disconnected and distant. In those moments it felt as if she escaped into a dissociated and withdrawn state. These instants seemed brief but appeared to be triggered by Ryan's attempt at initiating contact, such as when he snuggled into her or wrapped his hand around her finger. I wondered if his attempts to engage his mother were frightening for her. I also wondered how her lack of responsiveness, or at times her somewhat aggressive behaviour (shaking him vigorously) was experienced by Ryan. Was it frightening for him? There were also times when Betty was gentle and present; she had looked directly at him and even attempted to interact with him. However, in those moments Ryan had seemed too dysregulated to respond. Thus, despite both parties reaching out for connection at different times, Betty and Ryan found it hard to find synchrony.

While there is a risk that the documentation of poor attunement in a mother may be perceived as mother-blaming, this was not the intention of the researchers. Rather, it was

hoped that by highlighting Betty's traumatic history and demonstrating the link between this and her experience of giving birth to a premature baby, that empathy for both mother and infant could be maintained. It is important to acknowledge that much consideration and thought went into the decision to write about my initial unusually unfavourable countertransference reactions towards Betty. However, these responses, once reflected upon and processed in the researcher team, were found to provide useful information regarding non-conscious dynamic interpersonal processes between mother, infant and observer (Cartwright, 2004; Rustin, 2006), that highlight the need to support staff working in units with premature infant-mother dyads. Significantly, by the end of the research process, I felt significantly more positive towards Betty. Betty had actually been extremely supportive of the research, going out of her way to ensure that all components had been completed before Ryan was discharged. I also felt that she was dedicated to Ryan, and was trying her best to be a mother to him. I felt the need to convey this to Betty. Once the research process was finished, I showed Betty several videos that had been taken which conveyed moments of connection and engagement between her and her baby. Betty had reported being very touched by this. It was my hope that this might leave Betty with a feeling of competence in her maternal abilities.

Charity and Nono: 'I am here for you and I'm your mom and I love you'

Charity is a 33-year-old married mother who delivered at 30 weeks gestation due to high blood pressure. Her baby girl, Nono, was born weighing only 830g. She was considered an extremely low birth weight infant. Doctors had reportedly felt anxious about Nono's survival, given her birth weight and subsequent medical complications. Nono was in an incubator, with one tube taped to her arm and another accessed a vein on the top of her small head. Just prior to the observation, doctors inserted a feeding tube into her mouth which went directly to her stomach due to challenges with Nono's digestive system. This was taped to her cheek. I found the sight of such a tiny baby connected to so much piping distressing. Charity was a calm presence in the unit with a maternal manner. She seemed to be respected by both the doctors and mothers, and had assumed the role of confidante for some of the newer mothers. Charity was given autonomy in taking care of her baby, a task she dedicated herself to fearlessly. Charity also endeared herself to me. I experienced a powerful positive countertransference reaction when watching her and Nono together. I felt

emotional and surprisingly protective throughout the process. When I left the hospital, it was Charity and Nono whom I found myself thinking about.

Like Betty, Charity had also experienced trauma as a result of her infant's premature birth. However, in the interviews, she had been able to reflect thoughtfully on her experiences. In fact, she emphasized the importance of being able to do so*: 'I think especially in our African culture, we are not taught to be out there, to be open to talk about things, and I think that is why more often times we carry a lot of baggage, because we never talk about it. So, I was like, 'No, talking about it makes it easier, makes it normal'.* Charity shared her story with me in a clear and coherent way, expressing a variety of feelings including anger, fear, vulnerability and sadness. She was realistic about potential challenges with Nono's health and she acknowledged the possibility that she might lose her. Lemma and Levy (2004) suggest that a mothers' ability to tolerate painful states of mind engenders hope that pain and trauma can be survived. Perhaps, Charity's sense that she could survive this ordeal meant she didn't need to defend against her feelings. Charity also maintained a sense of positivity and hope, which she held alongside her pain and vulnerability. These states of mind as well as her ability to tolerate her pain seemed to be linked with her childhood experience of being helped to manage distress. Despite having lost her father as a child, and her mother as a young adult, Charity described a loving, supportive relationship with both of her parents growing up. She shared that these losses had been painful to endure but that she had constantly felt the support of her family and community: 'So that's the kind of love, the kind of support I grew up with…life was rough… but we were protected'.

Charity was also able to think about Nono's experience in the hospital as well as possible future challenges. She made comments like*, 'Is it going to be a painful life for my child and stuff like that. You worry and all those things'.* However, her receptivity to Nono's pain did not seem to overwhelm her as she described wanting to give Nono comfort and reassurance. *'Like you want to cover her and say it's okay but then you are like, okay I don't know how much you understand, you put your hand and try to comfort her, it's okay I'm here anyway. You don't have to be scared'.* Charity also seemed to have confidence in her ability to soothe Nono*:'Cause whenever she cries, if I put my hands in the incubator and lift her just a little bit, she stops crying'.* She clearly saw Nono as an intentional person, and was acutely aware of any subtle expression of intersubjectivity: *'That I feel like whenever she opens her eyes…I feel like she can follow...I think she sees something. And I think she has also learnt to*

detect that this is my mom's voice'. Charity also assigned meaning and intention to her behaviours: *'Like, she is the baby that doesn't cry for no reason just to cry, so you already know there is something wrong, yah'.*

Observation: Charity and Nono

Mom sat to the left of Nono (N), looking at her through a hole on the side of the incubator. N was lying on folded sheets, wearing only a nappy. She was breathing rapidly. A nurse arrived, mom sat forward in her chair. I felt she looked anxious. As the nurse took out a needle, mom stood up. The nurse examined N, seemingly looking for a place to prick her. As she did this, mom put her hands into the incubator through the side holes and took N's fingers in her hand. The nurse pulled her left foot and pricked her until droplets of blood emerged and she touched the machine to the blood. N did not cry but her breathing became more rapid.

Mom continued to watch and hold onto N's hand. 'Hey' she said gently and she smiled at her. She opened the side window fully. She gently shook her hand and then her arm. 'Unjani?' [How are you?] she questioned. I felt mom looked concerned as she spoke gently to N. She touched N's cheek quite roughly. N wriggled her body. She lifted her head up and stretched her legs. She moved her arms into v shapes by her face. Her legs moved up in a fetal position as well. Her eyes remained closed.

Mom stroked her cheeks in a gentler way with her right hand. N kicked out with her left foot, and stretched her legs. Mom took her right foot in her right hand. N pushed her foot up against mom's hand. N was breathing heavily. She suddenly shook and then shuddered.

N was breathing in and out in a heavy, laboured manner. She startled repeatedly for a few minutes. Mom too was breathing deeply. N's eyes fluttered subtly. She moved her head to the one side. Mom called to her. N opened her eyes like slits. She put her tongue out her mouth and then mouthed the tube. Her eyes opened slightly and I thought to myself that she seemed to be trying to open her eyes. Mom touched her hand, speaking gently to her.

N opened her eyes slightly but seemed to be looking at mom. Her mouth moved into a wider position. Her breathing was heavy. Mom touched her cheek. N stretched her right hand and looked up at mom. She made an 'O' shape with her mouth'. Mom, who had been looking at her

throughout the exchange, touched N's mouth. Bubbles came from N's mouth as she opened and shut it. Her breathing seemed to have settled at that point, not seeming so rapid. I felt it to be a beautiful and intimate moment, and found myself feeling moved and emotional.

N's eyes became heavy and I felt she was tiring. She turned her head in the opposite direction to mom. Her eyes were opened like slits but drooping. N turned her head back to mom. Her eyes were mostly closed. She was tonging the tube in her mouth. Her left hand shuddered. Mom took her hands out of the incubator and sat down on the chair but continued to look at N.

This observation tracks a mother helping her infant to recover sufficiently from the distress of having blood taken, to the point where they are able to have a moment of mutual recognition. It starts as Charity watched Nono having blood taken by a nurse. Anscombe (2008) describes how evocative it is for mothers to watch their infants endure painful medical procedures. Charity had seemed anxious at the prospect of her baby being pierced with a needle. However, she was able to regulate her own anxiety sufficiently in order to engage emotionally with Nono and be a containing presence. Charity stood up immediately when it became clear that the nurse intended to use the needle she was holding, putting her hands into the incubator to offer comfort to her infant. She called gently to her infant, letting her know that she's not alone. Charity's sense of Nono's personhood was conveyed when she asks, 'Unjani', a Zulu term which means, 'how are you?'

Nono showed signs of physiological dysregulation during the observation such as tremors, startles, and rapid breathing (Nugent et al, 2014). I had wondered about how difficult and traumatic her week had been as she had had several invasive medical interventions including a tube placed down her throat. She may have also had gastro-intestinal discomfort, as doctors were concerned about her digestive system. Field (1990) highlights the impact of potentially stressful procedures on physiological signs such as increased heart-rate, altered skin-tone and breathing. The experience of having blood drawn from her foot was clearly distressing. I thought about a baby who was being assaulted from the outside as well as the inside. And yet, her mother's ability to recognise her distress and dysregulation and to offer containment allowed Nono gradually to become more regulated, as observed with the settling of her physiological distress signals. In addition, mom's attuned responses to Nono created the possibility of intersubjectivity. They both worked hard at making contact. Charity and Nono seemed to have several points of contact

including hands, feet, mouth and then remarkably - eyes. It felt as if Nono worked hard to be able to open her eyes and have a moment of intimate mutual gazing which was immensely moving to observe. Perhaps, equally important, however, was when Nono became tired and needed time to recover, Charity recognized this too and gave Nono the space she needed. Charity was not intrusive but respectful of Nono's communications.

Discussion

Premature birth increases the risk of derailment of parent-infant relationships (Ribeiro Batista Geraldini, 2016) and the glimpse that this paper provides into how this disruption manifests relationally between the premature infant and mother provides some evidence for much of theorizing in this area. It is clear in the cases above that parenting a premature infant is challenging because their need for facilitation and support is greater, and yet the cues given by premature infants are more subtle (Trevarthen & Aitken, 2001). Also as previously documented in the literature (Anscombe, 2008; Cantle, 2013; Steinberg, 2006, Vanier, 2017), the presence of trauma seems to be inherent to the experience of prematurity. However, as evident above, not all mothers experience this trauma in the same way. For some mothers, having a premature baby appears to evoke overwhelming emotional dysregulation and traumatised states of mind, which places the container-contained function at risk, compromising maternal capacity for intersubjectivity (Castro, 2011). These traumatised states of mind include the use of psychic defence mechanisms such as detachment or dissociation (Camhi, 2005; Mendelsohn, 2005), which function to protect the mother but potentially prevent her from processing her experience and working through complicated feelings such as guilt and inadequacy. These defences also appear to compromise maternal capacity to attune to her infant, with some mothers misinterpreting or cutting off from the infant's distress signals (Cohen, 2003; Mendelsohn, 2005). As evident in the material above, despite moments of gentle interaction Betty was often unable to perceive her baby's needs, his personhood or his attempts at intersubjectivity. Betty's state of mind meant that the parenting she offered Ryan was not guided by his communications and as a result appeared to dysregulate him further.

In stark contrast, Charity's ability to process and reflect on her experiences appeared to help her to regulate herself and reach out for support when needed, which allowed for more receptive and containing maternal mental states. Charity demonstrated an ability to remain

in contact with her own and her infant's experience, which seemed to afford her the ability to recognise Nono's communications and allow them to guide her parenting. This not only allowed her to soothe and contain Nono's distress but opened up the possibility for intersubjectivity. Her sensitivity to her baby's capacity for attention and non-attention, and her learning how to interpret her infant's behaviours allowed for synchronicity, despite Nono's challenging circumstances. This, in turn, allowed Nono to become more regulated, supporting her capacity to reach out and engage her mother. This is in keeping with several studies that have shown the premature infant as being able, under the right conditions, to offer of this kind of intersubjectivity (Mendelsohn, 2005; McFadyen, 1995; Tropiano, Fiamenghi-Je & Blascovi-Assis, 2017).

It is significant to note that the mothers' responses to the trauma of the premature birth of their infants, as detailed above, were closely aligned to their childhood histories of trauma, and the extent to which they were supported through this. It is possible that these unique trauma histories contributed to their respective capacities to parent their premature infants; mothers with a history of unresolved trauma or loss are believed to be more at-risk (Lemma & Levy; 2004; Vanier, 2015), as premature birth can reactivate associated feelings and impact on capacity for sensitive and reflective parenting (Cohen, 2003). Betty's frightening and unstable childhood meant that she did not seem to have the internal resources to cope with the recent trauma of Ryan's premature birth. Conversely, the support that Charity experienced as a child from her family and community enabled her to believe that she could remain connected despite pain. As such she seemed able to process this trauma more constructively, and receive her infant's communications.

Most significantly, however, the findings of this paper suggest that premature infants do indeed have remarkable potential to communicate with those taking care of them, regardless of their level of risk or medical stability. While Mendelsohn's study (2005) found that mothers tend to show less smiling and touching behaviours with sicker infants, this study emphasises the importance of this for these sicker infants. Nono's ability to open her eyes and focus despite medical challenges is likely partly attributable to her mother's sensitive and attuned holding. Even without the psychological support of his mother, Ryan was able to have moments where he was able to attempt intersubjectivity. Sadly, however, these attempts at relating were often lost, as his mother's traumatized maternal states of mind prevented perception of and attuned responsiveness to infant communications.

The findings of this paper support previous conclusions that the trauma of premature birth can be dysregulating for both mother and infant, resulting in poorly co-ordinated interactions (Brazelton & Cramer, 1990; Borghini et al, 2006; Browne & Talmi, 2005). Also evidenced above is the notion that traumatized maternal states interfere with the establishment of synchrony within the mother-infant dyad, compromising the infant's opportunities for regulation (Feldman, 2006; Feldman et al., 1999). This cycle of dysregulation that impedes the growing intersubjectivity between mother and infant appears to result in less 'affirmation' for mothers in their maternal roles, which further negatively influences their maternal states of mind. When synchrony is achieved, however, there is potential for both mother and infant to aid in each other's development; mother is assisted to develop her maternal identity and the infant is assisted to regulate emotion and sensation and ultimately, in the development of a self.

Limitations and conclusion

The strength of this paper is the detail captured through close observation, and the combination of observation and psychodynamic narrative analysis, which allowed for the evidencing of intersubjective processes previously theorized. While case study methodology does provide scope for detail and depth allowing for within- and between-case patterns to emerge, case study methodology does have limited generalizability (Simons, 2020). Despite this limitation, however, this study supports previous theorizing that traumatized maternal states of mind pose a risk to intersubjectivity in premature infant-mother dyads. From the above case studies, it is clear that although the vulnerability of the infant influences the task of attuned caring and the establishment of a relationship (the sicker the infant, the more difficult the task), the mother's state of mind appears to play a bigger role (the more traumatized the mother, the more difficult the task). This supports findings by Borghini et al. (2006) who found higher rates of insecure attachment representations in mothers of both high- and low-risk premature infants, and that of Wilfong et al. (1991) who found that maternal depressive symptoms predicted compromised responsivity to premature infants, more so than the severity of the infant's medical risk. This supports previous findings that maternal factors rather than infant factors are more predictive of infant attachment security (Cox et al, 2000), and suggests that the identification of mothers with traumatized states of mind and those with unattuned

responses to their infants would likely better predict dyads at risk. The need to screen for previous experiences of trauma and loss after premature birth is clear in order to identify mothers at risk of the development of trauma responses that may influence their capacity for attuned responsivity. While previous screening tools have emphasized the identification of birth trauma in mothers (Keren et al., 2003), this study suggests that screening for the presence of previous lifetime trauma might also assist in understanding the nature of the mother's trauma reaction post-partum. Pre-term infants with mothers who have significant rejection in their attachment histories have been previously identified as being at higher risk for attachment disruption and disorganisation (Cox et al., 2000). Mothers at risk need access to tailored psychological support in order to process their experiences and address their trauma. Maternal trauma-focused interventions have previously been found to be effective (Brecht et al, 2012). Psychological support for the dyad could aid in strengthening perceived maternal competence, promoting maternal states of mind more conducive to parenting premature infants in a sensitive, attuned manner.

The hospital environment itself represents a risk factor for maternal mental health (Porter, van Heugten & Champion, 2020). In this particular hospital setting, unlike many other high care or neonatal paediatric units in both public and private hospitals in South Africa, mothers were given significant responsibility regarding the practical care of their infants providing them with ample opportunities to interact and connect. This is often not the case, however, as hospital environments are often unsympathetic to the mother's emotional experience and her need to connect with her baby. Porter et al. (2020) suggest that "the maternal world and the medical world are neither complementary nor mutually understood" (p. 846). Limited opportunities for their own emotional reflection and support means that hospital staff often struggle to remain "emotionally receptive and available. This results in protective defences such as detachment, projecting unprocessed experiences as well as defences against connecting and empathising with premature infants and their parents" (Canin, 2023, p. 31).

The impact of the hospital environment therefore needs to be taken into account. Training of staff in the units is also essential in order to promote attuned mother-infant interaction, and to sensitize staff to situations of risk. Further research in this area is also essential to further understand how to support this fragile relationship in such a challenging context. This could assist in mitigating many of the risks associated with prematurity.

The implications of excluding mothers who did not meet the criteria will be highlighted as one of the limitations in the study.

5.4 Paper 4: Exploring Countertransference in Psychoanalytic Research: Reflecting on the journey of being a researcher, a psychotherapist, a mother and a human being in a neonatal high-care unit

Canin, N. (In Press). Exploring countertransference in psychoanalytic research: Reflecting on the journey of being a researcher, a psychotherapist, a mother and a human being in a neonatal high-care unit. *Psychoanalytic Practice*.

Abstract

This paper offers insights into the process of conducting psychoanalytically oriented research in a neonatal high-care unit with premature infants and their mothers. The paper emphasises how evocative and emotional the experience of conducting an ethnographic study with traumatised mother-baby dyads can be. The importance of constantly scrutinising the counter-transferential responses, thoughts and feelings induced in the researcher is emphasised. Case illustrations highlight how a reflexive exploration of these reactions resulted in crucial insights about the experience of prematurity. The 'lived experience' of anguish, pain and overwhelm allowed a profound sense of understanding and respect for what premature infants and their mothers need to endure. The challenges inherent in navigating the overlapping roles of researcher, psychotherapist, mother, and human being are also addressed.

Keywords: Countertransference, reflexivity, ethnography, prematurity, mother-baby dyads

"…to each level of sociality corresponds its own knowledge, and if one wishes to grasp a group's deepest knowledge one must commune with it's members, speak its Essential We-talk"
(Jules-Rosette, 1975, p8.)

Introduction

Premature infants, by definition, are born prior to 37 weeks' gestation which means that their physiological systems are often underdeveloped. This usually necessitates urgent hospitalisation in a neonatal intensive care unit (NICU) or high care unit. For many of these infants, the risk of death is ever-present and life-saving medical treatment is commonplace (Mello et al, 2011). Infants are often placed in incubators and separated from their parents. Progress in technology has meant that even younger, smaller and more fragile infants can survive (Vanderveen et al., 2009), however, the necessary treatments are all the more painful and violating (Botero & Sanders, 2014; Cantle, 2013; Ribeiro Batista Geraldini, 2016). This is devastating and traumatic for parents (Anscombe, 2008; Cantle, 2013; Kraemer & Steinberg, 2006; Steinberg, 2006, Vanier, 2017). In addition to coping with possibly ongoing separation, the unpredictability of their infant's health and viability is exceptionally stressful (Porter et al., 2020), as is witnessing painful medical procedures (Anscombe, 2008). The experience is described as a 'psychic trauma' (Harris, 2005, p. 250). In this way, the experience of prematurity can be dysregulating for both premature infant and mother, posing a risk to the premature mother-infant relationship (Harris, 2005; Ribeiro Batista Geraldini, 2016).

I am a psychodynamically trained psychotherapist whose passion and interest has always centred around infant mental health. I became particularly interested in the topic of prematurity, which appeared to be under-researched from a psychoanalytic perspective. When I began a research study investigating the relational experiences of mothers and hospitalised premature infants in high care units, I was intrigued by the paradox of fragility and courage that seemed representative of this experience. I was curious about whether, despite the trauma, it was possible for 'premature' mothers and infants to find their way back to one another. This specific relationship became the focus of my ethnographic study.

This paper documents my research journey in a neonatal high care ward with a particular focus on my countertransference responses. By scrutinising the thoughts and feelings that were evoked in me during the experiences and interactions that I had with premature mother-infant dyads, I gained crucial understandings about the experience of prematurity which allowed me to begin to understand their 'we-talk' (Jules-Rosette, 1975, as cited in Tedlock, 1991). This reflection also helped me discover much about myself in the process.

In sharing this, I hope to offer insights into the process of conducting psychoanalytically oriented research in a neonatal high care unit with premature infants and their mothers. A

research focus in this context is novel and it is my hope that writing this paper may also encourage further psychoanalytic research in this area. The paper also hopes to contribute to academic discussions regarding the challenges of conducting sensitive research in vulnerable populations, where heightened attention needs to be given to protecting participants from harm (Fahie, 2014; Koller et al., 2012; Komaromy, 2020;) whilst being brave enough to engage with painful material (Long & Eagle, 2009).

Researching prematurity

Premature infancy has been largely unexplored by psychoanalytic researchers (Canin, 2023). Psychoanalytic literature on prematurity comprises books and articles written by clinicians on the basis of their clinical experience (Canin, 2023). The reasons for this lack of psychoanalytically informed research is likely multi-dimensional. Neonatal intensive care and high care units are protected environments where infants are insulated and it is hard for non-health care professionals to gain access. Komaromy (2020) describes the inherent challenges for researchers in gaining access to places that are not part of the public domain. This setting is also saturated with trauma and loss, making it an exceptionally sensitive environment to explore (Cohen, 2003; McFadyen, 1995). Parents in this position are vulnerable and researching prematurity therefore requires caution in order to ensure that participants are protected from further emotional distress (Fahie, 2014; Komaromy, 2020; Lee, 1993). Research literature also emphasises the emotional (Dickson-Swift et al., 2007; Gemignani, 2011; Harvey, 2017) and even physiological (Holmes, 2014) impact of exploring sensitive or upsetting topics, especially those 'which are emotionally laden and inspire feelings of dread' (Jones, 2013, p. 117). These challenges can prove overwhelming, as I was to discover myself, thereby deterring potential researchers.

Given the lack of research in this area, I was reliant on the insights of psychoanalytic clinicians and observers working in hospital settings. These authors all suggested how emotionally intense it is to encounter premature infants and their families (Kraemer & Steinberg, 2006; Lazar & Ermann, 1998; Steibel et al., 2014). Clinicians working in the NICU describe powerful countertransference reactions such as 'fear and terror, debilitating anxiety, paralysis' (Canin, 2023, p. 26). The NICU is described as a place where there is 'violence everywhere … illness and unbearable pain' (Simon, 2010, p. 168). Confronting the impairment or possible death of a newborn is also portrayed as being overwhelming (Kraemer & Steinberg, 2006; Hardy,

2005). Feelings of helplessness and pain are described when in 'contact with this misery' (Miller, 2001, p. 97).

I had naively (and perhaps defensively) wondered if there wouldn't be safety in my role as an ethnographic researcher. I understood that a researcher-participant relationship would need to be established as a vehicle for data collection, but I was determined to remain neutral and, if I'm really truthful, a little detached. How contrary these ideas were from the reality I was to experience. Harvey (2017) suggests that 'it is impossible for a researcher to remain completely neutral when conducting qualitative research due to the researcher's own subjectivity being evoked during the process' (p. 322) This is particularly true when the topic is meaningful for the researcher (Gemignani, 2011), as it had been for me.

Interestingly, but perhaps in hindsight, expectedly, when I first started this research I did not relate my research interest to my own birthing experience – as my infant was not premature. However, I had haemorrhaged following the birth of my second child. For a few hours doctors had been unsure as to whether I would survive. During this time, I had been separated from my baby and this separation had been unspeakably painful. Once I had stabilised, my fears were that it would now be difficult for my daughter and I to establish a bond. However, upon being reunited, my daughter amazed me by latching and feeding from me immediately. For the next nine months, she would not let anyone else hold her as we repaired our disruptive beginning. It felt like a gift and I was profoundly grateful. I recognise now that I carried this traumatic experience into my research process, as I carried my gender, race, class and personal history. It is clearer to me now that the subjectivity of the researcher, like the psychotherapist, is inevitable (Elliott et al., 2012; Harvey, 2017; Hollway & Jefferson, 2000). However, it was only through a process of extensive professional and personal reflection that I was able to consider fully the influence of my subjectivity as well as the significance of my countertransference.

Countertransference and reflexivity

The original definition of countertransference was outlined by Freud (1910/1953)in the context of the analyst-patient relationship. This conceptualisation encompassed the feelings experienced by the analyst believed to have originated from the analyst's own unresolved conflicts. As such, countertransference was seen as contaminating the analytic process and therefore constantly needed to be overcome (Hayes, 2004). Subsequent analysts began to

consider the clinical usefulness of the therapists' emotional reactions, acknowledging their potential for highlighting unconscious feelings, conflicts or relational dynamics originating in the patient (Heimann, 1950; Little, 1951). This resulted in a paradigm shift whereby, 'all therapist reactions to a client, whether conscious or unconscious, conflict based or reality based, in response to transference or some other material, was considered countertransference' (Hayes, 2004, p. 22). Similarly, within the field of psychoanalytic research, the term countertransference is used to refer to the entirety of the researcher's emotional reactions, comprising both the researcher's unconscious childhood-based reactions as well as those provoked by the participant (Hollway, 2016; Marks & Mönnich-Marks, 2003). These elements are described as being 'co-created' (Elliott et al., 2012, p. 433), 'interwoven and inseparable' (Harvey, 2017, p. 316).

For several psychoanalytically-oriented researchers, countertransference is regarded as an important part of their data collection. Clarke (2002) interprets various forms of unconscious communication in his research project. Gemignani (2011) and Marks and Mönnich-Marks (2003) also describe how their countertransference helped uncover critical insights about their participants. However, several authors caution against the potential pitfalls of this approach (Frosh & Baraitser, 2008; Parker, 2010). The use of countertransference as a source of data raises a number of methodological issues. One may question the researcher's ability to accurately interpret latent meaning in the context of such a short-lived relationship (Long & Eagle, 2009). This compelling concern emphasises the importance of tentativeness when attempting to make inferences in this way (Frosch & Baraister, 2008). Various authors have also stressed the importance of not using countertransference in isolation, but rather as a collateral source of information (Cartwright, 2004; Gemignani, 2011; Holmes, 2014; Heimann, 1950). Cartwright (2004) highlights the importance of researchers taking responsibility for identifying their own emotional reactions (Holmes, 2014). Careful reflective evaluation is required to tease out what might be helpful to the research, and those aspects that the researcher should take responsibility for and 'work through' themselves (Gemignani, 2011).

It was decided that a process of reflexivity would be required to address these concerns. Reflexivity encompasses the critical examination undertaken by the researcher regarding their feelings, beliefs, biases and subjectivity as experienced throughout the research process (Harvey, 2017). This methodology is widely used as a resource in psychoanalytically oriented qualitative research (Harvey, 2017; Finlay, 2002; Pillow, 2003) 'to produce research that

questions its owns interpretations and is reflexive about its own knowledge production' (Pillow, 2003, p. 178). The aim is to generate research accounts that are responsible. Reflexivity helps to uncover motives or assumptions that may distort the research process (Brown, 2006). Psychoanalytic reflexivity extends this focus to include unconscious elements that are 'unspoken or unavailable to consciousness' (Elliott et al., 2012, p. 433). This incorporates evaluating the researcher's countertransference, unresolved conflicts, trauma-related defences as well as unconscious biases. For example, in an environment where life hangs in the balance, it was important to explore how my life-threatening experience might have shaped my research interest, interactions with participants and data interpretation.

I need to acknowledge that I found the process of reflexivity to be uncomfortable and challenging. Kraemer and Steinberg (2006) suggest that in the NICU environment emotions are often hard to bear or even to acknowledge. In one paper, they bravely admit 'we wanted to have our efforts to think be thought about with others but our hesitation to be bare took over and we retreated to individual presentations' (p. 165). As a clinician, I too was concerned about risking openness about my emotional experience. However, I felt that my role in this context as an ethnographer first, and psychotherapist second allowed me more freedom to share my journey of reflexivity, given that 'ethnography is always a depiction of the ethnographer's experience of particular people … one of shared subjectivity' (Berger, 2001, p. 507).

A psychoanalytic ethnographic approach

Ethnography is a discipline that involves the first-hand study of social and cultural dynamics. Ethnographers typically immerse themselves in the lives of the people they are studying in order to gain a holistic and nuanced understanding (Tedlock, 2010). Extended periods of time are spent observing and interacting in order to uncover beliefs, values and practices that shape the community in question (Hammersley, 2006). My fieldwork was carried out at a public mother and child hospital in Johannesburg, in their neonatal high care unit. I conducted semi-structured in-depth interviews with mothers as well as infant observations of the dyads in the unit, parts of which were video-recorded.

A psychoanalytically informed ethnographic approach seeks to understand conscious as well as unconscious psychological experiences, focusing on how these might shape

interactions and relationships (Ainslie & Brabeck, 2003). The utilisation of psychoanalytic ideas is believed to augment traditional research methods. Clarke (2002) suggests that 'addressing unconscious forces and motivations adds another level of analysis to sociological research providing us with a deeper understanding of both individual experience and the social psychodynamics' (p. 173). My research interview format as well as my data analysis was guided by Cartwright's (2004) psychoanalytic research interview technique, in an attempt to collect conscious as well as unconscious material (Cartwright, 2004). This method includes a focus on the countertransference or 'inchoate feeling-state responses' evoked in the researcher (Cartwright, 2004, p. 226).

The data utilised in the writing of this paper includes reflexive field notes, written soon after each interview and observation session. These notes contained detailed accounts of my research encounters, comprising my emotional reactions towards the participants as well as our interactions. These included moments of heightened affect as well as times when my feelings felt inexplicably muted (Cartwright, 2004). Proudfoot (2015) highlights that psychoanalytic reflexivity cannot be accomplished in isolation. I benefitted from the support of a talented and insightful supervisor who facilitated my reflexive process. I also had the privilege of being mentored by Margaret Cohen who offered input and supervision regarding the analysis of infant observations. Margaret is regarded as an authority on the practice of infant observation in hospital settings, having authored the seminal book on prematurity, Sent before my time: A child psychotherapist's view of life on a neonatal intensive care unit. Lastly, I was able to present my work in a group setting with several colleagues. In all these contexts, supervision involved attempts at reflecting on my countertransference reactions, and attempting to disentangle their meaning and significance. Notes from supervision sessions also provided a useful data resource for this paper.

Discussion

The painful but necessary shift from outsider to insider

> *I am worried. How am I going to keep my project alive? Have my expectations been too unrealistic? Did I make a mistake in choosing this topic? I feel desperate and overwhelmed. I contacted my supervisor today. She encouraged me to persist, reassuring me that 'it will happen'. I don't know if I can return to the hospital, knowing that I am likely to be rejected again.*
>
> *Notes from my reflexive diary - 17 July 2019*

Several researchers highlight the challenges faced in gaining acceptance and trust within communities (Nelson, 2020; Obasi, 2014; Sherif, 2001). The hospital where I conducted my study services an ethnically diverse population from the surrounding neighbourhoods. Bain et al., (2010) describe how the impact of South Africa's apartheid regime, with its racial brutality, forced removals and socio-economic marginalisation, is still felt in these predominantly black and coloured communities. As a result, there are unusually high rates of unemployment and poverty. Gang violence, drug trafficking and crime are pervasive. Families are often fragmented and without stability, contributing to the prevalence of gender-based violence and child abuse.

I wondered how my identity as a white, Westernised, middle-class professional might influence the research process. I knew that the women who would participate in my study would come from a significantly lower socio-economic bracket than I did. These women had likely experienced significant hardship. I was aware of the extreme differences regarding access to resources and opportunities that seemed to separate us. I felt acutely aware that I had given birth in an expensive private hospital. My participants had given birth in a hospital setting where there was often a lack of human and medical resources. I also knew that there would likely be differences in race, language and culture. I was concerned about how our differences might impact participants' willingness to engage with me. In addition, sharing private feelings and experiences with a stranger goes against certain African cultural norms (Berg, 2003). How could they trust me? Would I be treated like a trespasser?

Arriving at the hospital, I felt anxious and uncertain. I also worried about being intrusive. What would my research potentially open up for these women? When I considered my intensive research protocol, I was also concerned that I was asking a lot from traumatised mothers. Each mother would need to be interviewed on three separate occasions about topics related to their pregnancy and birth, their perceptions of their infants and their family histories. In addition, the mother-baby dyads needed to be observed for two separate hour long sessions. All of this during a highly anxious time for these mothers with a premature baby in an unfamiliar, medicalised setting. I could not imagine how anyone in these circumstances would agree to participate. My anxiety intensified after several mothers refused to take part in the study. I managed to set up two initial meetings with mothers who originally agreed but then changed their minds when faced with the consent forms. The ethical requirements demanded by the University seemed so onerous at the time.

Participants needed to sign three detailed consent forms in order to be interviewed, audio-recorded and observed. I felt that some of the mothers might have struggled to read the forms or perhaps understand the academic jargon. However, they had refused any of my attempts to explain or translate.

When I finally found a mother willing to participate, I was elated and profoundly relieved. We began the process and completed one interview and two observations. The following day, without warning, I arrived to find she had gone home. The room was empty. I remember my shock and disappointment, and then guilt and horror at my response. How could I be upset that her baby had been well enough to go home? However, I couldn't stop thinking about all the effort I had invested in them. I realised I could never know what I would find when I came to the hospital. Would my mother-baby pair be there? Would our process survive or end prematurely? I felt pressure to complete the process quickly, not being able to take anything for granted. I was tired. In my diary I spoke about 'bone deep exhaustion'.

Froggett and Hollway (2010) describe the notion of a collective unconscious experience that shapes the emotional atmosphere of an environment, being transferred to everyone in the setting through projective identification. This concept was termed *scenic understanding* by the German cultural analyst Alfred Lorenzer. Tapping into the scenic understanding of a particular context is believed to allow researchers access to a form of 'unsymbolized socio-cultural knowledge' that needs to be experienced in order to be understood (Hollway, 2013, p. 22).

My introduction to the hospital unit had felt jarring and brutal. I had felt overwhelmed by confusion and doubt. The experience left me feeling stirred, fraught with anxiety as well as uncertain about my role and the viability of my study. I wondered if my countertransference experience hadn't given me a small but potent sense of what mothers visiting their premature babies in hospital may experience – their intense anxiety, their uncertainty about their roles as mothers and their fears regarding the viability of their babies. The literature highlights that premature birth is stressful and emotionally taxing for parents (Castro, 2011; O'Donovan & Nixon, 2019). Mothers of premature infants are described as having a heightened state of arousal (Mendelsohn, 2005), often being trapped in a persecuted state of 'not-knowing' as they navigate so much uncertainty regarding the infant's survival as well as possible medical

challenges (Anscombe, 2008; Cantle, 2013; Steinberg, 2006). Feelings of inadequacy are also described as being commonplace (Hardy, 2005; Harris, 2005; Miller, 2001).

I was aware that my experience paled in comparison to the trauma that these mothers experienced daily. However, for the first time I did feel as if I could relate, albeit in a muted way, to the emotional rollercoaster that seemed to characterise this environment. Interestingly, once I began to reflect on these ideas, three mothers, Betty, Charity and Khanyi[1], came forward simultaneously offering to take part in my study. I wondered if somehow they sensed that I could now be more trusted with their stories, their feelings, and their pain. I reflected on my initial countertransference of feeling like an opportunistic intruder wanting to take from a fragile environment. However, I no longer felt this way. I no longer felt like an outsider. The importance of having persevered in this traumatising environment became clear. Perhaps, I too needed to 'survive' the experience. Acknowledging and then exploring my countertransference as I attempted to adjust to the hospital environment allowed me to get in touch with a collective unconscious experience within the hospital unit. This was enormously beneficial to my understanding of the setting.

Feelings about race – examining the lack of countertransference

> *The only thing that seems to matter is that I too am a mother*
> *Notes from my reflexive diary - 5 August 2019*

Throughout the research process, I had wondered if my race and socio-economic status would matter to the women I was interviewing. I asked the two Black participants about this aspect of the process. Charity responded with, "*What I feel when I'm speaking to Nicole, is that I'm speaking to another woman ... if you are kind and understanding, that's what I relate to. I don't relate to a skin colour".*

Khanyi seemed to feel that our cultural differences had made it easier to open up, suggesting, "*There's a sense of privacy … you are not part of my family and you are not part of the circle of my friends …."*

It is possible that the women did not feel comfortable to speak truthfully about the painful issue of cultural and racial difference. However, when I attempted to scrutinise my own

countertransference regarding race and culture, I kept having the same surprising conviction. After my initial hesitation and concern, once I began the data collection, feelings regarding race or socioeconomic status appeared to be remarkably absent.

The importance of engaging with the impact of racial and cultural identity in South Africa has been highlighted by several psychoanalytically minded clinicians and researchers (Berg, 2003; Esprey, 2017). Esprey (2017) alludes to the significance of acknowledging the impact of both our apartheid history as well as 'the potency of white supremacy … evident both in economic racial disparity and in the social currency which whiteness continues to command …" (p. 21) This is believed to create the milieu in which South Africans interact with one another. My lack of emotional response regarding an expected countertransference felt like it required reflexive consideration.

Stern (1998) suggests that after giving birth, a woman experiences a unique psychological shift which becomes the dominant psychic organisation through which she experiences her baby as well as the external world. He termed this the motherhood constellation. Stern (1998) suggests that after birth, the *motherhood constellation* displaces all other mental organisations and foci. A crucial aspect of this constellation is the significant role of the maternal grandmother. Dugmore (2013) highlights the developmental importance of this figure for the mother's 'transition to motherhood' (p. 60) In addition, mothers are believed to seek out grandmaternal figures as a result of the 'desire to be valued, supported, aided, taught and appreciated by a maternal figure' (Stern, 1998, p. 186). Stern (1998) coined the term *the good grandmother transference* which he described as the main transference that often results towards other women, especially those perceived to be older or more experienced with child-bearing. In the South African context, Berg (2007) highlights the concepts of the motherhood constellation and grandmaternal transference as being central to her work with mothers and infants in townships in Cape Town.

I began to wonder if the participants and myself hadn't disconnected from any racial awareness. Perhaps, this detachment allowed for the kind of engagement where I could function not only as a researcher but as a grandmaternal figure who was interested in learning about the mothers and their babies. Perhaps under different circumstances, our racial differences would be foregrounded. However, the only aspect of my identity that all the women appeared interested in was whether I too was a mother. They seemed comforted by the fact that I was, relieved about the identities that we did share – that of being a woman and

a mother. Their need to reinforce our shared identities is suggestive of the importance given to mutual understanding and areas of commonality. This may be significant for researchers wanting to engage with vulnerable mothers to hold in mind. The relevance of grandmaternal figures for mothers of premature infants also needs to be given more attention by researchers as well as clinicians.

Potent countertransference and shifting identifications

> *I don't think she will actually arrive for the interview…I find myself disliking her … I think I will be messed around a lot. I can't see this working out*
> *Notes from my reflexive diary - 21 August 2019*

Within the hospital unit, there were individual stories. Mothers experienced their births in vastly different ways. The severity of infant medical conditions, impacting the risk of disability and fears regarding loss of life, was distinct for each infant. In this way, each mother's experience was unique as was the level of trauma to which she was exposed. In addition, there were differences in the extent to which each mother could engage with her trauma as well as the defences she employed to cope with her painful experiences (Canin & Bain, 2023a). This is believed to be related to the mother's psychic structure, influenced by the quality of her early relationships as well as the extent to which previous traumas have been resolved (Vanier, 2017). With this in mind, I want to share how careful, reflexive consideration of my countertransference responses to one particular mother, helped provide latent content regarding her experience of prematurity that would otherwise have been inaccessible. This process also forced me to confront some of my own unresolved traumas and conflicts.

Betty was a 31-year-old mother who had given birth to her baby, Ryan, at 33 weeks. While it is uncomfortable for me to write about the strong, yet unfavourable countertransference reactions that I had towards Betty at various stages in our process, these proved to be important to understanding Betty. When re-reading my field notes, I was aware of an urge to edit out my negative feelings. I was worried about portraying Betty as well as myself in a negative light. Knowles (2006) describes the discomfort of acknowledging these kinds of feelings but suggests the importance of doing so as 'a guide to deeper insight' (Knowles, 2006, p. 402).

It is interesting that Betty and I shared aspects of our identity that I did not share with the other participants, by virtue of both of us being white. However, I felt much less connected to her than the other mothers. The potency of my initial reaction towards Betty surprised me. I found myself disliking her and being suspicious of the likelihood that she would complete the research protocols. After our first meeting, the notes that I made were uncharacteristically cold and unempathic. In actuality, Betty proved to be extremely reliable and went out of her way to accommodate me. For example, when she realised she was going to be discharged, she offered to combine two interviews as well as an observation in one day in order to ensure that I completed my process. Yet, despite her reliability, I found interviewing Betty chaotic and exhausting. Her narrative was confusing and full of contradiction. At times, it had felt very hard to make sense of what she was sharing.

My observation with Betty and Ryan (R) revealed that Betty wasn't always able to perceive Ryan's attempts at engaging her, highlighted in my observation notes.

"*R surprised me by snuggling into her and putting his hands into her top. I was very touched by this connecting gesture, despite what had felt like an intrusive feed. Mom's phone rang and she answered it. R cried a little and while speaking she began to pat his back distractedly. He moved his hand further into mom's shirt, and I found this gesture touching and painful because I didn't think mom had noticed it".*

Betty also seemed to struggle to recognise his communications of discomfort or even physiological distress. She wasn't always able to offer comfort that was helpful or appropriate. As a result, my emotional and physical response during our observations was intense and at times alarming. The comments in my notes were unusually emotive. I wrote, "*I felt myself becoming anxious … I felt overwhelmed at this point, and I became aware that my body felt 'over-heated'. It felt hard to concentrate … I felt desperately sad".* Notably, in hindsight, I was highly identified with Ryan during these observations and mistrusting of Betty's capacity as a mother.

My analysis of Betty's frame of mind utilised various data sources including interview and observational material, documented countertransference responses as well as knowledge of her history. Betty had shared the fact that she had grown up with an alcoholic father who physically abused her mother. Betty had later married a man who also became alcohol dependent and abusive towards her. In a previous paper which explored these dynamics, I

had written, “With a long history of dysregulated relational experience, it isn’t surprising that Betty appeared to have been highly traumatised by the life-threatening, premature birth of her son … She was re-experiencing overwhelming feeling states with no internal resources to cope with those feelings … In this state of confusing fragmentation, there did not seem to be much space for Ryan’s experience to be thought about” (Canin & Bain, 2023a, p. 114).

Whilst my conclusions were tentative, these pieces all seemed congruous. However, it was the consideration of my initial response to Betty that added another potential layer of understanding. Despite her amenability, I wondered if my strong and uncharacteristic initial dislike and distrust of Betty wasn’t suggestive of a disowned part of Betty that found it hard to trust in other people’s safety and reliability. This was unsurprising given how threatening and unstable her caregivers and husband had been. It was only once I considered this possibility that I recognised other subtle indications of the theme of distrust. For example, when describing her feelings towards the medical team she admitted wondering, *‘are they not hiding some stuff from you?’*

As part of the process of reflexivity, I needed to consider my psychological contribution to these evocative encounters. I wondered if my birthing experience, where I had been vulnerable and at risk, had created an identification with Ryan. Initially, I had been upset by one particular aspect of our first conversation. I had noted, “*She was a bit strange about setting up the time and made as if she wasn’t at the hospital much. I discovered this later to not be true”.*

I wondered if I hadn’t unwittingly become defensive of Ryan, a vulnerable infant who needed his mother to be present. I also wondered if this identification hadn’t intensified my emotional response to watching how unattuned Betty was to his needs. Perhaps my guilt at having been unavailable to my baby in the first few hours of her life, had me distancing myself from Betty.

As the process unfolded, however, I found myself being able to access more empathy towards Betty. It became clear that despite her trauma and confusion, Betty was trying hard to be a mother. My identification then seemed to shift to a more ‘grandmaternal’ identification where I wanted to offer support and encouragement to Betty. Once we finished our final interview, I chose to show Betty videos I had taken which demonstrated moments where there had been

connection and engagement between her and her baby. Betty had reported being touched by this, and I ended the process feeling pleased that I had left her with a sense of competence in her maternal abilities.

Countertransferential responses are frequently used by clinicians and observers working with prematurity as a window into understanding both maternal as well as infant experience (Canin, 2023). I propose that this practice may be equally helpful for researchers wanting to explore this topic. However, the importance of careful reflexive consideration of countertransference responses is clear. Harvey (2017) refers to 'ongoing resonance within and between the conscious, preconscious and unconscious levels of both participant and researcher' (p. 314). It seems clear to me that my countertransference reactions towards Betty were mutually created taking into account Betty's internal conflicts as well as my own in the context of our developing relationship. Evaluating my countertransference was not only important for the generation of trustworthy data but also in the facilitation of appropriately supportive interactions with Betty. This has relevance for both researchers and clinicians regarding the management and understanding of mothers who may be experienced as difficult.

Empathy and boundaries

> *I can't focus on anything tonight. I'm worried about baby Nono. I keep thinking about Charity. She seemed so lost today. I keep wondering if they're okay, if they will be okay … I'm meant to see them tomorrow but I don't know what will be waiting for me. I feel fragile and almost teary.*
> *Notes from my reflexive diary - 28 August 2019*

The researcher–participant relationship is a working alliance through which data is collected. Theoretically, the fixed roles of each party are not overly complex (Mitchell & Irvine, 2008). As a researcher, my role is to collect information which facilitates an understanding of the participant's experience or story, which he/she contracts to share with me. Literature suggests that researchers need to uphold flexible and thoughtful researcher–participant boundaries (Harvey, 2017). In reality, demarcating and maintaining these boundaries, whilst encouraging rapport and trust, is a complex and delicate process (Gemignani, 2011; Harvey, 2017). Several authors caution about the importance of finding the appropriate balance of familiarity or even intimacy (Dickson-Swift et al., 2007). Long and Eagle (2009) suggest that

having an additional background as a psychotherapist may paradoxically making it harder for researchers to judge when it is appropriate to engage empathically. At times, these constraints are also tested by the need to be a caring human being.

I had not anticipated how these boundaries would be tested with one particular mother-baby dyad or how I would be drawn into the relationship. Charity was a 33-year-old mother whose baby girl, Nono, was born prematurely at 30 weeks gestation. Nono was the most medically vulnerable of all the infants I had encountered. She was considered an extremely low birth weight infant, weighing only 830g. She had significant medical complications and doctors were concerned about her survival. I experienced Charity as being warm and engaging from the beginning. However, I found her to be reserved and a little hesitant in the first interview. Nevertheless, my countertransference reaction towards this mother-baby dyad was powerful. I felt protective towards them both, invested in their wellbeing. This was possibly intensified by Nono's fragility. They seemed to occupy my mind constantly.

During the interviews, I found it challenging to monitor my levels of empathy. In my field notes, I had written, "*I wondered after the interview if I had moved beyond the pure interview stance at times?... Whilst trying to ask questions, being careful not to be leading, I found myself reflecting in a more therapeutic way".*

The lines which delineated my role as researcher also became blurred when Nono had experienced a worrying medical challenge with her stomach. As a result, we had needed to delay our second interview. That night, at home, I was unable to stop thinking about what they must both be going through. I decided to message Charity to see how they were both doing. I was certain that I had broken some unspoken boundary regarding contact. However, it had felt like the right thing to do, the thing I needed to do. Charity had responded to my message, and when we met again for the second interview, her initial hesitation had disappeared, and a strong working alliance had been formed.

At the time, I wasn't clear about the extent to which my contacting her between meetings would be considered a boundary violation. I'm still not entirely clear. The literature is mixed regarding the impact of these kinds of empathic gestures. Gemignani (2011) describes how personal involvement can enrich rapport, thereby contributing to the richness of the data that is able to be collected. Holmes (2017) suggests that if the interest in the other is only in

the service of a 'purely intellectual procedure then efforts at creating rapport are a sham, which at some level will be realized' (p. 713). Conversely, Gair (2012) cautions against overusing empathy and risking a breach of interpersonal boundaries.

My process of reflexivity helped me to understand that I may have wished to align myself with Charity, whom I perceived to be an extraordinary woman and mother. I had been in awe of her ability to remain in touch with Nono's experiences, a fact which seemed to have allowed her to form a strong bond with Nono. They had found each other despite their circumstances. Observing them moved me immensely and I felt connected to both of them. I need to acknowledge that this idealising identification played out in several ways during the process, as described above.

However, beyond this, I wondered if aspects of my countertransference and behaviour towards this mother-baby dyad hadn't also constituted an appropriate shift of role – from that of researcher to caring fellow human being. While it was my need to ease my own anxiety about Nono, it was also genuine concern for Charity and Nono's well-being that had motivated the message. In some ways, this heightened connection allowed for richer material to be uncovered. After this event, it felt as if Charity's sharing about her current as well as her historical experiences deepened significantly. In my notes I wrote "*I experienced Charity as being more contained. I felt that we had established a more authentic connection".*

At the end of the process, Charity highlighted what it had meant for her to speak openly to me about her experiences and feelings, "*This was the first time I can still talk about myself ... It's like I'm going back to normal … cause I felt that there was that part of me that was stolen just before I gave birth to Nono. The stress I went through, it wasn't easy at the time, but now I feel like life's normalising ... after talking to you".*

Once again, this is suggestive of Charity's need for a caring grandmaternal figure that she could share her experience with. Researchers wanting to establish authentic connections with 'premature' mothers that facilitate a deepened sharing of experience may need to be aware of the need for subtle shifts in the researcher role. Once again, this can only be responsibly attempted within the context of a reflexive process.

Managing feelings of loss and trauma: The importance of defences and support

> *I can't seem to focus on my research … I don't know when that might change*

Notes from my reflexive diary - 25th September 2019

A week after I completed my data collection, I messaged all of the participants to see how they were faring at home. I had positive responses from both Betty and Charity. Khanyi was the third mother in my process. She had spent much time at the hospital taking care of her baby, Vincent. However, during the interviews it had seemed as if Khanyi was preparing herself for the possibility of Vincent's death. During the interviews she admitted, "*I hope that he will make it but … I am kind of preparing myself to say you know what if he doesn't, you have got to be prepared, you have got to be prepared".*

Khanyi replied to my message by telling me that Vincent had passed away. I responded immediately by telling her how sorry I was, asking how she had been and exploring whether she required professional support. However, I felt completely crushed, overwhelmed with a profound sense of loss and pain that I wasn't sure I was justified in claiming. At that point, I put away my work. I didn't want to engage with it anymore. The enormity of what I had experienced, culminating in Vincent's death felt too much – too overwhelming.

I had read about the defence mechanisms that mothers of premature infants utilise to protect themselves from psychic pain. The concept of avoidance is highlighted throughout the psychoanalytic literature as a prominent defence mechanism used to escape the trauma and anxiety associated with having infants in a precarious position (Cohen, 2003; Vanier, 2015). This defense, which can manifest as emotional detachment, numbing (Kraemer & Steinberg, 2006) or even dissociation (Negri, 2018), also allows mothers to avoid facing their own vulnerability or helplessness (Mendelsohn, 2005). However, processing the trauma becomes more challenging. I reflected on this in another paper, in which I had written, 'traumatised mothers may … shift to more robotic, less reflective states of mind in which the capacity for dialogue, with oneself as well as others, is diminished. Mothers may then struggle to put their traumatic experiences into words or represent their thoughts and feelings psychologically' (Canin & Bain, 2023a p.108).

Several authors stress the importance of ongoing support and supervision for those working with premature infants, in order to remain in touch with one's emotions (Hardy, 2005; Kraemer & Steinberg, 2006; Miller, 2001; Steibel et al., 2014). A few weeks after the call with Khanyi, I began the process of supervision. I also presented some of my observations to a group of colleagues. I was baffled by how emotionally cut off from the material I initially felt

when beginning the presentation. This was evident in how I couldn't recall certain key details like what my research questions had been. Kraemer and Steinberg (2006), when referring to their work with premature infants, suggest that, 'in an atmosphere where psychic space is quite permeable and the evacuation of unbearable states commonplace, finding ways to allow for reflection … can be quite difficult' (p. 165). I felt as if I'd been 'emptied' of any emotion or ability to make connections, even simple ones. Interestingly, the group reported having a strong emotional response to the content of my presentation.

Over time, the supervision process allowed me to digest the experience until I was slowly able to return to the data and begin to reflect on it. I was gradually able to explore the meaning and relevance of my feelings, helping me process the trauma. I still found analysing the data painful and initially I only managed small pockets of time. However, with support, a space for thinking and reflection was created. Hollway (2016) suggests that with this kind of emotive research, 'in order to 'correctly grasp' the emotional factor…raw emotional experience must be digested, symbolized, processed if it is to be used helpfully' (p. 4). It seems clear that the evocative process of digesting my research experience also furthered my understanding of the experiences of 'premature' mothers and babies.

It was only after my lived experience that I felt I really understood. My countertransference helped me to think about mothers like Betty with far more empathy and understanding. The literature is clear about the importance of offering support for mothers of premature infants. However, they may also need to be offered time and space to process their trauma. Perhaps the experience of finding one's capacity to reflect and create meaning needs to be seen as a longer-term process that for some mothers may not be possible in the hospital unit. This may need to be taken into account when designing interventions for premature mother-infant dyads.

Conclusion

This paper highlights how evocative and emotional the experience of conducting research with traumatised mother-baby dyads in a neonatal high care ward can be. When I began my research, I had not understood that attempting to 'grasp' my chosen community would leave me reeling and battling defences. I did not know it would impact me physically, causing powerful bodily reactions, whilst simultaneously challenging my ability to think. However, I

am convinced that my countertransference, encompassing a 'lived experience' of anguish, pain and overwhelm, allowed me a profound sense of understanding and respect for what premature infants and their mothers need to endure.

This research was not comfortable and it challenged me mentally as well as emotionally. I had not anticipated that my journey would have me questioning the overlapping roles of researcher, clinician, mother, and human being. It is clear that in environments saturated with trauma and vulnerability, the researcher's subjectivity and humanness cannot be separated. Further, as this was not a formal infant observation, the more neutral psychoanalytic stance of the infant observer, appeared to require some adjustment to the more intersubjective experience of being a psychoanalytically oriented clinician doing ethnographic research. Professional boundaries and roles may need to be thoughtfully adjusted in the service of building trust and safety for participants, but also because one may be called upon to be a caring human being. This is particularly relevant when working with new mothers, operating within the psychic organisation of the 'maternal constellation'. These mothers may require a more human connection in order to endure and perhaps even benefit from the research process. In my research, this need felt so powerful that it surpassed racial and socio-economic influences.

It is also evident that this type of research can only be conducted in conjunction with a rigorous process of reflexivity in order to ensure that the research is responsible as well as rich in content. I found the necessary self-reflection, candour and constant evaluation of my feelings taxing and confronting. This process was only possible because of the support I received from skilled and compassionate supervisors. With their guidance, I was able to attain meaningful learnings about the premature mother-baby experience as well as about myself.

Chapter 6: Discussion

6.1 Introduction

The aim of this study was to gain an understanding of the in-hospital experiences of premature infants and their mothers. Within this overarching agenda, the study aimed to engage mothers about their subjective experiences of prematurity, taking into account conscious as well as unconscious intrapsychic processes, states of mind, representations, feelings and thoughts. The study was also interested in the relational dimension of the premature mother-baby dyad, focusing on the communication and interaction between the mothers and premature infants in a neonatal high care unit. In addition, infant communications and non-verbal interactions were examined in order to explore what could be gleaned regarding the infant's capacity to interact and engage. The strength of this thesis is the depth and detail that was captured regarding the experience of three premature mother-infant dyads. This allowed patterns to emerge as well as the evidencing of intrapsychic and intersubjective processes. Related aims were to document the trends and gaps in current psychoanalytic literature on prematurity and to document the process of researching prematurity for the researcher.

In order to achieve these aims, the two main fields which address infant and maternal experience, namely psychoanalysis and developmental psychology (Baradon, 2005) were utilised. Some of the findings of this study solidify and support previous theory and research from both these fields. Some results challenge previous assumptions. In addition, new insights and hypotheses regarding the experiences of premature infants and their mothers were generated. The findings of the study and the manner in which these findings addressed the research aims and questions of the thesis are explored below, integrating ideas and arguments from all four published papers into one coherent narrative.

6.2 Psychoanalytic Literature on Prematurity

How is the experience of prematurity, for both infant and mother, understood currently in the psychoanalytic literature? Where are the gaps in this literature?

The first research question was addressed in detail in paper one. From the outset, the study was anchored in a psychoanalytic framework. As such, it was particularly interested in the unconscious or nuanced elements of the premature experience. The research project began with an investigation into how the experience of prematurity, for both infant and mother, had been theorised or understood in the psychoanalytic literature. By exploring what had been written, it was also possible to identify gaps in the literature.

The experience of prematurity in the psychoanalytic literature is understood as being traumatic for both premature infant and mother. The uncertainty as well as the psychological pain and suffering for both is emphasised (Mendelsohn, 2005; Lazar & Ermann, 1998). The premature infant has the added dimension of physical suffering. The premature infant is portrayed as being ill-equipped for reality outside of the womb (Riberio Batista Geraldini, 2016). Nevertheless, these fragile infants are described as seeking out connection, requiring human interaction in order to facilitate their psychological development. The importance of experiencing psychological holding and containment is also stressed (Blessing, 2006; Botero & Sanders, 2014; Castro, 2011; MacDonald, 2015). However, the literature emphasises how traumatic and stressful premature birth is for mothers, impacting on maternal states of mind (Anscombe, 2008; Cantle, 2013; Kraemer & Steinberg, 2006), parental confidence (Cantle, 2013; Kraemer & Steinberg, 2006) and the ability to offer maternal reverie (Amez & Botero, 2000; Cantle, 2013; Miller, 2001; Steinberg, 2006). Thus, prematurity often results in a traumatised mother-infant pair, placing the container-contained function as well as the development of the parent-infant relationship at risk (Botero & Sanders, 2014; Ribeiro Batista Gerladini, 2016).

The scarcity of psychoanalytically informed literature focusing on prematurity was unexpected. Three seminal, niche books had been published by psychoanalytic clinicians. These texts appeared to be critical for any psychoanalytically minded clinician working in this environment. However, there was a clear void in the journal-based literature. As explained in paper one, "when examining the extent to which premature birth has appeared in the 24 psychoanalytically-oriented journals, the paucity of papers is evident" (Canin, 2023, p. 5). This was surprising, given the potential benefits of psychoanalytic thinking and practice in this context. In paper one, the scoping review revealed how "parents who are supported by psychoanalytically-oriented practitioners appear to be able to process the trauma of the experience, engaging productively with their own mental states and creating

space for thinking about those of their infant, and the relationship between them. The work appears to allow for more recognition of the infant as a person, despite the risk of loss present in the NICU… psychoanalytically-oriented clinicians are perfectly placed to do this" (Canin, 2023, p. 32).

The scoping review identified potential reasons for the lack of psychoanalytic articles. These include the practical challenges of accessing such an insulated environment as well as the intensity of working in an environment saturated with trauma and loss. The review also proposed that there may be a lack of exposure for psychoanalytic theorists and clinicians to the topic of prematurity. Subsequently, practitioners may not even consider the possibility of exploring or working in this environment (Canin, 2023). This study has attempted to address the paucity of psychoanalytic studies focusing on prematurity thereby increasing exposure to this topic for psychoanalytically oriented clinicians. It was ensured that all of the papers from this study were published in psychoanalytic journals with a larger reach and appeal for psychoanalytic clinicians rather than journals with a methodological focus.

In addition to the paucity of psychoanalytic literature, the scoping review also revealed several gaps in the available literature. For example, the premature parent-infant relationship was flagged as an area which requires much attention. Gaps also included specific foci such as the potential influence of a mother's history and previous traumas or the impact of maternal states of mind on infant responsivity. An effort to address these gaps was incorporated into the attempt to answer the second research question regarding what could be understood about the experiences of premature infants and their mothers that contributes to the available literature. This research question was broken down further into exploring the experiences of mothers as well as the processes of intersubjectivity between mother and premature infant. It became clear that addressing these aspects of the premature experience would benefit from the field of developmental psychology, incorporating infant research, attachment theory and intersubjectivity. Literature from this arena was therefore included in the study. Lastly, a process of reflexivity was utilised to explore the experience of researching prematurity in the context of a neonatal high-care ward.

6.3 The experiences of mothers of premature infants in neonatal high care wards

What can be understood about the experiences of the mothers of premature infants within the context of a neonatal high care ward?

Very few psychoanalytic or developmental articles explore the premature mother's independent, subjective experience. The issue of maternal subjectivity has in fact been broadly neglected within psychoanalytic literature (Benjamin, 1988; Harvey, 2015; Raphael-Leff, 2010). A qualitative exploration of the subjective experience of mothers of premature infants was therefore felt to be important in this study. Two important concepts are spotlighted in both psychoanalytic and developmental literature as being relevant in this regard, namely maternal states of mind and maternal representations (Main et al, 1985; Mendelsohn, 2005; Stern-Bruschweiler & Stern, 1989; Stern, 1991).

6.3.1 Maternal States of Mind

How does the experience of prematurity influence maternal states of mind?

The construct of maternal states of mind was felt to be relevant for this study given the impact of states of mind on a mother's thoughts and feelings towards her infant (Benoit et al., 1997; Borghini et al., 2006) as well as on her ability to parent sensitively (Fonagy, 2015; Sroufe, et al., 1999, Sroufe et al., 1990). This study explored the impact of prematurity on maternal states of mind, including the states of mind necessary for sensitive mothering. Existing literature highlights the fact that prematurity disrupts maternal states of mind (Kim et al., 2015; Mendelsohn, 2005, Vanier, 2017). Mental health conditions such as post-traumatic stress disorder (Gangi et al., 2013; Shaw et al., 2006), depression (Harris et al., 2018; Vigod et al., 2010) and anxiety (Hardy, 2005; Kraemer & Steinberg, 2006) have been identified as being more prevalent in mothers of premature infants. The findings of this study supported this understanding, as discussed below.

6.3.1.1 Trauma

In the current study, the experience of trauma was identified as having the most prominent impact on maternal states of mind. Giving birth prematurely was traumatic for all the

mothers in the study. This result is consistent with the undisputed assertion in psychoanalytic literature that trauma is inherent to the experience of prematurity (Anscombe, 2008; Cantle, 2013; Kraemer & Steinberg, 2006; Steinberg, 2006; Vanier, 2017). Several developmental studies also highlighted the prevalence of stress (Carter et al., 2007; Gray et al., 2013); trauma and post-traumatic stress disorder (PTSD) (Kim et al., 2015; Lasiuk et al., 2013) in mothers with premature infants. Interestingly, there are studies which did not find elevated levels of stress or trauma in this population (Lau and Morse, 2003; Gray et al., 2012). These are, however, in the minority and may well be explained through differing definitions and criteria for the presence of trauma being used. Subclinical presentations that do not meet the diagnostic criteria of Acute Stress Disorder or PTSD in the DSM 5 may be missed when defensive processes such as dissociation are not considered.

Paper two highlights the impact of trauma on the states of mind of the three mothers in the study. In-depth exploration of maternal narratives allowed for subtle nuances in the way that the trauma impacted the mothers in this study to be explored. Trauma manifested in vastly different ways for each mother. Their states of mind were affected to varying degrees, taking into account their emotional regulation abilities, reflective capacities as well as the defences they needed to employ. Two of the mothers, Khanyi and Betty, attempted to disconnect emotionally from the trauma of their infants' birth as well as from the trauma of having an infant in a precarious position. They did so differently. Whilst not always successful, they both attempted to avoid acknowledging certain painful aspects of their experience. Avoidance is described in psychoanalytic literature as one of the main ways in which mothers of premature infants respond to their trauma (Harris, 2005; Mendelsohn, 2005). The use of avoidance allows mothers to protect their psyche and avoid pain, often resulting in detachment, numbing or dissociation (Kraemer & Steinberg, 2006). The concept of dissociation was found to be critical for understanding the states of mind of these mothers, as both were prone to utilising this defence mechanism to some extent. This result is consistent with Jubinville et al. (2012) who suggested that dissociation was one of the most common psychiatric symptoms associated with prematurity. However, the third mother, Charity, responded very differently to her traumatic experience. She utilised internal as well as external support structures to hold herself psychologically through the trauma. As such, she did not need to avoid painful affects or utilise dissociation. The study

found that the experience of trauma was vastly different for those mothers who utilised dissociation and those who did not need to.

6.3.1.2 Dissociation

Dissociation is a potent protective mechanism allowing for mental escape from overwhelming emotional pain (Ensink et al., 2017; Bohleber, 2018). Its relevance in modern psychoanalytic thinking is highlighted in the literature review. Bohleber (2018) advised "I advocate for liberating dissociation as a clinical phenomenon from its marginal position and reintegrating it into the mainstream corpus of psychoanalytic inquiry" (p. 35). It is important to note that despite this focus in developmental psychoanalysis, the concept of dissociation is not addressed in the prematurity literature as a relevant feature in the experience. The Jubinville (2012) study was unique as dissociation is otherwise not explored or addressed in the developmental literature pertaining to prematurity. This literature generally focuses on coping mechanisms rather than defence mechanisms. In the psychoanalytic literature on prematurity, this defence is only mentioned briefly or alluded to in very few papers. For example, Kraemer and Steinberg (2006) questioned the possibility of dissociation, "I have wondered if I was witnessing a detachment reflective of a dissociated state, but at this point I couldn't be sure" (p. 170). Perhaps reflective of the scarcity of psychoanalytic literature on this topic more broadly, it may also reflect the as yet largely unexplored application of intersubjective psychoanalytic theory to this area. In my view, based on the findings of this study, the impact and significance of dissociation is unappreciated in the literature, creating a vacuum which needs to be addressed in order to fully appreciate the maternal experience of prematurity. This is particularly important given findings related to the impact of maternal loss and trauma on the mother-infant relationship and the developing subjectivity of the infant (Main & Hesse, 1990).

There were several findings with regard to the experience of maternal dissociation in this study. Mothers differed in terms of the extent to which dissociative defences were activated. Whilst dissociation was evident in Khanyi's interviews, it was more prominent and severe with Betty. This is in keeping with the developmental model of trauma which highlights the range of dissociative states from subtle to extreme (Bohleber, 2018; Schimmenti & Caretti, 2016). The quality of their dissociative states also differed. In paper two, it was stated: "Khanyi's dissociated self-states…were qualitatively different to Betty's.

Khanyi's dissociated self-states did not appear to be as imbued with fear and aggression as Betty's" (Canin & Bain, 2023a, p.116). Possible reasons for this will be addressed in the next section.

The study found that the use of dissociative defences impacted on several cognitive and emotional abilities. This is in keeping with contemporary trauma literature which emphasises how dissociation compromises various neurobiological systems (Ensink et al., 2017). In my study, the extent to which this occurred seemed to be determined by the extent to which dissociative defences were activated. Nevertheless, mothers who utilised this defence were less able to tolerate or reflect on painful states of mind. Rather, they attempted to suppress or deny these emotions, reducing the intensity or range of feeling they could be in touch with. These mothers found it difficult to reflect on their feelings, particularly those related to the experience of prematurity. As a result, processing their emotions was also inhibited. For example, for Betty, complicated feelings like guilt or inadequacy could not be worked through.

It is important to note that none of the mothers were able to express negative or ambivalent feelings towards their infant. (This will be explored in more detail in the section on maternal representations). However, with regard to maternal states of mind, what appeared to be relevant was the extent to which mothers were able to acknowledge their vulnerability and pain alongside the positivity. The mothers utilising dissociative defences seemed to struggle with this. However, despite needing to portray her infant in a positive light, Charity seemed to be capable of recognising and integrating "the intense oscillations of emotion associated with having an infant in a high care unit, where the infant's existence is precarious" (Canin & Bain, 2023a, p.116). The use of dissociative defences seemed to make this difficult for both Khanyi and Betty, to varying degrees. Khanyi was in touch with the possibility of her baby dying, however she was emotionally detached from what it would mean for her to lose her baby. Betty was experienced as being even less in touch with the realities of her own or her baby's predicament. Both Betty and Khanyi were therefore less able to engage with the difficult realities of their situation "without becoming overwhelmed and shutting down" (Canin & Bain, 2023a, p.116). While Khanyi overregulated her emotion, shut off from her own and her infant's vulnerability, Betty appeared to move between extreme dysregulation and denial, which led to distortions in

her thinking. Their ability to make meaning of their experience was therefore compromised impacting their capacity for symbolic as well as reflective functioning.

This is in keeping with traditional psychoanalytic trauma literature, which highlights the sequelae of trauma as the breakdown of the ability to reflect on, represent, integrate and therefore process experience (Harris, 2005; Lemma & Levy; 2004; Rustin & Shuttleworth, 1989). This literature does not use the term 'dissociation', but similarities are evident in how the developmental model of trauma highlights how the use of dissociative defences fragments consciousness, preventing one from engaging with their experience. Dissociation is seen as a "pathological form of self-regulation" (Bohleber, 2018, p. 34). Schimmenti and Caretti (2016) highlight how dissociation "can hinder the development of more mature strategies of affect regulation, impairing the possibility to integrate emotional states" (p. 111).

Most of the literature suggests that premature birth disrupts states of mind conducive to mothering (Cohen, 20023; Mendelsohn, 2005). This study found that the disturbance of maternal states of mind was once again associated with the severity of the mother's use of dissociative defences. For Khanyi and Betty it seemed to impact their ability to engage emotionally with their infants and be in touch with their pain. For example, the description of how Betty had responded to the traumatic medical experiences her baby Ryan had endured had read: "The blunted tone she used when describing these experiences highlighted how disconnected she was with the trauma of this experience for him" (Canin & Bain, 2023b, p. 8).

This study also found that mothers who utilised dissociation had difficulties with seeing their infant as an intentional, separate person. These mothers were therefore less able to make sense of their infant's behaviour, often missing or misinterpreting cues. It was explained how Betty "hadn't been able to recognize Ryan's subtle attempts at engaging with her" (Canin & Bain, 2023b, p.9) and Khanyi "often seemed to struggle to connect to Vincent or to think about what he was experiencing" (Canin & Bain, 2023a, p. 110). This meant that at times, they were both cut off from their infants' distress signals. For both Khanyi and Betty, their babies' behaviours were not regarded as meaningful communications or attempts at engagement. This is in keeping with psychoanalytic literature which describes the reduced ability of mothers of premature infants to decipher their infant's cues and respond sensitively (Amez & Botero, 2000; Cantle, 2013, Mendelsohn, 2005). However,

once again the literature attributes this to parental distress rather than the utilisation of dissociation.

By contrast, "Charity's ability to process and reflect on her experiences appeared to help her to regulate herself and reach out for support when needed, which allowed for more receptive and containing maternal mental states" (Canin & Bain, 2023ab, p. 16). Charity was able to remain connected to her baby's experience, despite the fact that it was painful for her. This is keeping with Slade (2005) who emphasised the essential link between able to be self-reflective and the ability to reflect on the infant's mental states as well as the meaning of their behaviour as an expression of this (Fonagy et al, 1998; Slade, 2005). Charity's ability to be present and process her own trauma more constructively meant that she was more able to receive her infant's communications. Khanyi also had moments when she was able to be reflective. In paper two, it was stated: "The moments where Khanyi could be reflective about her feelings were conspicuous. In these moments, Khanyi was able to recognize and reflect on Vincent's distress and vulnerability" (Canin & Bain, 2023a, p. 111). To a lesser extent, Betty also had fleeting moments when she was able to be self-reflective as well as empathic towards Ryan's in-hospital experiences.

I believe that the most compelling explanation for this observation is the fact that Khanyi and Betty appeared to move in and out of dissociated states. This resulted in a fragmentation of consciousness and various, often contradictory, self-states. In other words, these mothers frequently shifted between states of mind with corresponding shifts in their mental capacities and abilities. Khanyi and Betty appeared to fluctuate between states of mind where "they could acknowledge their pain and fear and states of 'cut-off coping'" (Canin & Bain, 2023a, p. 116). As their mental states shifted, so too their ability to be reflective regarding their own as well as their infant's experience shifted. The potential for unintegrated mental states or fragmentations of consciousness is central within the latest trauma research (Bohleber, 2018, Schimmenti and Caretti, 2016), and variations in self-states cause shifts in ability to be reflective (Chefetz, 2013).

This study also found that for those mothers utilising dissociative defences, the ability to create coherent narratives regarding their experience was also affected; the more the defence was utilised, the less coherent the mother's narrative. Qualitative differences were found in the nature of mother's narratives depending on the extent to which they appeared

to be using dissociative defences. For example, in relation to Betty's narrative I had written "interviewing Betty had felt chaotic, confusing and exhausting. I found it hard to hold onto my mind while trying to make sense of what Betty was sharing" (Canin & Bain, 2023a, p. 112). However, my experience with Charity was significantly different. In paper two I shared, 'Charity was able to reflect on her traumatic experiences which she shared in a clear and coherent way" (Canin & Bain, 2023a, p. 112).

Coherence as a construct is found most prominently in the attachment literature. It is considered central to understanding how attachment narratives might be identified with specific interviewing instruments (Main et al., 2003; Water et al., 2001; Zeanah et al., 1994). Examples of frequently used interviews in the field of attachment include the Adult Attachment Interview, (George et al., 1996; Main et al., 2003) the Current Relationship Interview (Crowell & Owens, 1996) and the Working Model of the Child Interview (Zeanah, et al., 1994). Within these attachment interviews, individuals are classified on the basis of the properties of their discourse, based on general principles identified by the linguistic philosopher Grice (1975). The capacity to provide a clear, flexible, and emotionally balanced narrative when speaking about one's children or the process of mothering them, is thought to be associated with mental states as well as the psychological processes of emotional regulation and integration (Oppenheim, 2006). The presence of dissociation is believed to create lapses in reasoning and clarity as a result of temporary interference with memory systems and mental processing, representing micro-dissociative episodes (George, et al., 1996). Viewed in this way, it is unsurprising that within the study, levels of coherence were found to be useful as rudimentary gauges regarding the times when mothers were utilising dissociative defences. This was clearer with Betty than with Khanyi, as her dissociative episodes were more extreme.

6.3.1.3 The significance of previous relational traumas

The scoping review of paper one revealed that insufficient attention has been paid to the impact of a mother's previous traumas, in particular potential relational traumas (Canin, 2023). This is surprising given the emphasis in psychoanalytic theory on the ability of early childhood trauma to jeopardise maternal states of mind (Baradon, 2009; Fraiberg et al., 1975; Lieberman & Van Horn, 2011). In fact, both developmental and psychoanalytic trauma literature emphasise that understanding trauma requires an appreciation of early relationships and developmental history (Berthelot et al., 2015; Garland, 1998; Lemma &

Levy, 2004). Both infant research and developmental psychoanalysis spotlight the psychological risks of recurrent episodes of affect dysregulation in childhood (Brazelton & Cramer, 1990; Schimmenti & Caretti, 2016). In the current study, all of the mothers described a history of childhood loss and trauma. This allowed for an exploration of the possible impact of prior trauma on the experience of prematurity.

The literature is clear that it is not merely the presence of previous trauma that confers psychological risk. Fraiberg et al. (1975) in their ground-breaking paper 'Ghosts in the nursery' emphasised the significance of not having supressed the emotions associated with earlier trauma: "There are many parents who have themselves lived tormented childhoods but who do not inflict their pain upon their children…these are the parents who say explicitly…I remember what it was like" (p. 419). With regard to premature birth specifically, the seminal books on prematurity have, to some extent, offered commentary. They suggested that, with regard to previous traumas, the most relevant concern is the extent to which this trauma has been resolved (Cohen, 2003; Vanier, 2015). Cohen (2003) suggested that unresolved traumas are at risk of being revived following premature birth, with their associated memories and feelings reactivated. The findings of the current study supported this idea, highlighting how "the experience of having an infant in high care who may not survive, whom she cannot hold or mother in warm, safe, present ways, could re-evoke experiences of failure, absence and loss for a mother" (Canin & Bain, 2023, p. 109). Further, areas of trauma or loss that had not been acknowledged or processed seemed to trigger dissociative processes. For example, Khanyi's dissociative experiences seemed to center around the potential loss of her baby. This correlated with the fact that the losses of both her parents represented Khanyi's "sites of traumatic loss" (Canin & Bain, 2023a, p. 111).

However, the study found an additional aspect of earlier trauma that appeared to be even more significant, namely the manner in which the childhood trauma was managed by outside caregivers and the extent to which mothers were supported through their earlier trauma. For some mothers, the presence of supportive figures even offered protection from unresolved trauma. By way of example, Charity's amplified emotional response when discussing the loss of her own mother suggested that this loss had not been resolved for her. However, her history of being supported through the loss of both parents prevented this trauma from imposing on her state of mind following her premature birth. The study found that even the presence of some attuned parenting experiences in early childhood

appeared to support the capacity for reflection and mentalisation, as exhibited with Khanyi in paper two. It would appear that the extent to which each mother received support through their earlier traumas was so significant that it impacted the extent to which previous traumas were re-activated, the extent to which each mother dissociated and the extent to which each mother was traumatised by the experience of prematurity. This was felt to be one of the most important findings of the study.

If one attempts to understands these results from an object relations perspective, the experience of supportive, containing caregivers seems to mean that mothers are more likely to have developed capacities associated with depressive position functioning (Klein, 1935). in their infancy and childhood. Lemma and Levy (2004) suggested that those individuals with more developed depressive capacities are less susceptible to disturbed states of minds following the experience of trauma in one's adult life. Those individuals with more developed depressive capacities may be less susceptible to paranoid schizoid states of mind as well as being less reliant on primitive defence mechanisms like splitting or dissociation. In paper two, it was stated: "mothers who have, as part of their internal worlds, a good internal object that is thoughtful and can accept her potential for both love and hate, appear to use less dissociative defences, …however, for those mothers with less benevolent internal objects due to previous trauma, dissociative defences appear more evident" (Canin & Bain, 2023a, p11). This is keeping with Lemma and Levy's (2004) assertion that the meaning associated with a particular trauma is often associated with the nature of one's internal objects. They proposed that the presence of good internal objects allow mothers to tolerate the painful affects associated with premature birth, helping her to believe that she can survive the experience psychologically. One can surmise that this would then reduce the need for dissociative defences.

Attachment theory is also a useful model to explore because it focuses on what happens in times of distress. Ainsworth (1969) highlighted the relevance of the sensitivity of one's own received parenting and experience of being helped to manage distress. This is believed to provide mothers with internal resources or 'templates' to cope better with trauma later in life. In this way, secure attachment has been shown to offer psychological protection and resilience in the face of future trauma (Mucci, 2021). Securely attached adults are also more likely to be supportive, attuned parents (Jones et al., 2015). In the prematurity literature, this idea is reaffirmed by Vanier (2015) who suggested that mothers whose needs for love

and protection were not met in childhood appear to have the most difficulty in recovering from the trauma of prematurity.

The developmental trauma model is grounded in the convergent findings of psychoanalytic, developmental and neuroscience research. This theory therefore builds on the ideas mentioned previously. However, once again the concept of dissociation is at the forefront. The model suggests that the psychological tendency to dissociate results from early relational trauma. Dissociation is believed to be activated during childhood trauma to prevent the child from being overwhelmed by intolerable experiences. In order to protect the child, aspects of these experiences are prevented from being integrated into consciousness (Schimmenti & Caretti, 2016). This can result from more extreme traumas such as abuse and neglect. Where these hardships are severe and sustained over long periods of time, they can result in the development of more extreme dissociation disorders (Mucci, 2021). However, milder dissociative processes can also result from the repeated experience of affective dysregulation in infancy or childhood where caregivers fail to respond sensitively and synchronously to their child's needs and where is a lack of interactive repair (Bromberg, 1994; Schimmenti & Caretti, 2016). Later in life, these dissociative processes can be re-activated when trauma overwhelms one's defensive structure (Schimmenti & Caretti, 2016).

The impact of previous relational traumas on dissociative processes was evidenced in this study. Betty was the mother who experienced the most extreme form of childhood trauma, characterised by physical abuse, instability, fear and a lack of emotional regulation. The unmediated distress of this kind of childhood manifested in dissociative self-states which were more extreme as well as being imbued with fear and mistrust. In paper three I commented, "with a long history of dysregulated relational experience, it isn't surprising that Betty appeared to have been highly traumatized by the life-threatening, premature birth of her son" (Canin & Bain, 2023a, p.114). Khanyi's separation from her parents in her latency years was the backdrop against which she experienced the possibility of the loss of her premature baby. It appeared that she had not been supported with the loss of her parental figures nor helped to process her feelings of abandonment or loneliness which accompanied these losses. As a result, "dissociative processes may have resulted leaving her with contradictory self-states: one an overwhelmed, frightened, sad young girl, unprepared to assume a "caretaker" role, and the other an independent woman who expects and

prepares for loss" (Canin & Bain, 2023a, p. 111). Nevertheless, Khanyi's dissociation appeared to be less extreme than Betty's. This is in keeping with the distinction made in developmental trauma literature regarding 'first level traumatisation' following experiences characterised by a lack of attunement and the mediation of distress, and 'second level traumatisation' from "active abuse, severe deprivation, maltreatment, or incest" (Mucci, 2021, p. 86).

Charity had also experienced previous trauma and loss. However, she described a loving, supportive relationship with both her parents growing up. She emphasised the support she had received from her community and extended family following her losses. Charity recognised the protection this support offered her even as an adult and expressed wanting to offer this experience to her children. She had articulated: "I think that's what I want to give to my kids because…yah it still covers me today" (Canin & Bain, 2023a, p. 115). When describing the unbearable pain of having lost her mother at the age of 23, the experience seemed to have been made manageable by identifying with her mother's love and strength. As a result of previous experiences of having her pain mediated, Charity was able to tolerate the excruciating pain of trauma and loss and did not need to dissociate even when faced with the potential loss of her baby. Thus, despite the fact that Charity's baby was the sickest of the three, Charity was the least traumatised by her experience of prematurity.

The experience of being supported through previous traumas also seemed to impact the mothers' ability to trust and accept support from others in the ward, both professionals and other mothers. In paper two, I described Betty's difficulty with trusting and leaning on others, highlighting how "implicit memories of being vulnerable and surrounded by people who cannot protect her from harm seemed to have been triggered…she was re-experiencing overwhelming feeling states with no internal resources to cope with those feelings, or trust that anyone else could help her with them" (Canin & Bain, 2023a, p. 114). Betty appeared to have experienced hospital staff in ways that were reminiscent of her previous relational experiences. By comparison, Charity found it easier to garner empathy and support from doctors, nurses as well as other mothers in the unit. She described the comfort she had found from this external support, which I believe had further reinforced her maternal states of mind. The importance of being able to utilise staff members as well as other mothers in the unit is emphasised in the developmental literature as diminishing stress levels for mothers (Loewenstein et al., 2019). Thus, for various reasons, the mother's previous

relational experiences appear to be critical in determining her ability to manage the trauma of a premature birth.

In fact, these findings strongly imply that a mother's previous relational trauma and how this was mediated is more predictive of a mother's traumatic response than the objective risk status of her infant. This finding contributes to the developmental research on prematurity that tends to highlight the relevance of the infant risk factors, by balancing this with the need to also consider maternal risk factors. The severity of the perinatal risk has been found to impact maternal attachment representations (Borghini et al., 2006), the quality of mother-infant interaction (Minde, 1983) and maternal states of mind (Demier et al., 1996; Shaw et al., 2006; Gray et al., 2013). Several studies suggest that mothers of high-risk babies exhibit a higher prevalence of PTSD (Callahan et al., 2002; Shaw et al., 2006; Vanderbilt et al., 2009). This study may provide additional clarity with regards to which mothers of high-risk babies are most at risk themselves. Zelkowitz et al. (2007) found that maternal anxiety was greater with smaller, more vulnerable infants. While this may indeed be the case, what appears of most relevance is how the mothers manage this anxiety. The findings of this study appear to allow for a more nuanced understanding as to why mothers with damaged parts of their internal psyches experience the trauma as more catastrophic and frightening (Lemma & Levy, 2004).

It is important to emphasise that whilst the vulnerability of the infant appears to play a more reduced role than anticipated, the infant's precarious position still played a role in the mothers' experience of distress and trauma. Notably, this study found that so too, could the infant's healthier attachment behaviours. By way of example, for Betty, Ryan's attempts at engagement also appeared to have served as a trigger for her dissociated states. These attempts seemed to have been frightening for her, perhaps understandably when considering her previous relational experiences.

6.3.1.4 Implications of findings regarding maternal states of mind

Given how central the experience of trauma is for the mothers of premature infants, it is critical that those practitioners supporting 'premature' mothers are sufficiently trained in understanding and working with trauma, particularly in the concept of dissociation which appears to be central to making sense of the experiences of 'premature' mothers.

The above-mentioned findings also have important implications for identifying at-risk mothers who may need more intensive intervention. These results highlight the need to screen mothers for previous trauma, taking into account the extent to which trauma appears resolved but perhaps more importantly, the extent to which mothers were supported through their earlier traumas. In paper three I suggested "while previous screening tools have emphasized the identification of birth trauma in mothers, this study suggests that screening for the presence of previous lifetime trauma might also assist in understanding the nature of the mother's trauma reaction post-partum" (Canin & Bain, 2023b, p. 18).

Mothers may also need to be screened regarding the extent to which dissociative mechanisms have been triggered by the premature birth. In paper one, I highlighted the importance for mothers of being helped to "process the trauma of the experience, engaging productively with their own mental states and creating space for thinking about those of their infant, and the relationship between them" (Canin, 2023, p. 32). However, practitioners who are able to recognise and be respectful of the mother's need to dissociate may be more respectful in their interactions with such mothers, rather than being guided by their agenda and pressing mothers beyond what they are ready for. The tendency to fluctuate with regard to dissociated states of mind means that clinicians may be able to identify periods when mothers are more receptive to intervention. As mothers are helped to become reflective of their own traumas, the more likely they are to be able to be in touch with their infant's experience. Mothers clearly need access to psychological intervention that is tailored in order to process their experiences and address their trauma. This understanding may also be helpful in terms of creating empathy and patience with mothers who may initially appear difficult or unsympathetic to their infant's plight. The coherence of a mother's narrative might be a useful, though rudimentary, gauge of the extent of mothers' use of dissociative defences.

6.3.2 Maternal representations

Stern (1991) suggested that a mother's representations of her baby play a formidable role in the progression of the parent-infant relationship, facilitating both normal and pathological development. Attachment theory emphasises their importance in guiding maternal behaviours (Bowlby, 1982; Stern, 1995; Zeanah & Benoit, 1995). Borghini et al. (2006) highlighted the importance of exploring how parental representations might be

influenced by the trauma of prematurity, suggesting a lack of focus on parental attachment representations toward a premature child. Maternal representations were therefore felt to be essential to explore in the current study.

In this study, maternal representations were hard to establish. All of the mothers presented with overwhelmingly positive accounts of their infants which felt slightly unnatural. As mentioned previously, the mothers seemed unable to express or acknowledge negative or ambivalent feelings towards their infant or the process of mothering their infants. One explanation for the forced positivity may be the societal pressures related to expectations regarding mothering. In paper two I wrote, "the participants are subject to varied pressures, both internal and external, with regards to what it means to be a 'good mother'...mothers likely felt pressure, at times, to give a narrative that they thought would be viewed more favourably" (Canin & Bain, 2023a, p. 110).

"The unacceptable face" of maternal ambivalence referred to by Parker (1996) epitomises the challenge faced by all mothers as a result of societal expectations and judgements of motherhood (p. 49). Motherhood is often idealised in society with the subsequent expectation of a constantly selfless, nurturing and loving mother (Raphael-Leff, 2010). Maternal ambivalence refers to the array of conflicting emotions a mother may experience towards her child, including love, frustration and even hatred (Parker, 1996). Parker (1996) suggested that all mothers share the experience of both loving and hating their children. Cohen (2005) explained that even when facing a pregnancy and birth without complications, women may feel resentful about the need to give up their independent life.

Reflecting on the traumatic and often life-threatening birth which introduces mothers to their premature infants, as well as the rollercoaster of emotion that the fragile infant, by virtue of its precariousness, causes the mother, Bain et al. (2010) suggested that with premature infants, even more negative feelings would be expected. And yet, paradoxically, the infant's precarious position might make these feelings even more difficult to admit. Bain et al. (2010) explained how the utilisation of splitting prevents negative feelings from emerging, keeping them repressed. In this way, the traumatised mother is protected from acknowledging that the infant who they are so concerned about is the same infant who terrorises them with the possibility of loss (Bain et al., 2010). This is not necessarily a pathological mechanism as it allows mothers to remain close to their infants. However, professionals working with mothers need to allow for the possibility for mothers to admit

that they may have negative feelings, encouraging them to work through these where possible.

The importance of working with negative maternal feelings is emphasised by several psychoanalytic theorists. Parker (1996) cautioned against preventing a mother from experiencing feelings of aggression and hostility towards her baby. Raphael-Leff (2010) also argued for the need to allow uncomfortable or painful maternal experiences including those of "persecution and hatred" (p. 3). She suggested that the lack of acknowledgement of maternal ambivalence compels mothers to "hide...conflictual and shameful negative feelings from professionals – and from ourselves" (Raphael-Leff, 2010, p. 3). Cohen (2005) advised that "there is more risk of these feelings being acted out when they cannot be acknowledged or worked with" (p. 124).

It is relevant that most of the studies exploring maternal representations of premature infants investigate older infants. Several of these studies highlighted that maternal representations are often more negative particularly with regard to regulatory functions such as feeding and sleeping (Borghini et al., 2006; Korja et al., 2009; Leonard et al., 1992; Levy-Shiff et al., 1989). This is suggestive of the fact that risks regarding negative maternal representations of premature infants may emerge over time. Thus, in the hospital setting one could argue that one is dealing with negative feelings rather than negative representations. It is possible that one of the reasons that this study was not able to collect much data with regard to maternal representations is that they are still immature or perhaps have not even formed yet. Stern (1991) argued that despite the fact that the mother develops representations of her foetus during pregnancy, these representations are believed to dissolve following birth, providing an opportunity for new representations to develop. This highlights the importance of slowly allowing for the expression of negative feelings before they manifest as maternal representations. The hospital setting appears to be an ideal time to intervene in this regard, helping mothers with their negative feelings and setting the formation of maternal representations on a healthier trajectory. This notion is accentuated by Borghini et al.'s (2006) finding that mothers of older premature infants demonstrate less openness to changing their representations.

There is another dimension to maternal representations that was also explored in the study.

Psychoanalytic literature suggests that maternal representations incorporate both accurate perceptions of the 'real' infant as well as distortions and fantasies rooted in unresolved childhood traumas, as explained in the previous section (Fraiberg et al, 1975; Sandler & Sandler, 1978). This was only observed with one of the mothers with a history of more extreme trauma. For Betty, her maternal experience was complicated by the use of projection. Betty was experienced as being preoccupied with her own trauma to the extent that she was unable to appreciate Ryan's experience as separate from hers. Her descriptions of Ryan's experience were often confused with narrations of her own experience. I believed that this was also tied to the presence of dissociated self-states that had been re-evoked by her trauma. Betty's inability to see her infant as separate in conjunction with her need to defend against her pain may have resulted in seemingly contradictory, confused and disowned aspects of herself to be projected into the infant. At times, Ryan represented a potentially abandoning other who may die and leave her, showing up her deeply feared inadequacy, repeating her own experiences as a child. As such, she experienced Ryan in ways that reflected her previous traumatic relational experiences rather than appreciating him for who he really was. I would argue that over time, this would result in disturbed maternal representations of her infant.

6.4 Intersubjectivity in premature mother-infant dyads

How does prematurity influence processes of intersubjectivity between the mother and her premature infant and their ability to engage one another?

Despite undisputed recognition in the literature regarding the importance of the premature mother-infant relationship, the dynamics of this relationship, incorporating shared experiences of intersubjectivity and reciprocity, is not adequately addressed in either the psychoanalytic or developmental literature. In paper one, I suggested, "implications for the intersubjectivity between them are not addressed…the processes that occur between premature infant and parent appear to require more attention…" (Canin, 2023, p. 30). This is particularly the case regarding interactions in hospital settings, prior to the infant's discharge. And yet, the importance of these early interactions is emphasised in the literature. Loewenstein et al. (2019) suggested that "less than optimal patterns of mother-infant interaction (extend) beyond the period of hospitalization and well into the infant's early childhood" (p. 347). This study attempted an in-depth analysis of the bi-directional

interaction and attempts at communication and possible processes of intersubjectivity between premature infants and mothers, managing to capture subtle patterns of engagement and communication, as well as moments when these are disrupted or derailed. These were explored in paper three.

The study found that the trauma of premature birth can dysregulate both mother and infant, disturbing the possibility of attunement and synchrony for the mother-infant dyad (Canin & Bain, 2023b). This finding was expected, supporting a key tenet in the psychoanalytic journal-based literature that "the impact of the combination of a traumatised, fragile infant with limited abilities and a parent whose mental state and capacity for reverie are compromised. This often results in poorly co-ordinated, mis-attuned interactions which can derail the development of the parent-infant relationship" (Canin, 2023, p. 30).

However, the study was able to contribute to this literature by highlighting nuances in the mother-infant relationship. For example, with regard to the establishment of intersubjectivity, the study found that the impact of maternal states of mind was more relevant than infant variables such as gestational age or medical stability. In paper three, I concluded, "it is clear that although the vulnerability of the infant influences the task of attuned caring and the establishment of a relationship (the sicker the infant, the more difficult the task), the mother's state of mind appears to play a bigger role (the more traumatised the mother, the more difficult the task)" (Canin & Bain, 2023b, p. 17).

This was evidenced by the lack of synchrony observed in the interactions between Betty and her infant Ryan. Despite the fact that Ryan was the most medically stable of the infants in the study, Betty's traumatised state of mind together with her utilisation of dissociative defences derailed Ryan's attempts at engaging with her. Her inability to decipher his cues often resulted in poorly timed and intrusive interactions which dysregulated him. In this way "traumatized maternal states interfere with the establishment of synchrony within the mother-infant dyad, compromising the infant's opportunities for regulation" (Canin & Bain, 2023b, p. 17). By contrast, Charity was able to offer a containing presence for her baby Nono, despite Nono being the most medically at-risk baby. Charity's ability to recognise Nono's distress, remaining receptive to her pain without being overwhelmed, enabled her to offer emotional containment as well as settling Nono's physiological distress signals. This

supported Nono in becoming regulated, despite a compromising stomach condition and a painful medical experience. This allowed for the possibility of intersubjectivity, with Nono observed to be highly responsive to Charity. As suggested in paper three, "her sensitivity to her baby's capacity for attention and non-attention, and her learning how to interpret her infant's behaviours allowed for synchronicity, despite Nono's challenging circumstances" (Canin & Bain, 2023b, p. 16).

These results differ from several developmental studies asserting that the premature parent-infant relationship was more impacted by the severity of postnatal infant risk than the mother's mental and emotional health (Borghini et al., 2006; Gray et al., 2013; Minde, 1983). Other studies, whilst not attempting comparisons, highlight how infant distress alters the regulatory behaviours of infants (Pierrehumbert et al., 2003) and by extension premature mother-baby interactions (Cronin et al., 1995; Meyer et al., 1995). It is important to note that insensitive parental interactions are emphasised in the literature, with parents of premature infants often accused of being less sensitive (Borghini et al., 2006; Zelkowitz et al., 2007), more controlling, as well as offering less warmth and flexibility (Bardin et al., 2007). However, this study challenges the notion of attempting to characterise the parents of premature infants as a homogenous group.

The mediating role that mothers can play for infant regulation is highlighted to some extent in the developmental literature, including the possibility of supportive interactions between parent and infant. Mello et al. (2011) highlighted the positive impact of maternal presence for the reduction in cortisol levels of premature infants in incubators. Supportive parent-child relationships are also explained as mediating developmental risk (Poehlmann et al., 2014; D'Agata et al., 2017). An exploration of synchronous interactions is particularly limited in the psychoanalytic prematurity literature. In addition, they are generally showcased within the context of psychoanalytically oriented interventions designed to actively support maternal states of mind (Amez & Botero, 2000; Hardy, 2005). The possibility that certain mothers may be able to facilitate healthy interactions independent of clinical support is not explored. Once again, the dynamics of attuned interactions is not explored in depth.

A central finding of this study is that maternal states of mind which allow for attuned maternal responses create the possibility of intersubjectivity within the premature mother-

infant dyad. One of the strengths of this research is the detail with which this process was captured. In addition, this finding addresses a critical void in the psychoanalytic prematurity literature (Canin, 2023). In paper one, I highlighted, "the literature does explore the impact of maternal states of mind on the infant, it does not take this a step further and engage with how this may impact infant responsivity to the mother, and the contributions this may then make to the reciprocal process of relating between them." (p. 30). The results of this study are consistent with developmental research on full-term infants which found that the presence of synchronous parental responses supports infants in becoming more regulated, thereby promoting infant responsivity (Feldman, 2007; Field, 1994). Similar studies pertaining to premature infants are limited. Trevarthen and Aitken (2001) highlighted the possibility of intersubjective exchanges with premature infants if the caregiver is able to be "sympathetic" (p. 7), alluding to the need for interactions to be sensitive and appropriate. Conversely, Wilfong et al. (1991) highlighted how maternal depressive symptoms diminished responsivity in premature infants.

Another critical implication of this finding is the confirmation that premature infants are capable, when appropriately supported, of being able to communicate and engage with caregivers, regardless of their medical stability. In the prematurity literature, this topic is only addressed superficially. The possibility that the premature infant is capable of this kind of intersubjectivity is highlighted in very few articles, in both psychoanalytic and developmental literature. Nevertheless, this capacity has been addressed in a limited way (Mendelsohn, 2005; McFadyen, 1995; Tropiano et al., 2017). Once again, the uniqueness of this study lies in the detail with which this capacity was captured, as well as the intersubjective processes leading to this capacity.

Despite the influence of maternal states of mind, the study also confirmed the notion of the mother-infant pair as a "mutually coordinated" system (Tronick, 2003, p. 45). Intersubjectivity, by definition, refers to a bi-directional, reciprocal process of interaction (Beebe, 1982; Beebe et al, 2010; Meltzoff & Moore, 1998; Trevarthen & Aitken, 2001; Stern, 2005). This too was evidenced in the case studies. For example, the premature infants' vulnerability seemed to make the possibility of repair and reconnection that much more difficult. This was viewed with Betty, where subsequent to her dysregulating behaviour Ryan struggled to recover and was unable to respond to her later attempts at engagement. In paper three it was suggested that "the cyclical nature of these interactions means that the

infant's dysregulation results in "less 'affirmation' for mothers in their maternal roles… which further negatively influences their maternal states of mind" (Canin & Bain, 2023b, p. 17).

It is important to note that the mothers in the current study were responsible for the daily care of their infants. The study found that ability to care for her infant was extremely important to Charity, and seemed to support a healthier state of mind. In paper two, I commented on how "her ability to care for Nono and be part of her growth and recovery also seemed to be crucial" (Canin & Bain, 2023a, p. 115). Thus, her ability to take care of her infant combined with the lack of separation may have played a crucial role in supporting her maternal states of mind as well as her capacity to create intersubjectivity. Loewenstein et al. (2019) suggested that mothers need to interact with their infants in order to establish their maternal identities. The separation that is often inherent to the hospitalisation experience may therefore further compromise the parent-infant relationship. Extended mother-infant hospitalisation has been identified as conferring risk to the parent-infant relationship (Feldman et al., 1999; Leifer et al., 1972; Zabielski, 1992). Several authors have suggested that parental involvement in the care of their infants, particularly during hospitalisation, is critical for the prevention of trauma for parents (Gangi et al., 2013; Lasiuk et al., 2013; Shaw et al., 2006).

6.4.1 Implications for Risk Assessment, Intervention and Applicability

Zeanah (2000) highlighted the importance of exploring and understanding the quality of the infant–parent relationship, as the vehicle through which to evaluate and treat infants and their parents. Once again, the findings of this study have important implications for identifying risk within the premature mother-baby dyad as well as for the designing of appropriate interventions for hospital settings. The importance of supporting parental states of mind and behaviours that facilitate infant regulation and by extension infant reciprocity is highlighted in this study. Maternal factors appear to be more significant than infant factors in this regard. The identification of at-risk mothers with traumatised states of mind as well as those who are unable to offer attuned responses to their infants is more likely to predict at-risk mother-baby dyads. In paper three I emphasised, "psychological support for the dyad could aid in strengthening perceived maternal competence, promoting maternal states of mind more conducive to parenting premature infants in a sensitive,

attuned manner" (Canin & Bain, 2023b, p. 18). This may be even more beneficial for sicker infants, for whom attachment behaviours may potentially play an even more significant role. For example, Nono required very sensitive and attuned holding in order to become regulated enough to open her eyes and focus on her mother. This is critical because, "when synchrony is achieved…there is potential for both mother and infant to aid in each other's development; mother is assisted to develop her maternal identity and the infant is assisted to regulate emotion and sensation and ultimately, in the development of a self" (Canin & Bain, 2023b, p. 17).

In addition, the study supports the relevance of psychoanalytic theory for understanding the experience of prematurity within the diverse, multi-cultural context of South Africa. The applicability of attachment theory within a local context has been established in several studies (Minde et al., 2006; Tomlinson et al., 2005). Broadly speaking, the application of psychoanalytic ideas in community intervention is also supported (Kruger, 2014; Smith et al., 2013). However, this study confirms the importance of these ideas for understanding the subtle nuances of prematurity. The study also suggests that these ideas are equally important when designing interventions within this context.

6.5 Researcher Experiences

What is the experience of the researcher when investigating premature infant-mother relationships from a psychoanalytic perspective?

Paper four highlighted the lack of psychoanalytically oriented research on prematurity. The psychoanalytic literature that is available on prematurity encompasses books and articles written by psychoanalytically oriented clinicians written on the basis of therapeutic experience (Canin, 2023). An academic, research-based psychoanalytic exploration therefore offered a completely unique lens into the experience of prematurity, addressing a large void in the literature. Hayes (2004) emphasised the shortage of psychoanalytic research endeavours, despite all that psychoanalysis has to offer in this regard. Green (2018) highlighted the "unquestionable" benefits of psychoanalytic research for the discipline of psychoanalysis (p. 21). This study is the first of its kind to explore the experience of a researcher investigating premature infant-mother relationships from a psychoanalytic perspective. It highlights complexities of conducting research in a hospital

setting with premature mother-infant dyads. It is hoped that these understandings may guide and encourage future researchers to explore the challenging environment of premature infants.

One of the most difficult aspects of research with vulnerable populations is gaining acceptance while developing trust and rapport (Nelson, 2020; Obasi, 2014; Sherif, 2001). In paper four I described "the challenges of conducting sensitive research in vulnerable populations, where heightened attention needs to be given to protecting participants from harm whilst being brave enough to engage with painful material" (Canin, in press, p.2). Kelly (2006) highlighted the importance of making participants feel sufficiently comfortable and secure to share personal private thoughts and feelings, whilst at the same time not feeling overly exposed or vulnerable. Throughout my research experience, I found that the most significant consideration of the process was the relationship between myself and the participants. Several aspects of this relationship were captured in paper four, as summarised below.

6.5.1 The Role of Identity

The socio-political climate in which research relationships are formed needs to be contemplated within any responsible research endeavour. Potential issues of power, class, and race need to be examined and acknowledged (Swartz, 2007). Several South African researchers have highlighted how the impact of South Africa's apartheid history needs to be taken into consideration when doing local research (Bain et al, 2010; Esprey 2017; Layton, 2006). Esprey (2017) further highlighted the relevance of "the potency of white supremacy…evident both in economic and racial disparity and in the social currency which whiteness continues to command…" (p. 21). In paper four I suggested, "this is believed to create the milieu in which South Africans interact with one another" (Canin, in press, p. 7). Keller (2018) also argued that in order to fully understand parenting behaviours, the cultural beliefs and practices in which they are embedded need to be considered. In this study, the mothers mostly came from working-class families. Two of the mothers were Black African. This research endeavour therefore required that I consider how my identity as a white, Westernised, middle-class professional might influence the research process. This was particularly relevant given the intersubjective focus of the study. Exploring the impact of my identity therefore became a critical part of the reflexive process.

Surprisingly and often inexplicably, throughout the research process, issues of power, race and class were remarkably absent. They were absent from participant narratives, even when directly probed, as well as from my countertransference responses. Only issues of gender featured strongly, and more specifically, the question as to whether I too was a mother. In paper four, I offered a few possible explanations for this. It was possible that no one felt comfortable enough to engage honestly about the "painful issue of cultural and racial difference" (Canin, in press, p. 7). I believe that is most likely that we disconnected from these issues in order to focus on aspects of our identities that we shared. This would allow for increased intimacy, trust and sharing. Esprey (2017) explained the possibility of race becoming a dissociated self-state which is then unacknowledged and may potentially undermine the research process. Interestingly, several researchers have suggested that differences in identity can either hinder or promote research outcomes (Diefenbach, 2009; Perera, 2020). I would argue that in my study rather than weakening or destabilising the process or encouraging acting out behaviours, detachment from race and culture was critical in order to allow participants to find a sense of commonality with me without which the intimate sharing of maternal feelings and concerns would not be possible.

The study found that the mothers showed various features typical of the psychological constellation termed 'the motherhood constellation' by Stern (1998). A crucial aspect of this constellation is the significant role of the maternal grandmother. Dugmore (2013) highlighted the developmental importance of this figure for the mother's transition to motherhood. Consequently, mothers often demonstrate a need to connect with other women with whom they can share their experiences, women who take an interest in their infant. This was found to be the case with the women in the study. In fact, before mothers were willing to engage with me at all, a sense of shared identity, mutual understanding and areas of commonality needed to be established. In paper four I commented, "I began to wonder if the participants and myself hadn't disconnected from any racial awareness in the service of something more fundamental. Perhaps, this detachment allowed for the kind of engagement where I could function not only as a researcher but as a 'grandmaternal figure' who was interested in learning about the mothers and their babies. The only aspect of my identity that both women asked me about was whether I too was a mother. They seemed comforted by the fact that I was, relieved about the identities that we did share – that of being a woman and a mother" (Canin, in press, p. 8).

This finding is important for researchers wanting to engage with vulnerable mothers to hold in mind. Areas of commonality or shared experience may be an avenue through which clinicians or researchers can attempt to connect with mothers. This may have implications for working with mothers who are experienced as difficult or hard to engage. However, I would argue that the process needs to be authentic, requiring the researcher to exhibit a genuine interest as well as a willingness to shift boundaries and roles in the service of offering mothers a human connection. This is in keeping with Holmes (2017) who suggested that if the researcher only offers a "purely intellectual procedure then efforts at creating rapport are a sham, which at some level will be realized" (p. 713). Whilst needing careful reflection and evaluation, I believe that my flexibility as well as my willingness to demonstrate genuine care facilitated a deepened sense of trust and sharing. In paper four I commented, "I have come to believe that in environments saturated with trauma and vulnerability, the researcher's subjectivity and humanness cannot be separated. Professional boundaries and roles may need to be thoughtfully adjusted in the service of building trust and safety for participants; but also because one may be called upon to be a caring human being" (Canin, in press, p.14). The importance of 'grandmaternal' figures for mothers of premature infants is an area which appears to require more attention from researchers as well as clinicians.

6.5.2 Potent Countertransference

In paper four, I described the powerful and at times alarming descriptions given by psychoanalytic clinicians and observers working in hospital setting regarding their counter-transferential responses. Phrases like "fear and terror, debilitating anxiety, paralysis" (Canin, 2023, p.26), being in "contact with this misery" (Miller, 2001, p. 97) and "violence everywhere…illness and unbearable pain" (Simon, 2010, p. 168) have been used to describe the experience. Approaching this environment from a research perspective did not protect me from how evocative, and at times distressing, it is to interact with traumatised premature mother-baby dyads. In paper four, I reflected, ""When I began my research, I had not understood that attempting to 'grasp' my chosen community would leave me reeling and battling defences. I did not know it would impact me physically, causing powerful bodily reactions, whilst simultaneously challenging my ability to think" (Canin, in press, p. 14).

And yet, I would argue that my lived experience, though difficult, offered me crucial insights that I would otherwise not have had access to. My countertransferential responses not only offered me a critical window into understanding both maternal as well as infant experience, but they facilitated my ability to understand how I might need to interact with these vulnerable mothers. For example, countertransference responses assisted me in understanding Betty, the mother I had experienced as being the most difficult. This allowed me to respond to her with more empathy and understanding. In addition, my countertransference allowed me access to a collective unconscious experience within the hospital unit, which was extremely beneficial to my understanding of the setting. In paper four, I explained that "tapping into the scenic understanding of a particular context is believed to allow researchers access to a form of 'unsymbolized socio-cultural knowledge' that needs to be experienced in order to be understood" (Canin, in press, p.6) . I am convinced that my countertransference experience was essential to the research process, allowing me a profound understanding of what premature infants and their mothers need to endure.

6..3 Reflexivity and Supervision

The importance of engaging in a careful process of reflexivity when utilising countertransference responses is emphasised in the literature (Harvey, 2017; Finlay, 2002; Pillow, 2003). Given the evocative nature of the environment, this assertion is particularly relevant when researching prematurity. In paper four, I emphasised how, "this type of research can only be conducted in conjunction with a rigorous process of reflexivity in order to ensure that the research is responsible as well as rich in content" (Canin, in press, p. 14). The significance of countertransference for my study is highlighted in the previous section. However, I needed to consider my psychological contribution throughout the research process. Harvey (2017) highlighted the presence of an "ongoing resonance within and between the conscious, preconscious and unconscious levels of both participant and researcher" (p. 314). Countertransference was mutually created by my internal world (and unresolved conflicts) as well as those of my participants. This was evidenced most clearly in my countertransferential response towards Betty. In paper four, I illuminated how an unusual reaction that I had had towards her allowed for an additional layer of understanding, whilst also being representative of my own unresolved conflicts and identifications.

A process of reflexivity requires support from skilled and compassionate supervisors. These structures need to put in place prior to beginning the research. This is in keeping with several authors who emphasise how critical supervision is for remaining “emotionally receptive and available” (Canin, 2023, p. 31). This support is essential for creating the necessary space for thinking, reflection as well as the processing of overwhelming, and at times unmetabolized emotions (Hollway, 2016).

Chapter 7: Conclusion

7.1 Limitations of the study

There are several potential limitations with regard to the results of this study. The first set of limitations involves the methodological choices. The study adopted a case study methodology with a small sample of participants. It is acknowledged that this methodology has limited generalisability (Simons, 2020). This is further limited by the chosen psychoanalytic methodology which requires in-depth analysis. However, it is important to emphasise that the aim of the study was not to generate data that could be applied to a wider population. Rather the study aimed to produce in-depth, nuanced data which allowed for detail and complexity, that could inform ways of thinking about other mother-infant dyads. In addition, the small sample size still allowed for the documentation of observable patterns across participants. As such, I contend that the research design was ideal considering the purposes of the study.

The use of psychoanalytic interviews is also believed to limit the generalisability as well as the objectivity of the study (Midgley, 2006). The subjectivity of the researcher can also be regarded as a limitation of the study, potentially distorting the results of the study (Frosch & Baraister, 2008). This potential pitfall was taken seriously in the study and a process of reflexivity was followed in order to address this concern. This methodology is widely used in psychoanalytically oriented qualitative research in order to generate responsible research findings. Further, when acknowledged and addressed subjectivity can be a strength in the research rather than a limitation (Harvey, 2017; Finlay, 2002; Pillow, 2003). This study went to great lengths to evaluate the researchers reflexivity, and further was undertaken under the guidance of skilled supervisors.

Despite this, the potential impact of socio-economic and race differences between the researcher and the participants may also have limited or negatively impacted on the study. All of the participants are from working class families, and two of them were black women. My identity as a white psychologist with a higher educational level and average monthly household income than the participants may have distorted the results in some way. Attempts were made to engage extensively with how these factors might have influenced

the results. Despite all efforts made, it is possible that there were effects that were not recognised or taken into account.

Lastly, there are several limitations relating to the transferability of the study. The study focused on the experiences of premature infants and their mothers in neonatal high care ward. However, there were several features of this hospital unit that were unusual in hospital settings. This included the level of involvement and responsibility that mothers assumed in taking care of their infants at Rahima Moosa. Mothers and infants were given ample opportunity to interact and bond. This is often not the case in hospital settings. Further research is needed to explore the impact of parent-infant separation which is highlighted in the literature as being one of the main risk factors for maternal mental health as well as the premature mother-infant relationship (Porter, et al., 2020). Nevertheless, the study does highlight the protective effect of being able to take care of their infants for maternal states of mind. This has implications for recommendations regarding intervention.

7.2 Recommendations for Future Research

One of the most important contributions made by this study to the field of prematurity may be the introduction of key areas that require further research and engagement. This study contends that the field of psychoanalysis in conjunction with developmental psychology has much to offer the topic of prematurity. This thesis contends that any further psychoanalytically oriented research endeavours into subjective maternal experiences, a neglected topic within psychoanalytic literature, is likely to yield rich data. In terms of future research into the field of prematurity specifically, it would be useful to extend the current findings by further examining the use of dissociative defences in mothers of premature infants. Further research exploring the intersubjectivity between premature infant and mother would also be valuable. It is recommended that this be undertaken by both psychoanalytic and developmental research. More research is necessary regarding the effectiveness of mother-infant interventions that reinforce maternal states of mind, address dissociation and support mother-infant intersubjectivity. This would assist in mitigating many of the risks associated with prematurity. Gaps that were identified by the scoping review that were beyond the scope of this study include the experience of prematurity for siblings as well as for fathers. The need to address fatherhood and the paternal experience more broadly is emphasised in the literature (Davies, 2014; Freeman, 2008) in order to

address “the deep-seated reticence for parenting to be conceptualized as a significant dimension of male experience” (Freeman, 2008, p. 117). Further explorations in multi-cultural settings, locally as well as globally would also be important.

7.3 In Closing

The aim of the present study has been to enhance understandings of in-hospital experiences of premature infants and their mothers within the context of a South African public hospital Neonatal High Care Unit. The topic of prematurity has been surprisingly under-researched in the psychoanalytic literature, particularly taking into account the prevalence of premature birth as well as the associated risks. The study situates itself at the intersection between psychoanalysis and developmental psychology, in particular attachment theory, infant research and intersubjectivity. These fields converge with the latest trauma research as explored in developmental psychoanalysis. Key findings of study include the relevance of trauma and, in particular, the defence mechanism of dissociation in determining the mental states of ‘premature’ mothers. In addition, previous relational trauma and how this was mediated is highly predictive of the mother’s use of dissociation as well as the extent to which she is traumatised by the experience of prematurity. The study reiterated the notion that premature birth is disruptive of the attunement in mother-baby dyads with maternal variables being more significant than infant variables. The interactive potential of premature infants regardless of their medical vulnerability is also evidenced.

7.4 Reference Lists

The reference lists for the thesis and for each paper are provided below.

Reference list - thesis

Aagaard, H., & Hall, E. O. (2008). Mothers' experiences of having a preterm infant in the neonatal care unit: a meta-synthesis. *Journal of Pediatric Nursing*, 23(3), e26-e36.

Abraham, K. (1907). ‘The Experience of Sexual Trauma as a Form of Sexual Activity.’ In *Selected Papers on Psychoanalysis*, London: Maresfield Library, Karnac.

Ainsworth, M. D. (1964). Patterns of attachment behavior shown by the infant in interaction with his mother. *Merrill-Palmer Quarterly of Behavior and Development*, 10(1), 51-58.

Ainsworth, M. D. S. (1969). Maternal sensitivity scales. *Power*, 6, 1379-1388.

Ainsworth, M., Bell, S. M., & Stayton, D. J. (1971). Individual differences in strange-situation behavior of one-year-olds. In H. R. Schaffer (Ed.) *The origins of human social relations*. (pp. 17-58).Academic Press.

Ainsworth, M. (1979). Infant-mother attachment. *American Psychologist*, 34(10), 932–937.

Alkozei, A., McMahon, E., & Lahav, A. (2014). Stress levels and depressive symptoms in NICU mothers in the early postpartum period. *The Journal of Maternal-Fetal & Neonatal Medicine*, 27(17), 1738-1743.

Als, H. (1986). Synactive model of neonatal behavioral organization: Framework for the assessment and support of neurobehavioral development of the premature infant and his parents in the environment of the neonatal intensive care unit. In J.K. Sweeney Ed , *The high-risk neonate: Development therapy perspectives* pp. 3–55. New York: the Haworth Press.

American Psychiatric Association. (2013). *The Diagnostic and Statistical Manual of Mental Disorders (5th Edition).* American Psychiatric Association.

Amez, S. & Botero, H. (2000). The mother, the baby, the pouch and the observer. Feeding difficulties of an infant on the kangaroo mother programme. *Infant Observation*, 3(2),33–45.

Anderson, P. J., Doyle, L. W., & Victorian Infant Collaborative Study Group. (2004). Executive functioning in school-aged children who were born very preterm or with extremely low birth weight in the 1990s. *Pediatrics*, 114(1), 50-57.

Anscombe, E. (2008). The dichotomy of containing trauma amidst joy: New life and a neonatal death: the experience of working with the parents of twins on the NICU. *Infant Observation*, 11(2), 147-160.

Anzieu-Premmereur, C. (2019). Issues in Psychoanalytic Education: Infant Research and it's Application to Psychoanalysis. *American Psychoanalyst*, 53, (1).

Arksey, H. & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32.

Aron, L. (1991). The Patient's Experience of the Analyst's Subjectivity. *Psychoanalytic Dialogues,* 1, 29-51.

Bailey, T. D., & Brand, B. L. (2017). Traumatic dissociation: Theory, research, and treatment. *Clinical Psychology: Science and Practice*, 24(2), 170–185.

Bain, K., Gericke, R., & Harvey, C. (2010). Bonding experiences in a South African Community Hospital: Kangaroo mother care ward. *Attachment*, 4(3), 235-262.

Balbernie, R. (2007). The move to intersubjectivity: A clinical and conceptual shift of perspective. *Journal of Child Psychotherapy*, 33(3), 308-324.

Balint, M. (1969). 'Trauma and object relationship.' *International Journal of Psycho-Analysis*, 50, 429.

Baradon, T. (2005). "What is genuine maternal love?" Clinical considerations and technique in psychoanalytic parent-infant psychotherapy. *The Psychoanalytic Study of the Child*, 60, 47-73.

Baradon, T. (Ed.). (2009). Relational trauma in infancy: Psychoanalytic, attachment and neuropsychological contributions to parent-infant psychotherapy.

Baraitser, L. (2009). *Maternal encounters: The ethics of interruption*. London, UK: Routledge.

Beckwith, L., & Cohen, S. (1978). Premature birth: Hazardous obstetrical and postnatal events as related to caregiver-infant behavior. *Infant Behavior and Development*, 1, 403–412.

Beebe, B. (1982). Micro-timing in mother-infant communication. In M. Key (Ed.) *Nonverbal communication today: Current research*, 169-195. New York: Mouton.

Beebe, B., & Lachmann, F. (2003). The relational turn in psychoanalysis: A dyadic systems view from infant research. *Contemporary Psychoanalysis*, 39(3), 379-409.

Beebe, B., Knoblauch, S., Rustin, J., & Sorter, D. (2003). Introduction: A systems view. *Psychoanalytic Dialogues*, 13(6), 743-775.

Beebe, B., Jaffe, J., Markese, S., Buck, K., Chen, H., Cohen, P., Bahrick, L., Andrews, H. and Feldstein, S. (2010). The origins of 12-month attachment: A microanalysis of 4-month mother–infant interaction. *Attachment & Human Development*, 12(1-2), pp.3-141.

Bekhet, A. K., & Zauszniewski, J. A. (2012). Methodological triangulation: An approach to understanding data. *Nurse Researcher*, 20(2).

Belsky, J. (2002). Developmental origins of attachment styles. *Attachment & Human Development,* 4(2), 166-170.

Belsky, J., Rovine, M., & Taylor, G. (1984). The Pennsylvania Infant and Family Development Project III: The origins of individual differences in infant-mother attachment. *Child Development*, 55, 718-728.

Benjamin, J. (1990). An outline of intersubjectivity: The development of recognition. *Psychoanalytic Psychology*, 7(S), 33.

Benjamin, J. (1988). *The bonds of love: Psychoanalysis, feminism, and the problem of domination.* New York, NY: Pantheon.

Benjamin, J. (1995). *Like subjects, love objects: Essays on recognition and difference.* Cambridge, MA: Harvard University Press

Benoit, D., Parker, K. C., & Zeanah, C. H. (1997). Mothers' representations of their infants assessed prenatally: Stability and association with infants' attachment classifications. *Journal of Child Psychology and Psychiatry*, 38(3), 307-313.

Benoit, D., Zeanah, C. H., Parker, K. C., Nicholson, E., & Coolbear, J. (1997). "Working model of the child interview": Infant clinical status related to maternal perceptions. *Infant Mental Health Journal*, 18(1), 107-121.

Bentovim, A. (1979). Child development research findings and psychoanalytic theory – an integrative critique. *In The First Year of Life: Psychological and Medical Implications of Early Experience*. ed.Schaffer, & Dunn. Chichester: Wiley.

Berger, L. (2001). Inside out: Narrative Autoethnography as a path toward rapport. *Qualitative Inquiry* (7), 504-518.

Berthelot, N., Ensink, K., Bernazzani, O., Normandin, L., Luyten, P., & Fonagy, P. (2015). Intergenerational transmission of attachment in abused and neglected mothers: The role of trauma-specific reflective functioning. *Infant Mental Health Journal*, 36(2), 200-212.

Bick, E. (1964). Notes on infant observation in psycho-analytic training. *International Journal of Psycho-Analysis,* 45, 558-566.

Bick, E. (1986). Further considerations on the function of the skin in early object relations: Findings from infant observation. *British Journal of Psychotherapy*, 2(4), 292–299.

Bion W.R. (1962). *Learning from experience*. London: Heinemann.

Blessing, D. (2006). Shall I dare to come alive: Long term effects of painful beginnings. *Infant Observation*, 9(1), 53-64.

Birksted-Breen, D. (2018). The experience of having a baby: a developmental view 1. In Spilt Milk (pp. 17-27). Routledge.

Bohleber, W. (2018). *Destructiveness, intersubjectivity and trauma: The identity crisis of modern psychoanalysis.* Routledge.

Borghini, A., Pierrehumbert, B., Miljkovitch, R., Muller-Nix, C., Forcada-Guex, M., & Ansermet, F. (2006). Mother's attachment representations of their premature infant at 6 and 18 months after birth. *Infant Mental Health Journal*, 27(5), 494-508.

Botero, H.; & Sanders, C. (2014). Mother-baby relationship: a loving next for mental health – observing 'kangaroo' infants. *Infant Observation*, 17(3), 215-232.

Boticelli, S. (2004). The politics of relational psychoanalysis. *Psychoanalytic Dialogues*, 14, 635-651.

Bowlby, J. (I980). *Attachment and loss, Vol. 3: Loss, sadness and depression*. New York: Basic Books.

Bowlby, J. (1988). *A Secure Base*. New York: Basic Books.

Boyce, L. K., Cook, G. A., Simonsmeier, V., & Hendershot, S. M. (2015). Academic outcomes of very low birth weight infants: The influence of mother–child relationships. *Infant Mental Health Journal*, 36(2), 156-166.

Boyer, D., & Sorenson, P. (1999). Adapting the Tavistock model of infant observation to work in the neonatal intensive care unit. *Psychoanalytic Inquiry*, 19:2, 146-159.

Braarud, H. C., Slinning, K., Moe, V., Smith, L., Vannebo, U. T., Guedeney, A., & Heimann, M. (2013). Relation between social withdrawal symptoms in full-term and premature infants and depressive symptoms in mothers: A longitudinal study. *Infant Mental Health Journal*, 34(6), 532-541.

Brandon, D. H., Tully, K. P., Silva, S. G., Malcolm, W. F., Murtha, A. P., Turner, B. S., & Holditch-Davis, D. (2011). Emotional responses of mothers of late-preterm and term infants. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 40(6), 719-731.

Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3 (2), 77-101.

Brazelton, T. B., & Cramer, B. G. (1990). *The earliest relationship: Parents, infants, and the drama of early attachment.* Addison-Wesley/Addison Wesley Longman.

Brickman, C. (2018). *Race in psychoanalysis. Aboriginal populations in the mind*. London: Routledge.

Brisch, K. H., Bechinger, D., Betzler, S., Heinemann, H., Kachele, H., Pohlandt, F., Schmucker, G., & Buchheim, A. (2005). Attachment quality in very low- birthweight premature infants in relation to maternal attachment representations and neurological development. *Parenting: Science and Practice,* 5(4): 11-31.

Bromberg, P. M. (2009). Multiple self-states, the relational mind, and dissociation: A psychoanalytic perspective. In P. F. Dell & J. A. O'Neil (Eds.), *Dissociation and the dissociative disorders: DSM-V and beyond* (pp. 637–652). Routledge/Taylor &
Francis Group.

Bromberg, P. M., & Schore, A. N. (2012). *The shadow of the tsunami: And the growth of the relational mind*. Routledge.

Bronson, M.B. (2000). *Self-regulation in early childhood: Nature and Nurture*. New York,NY: Guilford

Browne, J. V., & Talmi, A. (2005). Family-based intervention to enhance infant–parent relationships in the neonatal intensive care unit. *Journal of Pediatric Psychology*, 30(8), 667-677.

Brunson, E., Thierry, A., Ligier, F., Vulliez-Coady, L., Novo, A., Rolland, A. C., & Eutrope, J. (2021). Prevalences and predictive factors of maternal trauma through 18 months after premature birth: A longitudinal, observational and descriptive study. *Plos one*, 16(2), e0246758.

Bruschweiler-Stern, N. (2009). The neonatal moment of meeting—Building the dialogue, strengthening the bond. *Child and Adolescent Psychiatric Clinics of North America*, 18(3), 533-544.

Callahan, J.L., & Hynan, M.T. (2002). Identifying mothers at risk for postnatal emotional distress: further evidence for the validity of perinatal postratumatic stress disorder questionnaire. *Journal of Perinatology*, 22(6), 448-454.

Canin, N. (2023). Premature infancy: a 25-year scoping review of psychoanalytic journal articles. *Psychoanalytic Psychotherapy*, 37(1), 4-40.

Canin, N., & Bain, K. (2023a). Intersubjectivity in Premature Infant-Mother Dyads: Maternal States of Mind and Premature Infant Responsivity. *Psychoanalytic Social Work*, 1-23.

Canin, N., & Bain, K. (2023b). The trauma of premature birth for mothers with infants in neonatal high care: The role of dissociation due to traumatic childhood experience*. International Journal of Applied Psychoanalytic Studies*, 20(1), 106-119.

Canin, N. (In Press). Exploring countertransference in psychoanalytic research: Reflecting on the journey of being a researcher, a psychotherapist, a mother and a human being in a neonatal high-care unit. *Psychoanalytic Practice*.

Cantle, A. (2013). Alleviating the impact of stress and trauma in the neonatal unit and beyond. *Infant Observation*, 16(3), 257-269.

Caplan, G., Mason, E.A., & Kaplan, D.M. 1965 . Four studies of crisis in parents of prematures. *Community Mental Health Journal*, I, 149–161.

Cardefia, E. (1994). The domain of dissociation. *Dissociation: Clinical and Theoretical Perspectives*, 15-31.

Carter, J. D., Mulder, R. T., & Darlow, B. A. (2007). Parental stress in the NICU: The influence of personality, psychological, pregnancy and family factors. *Personality and Mental Health,* 1(1), 40-50.

Cartwright, D. (2004). The psychoanalytic research interview: Preliminary suggestions. *Journal of the American Psychoanalytic Association*, 52(1), 209–242.

Cassiano, R. G., Gaspardo, C. M., & Linhares, M. B. M. (2016). Prematurity, neonatal health status, and later child behavioral/emotional problems: A systematic review. *Infant Mental Health Journal,* 37(3), 274-288.

Castro, E. (2011). Observing a premature baby: the case of Elicier. *Infant Observation*: 14(3).

Chefetz, R. A. (2013). A Fluctuating Capacity to Mentalize: Affect Scripts and Self-State Systems as (not so)"Strange Attractors": A Discussion of Margy Sperry's "Putting our Heads Together: Mentalizing Systems". *Psychoanalytic Dialogues*, 23(6), 708-714.

Chi Luong, K., Long Nguyen, T., Huynh Thi, D. H., Carrara, H. P., & Bergman, N. J. (2016). Newly born low birthweight infants stabilise better in skin-to-skin contact than when separated from their mothers: a randomised controlled trial. *Acta Paediatrica*, 105(4), 381-390.

Chopik, W. J., Moors, A. C., & Edelstein, R. S. (2014). Maternal nurturance predicts decreases in attachment avoidance in emerging adulthood*. Journal of Research in Personality*, 53, 47-53.

Clarke, S. (2002). Learning from experience: psycho-social research methods in the social sciences. *Qualitative Research*, 2(2), 173-194.

Clarke, S. (2006). Theory and Practice: Psychoanalytic Sociology as Psycho-social Studies. *Sociology*, 40(6), 1153 -1169.

Cohen, M. (2003). *Sent before my time: a child psychotherapist's view of life on a neonatal intensive care unit.* Karnac Books.

Contratto S. (2002) A feminist critique of attachment theory. In: Ballou MB, Brown LS, editors. (eds) *Rethinking Mental Health and Disorder: Feminist Perspectives*, New York: Guilford Press, pp. 29–47.

Cope, D. G. (2014). *Methods and meanings: Credibility and trustworthiness of qualitative research.* Oncology Nursing Forum, 41(1), 89-91.

Corbin, J., & Morse, J. M. (2003). The unstructured interactive interview: Issues of reciprocity and risks when dealing with sensitive topics. *Qualitative Inquiry*, 9(3), 335-354.

Cox, S. M., Hopkins, J., & Hans, S. L. (2000). Attachment in preterm infants and their mothers: Neonatal risk status and maternal representations. *Infant Mental Health Journal*, 38(2), 306-317.

Cozolino, L. (2014). *The Neuroscience of Human Relationships: Attachment and the Developing Social Brain* (2nded.).WW Norton & Company.

Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches.* Sage publications.

Cronin, C.M.G., Shapiro, C.R., Casiro, O.G., & Cheang, M.S. (1995). The impact of very low-birthweight infants on the family is long lasting. A matched control study. *Archives of Pediatrics and Adolescent Medicine*, 149, 151–158.

Crouch, M., & McKenzie, H. (2006). The logic of small samples in interview-based qualitative research. *Social Science Information*, 45(4), 483-499.

Crowell, J. A., & Owens, G. (1996). Current Relationship Interview and scoring system. Unpublished manuscript, State University of New York at Stony Brook.

Crnic, K.A., Greenberg, M.T., Ragozin, A.S., Robinson, N.M., & Basham, R.B. (1983). Effects of stress and social support on mothers and premature and full-term infants. *Child Development*, 54, 209–217.

Datler, W., Datler, M., & Funder, A. (2010). Struggling against a feeling of becoming lost: A young boy's painful transition to day care. *Infant Observation*, 13(1), 65-87.

Datler, W., Trunkenpolz, K., & Lazar, R. A. (2009). An exploration of the quality of life in nursing homes: the use of single case and organisational observation in a research project. *Infant Observation*, 12(1), 63-82.

Davis, L., Edwards, H., Mohay, H., & Wollin, J. (2003). The impact of very premature birth on the psychological health of mothers. *Early Human Development*, 73(1-2), 61-70.

Davis, J.T. (2001). Revising psychoanalytic interpretations of the past: an examination of declarative and nondeclarative memory processes. *International Journal of Psychoanalysis*, 82, 449-462.

Dawson, N. (2021). *An Exploration of Maternal Sensitivity, Culture and Context in Alexandra Township*. Doctoral Dissertation. University of the Witwatersrand.

Davies, N. (2014). The elusive paternal function. Clincicians' perspectives. *Psycho-Analytic Psychotherapy in South Africa*, 22(2), 19-52.

Denzin, N.K. & Lincoln, Y.S. (1998). *Collecting and Interpreting Qualitative Materials*. USA: Sage Publications.

Demby, G. (2010). Observation as an adjuct to psychotherapy-when a patient delivers prematurely. *Infant Observation*, 13(3), 269–281.

DeMier, R. L., Hynan, M. T., Harris, H. B., & Manniello, R. L. (1996). Perinatal stressors as predictors of symptoms of posttraumatic stress in mothers of infants at high risk. *Journal of Perinatology*, 16(4), 276-280.

Dias, C. C., & Figueiredo, B. (2020). Mother's prenatal and postpartum depression symptoms and infant's sleep problems at 6 months. *Infant Mental Health Journal,* 41(5), 614-627.

Dickson-Swift, V., James, E. L., Kippen, S., & Liamputtong, P. (2007). Doing sensitive research: what challenges do qualitative researchers face? *Qualitative Research*, 7(3), 327-353.

Diehl, M., Elnick, A. B., Bourbeau, L. S., & Labouvie-Vief, G. (1998). Adult attachment styles: their relations to family context and personality. *Journal of Personality and Social Psychology*, 74(6), 1656.

Diefenbach,T.(2009).Are case studies more than sophisticated storytelling?: Methodological problems of qualitative empirical research mainly based on semi-structured interviews. *Quality & Quantity*, 43(6),875.

Dubois-Comtois, K., Cyr, C., & Moss, E. (2011). Attachment behavior and mother-child conversations as predictors of attachment representations in middle childhood: A longitudinal study. *Attachment & Human Development*, 13(4), 335-357.

Durrheim, K., Kelly, K., & Terre Blanche, M. (2006). Qualitative research. *Research in practice: Applied methods for the social sciences,* 271-284.

Duschinsky, R., Greco, M., & Solomon, J. (2015). The politics of attachment: Lines of flight with Bowlby, Deleuze and Guattari. *Theory, Culture & Society*, 32(7-8), 173-195.

Eagle, M. (2003). *From classical to contemporary psychoanalysis: A critique and integration* (Vol. 70). Taylor & Francis.

Eagle, M. (1997) Attachment and psychoanalysis. *British Journal of Medical Psychology*, 70: 217-229.

Eagle, G., Hayes, G., & Sibanda, T. (1999). Standpoint methodologies: Marxist, feminist and black scholarship perspectives. *Research in practice: Applied methods for the social sciences*, 438-461.

Eagle, M. (2003). The postmodern turn in psychoanalysis: A critique*. Psychoanalytic Psychology*, 20(3), 411-424.

Easterbrooks, M. A. (1989). Quality of attachment to mother and to father: effects of perinatal risk status. *Child Development*, 60: 825-830.

Edwards, A. (2007). Collaborative versus adversarial stances in scientific discourse: Implications for the role of systematic case studies in the development of evidence based practice in psychotherapy. *Pragmatic Case Studies in Psychotherapy*, 3(2), 6-34

Elfer, P. (2012). Psychoanalytic methods of observastion as a research tool for exploring young children's nursery experience. *International Journal of Social Research Methodology*, 15:3, 225-238.

Eliezer, K., & Peled, E. (2023). Intertextual psychoanalytic-intersubjective analysis in qualitative research:' can two walk together, except they be agreed?'. *International Journal of Social Research Methodology*, 26(4), 425-437.

Elliott, H., Ryan, J., & Hollway, W. (2012). Research encounters, reflexivity and supervision. *International Journal of Social Research Methodology*, 15(5), 433-444.

Elliott, R., Fischer, C. T., & Rennie, D. L. (1999). Evolving guidelines for publication of qualitative research studies in psychology and related fields. *British Journal of Clinical Psychology*, 38(3), 215-229.

Ellis, C., & Bochner, A. P. (Eds.). (1996). *Composing ethnography: Alternative forms of qualitative writing* (Vol. 1). Rowman Altamira.

Ensink, K., Bégin, M., Normandin, L., Godbout, N., & Fonagy, P. (2017). Mentalization and dissociation in the context of trauma: Implications for child psychopathology. *Journal of Trauma & Dissociation*, 18(1), 11-30.

Esprey, Y. M. (2017). The problem of thinking in black and white: Race in the South African clinical dyad. *Psychoanalytic Dialogues*, 27(1), 20-35.

Fahie, D. (2014). Doing sensitive research sensitively: Ethical and methodological issues in researching workplace bullying. *International Journal of Qualitative Methods*, 13(1), 19-36.

Farroni,T., Massaccesi, S., Pividori, D., and Johnson, M.H. (2004). Gaze following in newborns. *Infancy*, 5,39-60.

Feldman, R. (2007). Parent–infant synchrony and the construction of shared timing; physiological precursors, developmental outcomes, and risk conditions. *Journal of Child Psychology and Psychiatry*, 48(3-4), 329-354.

Feldman, R., Granat, A. D. I., Pariente, C., Kanety, H., Kuint, J., & Gilboa-Schechtman, E. (2009). Maternal depression and anxiety across the postpartum year and infant social engagement, fear regulation, and stress reactivity. *Journal of the American Academy of Child & Adolescent Psychiatry*, 48(9), 919-927.

Feldman, R., Weller, A., Leckman, J. F., Kuint, J., & Eidelman, A. I. (1999). The nature of the mother's tie to her infant: Maternal bonding under conditions of proximity, separation, and potential loss. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 40(6), 929-939.

Feldman, R., Weller, A., Leckman, J.F., Kuint, J., & Eidelman, A.I. (1999). The nature of the mother's tie to her infant: Maternal bonding under conditions of proximity, separation, and potential loss. Journal of the Child Psychology and Psychiatry, 40(6), 929–939

Ferenczi, S. (1933). 'Confusion of Tongues Between Adults and the Child' in *Final Contributions to the Problems and Methods of Psychoanalysis,* London: Hogarth Press.

Flick, U. (2002). *An Introduction to Qualitative Research*, 2nd. edn. Thousand Oaks, CA: Sage.

Flick, U. (2004). *Triangulation in qualitative research. A companion to qualitative research*, 3, 178-183.

Field, T.M., Woodson, R., Greenberg, R., & Cohen, C. (1982). Discrimination and imitation of facial expressions in newborns. *Science*, 218, 179-181.

Field, T. (1994). The effects of mother's physical and emotional unavailability on emotion regulation. *Monographs of the society for research in child development*, 208-227.

Finlay, L. (2002). Negotiating the swamp: the opportunity and challenge of reflexivity in research practice. *Qualitative Research*, 2(2), 209-230.

Fonagy, P., Higgit, A. C.; Moran, G. S.; Steele, M., & Steele, H.(1991). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. *Infant Mental Health Journal*, 12, 201-218.

Fonagy, P., Target, M., Steele, H., & Steele, M. (1998). Reflective-functioning manual version 5 for application to adult attachment interviews.

Fonagy, P. (2001). *Attachment Theory and Psychoanalysis*. London: Karnac.

Fonagy, P., & Target, M. (2007). The rooting of the mind in the body: New links between attachment theory and psychoanalytic thought. *Journal of the American Psychoanalytic Association*, 55(2), 411-456.

Fonagy, P. (2015). Mutual Regulation, Mentalization and Therapeutic Action: A Reflection on the Contributions of Ed Tronick to Developmental and Psychotherapeutic Thinking. *Psychoanalytic Inquiry*, 35: 355-369.

Fonagy, P., Gergely, G., & Jurist, E. L. (Eds.). (2018). *Affect regulation, mentalization and the development of the self.* Routledge.

Forcada-Guex, M., Borghini, A., Pierrehumbert, B., Ansermet, F., & Muller-Nix, C. (2011). Prematurity, maternal posttraumatic stress and consequences on the mother–infant relationship. *Early Human Development*, 87(1), 21-26.

Fossey, E., Harvey, C., McDermott, F., & Davidson, L. (2002). Understanding and evaluating qualitative research. *Australian and New Zealand Journal of Psychiatry*, 36(6), 717-732.

Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery: A psychoanalytic approach to the problems of impaired infant-mother relationships. *Journal of the American Academy of Child Psychiatry*, 14(3), 387-421.

Fraley, R. C., & Shaver, P. R. (2000). Adult romantic attachment: The- oretical developments, emerging controversies, and unanswered questions. *Review of General Psychology*, 4, 132-154.

Fraley, R. C., & Roisman, G. I. (2019). The development of adult attachment styles: Four lessons. *Current Opinion in Psychology*, 25, 26-30.

Fraley, R. C. (2002). Attachment stability from infancy to adult- hood: Meta-analysis and dynamic modeling of developmental mechanisms. *Personality and Social Psychology Review*, 6, 123-151.

Franchi, V., & Toth, A. (2014). Can you read the writing on the wall: what needs to happen for a researcher to see what she is observing? *Infant Observation*, 17(2), 126-139.

Freeman, T. (2008). Psychoanalytic concepts of fatherhood: Patriarchal paradoxes and the presence of an absent authority. *Studies in Gender and Sexuality*, 9(2), 113-139.
Fromm, E. (1994). *The Art of Being*. London: Continuum.

Freud. S. (1893). 'On the Psychical Mechanism of Hysterical Phenomena: A Lecture.' *Standard Edition*, vol 3.

Freud, S. (1920). Beyond the Pleasure Principle. SE, 18, 7-66.

Freud, S. (1933). New introductory lectures on psycho-analysis. In J. Strachey (Ed. & Trans.), The standard edition of the complete works of Sigmund Freud (Vol. XXII, pp.1-182). London, UK: The Hogarth Press.

Froggett, L., & Hollway, W. (2010). Psychosocial research analysis and scenic understanding. *Psychoanalysis, Culture & Society*, 15, 281-301.

Frosh, S., & Baraitser, L. (2008). Psychoanalysis and psychosocial studies. *Psychoanalysis, Culture & Society*, 13, 346-365.

Frosh, S., & Emerson, P. D. (2005). Interpretation and over-interpretation: disputing the meaning of texts. *Qualitative Research*, 5(3), 307-324.

Frosh, S., & Baraitser, L. (2008). Psychoanalysis and psychosocial studies. *Psychoanalysis, Culture & Society*, 13, 346-365.

Fusch, D. & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research.

Gabbard, G. O., & Hobday, G. S. (2012). A psychoanalytic perspective on ethics, self-deception and the corrupt physician. *British Journal of Psychotherapy*, 28(2), 235-248.

Gair, S. (2012). Feeling their stories: Contemplating empathy, insider/outsider positionings, and enriching qualitative research. *Qualitative Health Research*, 22(1), 134-143.

Gangi, S., Dente, D., Bacchio, E., Giampietro, S., Terrin, G., & De Curtis, M. (2013). Posttraumatic stress disorder in parents of premature birth neonates. *Procedia-Social and Behavioral Sciences*, 82, 882-885.

Garland, C. (1998). Thinking about trauma. In C. Garland (Ed.), *Understanding trauma: A psychoanalytical approach.* Duckworth.

Gemignani, M. (2011). Between researcher and researched: An introduction to countertransference in qualitative inquiry. *Qualitative Inquiry*, 17(8), 701-708.

Goldberg, S., Perrotta, M., Minde, K., & Corter, C. (1986). Maternal behaviour and attachment in low-birth-weight twins and singletons. *Child Development*, 57: 34- 46.

Goldberg, S., & DiVitto, B. (1995). Parenting children born preterm. In: M. H. Bornstein (Ed.), *Handbook of Parenting, Volume* 1. Mahwah, NJ: Lawrence Erlbaum

George, C., Kaplan, N., & Main, M. (1985). *The Adult Attachment Interview.* Unpublished manuscript, University of California, Berkeley.

George, C., Main, M., & Kaplan, N. (1996). Adult attachment interview. *Interpersona: An International Journal on Personal Relationships.*

Goldberg, S., Perrotta, M., Minde, K., & Corter, C. (1986). Maternal behavior and attachment in low-birth-weight twins and singletons. *Child Development*, 34-46.

González-Serrano, F., Lasa, A., Hernanz, M., Tapia, X., Torres, M., Castro, C., & Ibañez, B. (2012). Maternal attachment representations and the development of very low birth weight premature infants at two years of age. *Infant Mental Health Journal*, 33(5), 477-488.

Gorzilio, D. M., Garrido, E., Gaspardo, C. M., Martinez, F. E., & Linhares, M. B. M. (2015). Neurobehavioral development prior to term-age of preterm infants and acute stressful events during neonatal hospitalization. *Early Human Development*, 91(12), 769-775.

Gray, P. H., Edwards, D. M., O'Callaghan, M. J., Cuskelly, M., & Gibbons, K. (2013). Parenting stress in mothers of very preterm infants—Influence of development, temperament and maternal depression. *Early Human Development*, 89(9), 625-629.

Green, A. (2018). What kind of research for psychoanalysis?. *In Clinical and Observational Psychoanalytic Research* (pp. 21-26). Routledge.

Green, J., & Goldwyn, R. (2002). Annotation: attachment disorganisation and psychopathology: new findings in attachment research and their potential implications for developmental psychopathology in childhood. *Journal of Child Psychology and Psychiatry*, 43(7), 835-846.

Grice, H. P. (1975). Logic and conversation. *In Speech acts*(pp. 41-58). Brill.

Grunberg, V. A., Geller, P. A., & Patterson, C. A. (2020). Infant illness severity and family adjustment in the aftermath of NICU hospitalization. *Infant Mental Health Journal*, 41(3), 340-355.

Guedeney,A., Moe,V., M¨antymaa, M., Puura, K., & Tamminen, T. (2010). Social withdrawal in infancy. In V. Moe, K. Slinning, & M. Bergum. Hansen (Eds.), *Handbook of infant and toddlers mental health* (pp.561–573). Oslo, Norway: Gyldendal Akademisk.

Guedeney, A., Matthey, S., & Puura, K. (2013). Social withdrawal behavior in infancy: a history of the concept and a review of published studies using the Alarm Distress baby scale. *Infant Mental Health Journal*, 34(6), 516-531.

Guralnik, O. (2016). Sleeping dogs: Psychoanalysis and the socio-political. *Psychoanalytic*

Dialogues, 26(6), 655-663.

Gurevich, H. (2014). The return of dissociation as absence within absence. *The American Journal of Psychoanalysis*, 74(4), 313–321

Hammersley, M. (2006). Ethnography: problems and prospects. *Ethnography and Education*, 1(1), 3-14.

Hardy, N. (2005). A premature view: Observations in a SCBU. *Infant Observation*, 8(2), 169-176.

Harris, J. (2005). Critically ill babies in hospital–Considering the experience of mothers. *Infant Observation*, 8(3), 247-258.

Harris, A. (2011). The relational paradigm: Landscape and canon. *Journal of the American Psychoanalytic Association*., 59, 701-735.

Harris, R., Gibbs, D., Mangin-Heimos, K., & Pineda, R. (2018). Maternal mental health during the neonatal period: Relationships to the occupation of parenting. *Early Human Development*, 120, 31-39.

Harvey, C. (2017). The intricate process of psychoanalytic research: Encountering the intersubjective experience of the researcher–participant relationship. *British Journal of Psychotherapy*, 33(3), 312-327.

Harvey, C. (2015). Maternal subjectivity in mothering a child with a disability: A psychoanalytical perspective. *Agenda*, 29(2), 89-100.

Hawes, K., McGowan, E., O'Donnell, M., Tucker, R., & Vohr, B. (2016). Social emotional factors increase risk of postpartum depression in mothers of preterm infants. *The Journal of Pediatrics*, 179, 61-67.

Hayes, J. A. (2004). The inner world of the psychotherapist: A program of research on Countertransference. *Psychotherapy Research*, 14(1), 21-36.

Heale, R., & Forbes, D. (2013). Understanding triangulation in research. *Evidence-based Nursing*, 16(4), 98-98.

Heimann, P. (1950). On countertransference. *International Journal of Psychoanalysis*, 31, 81–84.

Henrich, J., Heine, S. J. & Norenzayan, A. (2010). The weirdest people in the world? *Behavioral and Brain Sciences*,33,61-135.

Herd, M., Whittingham, K., Sanders, M., Colditz, P., & Boyd, R. N.(2014). Efficacy of preventative parenting interventions for parents of preterm infants on later child behaviour: A systematic review and meta-analysis. *Infant Mental Health Journal*, 35(5), 630-641.

Hinton, D. E., & Lewis-Fernández, R. (2011). The cross-cultural validity of posttraumatic stress disorder: Implications for DSM-5. *Depression and Anxiety*, 28(9), 783-801

Hobson, R. P., Patrick, M., Crandell, L., GARCÍA–PÉREZ, R. O. S. A., & Lee, A. (2005). Personal relatedness and attachment in infants of mothers with borderline personality disorder. *Development and Psychopathology*, 17(2), 329-347.

Hollway, W., & Jefferson, T. (2000). *Doing qualitative research differently. Free association, narrative and the interview method.* Sage, London.

Hollway, W. (2001). From motherhood to maternal subjectivity. *International Journal of Critical Psychology*, 2, 13-38.

Hollway, W. (2012). Infant observation: opportunities, challenges threats. International *Journal of Infant Observation and its Applications*, 15:1, 21-23.

Hollway, W. (2013). Locating unconscious. *Organisational and Social Dynamics*, 13(1), 22-40.

Hollway, W. (2016) 'Emotional experience plus reflection: countertransference and reflexivity in research.' Special issue 'The creative use of self in research: explorations of

reflexivity and research relationships in psychotherapy.' *The Psychotherapist*, 62 (Spring) 19-21.

Holmes, J. (1997). Attachment, autonomy, intimacy: some clinical implications of attachment theory. *British Journal of Medical Psychology*, 70: 231-248.

Holmes, J. (2014). Countertransference in qualitative research: A critical appraisal. *Qualitative Research*.14(2). 166-183.

Ivey, G. (2009). The Case Study Method in Psychotherapy Research and Writing up Case Material for Publication. Department of Psychology, University of the Witwatersrand.

Jones, J. D., Cassidy, J., & Shaver, P. R. (2015). Parents' self-reported attachment styles: A review of links with parenting behaviors, emotions, and cognitions. *Personality and Social Psychology Review,* 19(1), 44-76.

Juffer, F., Bakermans-Kranenburg, M. J., & Van Ijzendoorn, M. H. (2005). Enhancing children's socioemotional development: A review of intervention studies. *Handbook of research methods in developmental science*, 213-232.

Kavanaugh, K., & Ayres, L. (1998). "Not as bad as it could have been": Assessing and mitigating harm during research on sensitive topics. *Research in Nursing and Health*, 21, 91-97.

Keller, H. (2018). Universality claim of attachment theory: Children's socioemotional development across cultures. *Proceedings of the National Academy of Sciences*, 115(45), 11414-11419.

Keller, H. (2016). Attachment. A pancultural need but a cultural construct. *Current Opinion in Psychology*, 8, 59-63.

Kelly, K. (2006). From encounter to text: Collecting data in qualitative research. In M. Terre Blanche, K. Durrheim, & D. Painter (Eds.), *Research in practice: Applied methods for the social sciences*(pp. 285-319). UCT Press.

Kernberg, O. F. (1996). A psychoanalytic theory of personality disorders. In J. F. Clarkin & M. Lenzenweger (Eds.), *Major Theories of Personality Disorder* (pp. 106–140). New York: Guilford Press.

Khan, M. (1963). The concept of cumulative trauma. In G Kohon (ed). *The British School of Psychoanalysis. The independent tradition*. London: Free Association books, p.117-135.

Kim, W. J., Lee, E., Kim, K. R., Namkoong, K., Park, E. S., & Rha, D. W. (2015). Progress of PTSD symptoms following birth: a prospective study in mothers of high-risk infants. *Journal of Perinatology*, 35(8), 575-579.

Klass, D. (1999). Developing a cross-cultural model of grief: The state of the field. OMEGA-*Journal of Death and Dying*, 39(3), 153-178.

Klein, M. (1935). A contribution to the psychogenesis of manic-depressive states. *International Journal of Psychoanalysis*, 16: 145-174

Klein, M. (1946). Notes of schizoid mechanisms. In M. Klein (Ed). *Envy and gratitude and other works 1946-1963,* (p.292-320). Vintage.

Klug, N. (2016). "The more things change, the more they stay the same: a case study of Westbury, Coronationville and Slovo Park informal settlement". Report 5. Spatial Transformation through Transit- Oriented Development in Johannesburg Research Report Series. South African Research Chair in Spatial Analysis and City Planning. University of the Witwatersrand: Johannesburg.

Koffman O. (2015) 'A healthier and more hopeful person': Illegitimacy, mental disorder and the improved prognosis of adolescent mothers. *Journal of Medical Humanities* 36: 113–126.

Koller, S. H., Raffaelli, M., & Carlo, G. (2012). Conducting research about sensitive subjects: The case of homeless youth. *Universitas Psychologica*, 11(1), 55-65.

Komaromy, C. (2020). The performance of researching sensitive issues. *Mortality*, 25(3), 364-377.

Korja, R., Savonlahti, E., Haataja, L., Lapinleimu, H., Manninen, H., Piha, J., Lehtonen, L. and PIPARI Study Group (2009). Attachment representations in mothers of preterm infants. Infant behavior and development, 32(3), pp.305-311.

Kraemer, S.B.; & Steinberg, Z. (2006). It's rarely cold in the NICU: The permeability of psychic space. *Psychoanalytic Dialogues*, 16(2), 165-179.

Kruger, L.M. (2006). Motherhood. In T. Shefer, F. Boonzaier, & P. Kiguwa (Eds.), *The gender of psychology* (pp. 182-195). Cape Town, SOUTH AFRICA: UCT Press.

Kruger, L. M. (2014). *Psychodynamic Psychotherapy in South Africa: Contexts, Theories and Applications.*

Kvale, S. (1996). *Interviews: An Introduction to Qualitative Research Interviewing*. London: Sage

Kvale, S., & Brinkmann, S. (2009). *Interviews. Learning the craft of qualitative research interviewing* (2nd ed.). Los Angeles, CA: Sage.

Lasiuk, G. C., Comeau, T., & Newburn-Cook, C. (2013). Unexpected: an interpretive description of parental traumas' associated with preterm birth. *BMC pregnancy and childbirth*, 13(1), 1-10.

Lau, R., & Morse, C. A. (2003). Stress experiences of parents with premature infants in a special care nursery. *Stress and Health: Journal of the International Society for the Investigation of Stress*, 19(2), 69-78.

Lazar, R. A., & Ermann, G. (1998). Learning to be: On the observation of a premature baby. *Infant Observation*, 2(1), 21-39.

Layton, L. (2006). Racial identities, racial enactments and normative unconscious processes. *Psychoanalytic Quarterly*, 75, 237-269.

Lee, H., Park, J. H., & Cho, H. (2022). Analysis of research on developmentally supportive care for prematurity in neonatal intensive care unit: a scoping review. *Child Health Nursing Research*, 28(1), 9.

Lefafa, N. (2020). Premature births linked to poverty, inequality and access to healthcare, say experts. *Health-E News: Journalism for Public Health*.

Leifer, A. D., Leiderman, P. H., Barnett, C. R., & Williams, J. A. (1972). Effects of mother-infant separation on maternal attachment behavior. *Child Development*, 43: 1203-1218.

Lemma, A., & Levy, S. (2004). *The impact of trauma on the psyche: Internal and external processes.*

Leonard, B.J., Scott, S.A., & Erpestad, N. (1992). Maternal perception of first-born Infants: A controlled comparative study of mothers of premature and full-term Infants. *Journal of Pediatric Nursing*, 7(2), 90–96.

Levitt, H. M., Bamberg, M., Creswell, J. W., Frost, D. M., Josselson, R., & Suárez-Orozco, C. (2018). Journal article reporting standards for qualitative primary, qualitative meta-analytic, and mixed methods research in psychology: The APA Publications and Communications Board task force report. *American Psychologist*, 73(1), 26-46.

Levy, K. N., Ellison, W. D., Scott, L. N., & Bernecker, S. L. (2011). Attachment style. *Journal of Clinical Psychology*, 67(2), 193-203.

Levy-Shiff, R., Sharir, H., & Mogilner, M. (1989). Mother and father preterm infant relationship in the hospital preterm nursery. Child Development, 60, 93–102.

Lewis, J. & Ritchie, J. (2003) Generalising from qualitative research. In J. Ritchie &J. Lewis, (Eds.),*Qualitative research practice: A guide for social science students and researchers.* Sage.

Lieberman, A. F., & Van Horn, P. (2011). *Psychotherapy with infants and young children: Repairing the effects of stress and trauma on early attachment*. Guilford Press.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic Inquiry*. Sage.

Lincoln, Y. S., & Guba, E. G. (1990). Judging the quality of case study reports. *International Journal of Qualitative Studies in Education*, 3(1), 53-59.

Loewenstein, K., Barroso, J., & Phillips, S. (2019). The experiences of parents in the neonatal intensive care unit: an integrative review of qualitative studies within the transactional model of stress and coping. *The Journal of Perinatal & Neonatal Nursing*, 33(4), 340-349.

Long, C. & Eagle, G. (2009). Ethics in tension: Dilemmas for clinicians conducting sensitive research. *Psychoanalytic Psychotherapy in South Africa*, 17 (2), 27-52.

Mahler, M., Pine, F., & Bergman, A. (1975). *The Psychological Birth of the Human Infant.* London: Hutchinson & Co.

Main, M., & Solomon, J. (1986). Discovery of a new, insecure-disorganized/disoriented attachment pattern. In M. Yogman & T. B. Brazelton (Eds.), *Affective development in infancy* (pp. 95–124). Norwood, NJ: Ablex.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood and adulthood: a move to the level of representation. In: J. Brethetton & E. Waters (Eds.), *Growing Points of Attachment Theory and Research. Monographs of the Society for Research in Child Development*, 50(1-2).

Main, M. (1996). Introduction to the special section on attachment. *Journal of Consulting and Clinical Psychology*, 64(2): 237-244.

Main, M., & Hesse, E. (1990). Parents' unresolved traumatic experiences are related to infant disorganized attachment status: Is frightened and/or frightening parental behavior the linking mechanism? In M. T. Greenberg, D. Cicchetti, & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and intervention* (pp. 161–182). The University of Chicago Press.

Main, M., Kaplan, N., & Cassidy, J. (1985). Security in infancy, childhood, and adulthood: A move to the level of representation. *Monographs of the Society for Research in Child Development*, 66-104.

Main, M., Goldwyn, R., & Hesse, E. (2003). *Adult attachment classification system version 7.2.* Unpublished manuscript, University of California, Berkeley.

Maree, C., Kekana, P., van der Walt, C., Yazbek, M., & Leech, R. (2017). Quality improvement initiative for family-centered care in the neonatal intensive care unit of a tertiary hospital in South Africa. *The Journal of Perinatal & Neonatal Nursing*, 31(3), 274-280.

Marks, S., & Mönnich-Marks, H. (2003). The analysis of countertransference reactions is a means to discern latent interview-contents. *Qualitative Social Research*, 4, (2).

Marques, L., Robinaugh, D. J., LeBlanc, N. J., & Hinton, D. (2011). Cross-cultural variations in the prevalence and presentation of anxiety disorders. *Expert Review of Neurotherapeutics*, 11(2), 313-322.

McFadyen, A. (1995). Reflections on special-care babies and their early experience. *Psychoanalytic Psychotherapy*, 9(2), 157-174.

McMahan True, M., Pisani, L., & Oumar, F. (2001). Infant–mother attachment among the Dogon of Mali. *Child Development*, 72(5), 1451-1466.

McManus, B. M. (2015). Integration of the Newborn Behavioral Observations (NBO) System into Care Settings for High-Risk Newborns. *Zero to Three*, 36(1), 11-20.

Mello, M. F., Serafim, P. M., Moraes, M. L., Miranda, A. M., Soussumi, Y., & Mello, A. F. (2011). The impact of early maternal presence on child development and the stress response system. *Neuropsychoanalysis,* 13(2), 177-185.

Melnyk, B. M., Crean, H. F., Feinstein, N. F., & Fairbanks, E. (2008). Maternal anxiety and depression after a premature infant's discharge from the neonatal intensive care unit: explanatory effects of the creating opportunities for parent empowerment program. *Nursing Research*, 57(6), 383-394

Meltzoff, A. N., & Moore, M. (1998). Infant intersubjectivity: broadening the dialogue to include imitation, identity and intention. In *intersubjective communication and emotion in early ontogeny, Braten, S.*(ed). Cambridge: Cambridge University Press, p.47-62.

Mendelsohn, A. (2005). Recovering reverie: Using infant observation in interventions with traumatised mothers and their premature babies. *Infant Observation*, 8(3), 195-208.

Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.

Mesman, J., Van Ijzendoorn, M. H., & Sagi-Schwartz, A. (2016). Cross-cultural patterns of attachment. *Handbook of attachment: Theory, research, and clinical applications*, 852-877.

Meyer, E.C., Garcia, C.T., Seifer, R., Ramos, A., Kilis, E., & Oh, W. (1995). Psychological distress in mothers of preterm infants. *Developmental and Behavioral Pediatrics*, 16(6), 412–417.

Midgley, N. (2006). 'Psychoanalysis and qualitative psychology: complementary or contradictory paradigms.' *Qualitative Research in Psychology*, 3, 213-31.

Miller, B. (2001). 'Sharing the thought': Work in a neo-natal unit. *Infant Observation*, 4(3), 97-108.

Miller, Resiman, McIntosh & Simon (2001). An ecological model of sensory modulation: Performance of children with fragile-X syndrome, autistic disorder, attention deficit/hyperactivity disorder and sensory modulation dysfunction. In R. Schaf (Ed.). *Understanding the nature of sensory integration with diverse populations* (pp.57-82). San Antonia: Therapy Skill Builders.

Minde, K., Minde, R. & Vogel, W. (2006). Culturally sensitive assessment of attachment in children aged 18-40 months in a South African Township. *Infant Mental Health Journal*, 27(26), 544-558.

Minde, K., Whitelaw, A., Brown, J., & Fitzhardinge, P. (1983). Effect of neonatal complications in premature infants on early parent-infant interactions. *Developmental Medicine & Child Neurology*, 25(6), 763-777.

Minde, K., Goldberg, S., Perrotta, M., Washington, J., Lojkasek, M., Corter, C., & Parker, K. (1989). Continuities and discontinuities in the development of 64 very small premature infants to 4 years of age. *Journal of Child Psychology and Psychiatry*, 30, 391–304.

Minde, K. (1993). Prematurity and serious medical illness in infancy: Implications for development and intervention. In Zeanah, C. Ed. *Handbook of Infant Mental Health*. pp. 87–105. New York: Guilford Press.

Mintzer, D., Als, H., Tronick, E. Z., & Brazelton, T. B. (1984). Parenting an infant with a birth defect: The regulation of self-esteem. *The Psychoanalytic Study of the Child*, 39(1), 561-589.

Monticelli, M. (2014). The experience of infant observation in difficult situations: retaining the ability to observe. *International Journal of Infant Observation and its Applications*, 17:3, 179-194.

Mouton, J. (2001). *How to succeed in your master's and doctoral studies: A South African guide and resource book.* Van Schaik.

Morelli G., Chaudhary, N., Gottlieb, A., Keller, H., Murray, M., Quinn, N., et al. (2017). Taking culture seriously: A pluralistic approach to attachment. Contextualizing Attachment: The Cultural Nature of Attachment. In Keller, H., & Bard, K. A. (Eds.), *Contextualizing attachment: the cultural nature of attachment* (pp. 139-170).MIT.

Mucci, C. (2021). Dissociation vs repression: A new neuropsychoanalytic model for psychopathology. *The American Journal of Psychoanalysis*, 81(1), 82-111.

Muller-Nix, C., Forcada-Guex, M., Pierrehumbert, B., Jaunin, L., Borghini, A., & Ansermet, F. (2004). Prematurity, maternal stress and mother–child interactions. *Early Human Development*, 79(2), 145-158.

Nanni, V., Uher, R., & Danese, A. (2012). Childhood maltreatment predicts unfavorable course of illness and treatment outcome in depression: a meta-analysis. *American Journal of Psychiatry*, 169(2), 141-151.

Ndlovu, M. (2023). 'Health ombud declares 'filthy' Rahima Moosa an unsafe hospital'. *Mail & Guardian,* 14/03, Health Section.

Negri, R. (2018). *The newborn in the intensive care unit: A neuropsychoanalytic prevention model.* Harris Meltzer Trust.

Ngoma, R. (2016). What are the complexities surrounding the provision of social infrastructure in South African metropolitan areas considering the Corridors of Freedom plan?: Case Study: Westbury, unpublished honours research report, University of the Witwatersrand, Johannesburg, South Africa.

Noel, T.K. (1998). An observation of loss in the Neonatal Intensive Care Unit. *Infant Observation*, 1(2),100-106.

Ntswane-Lebang, M. A., & Khoza, S. (2010). Mothers' experiences of caring for very low birth weight premature Infants in one public hospital in Johannesburg, South Africa. *Africa Journal of Nursing and Midwifery,* 12(2), 69-82.

Nugent, J. K., Keefer, C. H., Minear, S., Johnson, L. C., & Blanchard, Y. (2007). *The newborn behavioural observations (NBO) system handbook.* Baltimore, MD, US: Paul H Brookes Publishing.

O'Donovan, A.; & Nixon; E. (2019). 'Weathering the storm:' Mothers' and fathers' experiences of parenting a preterm infant. *Infant Mental Health Journal*, 40, 573-587.

Ogden, T. (1994). The analytic third: Working with intersubjective clinical facts. *International Journal of Psychoanalysis*, 75, 3-19.

O'Loughlin, M. (2020). Whiteness and the psychoanalytic imagination. *Contemporary Psychoanalysis*, 353-374.

Oppenheim, D. (2006). Child, parent, and parent–child emotion narratives: Implications for developmental psychopathology. *Development and Psychopathology*, 18(3), 771-790.

Park, J., Thoyre, S., Estrem, H., Pados, B. F., Knafl, G. J., & Brandon, D. (2016). Mothers' psychological distress and feeding of their preterm infants. MCN. The American Journal of Maternal Child Nursing, 41(4), 221.

Parker, I. (2010). The place of transference in psychosocial research. *Journal of Theoretical & Philosophical Psychology,* 30(1), 17-31.

Parker, R. (1996). *Torn in two. The experience of maternal ambivalence*. London, UK: Virago

Pederson, D. R., Moran, G., Sitko, C., Campbell, K., Ghesquire, K., & Acton, H. (1990). Maternal sensitivity and the security of infant–mother attachment: A Q-sort study. *Child Development*, 61,1974–1983.

Perera,K. (2020).The interview as an opportunity for participant reflexivity. *Qualitative Research*, 20(2),143-159.

Peterson, J., Pearce, P. F., Ferguson, L. A., & Langford, C. A. (2017). Understanding scoping reviews: Definition, purpose, and process. *Journal of the American Association of Nurse Practitioners*, 29(1), 12-16.

Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & McEwen, S. A. (2014). A scoping review of scoping reviews: advancing the approach and enhancing the consistency. *Research Synthesis Methods*, 5(4), 371-385.

Pierrehumbert, B., Nicole, A., Muller-Nix, C., Forcada-Guex, M., & Ansermet, F. (2003). Parental post-traumatic reactions after premature birth: implications for sleeping and eating problems in the infant. *Archives of Disease in Childhood-Fetal and Neonatal Edition*, 88(5), F400-F404.

Pillow, W. (2003) Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research, *International Journal of Qualitative Studies in Education*, 16:2, 175-196,

Poehlmann, J., Burnson, C., & Weymouth, L. A. (2014). Early parenting, represented family relationships, and externalizing behavior problems in children born preterm. *Attachment & Human Development*, 16(3), 271-291.

Porter, L., van Heugten, K., & Champion, P. (2020). The risk of low risk: First time motherhood, prematurity and dyadic well-being. *Infant Mental Health Journal*, 41(6), 836-849.

Ramokolo, V., Malaba, T., Rhoda, N., Kauchali, S., & Goga, A. (2019). A landscape analysis of preterm birth in South Africa: systemic gaps and solutions. *South African Health Review*, 2019(1), 133-144.

Raphael-Leff, J. (2010). Healthy maternal ambivalence. *Psycho-analytic Psychotherapy in South Africa,* 18(2), 57-73.

Raphael-Leff, J. (2010a). 'Mother's and father's orientations: patterns of pregnancy, parenting and the bonding process,' in *Parenthood and Mental Health: A Bridge between Infant and Adult Psychiatry'*, eds S. Tyano, M. Keren, H. Herrman, and J. Cox (Oxford: Wiley Blackwell), 9-22.

Reid, T. (2000). Maternal identity in preterm birth. *Journal of Child Health Care*, 4(1), 23-29

Reja, U., Manfreda, K. L., Hlebec, V., & Vehovar, V. (2003). Open-ended vs. close-ended questions in web questionnaires. *Advances in Methodology and Statistics (Metodološki zvezki)*, 19, 159-177.

Renik, O. (1998). The analyst's subjectivity and the analyst's objectivity. *International Journal of Psychoanalysis*, 79, 487-498.

Report from the national scientific council of the developing child. (2014). A decade of science informing policy: The story of the national scientific council of the developing child. Harvard University.

Rhode, M. (2004). Infant observation as Research: Cross-Disciplinary Links. *Journal of Social Work Practice*, 18:3, 283-298.

Ribeiro Batista Geraldini, S.A. (2016). Becoming a person? Learning from observing premature babies and their mothers. *Infant Observation*, 19(1), 42-59.

Ritchie, J., Lewis, J., & Elam, G. (2003). Designing and selecting samples. *Qualitative Research Methods*, 77-108.

Roisman, G. I., Collins, W. A., Sroufe, L. A., & Egeland, B. (2005). Predictors of young adults' representations of and behavior in their current romantic relationships: Prospective tests of the prototype hypothesis. *Attachment and Human Development*, 7, 105-121.

Rosado, C. (1994). Understanding cultural relativism in a multicultural world. *The Elements of Moral Philosophy*, 15-29.

Rustin, M.J. (1997) 'What do we see in the nursery? Infant observation as laboratory work', *International Journal of Infant Observation*, 1, 93-110.

Rustin, M. (2006). Infant Observation Research: What have we learnt so far? *Infant Observation*, 9:1,35-52.

Rustin, M. (2011). Infant observation and research: a reply to Steven Groarke. *International Journal of Infant Observation and it's Applications*, 14:2, 179-190.

Sandler, J., & Sandler, A. M. (1978). On the development of object relationships and affects. *The International Journal of Psycho-Analysis*, 59, 285.

Saville Young, L. (2009). Not knowing: Towards an ethics for employing psychoanalysis in psychosocial research. *Psycho-analytic Psychotherapy in South Africa*, 17(2), 1-26.

Saville Young, L. (2011). Research entanglements, race, and recognisability: A psychosocial reading of interview encounters in (post-)colonial, (post-)Apartheid South Africa. *Qualitative Inquiry*, 17(1), 45-55.

Saville Young, L., & Frosh, S. (2010). “And where were your brothers in all this?”: A psychosocial approach to texts on “brothering”. *Qualitative Research*, 10(5), 511-531.

Schwandt, T. A., Lincoln, Y. S., & Guba, E. G. (2007). Judging interpretations: But is it rigorous? Trustworthiness and authenticity in naturalistic evaluation. *New Directions for Evaluation*, 114, 11-25.

Schimmenti, A., & Caretti, V. (2016). Linking the overwhelming with the unbearable: Developmental trauma, dissociation, and the disconnected self. *Psychoanalytic Psychology*, 33(1), 106–128.

Schore, A. N. (2001). Effects of a secure attachment relationship on right brain development, affect regulation, and infant mental health. *Infant Mental Health Journal*, 22(1-2), 7-66.

Schuker, E., & Shwetz, M. (1991). Pregnancy and motherhood. In E. Schuker, & N. A. Levinson (Eds.), *Female psychology: An annotated psychoanalytic bibliography* (pp. 239-240). Hillsdale, NJ: Analytic Press

Schwichtenberg, A. J., Shah, P. E., & Poehlmann, J. (2013). Sleep and attachment in preterm infants. *Infant Mental Health Journal,* 34(1), 37-46.

Segal, H. (2018). *Introduction to the work of Melanie Klein*. Routledge.

Serpell, R. (2017). How the study of cognitive growth can benefit from a cultural lens. *Perspectives on Psychological Science*,12(5), 889-899.

Seshadri-Crooks, Kalpana. (1998). ‘The Comedy of Domination: Psychoanalysis and the Conceit of Whiteness’, in *The Psychoanalysis of Race*, ed. Christopher Lane. New York: Columbia University Press.

Shallcross, W. (2012). What can be learned from a single case of psychoanalytic infant observation?. *Infant Observation and Research*: Emotional processes in everyday lives, 69-80.

Shaw, R. J., Deblois, T., Ikuta, L., Ginzburg, K., Fleisher, B., & Koopman, C. (2006). Acute stress disorder among parents of infants in the neonatal intensive care nursery. *Psychosomatics*, 47(3), 206-212.

Shonkoff, J.P., Garner, A.S., Committee on Psychosocial Aspects of Child and Family Health, Committee on Early Childhood, Adoption, and Dependent Care, and Section on Developmental and Behavioral Pediatrics, Siegel, B.S., Dobbins, M.I., Earls, M.F., Garner, A.S., McGuinn, L., Pascoe, J. and Wood, D.L. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1), pp.e232-e246.

Shuttleworth, J. (1989). In Rustin, M. & Shuttleworth, J. (Eds.), *Closely observed infants*. Duckworth.

Siegel, D. J. (2001). Toward an interpersonal neurobiology of the developing mind: Attachment relationships,"mindsight," and neural integration.*Infant Mental Health Journal*,22(1-2), 67-94.

Silverio, S. A., Wilkinson, C., Fallon, V., Bramante, A., & Staneva, A. A. (2021). When a mother's love is not enough: A cross-cultural critical review of anxiety, attachment, maternal ambivalence, abandonment, and infanticide. *International handbook of love: Transcultural and Transdisciplinary Perspectives*, 291-315.

Simons, H. (2020). Case Study Research: In-Depth Understanding in Context. In P, Leavy (Ed.). *The Oxford Handbook of Qualitative Research* (2nd ed.). (pp. 676–703). Oxford Academic.

Slade, A (2005). Parental reflective functioning: An Introduction. *Attachment and Human Development*, 7(3), 269-281.

Slade, A., Cohen, L.J., Sadler, L.S., and Miller, M. (2009). 'The psychology and psychopathology of pregnancy,' in *Handbook of Infant Mental Health*, 3rd Edn, ed. C.H.Zeanahpp (New York: Guilford Press), 22-39.

Slater, P. E., & Slater, D. A. (1965). Maternal ambivalence and narcissism: a cross-cultural study. *Merrill-Palmer Quarterly of Behavior and Development*, 11(3), 241-259.

Smith, C., Lobban, G., O'Loughlin, M., Swartz, S., Sideris, T., Ivey, G., Hemp, V.; Esprey, Y.; Eagle, G. & Del Fabbro, G. (2013). *Psychodynamic psychotherapy in South Africa: Contexts, theories and applications.* Wits University Press.

South African National Department of Health. *Guidelines for Maternity Care in South Africa: A Manual for Clinics, Community Health Centres and District Hospitals*. 4th edition. Pretoria: NDoH; 2017.

Spitzer, C., Barnow, S., Freyberger, H. J., & Grabe, H. J. (2006). Recent developments in the theory of dissociation. *World Psychiatry*, 5(2), 82

Sroufe, L. A., Egeland, B., & Kreutzer, T. (1990). The fate of early experience following developmental change: Longitudinal approaches to individual adaptation in childhood. *Child Development*, 61(5), 1363-1373.

Sroufe, L. A., Carlson, E. A., Levy, A. K., & Egeland, B. (1999). Implications of attachment theory for developmental psychopathology. *Development and Psychopathology*, 11(1), 1-13.

Sroufe, L. A. (2013). The promise of developmental psychopathology: past and present. *Development and Psychopathology*, 25(4pt2), 1215-1224.

Statista Research Department. (2022). 20 countries with the biggest inequality in income distribution worldwide in 2021, based on Gini index.

Steibel, D., Caron, N. A., & Lopes, R. S. (2014). An observer's intense and challenging journey observing the short life of an extremely premature baby in Neonatal Intensive Care. *Infant Observation*, 17(3), 233-247.

Steinberg, Z.S. (2006). Pandora meets the NICU parent or whither hope? *Psychoanalytic Dialogues*, 16(2), 133–147.

Steiner, J. (1990). The defensive functions of pathological organizations. In: B. L. Boyer & P. Giovacchini (Eds.), *Master Clinicians on Treating the Regressed Patient*. New York: Aronson.

Steiner, J. (1987). The interplay between pathological organizations and the paranoid-schizoid and depressive positions. *The International Journal of Psycho-Analysis*, 68, 69-80.

Stephens, B. E., Bann, C. M., Poole, W. K., & Vohr, B. R. (2008). Neurodevelopmental impairment: predictors of its impact on the families of extremely low birth weight infants at 18 months. *Infant Mental Health Journal*, 29(6), 570-587.

Stern, D. (1985). *The Interpersonal World of the Infant: A View from Psychoanalysis and Developmental Psychology*. New York: Basic Books.

Stern, D. N. (1991). Maternal representations: A clinical and subjective phenomenological view. *Infant Mental Health Journal*, 12(3), 174-186.

Stern, D. N. (1998). *The motherhood constellation: A unified view of parent-infant psychotherapy.* Routledge.

Stern, D. (2005). Intersubjectivity. In E. S. Person, A. M. Cooper, & G. O. Gabbard (Eds.), *The American Psychiatric Publishing Textbook of Psychoanalysis* (pp. 77–92). American Psychiatric Publishing, Inc.

Stern, D. B. (2022). Dissociation and unformulated experience: A psychoanalytic model of mind. In *Dissociation and the dissociative disorders* (pp. 341-351). Routledge.

Stern-Bruschweiler, N., & Stern, D. N. (1989). A model for conceptualizing the role of the mother's representational world in various mother-infant therapies. *Infant Mental Health Journal*, 10(3), 142-156.

Stolorow, R. D. (1997). Dynamic, dyadic, intersubjective systems: An evolving paradigm for psychoanalysis. *Psychoanalytic Psychology*, 14(3), 337.

Stone, A. (2014). Psychoanalysis and maternal subjectivity. Mothering and psychoanalysis: *Clinical, sociological and feminist perspectives*, 325-341.

Strømme, H., Gullestad, S. E., Stänicke, E., & Killingmo, B. (2010). A widened scope on therapist development: Designing a research interview informed by psychoanalysis. *Qualitative Research in Psychology*, 7(3), 214-232.

Swartz, S. (2015). Writing psychotherapy. In D. Posel, & F. C. Ross (Eds.), *Ethical quandaries in social research* (pp. 183-198). Cape Town, SOUTH AFRICA: HSRC Press.

Swartz, S. (2007). The power to name: South African intersubjective psychoanalytic psychotherapy and the negotiation of racialized histories. *European Journal of Psychotherapy and Counselling*, 9(2), 177-190.

Talmi, A., & Harmon, R. J. (2003). Relationships between preterm infants and their parents. Disruption and development. *Zero to Three*, 24(2),13-20.

Tarnopolsky, A. (2003). The concept of dissociation in early psychoanalytic writers. *Journal of Trauma & Dissociation*, 4(3), 7-25.

Terre Blanche, M., Durrheim, K., & Painter, D. (Eds.). (2006). *Research in practice: Applied methods for the social sciences.* Cape Town, SOUTH AFRICA: UCT Press.

Tilokskulchai, F., Phatthanasiriwethin, S., Vichitsukon, K., & Serisathien, Y. (2002). Attachment behaviours in mothers of premature infants: a descriptive study in Thai mothers*. Journal of Perinatal and Neonatal Nursing*, 16(3): 69-83.

Tilley, J. J. (2001). Cultural Relativism.Slightly revised version of "Cultural Relativism," *Human Rights Quarterly*,22,(2),501–547.

Tomlinson, M., Bornstein, M. H., Marlow, M., & Swartz, L. (2014). Imbalances in the knowledge about infant mental health in rich and poor countries: Too little progress in bridging the gap. *Infant Mental Health Journal*, 35(6), 624-629.

Tomlinson, M., Cooper, P. & Murray, L. (2005). The mother-infant relationship and infant attachment in a South African peri-urban settlement. *Child Development*,76(5),1044-1054.

Trevarthen, C., & Aitken, K. J. (2001). Infant intersubjectivity: Research, theory, and clinical applications. *The Journal of Child Psychology and Psychiatry and Allied Disciplines*, 42(1), 3-48.

Tronick, E.Z. (2003). Emotions and emotional communication in infants, In Raphael-Leff (Ed). *Parent-infant Psychodynamics, wild things, mirrors and ghosts* (pg 35-53). London: Whurr Publishers

Tronick, E. Z., Morelli, G. A., & Ivey, P. K. (1992). The Efe forager infant and toddler's pattern of social relationships: Multiple and simultaneous. *Developmental Psychology*, 28(4), 568.

Tropiano, L. M., Fiamenghi-Jr, G. A., & Blascovi-Assis, S. M. (2017). Mothers and Premature Infants' Emotional Interactions in a Neonatal Infant Care Unit: Case Studies. *European Scientific Journal*, 13(36), 1857-1961.

Tuckett, D. (1998). Evaluating psychoanalytic papers: Towards the development of common editorial standards. *International Journal of Psycho-analysis*, 79, 431-448.

Udry-Jørgensen, L., Pierrehumbert, B., Borghini, A., Habersaat, S., Forcada-Guex, M., Ansermet, F., & Muller-Nix, C. (2011). Quality of attachment, perinatal risk, and mother–infant interaction in a high-risk premature sample. *Infant Mental Health Journal*, 32(3), 305-318.

Vanderbilt, D., Bushley, T., Young, R., & Frank, D. A. (2009). Acute posttraumatic stress symptoms among urban mothers with newborns in the neonatal intensive care unit: a preliminary study. *Journal of Developmental & Behavioral Pediatrics*, 30(1), 50-56.

Vanderveen, J. A., Bassler, D., Robertson, C. M. T., & Kirpalani, H. (2009). Early interventions involving parents to improve neurodevelopmental outcomes of premature infants: a meta-analysis. *Journal of Perinatology*, 29(5), 343-351

Vanier, C. (2017). The relationship between the parents and the premature baby. International Forum of Psychoanalysis, 26(1):29-32.

Vanier, C (2015). *Premature Birth: The Baby, the Doctor and the Psychoanalyst*. Karnac Books, 2015.

Van Ijzendoorn, M. J. & Sagi-Schwartz, A. (2008). Cross-cultural patterns of attachment: Universal and contextual dimensions. In J. Cassidy & P. R. Shaver (eds.). *Handbook of Attachment: Theory, Research, and Clinical Applications* (2nd ed., pp.880-905). Guilford Press.

Varvin, S. (2011). Phenomena or Data? Qualitative and Quantitative Research Strategies in Psychoanalysis. *Scandinavian Psychoanalytic Review*, 34(2):117-123.

Vigod, S. N., Villegas, L., Dennis, C. L., & Ross, L. E. (2010). Prevalence and risk factors for postpartum depression among women with preterm and low-birth-weight infants: a systematic review. *BJOG: An International Journal of Obstetrics & Gynaecology*, 117(5), 540-550.

Waddell, M. (2018). *Inside lives: Psychoanalysis and the growth of the personality.* Routledge.

Wang, D., Duke, R., Chan, R. P., & Campbell, J. P. (2019). Retinopathy of prematurity in Africa: a systematic review. *Ophthalmic Epidemiology*, 26(4), 223-230.

Waters, E., Merrick, S. K., Treboux, D., Crowell, J., & Albersheim, L. (2000). Attachment security from infancy to early adulthood: A twenty-year longitudinal study. *Child Development*, 71, 684-689.

Waters, E., Treboux, D., Fyffe, C., & Crowell, J. (2001). Secure versus insecure and dismissing versus preoccupied attachment representation scored as continuous variables from AAI state of mind scales. Manuscript submitted for publication.

Weinfield, N., Sroufe, L. A., & Egeland, B. (1998). Attachment from infancy to early childhood in a high-risk sample: Continuity, discontinuity, and their correlates. *Child Development*, 71, 695-702.

Widlöcher, D. (1994). A case is not a fact. *International Journal of Psychoanalysis*, 75,1233-1244.

Wilfong, E. W., Saylor, C., & Elksnin, N. (1991). Influences on responsiveness: Interactions between mothers and their premature infants. *Infant Mental Health Journal*, 12 (1), 31-40.

Wilkinson, D., Connolly, C., & Stirling, S. (1999). Impact of prematurity on admission to the neonatal nursery of a rural South African district hospital. *Journal of Tropical Pediatrics*, 45(2), 76-80.

Williams, R., & Trentini, C. (2022). Two modes of being together: The levels of intersubjectivity and human relatedness in neuroscience and psychoanalytic thinking. *Frontiers in Human Neuroscience*, 16, 981366.

Winnicott, D. W. (1949). Hate in the countertransference. *International Journal of Psychoanalysis*, 30, 69-75.

Winnicott, D.W.(1960). The theory of the parent-infant relationship. In: D.W. Winnicott (Ed.), *Maturational Processes and the Facilitating Environment* (pp.37-55). New York: International Universities Press.

Winnicott, D. W. (1964). *The child, the family, and the outside world*. Middlesex: Penguin Books.

Winnicott, D. W. (1986). The theory of the parent-infant relationship. *Essential papers on object relations*, 233-253.

Winnicott, D. W. (1992). Primary maternal preoccupation. In: D. Winnicott (Ed.), *Collected Papers: Through Paediatrics to Psychoanalysis.* London: Karnac.

Woodhead, J., Bland, K., & Baradon, T. (2006). Focusing the lens: The use of digital video in the practice and evaluation of parent–infant psychotherapy. *Infant Observation*, 9(2), 139-150.

World Health Organisation & Unicef (2017). http://www.healthynewbornnetwork.org/country/south-africa/

Yesilada, F., & Direktör, E. (2010). Health care service quality: A comparison of public and private hospitals. *African Journal of Business Management*, 4(6), 962.

Yorke, C. (1971) Some Suggestions for a Critique of Kleinian Psychology, *The Psychoanalytic Study of the Child*, 26:1, 129-155.

Yurdakul, Z., Akman, I., Kuşçu, M. K., Karabekiroglu, A., Yaylalı, G., Demir, F., & Özek, E. (2009). Maternal psychological problems associated with neonatal intensive care admission. *International Journal of Pediatrics*, 2009.

Zabielski, M. T. (1992). *Recognition of maternal identity in preterm and fullterm mothers*. University of Pittsburgh.

Zeanah, C. H., & Barton, M. L. (1989). Introduction: Internal representations and parent-infant relationships. *Infant Mental Health Journal*, 10(3), 135-141.

Zeanah, C. H., Berlin, L. J., & Boris, N. W. (2011). Practitioner review: Clinical applications of attachment theory and research for infants and young children. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 52(8), 819.

Zeanah, C. H., & Benoit, D. (1995). Clinical applications of a parent perception interview in infant mental health. *Child and Adolescent Psychiatric Clinics of North America*, 4(3), 539-554.

Zeanah, C. H., Benoit, D., Hirshberg, L., Barton, M. L., & Regan, C. (1994). Mothers' representations of their infants are concordant with infant attachment classifications. *Developmental issues in Psychiatry and Psychology*, 1(1), 1-14.

Zeanah, C.H. (2000). Infant–parent relationship attachment. In C.H. Zeanah (Ed.), *Handbook of infant mental health* (2nd ed., pp. 222– 235). New York: Guilford Press.

Zelkowitz, P., Bardin, C., & Papageorgiou, A. (2007). Anxiety affects the relationship between parents and their very low birth weight infants. *Infant Mental Health Journal*, 28(3), 296-313.

Zelkowitz, P., Papageorgiou, A., Bardin, C., & Wang, T. (2009). Persistent maternal anxiety affects the interaction between mothers and their very low birthweight children at 24 months. *Early Human Development*, 85(1), 51-58.

Zepf, S. (2009). Psychoanalysis and qualitative psychotherapy research – some epistemological remarks. *The Journal of the American Academy of Psychoanalysis and Dynamic Psychiatry*, 37(4), 645-664.

Zhang, W., Pan, Q., & Guo, B. (2022). The significance of infant research for psychoanalysis. *Humanities and Social Sciences Communications*, 9(1), 1-8.

Zimmermann, P., Fremmer-Bombik, E., Spangler, G., & Grossmann, K. E. (1997). Attachment in adolescence: A longitudinal perspective. In W. Koops, J. B. Hoeksma, & D. C. van den Boom (Eds.), *Development of interaction and attachment: Traditional and non-traditional approaches* (pp. 281-292). Amsterdam, Netherlands: North-Holland.

References – Paper 1

Acquarone, S. (2004). *Infant–parent psychotherapy*: A handbook. Routledge.

Amez, S. & Botero, H. (2000). The mother, the baby, the pouch and the observer. Feeding difficulties of an infant on the kangaroo mother programme. *Infant Observation*, 3(2), 33–45.

Anscombe, E. (2008). The dichotomy of containing trauma amidst joy: New life and a neonatal death: The experience of working with the parents of twins on the NICU. *Infant Observation*, 11(2), 147–160.

Anzieu, D. (2018). *The skin-ego: A new translation by Naomi Segal*. Routledge.

Anzieu-Premmereur Luba Kessler, C. (2019). Issues in psychoanalytic education: Infant research and it's application to psychoanalysis. *American Psychoanalyst*, 53(1).

Arksey, H. & O'Malley, L. (2005). Scoping studies: Towards a methodological framework. *International Journal of Social Research Methodology*, 8(1), 19–32.

Bain, K., Gericke, R., & Harvey, C. (2010). Bonding experiences in a South African community hospital: Kangaroo mother care ward. *Attachment: New Directions in Relational Psychoanalysis and Psychotherapy*, 4(3), 235–262.

Bain, K. (2020). The challenge to prioritize infant mental health in South Africa. *South African Journal of Psychology*, 50(2), 207–217.

Balbernie, R. (2007). The move to intersubjectivity: A clinical and conceptual shift of perspective. *Journal of Child Psychotherapy*, 33(3), 308–324.

Baradon, T., Broughton, C., Biseo, M., Gibbs, I., James, J., Joyce, A., & Woodhead, J. (2005). *The practice of psychoanalytic parent-infant psychotherapy: Claiming the baby.* Routledge.

Barlow, J., Bennett, C., Midgley, N., Larkin, S. K., & Wei, Y. (2016). Parent–infant psychotherapy: A systematic review of the evidence for improving parental and infant mental health. *Journal of Reproductive and Infant Psychology*, 34(5), 464–482.

Bick, E. (1986). Further considerations on the function of the skin in early object relations: Findings from infant observation integrated into C. *British Journal of Psychotherapy*, 2(4), 292–299

Bion W.R. (1962). *Learning from experience*. Heinemann.

Blessing, D. (2006). Shall I dare to come alive: Long term effects of painful beginnings. *Infant Observation*, 9(1), 53–64.

Botero, H. & Sanders, C. (2014). Mother-Baby relationship: A loving next for mental health – observing 'kangaroo' infants. *Infant Observation*, 17(3), 215–232.

Boyer, D. & Sorenson, P. (1999). Adapting the Tavistock model of infant observation to work in the neonatal intensive care unit. *Psychoanalytic Inquiry*, 19(2), 146–159.

Brandon, D. H., Tully, K. P., Silva, S. G., Malcolm, W. F., Murtha, A. P., Turner, B. S., & Holditch-davis, D. (2011). Emotional responses of mothers of late-preterm and term infants. *Journal of Obstetric, Gynecologic & Neonatal Nursing*, 40(6), 719–731.

Brazelton, T. B. & Cramer, B. G. (1990). *The earliest relationship: Parents, infants, and the drama of early attachment*. Addison-Wesley/Addison Wesley Longman.

Camhi, C. (2005). Siblings of premature babies: Thinking about their experience. *Infant Observation*, 8(3), 209–233.

Cantle, A. (2013). Alleviating the impact of stress and trauma in the neonatal unit and beyond. *Infant Observation*, 16(3), 257–269

Carling, K. (2003). Thomas looking for George,' a premature twin emerging from the effects of trauma. *Journal of Child Psychotherapy*, 29(3), 335–356

Castro, E. (2011). Observing a premature baby: The case of Elicier. *Infant Observation*, 14(3), 257–271.

Cohen, M. (2003). *Sent before my time: A child psychotherapist's view of life on a neonatal intensive care unit*. Karnac Books.

D'Agata, A. L., Sanders, M. R., Grasso, D. J., Young, E. E., Cong, X., & Mcgrath, J. M. (2017). Unpacking the burden of care for infants in the NICU. *Infant Mental Health Journal*, 38(2), 306–317

Davies, N. (2014). The elusive paternal function: Clinicians' perspectives. *Psycho- Analytic Psychotherapy in South Africa*, 22(2), 19–52.

Davis, J. A., Richards, M., & Roberton, N. R. C. (Eds.). (2014). *Parent-baby attachment in premature infants (psychology revivals)*. Routledge.

Demby, G. (2010). Observation as an adjuct to psychotherapy-when a patient delivers prematurely. *Infant Observation*, 13(3), 269–281.

Fraiberg, S., Adelson, E., & Shapiro, V. (1975). Ghosts in the nursery: A psychoanalytic approach to the problems of impaired infant-mother relationships. *Journal of the American Academy of Child Psychiatry*, 14(3), 387–421.

Freeman, T. (2008). Psychoanalytic concepts of fatherhood: Patriarchal paradoxes and the presence of an absent authority. *Studies in Gender and Sexuality*, 9(2), 113–139

Gorzilio, D. M., Garrido, E., Gaspardo, C. M., Martinez, F. E., & Linhares, M. B. M. (2015). Neurobehavioral development prior to term-age of preterm infants and acute stressful events during neonatal hospitalization. *Early Human Development*, 91(12), 769–775.

Hardy, N. (2005). A premature view: Observations in a SCBU. *Infant Observation*, 8(2), 169–176.

Harris, J. (2005). Critically ill babies in hospital–considering the experience of mothers. *Infant Observation*, 8(3), 247–258

Herd, M., Whittingham, K., Sanders, M., Colditz, P., & Boyd, R. N. (2014). Efficacy of preventative parenting interventions for parents of preterm infants on later child behaviour: A systematic review and meta-analysis. *Infant. Mental Health Journal*, 35(5), 630–641.

Klein, M. (1946). Notes on schizoid mechanisms. In M. Klein (Ed.), *Envy and gratitude and other works* 1946-1963 (pp. 292–320). Vintage.

Kraemer, S. B. & Steinberg, Z. (2006). It's rarely cold in the NICU: The permeability of psychic space. *Psychoanalytic Dialogues*, 16(2), 165–179.

Kraemer, S. B. (2006). So the cradle won't fall. Holding the staff who hold the parents in the NICU. *Psychoanalytic Dialogues*, 16(2), 149–164.

Lazar, R. A. & Ermann, G. (1998). Learning to be: On the observation of a premature baby. *Infant Observation*, 2(1), 21–39.

Lemma, A. & Levy, S. (2004). The impact of trauma on the psyche: Internal and external processes. In A. Lemma, & S. Levy (Eds). *The perversion of loss: Psychoanalytic perspectives on trauma* (pp. 1–20).

Loose, J. & Foster, C. (2002). The use of film observation in clinical work with parents and infants in a neonatal unit. *Infant Observation*, 5(3), 41–46.

MacDonald, S. (2015). The incubator psyche. *Psychoanalytic Psychotherapy*, 29(1), 88–106.

McFadyen, A. (1995). Reflections on special-care babies and their early experience. *Psychoanalytic Psychotherapy*, 9(2), 157–174.

McManus, B. M. (2015). Integration of the Newborn Behavioral Observations (NBO) system into care settings for high-risk newborns. *Zero to Three*, 36(1), 11–20.

Mello, M. F., Serafim, P. M., Moraes, M. L., Miranda, A. M., Soussumi, Y., & Mello, A. F. (2011). The impact of early maternal presence on child development and the stress response system. *Neuropsychoanalysis,* 13(2), 177–185.

Mendelsohn, A. & Philips, A. (2005). Introduction to working in the NICU: Our work in context. *Infant Observation*, 8(3), 191–193.

Mendelsohn, A. (2005). Recovering reverie: Using infant observation in interventions with traumatised mothers and their premature babies. *Infant Observation*, 8(3), 195–208.

Miller, B. (2001). 'Sharing the thought': Work in a neo-natal unit. *Infant Observation*, 4(3), 97–108.

Negri, R. (2018). *The newborn in the intensive care unit: A neuropsychoanalytic prevention model*. Harris Meltzer Trust.

Noel, T. K. (1998). An observation of loss in the Neonatal Intensive Care Unit. *Infant Observation*, 1(2), 100–106.

Porter, L., van Heugten, K., & Champion, P. (2020). The risk of low risk First time motherhood, prematurity and dyadic well-being. *Infant Mental Health Journal*, 41(6), 836–849.

Ribeiro Batista Gerladini, S. A. (2016). Becoming a person? Learning from observing premature babies and their mothers. *Infant Observation*, 19(1), 42–59.

Segre, L. S., McCabe, J. E., Chuffo-Siewert, R., & O'Hara, M. W. (2014). Depression and anxiety symptoms in mothers of newborns hospitalized on the neonatal intensive care unit. *Nursing Research*, 63(5), 320.

Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., Pascoe, L., McGuinn, J., Wood, D. L., & Committee on Early Childhood, Adoption, and Dependent Care. (2012). The lifelong effects of early childhood adversity and toxic stress. *Pediatrics*, 129(1).

Shuttleworth, J. (1989). In Rustin, M. & Shuttleworth, J. (Eds.), *Closely observed infants*. Duckworth.

Siegel, D. J. (2020). *The developing mind: How relationships and the brain interact to shape who we are.* Guilford Publications.

Simon, J. (2010). The ogre and Little Thumb. Love, hate and survival in neonatology: An application of Ester Bick's method of infant observation. *Infant Observation*, 13(2), 167–178.

Sroufe, L. A. (2013). The promise of developmental psychopathology: Past and present. *Development and Psychopathology*, 25(4pt2), 1215–1224.

Steibel, D., Caron, N. A., & Lopes, R. S. (2014). An observer's intense and challenging journey observing the short life of an extremely premature baby in Neonatal Intensive Care. *Infant Observation*, 17(3), 233–247.

Steinberg, Z. S. (2006). Pandora meets the NICU parent or whither hope? *Psychoanalytic Dialogues*, 16(2), 133–147.

Stern, D. (1985). *The interpersonal world of the infant*. Basic Books.

Stern, D. (1995). *The motherhood constellation: A unified view of parent– infant psychotherapy*. Karnac Books.

Talmi, A. & Harmon, R. J. (2003). Relationships between preterm infants and their parents: Disruption and development. *Zero to Three*, 24(2), 13–20.

Urwin, C. (1998). Psychic links and traumatic events: Some implications of premature birth. *Journal of Child Psychotherapy*, 24(1), 61–84.

Vanier, C. (2015). *Premature birth: The baby, the doctor and the psychoanalyst*. Karnac Books.

Vanier, C. (2017). The relationship between the parents and the premature baby. *International Forum of Psychoanalysis*, 26(1), 29–32.

Willock, B. (2015). Psychoanalysis of prematurity. *Psychoanalytic Dialogues*, 25(1), 35–50.

Winnicott, D. W. (1992). *Collected papers: Through paediatrics to psychoanalysis*. Karnac.

World Health Organization. (2018). Preterm birth: Fact sheet. www.who.int/mediacentre/factsheets/fs363/en/

Zeanah, C. H., Berlin, L. J., & Boris, N. W. (2011). Practitioner review: Clinical applications of attachment theory and research for infants and young children. *Journal of Child Psychology and Psychiatry*, 52(8), 819–833.

References- Paper Two

Amez, S., & Botero, H. (2000). The mother, the baby, the pouch and the observer. Feeding difficulties of an infant on the kangaroo mother programme. Infant Observation, 3(2), 33–45.

Anscombe, E. (2008). The dichotomy of containing trauma amidst joy: New life and a neonatal death: The experience
of working with the parents of twins on the NICU. Infant Observation, 11(2), 147–160.

Bailey, T. D., & Brand, B. L. (2017). Traumatic dissociation: Theory, research, and treatment. Clinical Psychology: Science and Practice, 24(2), 170–185.

Baradon, T. (Ed.) (2009). Relational trauma in infancy: Psychoanalytic, attachment and neuropsychological contributions to parent-infant psychotherapy.

Berthelot, N., Ensink, K., Bernazzani, O., Normandin, L., Luyten, P., & Fonagy, P. (2015). Intergenerational transmission of attachment in abused and neglected mothers: The role of trauma-specific reflective functioning. Infant Mental Health Journal, 36(2), 200–212.

Bouchard, M. A., Target, M., Lecours, S., Fonagy, P., Tremblay, L. M., Schachter, A., & Stein, H. (2008). Mentalization in adult attachment narratives: Reflective functioning, mental states, and affect elaboration compared. Psychoanalytic Psychology, 25(1), 47–66.

Bromberg, P. M. (1994). “Speak! that I may see you”; some reflections on dissociation, reality, and psychoanalytic listening. Psychoanalytic Dialogues, 4(4), 517–547.

Bromberg, P. M. (2009). Multiple self-states, the relational mind, and dissociation: A psychoanalytic perspective. In P. F. Dell & J. A. O'Neil (Eds.), Dissociation and the dissociative disorders: DSM-V and beyond (pp. 637–652). Routledge/Taylor & Francis Group.

Brunson, E., Thierry, A., Ligier, F., Vulliez-Coady, L., Novo, A., Rolland, A. C., & Eutrope, J. (2021). Prevalences and predictive factors of maternal trauma through 18 months after premature birth: A longitudinal, observational and descriptive study. PLoS One, 16(2).

Cantle, A. (2013). Alleviating the impact of stress and trauma in the neonatal unit and beyond. Infant Observation, 16(3), 257–269.

Cartwright, D. (2004). The psychoanalytic research interview: Preliminary suggestions. Journal of the American Psychoanalytic Association, 52(1), 209–242.

Cohen, M. (2003). Sent before my time: A child psychotherapist's view of life on a neonatal intensive care unit. Karnac Books.

D'Agata, A. L., Sanders, M. R., Grasso, D. J., Young, E. E., Cong, X., & Mcgrath, J. M. (2017). Unpacking the burden of care for infants in the NICU. Infant Mental Health Journal, 38(2), 306–317.

Gangi, S., Dente, D., Bacchio, E., Giampietro, S., Terrin, G., & De Curtis, M. (2013). Posttraumatic stress disorder in parents of premature birth neonates. Procedia-Social and Behavioral Sciences, 82, 882–885.

Garland, C. (1998). Thinking about trauma. In C. Garland (Ed.), Understanding trauma: A psychoanalytical approach. Duckworth.

Gurevich, H. (2008). The language of absence. The International Journal of Psychoanalysis, 89(3), 561–578.
Gurevich, H. (2014). The return of dissociation as absence within absence. The American Journal of Psychoanalysis, 74(4), 313–321.

Harris, J. (2005). Critically ill babies in hospital–Considering the experience of mothers. Infant Observation, 8(3), 247–258.

Hollway, W., & Jefferson, T. (2000). Doing qualitative research differently: Free association, narrative and the interview method. Sage.

Holmes, J. (2014). Countertransference in qualitative research: A critical appraisal. Qualitative Research, 14(2), 166–183.

Jubinville, J., Newburn-Cook, C., Hegadoren, K., & Lacaze-Masmonteil, T. (2012). Symptoms of acute stress disorder in mothers of premature infants. Advances in Neonatal Care, 12(4), 246–253.

Karatzias, T., Chouliara, Z., Maxton, F., Freer, Y., & Power, K. (2007). Post-traumatic symptomatology in parents with premature infants: A systematic review of the literature. Journal of Prenatal & Perinatal Psychology & Health, 21(3), 249.

Kim, W. J., Lee, E., Kim, K. R., Namkoong, K., Park, E. S., & Rha, D. W. (2015). Progress of PTSD symptoms following birth: A prospective study in mothers of high-risk infants. Journal of Perinatology, 35(8), 575–579.

Kraemer, S. B., & Steinberg, Z. (2006). It's rarely cold in the NICU: The permeability of psychic space. Psychoanalytic Dialogues, 16(2), 165–179.

Lau, R., & Morse, C. A. (2003). Stress experiences of parents with premature infants in a special care nursery. Stress and Health: Journal of the International Society for the Investigation of Stress, 19(2), 69–78.

Lemma, A., & Levy, S. (2004). The impact of trauma on the psyche: Internal and external processes.

Lieberman, A. F., Chu, A., Van Horn, P., & Harris, W. W. (2011). Trauma in early childhood: Empirical evidence and clinical implications. Development and Psychopathology, 23(2), 397–410.

Loewenstein, K. (2018). Parent psychological distress in the neonatal intensive care unit within the context of the social ecological model: A scoping review. Journal of the American Psychiatric Nurses Association, 24(6), 495–509.

Marks, S., & Mönnich-Marks, H. (2003). The analysis of countertransference reactions is a means to discern latent
interview-contents. Forum: Qualitative Social Research, 4(2), 1–13.

Mendelsohn, A. (2005). Recovering reverie: Using infant observation in interventions with traumatized mothers and their premature babies. Infant Observation, 8(3), 195–208.

Mortimer, H., Habash-Bailey, H., Cooper, M., Ayers, S., Cooke, J., Shakespeare, J., Aslanyan, D., & Ford, E. (2021). An exploratory qualitative study exploring GPs' and psychiatrists' perceptions of post-traumatic stress disorder in postnatal women using a fictional case vignette. Stress and Health, 38(3), 544–555.

Mucci, C. (2021). Dissociation vs repression: A new neuropsychoanalytic model for psychopathology. The American Journal of Psychoanalysis, 81(1), 82–111.

Negri, R. (2018). The newborn in the intensive care unit: A neuropsychoanalytic prevention model. Harris Meltzer Trust.

Pierrehumbert, B., Nicole, A., Muller-Nix, C., Forcada-Guex, M., & Ansermet, F. (2003). Parental post-traumatic reactions after premature birth: Implications for sleeping and eating problems in the infant. Archives of Disease in Childhood - Fetal and Neonatal Edition, 88(5), F400–F404.

Rustin, M., & Shuttleworth, J. (1989). Closely observed infants. Duckworth.

Schimmenti, A., & Caretti, V. (2016). Linking the overwhelming with the unbearable: Developmental trauma, dissociation, and the disconnected self. Psychoanalytic Psychology, 33(1), 106–128.

Shaw, R. J., Deblois, T., Ikuta, L., Ginzburg, K., Fleisher, B., & Koopman, C. (2006). Acute stress disorder among parents
of infants in the neonatal intensive care nursery. Psychosomatics, 47(3), 206–212.

Shaw, R. J., St John, N., Lilo, E., Jo, B., Benitz, W., Stevenson, D. K., & Horwitz, S. M. (2014). Prevention of traumatic stress in mothers of preterms: 6-month outcomes. Pediatrics, 134(2), e481–e488.
Steinberg, Z. S. (2006). Pandora meets the NICU parent or whither hope? Psychoanalytic Dialogues, 16(2), 133–147.

Strømme, H., Gullestad, S. E., Stänicke, E., & Killingmo, B. (2010). A widened scope on therapist development: Designing a research interview informed by psychoanalysis. Qualitative Research in Psychology, 7(3), 214–232

Vanier, C. (2015). Premature birth: The baby, the doctor and the Psychoanalyst. Karnac Books.

Yaari, M., Millo, I., Harel-Gadassi, A., Friedlander, E., Bar-Oz, B., Eventov-Friedman, S., Mankuta, D., & Yirmiya, N. (2017). Maternal resolution of preterm birth from 1 to 18 months. Attachment & Human Development, 19(5), 487–503.

References – Paper 3

Amez, S., & Botero, H. (2000). The mother, the baby, the pouch and the observer. Feeding difficulties of an infant on the kangaroo mother programme. Infant Observation, 3(2), 33-45.

Anderson, P.J. & Doyle, L.W. (2004). Executive functioning in school aged children who were born very preterm or with extremely low birthweight in the 1990s. Pediatrics, 114(1), 50-57.

Anscombe, E. (2008). The dichotomy of containing trauma amidst joy: New life and a neonatal death: the experience of working with the parents of twins on the NICU. Infant Observation, 11(2), 147-160.

Anzieu-Premmereur, C. (2019). Issues in Psychoanalytic Education: Infant Research and its Application to Psychoanalysis. American Psychoanalyst, 53, (1).

Balbernie, R. (2007). The move to intersubjectivity: A clinical and conceptual shift of perspective. Journal of Child Psychotherapy, 33(3), 308-324.

Bailey, T. D., & Brand, B. L. (2017). Traumatic dissociation: Theory, research, and treatment. Clinical Psychology: Science and Practice, 24(2), 170.

Beebe, B. (1982). Micro-timing in mother-infant communication. In M. Key (Ed.) Nonverbal communication today: Current research, 169-195. New York: Mouton.

Beebe, B., Jaffe, J., Markese, S., Buck, K., Chen, H., Cohen, P., Bahrick, L., Andrews, H. and Feldstein, S. (2010). The origins of 12-month attachment: A microanalysis of 4-month mother–infant interaction. Attachment & human development, 12(1-2), pp.3-141.

Beebe, B., Rustin, J., Sorter, D., & Knoblauch, S. (2003). An expanded view of intersubjectivity in infancy and its application to psychoanalysis. Psychoanalytic Dialogues, 13(6), 805-841.

Berthelot, N., Ensink, K., Bernazzani, O., Normandin, L., Luyten, P., & Fonagy, P. (2015). Intergenerational transmission of attachment in abused and neglected mothers: The role of trauma-specific reflective functioning. Infant mental health journal, 36(2), 200-212.

Bion (1964). Learning from experience. Heinemann.

Blessing, D. (2006). Shall I dare to come alive: Long term effects of painful beginnings. Infant Observation, 9(1), 53-64.

Borghini, A., Pierrehumbert, B., Miljkovitch, R., Muller-Nix, C., Forcada-Guex, M., & Ansermet, F. (2006). Mother's attachment representations of their premature infant at 6 and 18 months after birth. Infant Mental Health Journal, 27(5), 494-508.

Botero, H.; & Sanders, C. (2014). Mother-baby relationship: a loving next for mental health – observing 'kangaroo' infants. Infant Observation, 17(3), 215-232.

Boyer, D., & Sorenson, P. (1999). Adapting the Tavistock model of infant observation to work in the neonatal intensive care unit. Psychoanalytic Inquiry, 19:2, 146-159.

Brazelton, T. B., Tronick, E., Adamson, L., Als, H., & Wise, S. (1975). Early mother-infant reciprocity. Parent-infant interaction, 33(137-154), 122.

Brazelton, T. B., & Cramer, B. G. (1990). The earliest relationship: Parents, infants, and the drama of early attachment.Addison-Wesley:Addison Wesley Longman.

Brecht, C. J., Shaw, R. J., St. John, N. H., & Horwitz, S. M. (2012). Effectiveness of therapeutic and behavioral interventions for parents of low-birth-weight premature infants: A review. Infant mental health journal, 33(6), 651-665.

Bromberg, P. M. (1994). "Speak! that I may see you"; some reflections on dissociation, reality, and psychoanalytic listening. Psychoanalytic dialogues, 4(4), 517-547.

Browne, J. V., & Talmi, A. (2005). Family-based intervention to enhance infant–parent relationships in the neonatal intensive care unit. Journal of pediatric psychology, 30(8), 667-677.

Bruschweiler-Stern, N. (2009). The neonatal moment of meeting—building the dialogue, strengthening the bond. Child and Adolescent Psychiatric Clinics of North America, 18(3), 533-544.

Camhi, C. (2005). Siblings of premature babies: thinking about their experience. Infant Observation, 8(3), 209-233.

Canin, N. (2023). Premature infancy: A 25-year scoping review of psychoanalytic journal articles, Psychoanalytic Psychotherapy, 1-37.

Cartwright, D. (2004). The psychoanalytic research interview: Preliminary suggestions. Journal of the American Psychoanalytic Association, 52(1), 209-242.

Castro, E. (2011). Observing a premature baby: the case of Elicier. Infant Observation: 14(3).

Cantle, A. (2013). Alleviating the impact of stress and trauma in the neonatal unit and beyond. Infant Observation, 16(3), 257-269.

Cassiano, R. G., Gaspardo, C. M., & Linhares, M. B. M. (2016). Prematurity, neonatal health status, and later child behavioral/emotional problems: A systematic review. Infant Mental Health Journal, 37(3), 274-288.

Cho, Y., Hirose, T., Tomita, N., Shirakawa, S., Murase, K., Komoto, K., ... & Omori, T. (2013). Infant mental health intervention for preterm infants in Japan: promotions of maternal mental health, mother–infant interactions, and social support by providing continuous home visits until the corrected infant age of 12 months. Infant Mental Health Journal, 34(1), 47-59.

Cohen, M. (2003). Sent before my time: a child psychotherapist's view of life on a neonatal intensive care unit. Karnac Books.

Cox, S. M., Hopkins, J., & Hans, S. L. (2000). Attachment in preterm infants and their mothers: Neonatal risk status and maternal representations. Infant mental health journal, 21(6), 464-480.

D'Agata, A. L., Sanders, M. R., Grasso, D. J., Young, E. E., Cong, X., & Mcgrath, J. M. (2017). Unpacking the burden of care for infants in the NICU. Infant Mental Health Journal, 38(2), 306-317.

Danese, A., Caspi, A., Williams, B., Ambler, A., Sugden, K., Mika, J., Werts, H., Freeman, J., Pariante, C.M., Moffitt, T.E. and Arseneault, L., 2011. Biological embedding of stress through inflammation processes in childhood. Molecular psychiatry, 16(3), pp.244-246.

Feldman, R. (2006). From biological rhythms to social rhythms: Physiological precursors of mother-infant synchrony. Developmental Psychology, 42, 175–188.

Feldman, R., Greenbaum, C. W., & Yirmiya, N. (1999). Mother–infant affect synchrony as an antecedent of the emergence of self-control. Developmental psychology, 35(1), 223.

Field, T. (1994). The effects of mother's physical and emotional unavailability on emotion regulation. Monographs of the Society for Research in Child Development, 59, 208–227.

Field, T.M. (1990). Neonatal stress and coping in intensive care. Infant Mental Health Journal, 11, 57-65.

Fonagy, P., Steele, M., Steele, H., Moran, G. S., & Higgitt, A. C. (1991). The capacity for understanding mental states: The reflective self in parent and child and its significance for security of attachment. Infant mental health journal, 12(3), 201-218.

Fonagy, P. (2015). Mutual regulation, mentalization, and therapeutic action: A reflection on the contributions of Ed Tronick to developmental and psychotherapeutic thinking. Psychoanalytic inquiry, 35(4), 355-369.

Gorzilio, D. M., Garrido, E., Gaspardo, C. M., Martinez, F. E., & Linhares, M. B. M. (2015). Neurobehavioural development prior to term-age of preterm infants and acute stressful events during neonatal hospitalization. Early Human Development, 91(12), 769-775.

Gorski, P.A. (1983). Premature infant behavioural and physiological response to caregiving intentions in the intensive care nursery. In J.D. Call (Ed.). Frontiers of Infant Psychiatry, Vol 1. Basic Books.

Gurevich, H. (2014). The return of dissociation as absence within absence. The American Journal of Psychoanalysis, 74(4), 313-321.

Harris, J. (2005). Critically ill babies in hospital–Considering the experience of mothers. Infant Observation, 8(3), 247-258.

Holmes, J. (2014). Countertransference in qualitative research: A critical appraisal. Qualitative Research, 14(2), 166-183.

Jubinville, J., Newburn-Cook, C., Hegadoren, K., & Lacaze-Masmonteil, T. (2012). Symptoms of acute stress disorder in mothers of premature infants. Advances in Neonatal Care, 12(4), 246-253.

Keren, M., Feldman, R., Eidelman, A. I., Sirota, L., & Lester, B. (2003). Clinical interview for high-risk parents of premature infants (CLIP) as a predictor of early disruptions in the mother–infant relationship at the nursery. Infant Mental Health Journal, 24(2), 93-110.

Klein, M. (1946). Notes on schizoid mechanisms. In Klein, M. (Ed.), Envy and gratitude and other works 1946-1963. London: Vintage.

Lemma, A., & Levy, S. (2004). The impact of trauma on the psyche: Internal and external processes.

Lazar, R. A., & Ermann, G. (1998). Learning to be: On the observation of a premature baby. Infant Observation, 2(1), 21-39.

MacDonald, S. (2015). The incubator psyche. Psychoanalytic Psychotherapy, 29(1), 88-106.

McFadyen, A. (1995). Reflections on special-care babies and their early experience. Psychoanalytic psychotherapy, 9(2), 157-174.

Mello, M. F., Serafim, P. M., Moraes, M. L., Miranda, A. M., Soussumi, Y., & Mello, A. F. (2011). The impact of early maternal presence on child development and the stress response system. Neuropsychoanalysis, 13(2), 177-185.

Melnyk, B. M., Crean, H. F., Feinstein, N. F., & Fairbanks, E. (2008). Maternal anxiety and depression after a premature infant's discharge from the neonatal intensive care unit: explanatory effects of the creating opportunities for parent empowerment program. Nursing research, 57(6), 383-394.

Meltzoff, A. N., & Moore, M. (1998). Infant intersubjectivity: broadening the dialogue to include imitation, identity and intention. In Intersubjective communication and emotion in early ontogeny, Braten, S.(ed). Cambridge: Cambridge University Press, p.47-62.

Mendelsohn, A. (2005). Recovering reverie: Using infant observation in interventions with traumatised mothers and their premature babies. Infant Observation, 8(3), 195-208.

Miller, B. (2001). 'Sharing the thought': Work in a neo-natal unit. Infant Observation, 4(3), 97-108.

Moster, D., Lie, R.T., & Markestad, T. (2008). Long-term medical and social consequences of preterm birth. New England Journal of Medicine, 359(3), 262-273. Doi: 10.1056/NEJMoa0706475.

Negri, R. (2018). The newborn in the intensive care unit: a neuropsychoanalytic prevention model, Harris Meltzer Trust.

Nugent, J. K., Keefer, C. H., Minear, S., Johnson, L. C., & Blanchard, Y. (2007). The newborn behavioural observations (NBO) system handbook. Baltimore, MD, US: Paul H Brookes Publishing.

Porter, L., van Heugten, K., & Champion, P. (2020). The risk of low risk: First time motherhood, prematurity and dyadic well-being. Infant Mental Health Journal, 41(6), 836-849.

Raphael-Leff, J. (2018). The psychological processes of childbearing. Routledge.

Ribeiro Batista Gerladini, S.A. (2016). Becoming a person? Learning from observing premature babies and their mothers. Infant Observation, 19(1), 42-59.

Rustin, M. (2006). Infant Observation Research: What have we learnt so far? Infant Observation, 9:1,35-52.

Schimmenti, A., & Caretti, V. (2016). Linking the overwhelming with the unbearable: Developmental trauma, dissociation, and the disconnected self. Psychoanalytic Psychology, 33(1), 106.

Shuttleworth, J. (1989). In M. Rustin, M. & J. Shuttleworth. Closely observed infants. Duckworth.

Shonkoff, J. P., Garner, A. S., Siegel, B. S., Dobbins, M. I., Earls, M. F., McGuinn, L., Pascoe, J., Wood, D.L., & Committee on Early Childhood, Adoption, and Dependent Care. (2012). The lifelong effects of early childhood adversity and toxic stress. Pediatrics, 129(1), e232-e246.

Simons, H. (2020). Case Study Research: In-Depth Understanding in Context. In P, Leavy (Ed.). The Oxford Handbook of Qualitative Research (2nd ed.). (pp. 676–703). Oxford Academic.

Slade, A. (2005). Parental reflective functioning: An introduction. Attachment & human development, 7(3), 269-281.

Sroufe, L. A. (2013). The promise of developmental psychopathology: past and present. Development and psychopathology, 25(4pt2), 1215-1224.

Steibel, D., Caron, N. A., & Lopes, R. S. (2014). An observer's intense and challenging journey observing the short life of an extremely premature baby in Neonatal Intensive Care. Infant Observation, 17(3), 233-247.

Steinberg, Z.S. (2006). Pandora meets the NICU parent or whither hope? Psychoanalytic Dialogues, 16(2), 133-147.

Stern, D. N. (1995). The Motherhood Constellation: A Unified View of Parent-infant Psychotherapy. International Universities Press.

Stern, D. (1985). The Interpersonal World of the Infant: A View from Psychoanalysis and Developmental Psychology. New York: Basic Books.
Stern, D. (2005). Intersubjectivity. In E. S. Person, A. M. Cooper, & G. O. Gabbard (Eds.), The American psychiatric publishing textbook of psychoanalysis (pp. 77–92). American Psychiatric Publishing, Inc.

Trevarthen, C., & Aitken, K. J. (2001). Infant intersubjectivity: Research, theory, and clinical applications. The Journal of Child Psychology and Psychiatry and Allied Disciplines, 42(1), 3-48.

Tropiano, L. M., Fiamenghi-Jr, G. A., & Blascovi-Assis, S. M. (2017). Mothers and Premature Infants' Emotional Interactions in a Neonatal Infant Care Unit: Case Studies. European Scientific Journal December, 13(36), 1857-1961.

Vanderveen, J. A., Bassler, D., Robertson, C. M. T., & Kirpalani, H. (2009). Early interventions involving parents to improve neurodevelopmental outcomes of premature infants: a meta-analysis. Journal of perinatology, 29(5), 343-351.

Vanier, C (2015). Premature Birth: The Baby, the Doctor and the Psychoanalyst. Karnac Books, 2015.

Vanier, C. (2017). The relationship between the parents and the premature baby. International Forum of Psychoanalysis, 26(1):29-32.

Wijnroks, L. (1999). Maternal recollected anxiety and mother–infant interaction in preterm infants. Infant Mental Health Journal, 20(4), 393-409.

Wilfong, E. W., Saylor, C., & Elksnin, N. (1991). Influences on responsiveness: Interactions between mothers and their premature infants. Infant Mental Health Journal, 12(1), 31-40.

Winnicott, D. W. (1960). The Theory of the Parent-Infant Relationship. International Journal of Psycho-Analysis, 41, 585-595.

Winnicott, D. W. (1956). Primary maternal preoccupation. The maternal lineage: Identification, desire, and transgenerational issues, 59-66.

Winnicott, DW. (1965). The maturational process and the facilitating environment. London: Hogarth.

References – Paper 4

Ainslie, R. C., & Brabeck, K. (2003). Race murder and community trauma: Psychoanalysis and ethnography in exploring the impact of the killing of James Byrd in Jasper, Texas. Journal for the Psychoanalysis of Culture and Society, 8(1), 42-50.

Anscombe, E. (2008). The dichotomy of containing trauma amidst joy: New life and a neonatal death: the experience of working with the parents of twins on the NICU. Infant Observation, 11(2), 147-160.

Bain, K., Gericke, R., & Harvey, C. (2010). Bonding experiences in a South African Community Hospital: Kangaroo mother care ward. Attachment, 4(3), 235-262.

Berg, A. (2003). Beyond the dyad: Parent–infant psychotherapy in a multicultural society—reflections from a South African perspective. Infant Mental Health Journal: Official Publication of The World Association for Infant Mental Health, 24(3), 265-277.

Berg, A. (2007) 'Ten years of parent–infant psychotherapy in a township in South Africa. What have we learnt?'. In Pozzi-Monzo, M.E. and Tydeman, B. (eds) Innovations in Parent–Infant Psychotherapy. London: Karnac.

Berger, L. (2001). Inside out: Narrative Autoethnography as a path toward rapport. Qualitative Inquiry (7), 504-518.

Botero, H.; & Sanders, C. (2014). Mother-baby relationship: a loving next for mental health – observing 'kangaroo' infants. Infant Observation, 17(3), 215-232.

Brown, J. (2006). Reflexivity in the Research Process. Psychoanalytic Observations, 9(3), 181-197. DOI: 10.1080/13645570600652776

Canin, N. (2023). Premature infancy: A 25-year scoping review of psychoanalytic journal articles, Psychoanalytic Psychotherapy, 1-37.

Canin, N. & Bain, K. (2023a). The trauma of premature birth for mothers with infants in neonatal high care: The role of dissociation due to traumatic childhood experience. International Journal of Applied Psychoanalytic Studies.

Canin, N., & Bain, K. (2023b). Intersubjectivity in Premature Infant-Mother Dyads: Maternal States of Mind and Premature Infant Responsivity. Psychoanalytic Social Work, 1-23.

Cantle, A. (2013). Alleviating the impact of stress and trauma in the neonatal unit and beyond. Infant Observation, 16(3), 257-269.

Cartwright, D. (2004). The psychoanalytic research interview: Preliminary suggestions. Journal of the American Psychoanalytic Association, 52(1), 209-242.

Castro, E. (2011). Observing a premature baby: the case of Elicier. Infant Observation: 14(3).

Clarke, S. (2002). Learning from experience: psycho-social research methods in the social sciences. Qualitative Research, 2(2), 173-194.

Cohen, M. (2003). Sent before my time: a child psychotherapist's view of life on a neonatal intensive care unit. Karnac Books.

Dickson-Swift, V., James, E. L., Kippen, S., & Liamputtong, P. (2007). Doing sensitive research: what challenges do qualitative researchers face? Qualitative Research, 7(3), 327-353.

Dugmore, N. (2013). The grandmaternal transference in parent–infant/child psychotherapy. Journal of Child Psychotherapy, 39(1), 59-75.

Elliott, H., Ryan, J., & Hollway, W. (2012). Research encounters, reflexivity and supervision. International Journal of Social Research Methodology, 15(5), 433-444.

Esprey, Y. M. (2017). The problem of thinking in black and white: Race in the South African clinical dyad. Psychoanalytic Dialogues, 27(1), 20-35.

Fahie, D. (2014). Doing sensitive research sensitively: Ethical and methodological issues in researching workplace bullying. International journal of qualitative methods, 13(1), 19-36.

Finlay, L. (2002). Negotiating the swamp: the opportunity and challenge of reflexivity in research practice. Qualitative Research, 2(2), 209-230.DOI: 10.1177/146879410200200205

Freud, S. (1910/1959) Five lectures on psycho-analysis. In: Strachey, J. (ed. and trans.), The Standard Edition of the Complete Psychological Works of Sigmund Freud, Volume 11. London: Hogarth Press, 1953.

Froggett, L., & Hollway, W. (2010). Psychosocial research analysis and scenic understanding. Psychoanalysis, Culture & Society, 15, 281-301.

Frosh, S., & Baraitser, L. (2008). Psychoanalysis and psychosocial studies. Psychoanalysis, Culture & Society, 13, 346-365.

Gair, S. (2012). Feeling their stories: Contemplating empathy, insider/outsider positionings, and enriching qualitative research. Qualitative Health Research, 22(1), 134-143.

Gemignani, M. (2011). Between researcher and researched: An introduction to countertransference in qualitative inquiry. Qualitative Inquiry, 17(8), 701-708.

Hammersley, M. (2006). Ethnography: problems and prospects. Ethnography and Education, 1(1), 3-14.

Hardy, N. (2005). A premature view: Observations in a SCBU. Infant Observation, 8(2), 169-176.

Harris, J. (2005). Critically ill babies in hospital–Considering the experience of mothers. Infant Observation, 8(3), 247-258.

Harvey, C. (2017). The intricate process of psychoanalytic research: Encountering the intersubjective experience of the researcher–participant relationship. British Journal of Psychotherapy, 33(3), 312-327.

Hayes, J. A. (2004). The inner world of the psychotherapist: A program of research on countertransference. Psychotherapy Research, 14(1), 21-36.

Heimann, P. (1950). Countertransference. British Journal of Medical Psychology, 33, 9–15.

Heimann, P. (1950). On countertransference. *International Journal of Psychoanalysis*, 31, 81–84.

Hollway, W., & Jefferson, T. (2000). Doing qualitative research differently: Free association, narrative and the interview method. Sage.

Hollway, W. (2013). Locating unconscious. Organisational and Social Dynamics, 13(1), 22-40.

Hollway, W. (2016) 'Emotional experience plus reflection: countertransference and reflexivity in research.' Special issue 'The creative use of self in research: explorations of reflexivity and research relationships in psychotherapy.' *The Psychotherapist*, 62 (Spring) 19-21.

Holmes, J. (2014). Countertransference in qualitative research: A critical appraisal. Qualitative Research.14(2). 166-183.

Heimann, P. (1950). On countertransference. International Journal of Psychoanalysis, 31, 81–84.

Jones, K. (2013). Adopting a reflexive approach to researching sensitive subjects: parental experiences of stillbirth and neonatal death. Methodological Innovations Online, 8(1), 113-127.

Jules-Rosette, B. (1979). African apostles: Ritual and conversion in the church of John Maranke.NewYork: Cornel University Press.

Knowles, C. (2006). 'Handling your baggage in the field: Reflections on research relationships. International Journal of. Social Research Methodology, 9(5), 393–404.

Koller, S. H., Raffaelli, M., & Carlo, G. (2012). Conducting research about sensitive subjects: The case of homeless youth. *Universitas Psychologica*, 11(1) 55-65.

Komaromy, Carol (2020). The performance of researching sensitive issues. Mortality, 25(3) pp. 364–377.

Kraemer, S.B.; & Steinberg, Z. (2006). It's rarely cold in the NICU: The permeability of psychic space. Psychoanalytic Dialogues, 16(2), 165-179.

Lazar, R. A., & Ermann, G. (1998). Learning to be: On the observation of a premature baby. Infant Observation, 2(1), 21-39.

Lee, R. M. (1993) Doing Research on Sensitive Topics, London: Sage.

Little, M. (1951). Countertransference and the patient's response to it. International Journal of Psychoanalysis, 32, 32–40.

Long, C., & Eagle, G. (2009). Ethics in tension: Dilemmas for clinicians conducting sensitive research. Psychoanalytic Psychotherapy in South Africa, 17 (2), 27-52.

Marks, S., & Mönnich-Marks, H. (2003). The analysis of countertransference reactions is a means to discern latent interview-contents. Qualitative Social Research, 4, (2).

McFadyen, A. (1995). Reflections on special-care babies and their early experience. *Psychoanalytic Psychotherapy*, 9(2), 157-174.

Mello, M. F., Serafim, P. M., Moraes, M. L., Miranda, A. M., Soussumi, Y., & Mello, A. F. (2011). The impact of early maternal presence on child development and the stress response system. Neuropsychoanalysis, 13(2), 177-185.

Mendelsohn, A. (2005). Recovering reverie: Using infant observation in interventions with traumatised mothers and their premature babies. Infant Observation, 8(3), 195-208.

Miller, B. (2001). 'Sharing the thought': Work in a neo-natal unit. Infant Observation, 4(3), 97-108.

Mitchell, W. & Irvine, A. (2008) I'm okay, you're okay? Reflections on the well-being and ethical requirements of researchers and research participants in conducting qualitative fieldwork interviews. International Journal of Qualitative Methods, 7(4): 31–44.

Negri, R. (2018). *The newborn in the intensive care unit: A neuropsychoanalytic prevention model.* Harris Meltzer Trust.

Nelson, R. (2020). Questioning identities/shifting identities: the impact of researching sex and gender on a researcher's LGBT+ identity. Qualitative Research, 20(6), 910-926.

Obasi C (2014) Negotiating the insider/outsider continua: a black female hearing perspective on research with deaf women and black women. Qualitative Research, 14(1): 61–78.

O'Donovan, A.; & Nixon; E. (2019). 'Weathering the storm:' Mothers' and fathers' experiences of parenting a preterm infant. Infant Mental Health Journal, 40, 573-587.

Parker, I.(2010). The place of transference in psychosocial research. Journal of Theoretical & Philosophical Psychology, 30(1), 17-31.

Pillow, W. (2003) Confession, catharsis, or cure? Rethinking the uses of reflexivity as methodological power in qualitative research, International Journal of Qualitative Studies in Education, 16:2, 175-196, DOI: 10.1080/0951839032000060635

Porter, L., van Heugten, K., & Champion, P. (2020). The risk of low risk: First time motherhood, prematurity and dyadic well-being. Infant Mental Health Journal, 41(6), 836-849.

Proudfoot, J. (2015). Anxiety and phantasy in the field: The position of the unconscious in ethnographic research. Environment and Planning: Society and Space, 33(6), 1135-1152.

Ribeiro Batista Gerladini, S.A. (2016). Becoming a person? Learning from observing premature babies and their mothers. Infant Observation, 19(1), 42-59.

Sherif B (2001) The ambiguity of boundaries in the fieldwork experience: establishing rapport and negotiating insider/outsider status. Qualitative Inquiry, 7(4): 436–447.

Simon, J. (2010). The ogre and Little Thumb. Love, hate and survival in neonatology: an application of Ester Bick's method of infant observation. Infant Observation, 13(2), 167-178.

Steibel, D., Caron, N. A., & Lopes, R. S.(2014). An observer's intense and challenging journey observing the short life of an extremely premature baby in Neonatal Intensive Care. Infant Observation, 17(3), 233-247.

Steinberg, Z.S. (2006). Pandora meets the NICU parent or whither hope? Psychoanalytic Dialogues, 16(2), 133-147.

Stern, D. N. (1998). The motherhood constellation: A unified view of parent-infant psychotherapy. Routledge.

Tedlock, B. (1991). From Participant Observation to the Observation of Participation: The Emergence of Narrative Ethnography. Journal of Anthropological Research, 47 (1), 69-94.

Vanderveen, J. A., Bassler, D., Robertson, C. M. T., & Kirpalani, H. (2009). Early interventions involving parents to improve neurodevelopmental outcomes of premature infants: a meta-analysis. Journal of Perinatology, 29(5), 343-351.

Vanier, C (2015). Premature Birth: The Baby, the Doctor and the Psychoanalyst. Karnac Books, 2015.

Vanier, C. (2017). The relationship between the parents and the premature baby. International Forum of Psychoanalysis, 26(1):29-32.

7.5 Appendix A: Participant Information Sheet

Dear Madam,

My name is Nicole Canin and I am a Doctoral (PhD) student in the Psychology Department at the University of the Witwatersrand. I am conducting a research project which explores the experiences of premature infants and their mothers in a neonatal intensive care unit (NICU). I would like to invite you to participate in my research.

If you agree to participate, you will be asked to have a conversation with me during three interviews around the topic mentioned above. These interviews will be arranged over the course of two weeks. In these interviews I am interested in hearing about your baby's experiences in the NICU. I am also interested in hearing about your experiences over this time, and how this has affected your feelings towards your baby and your role as a mother. Each interview will be audio-recorded, with your permission. The interviews will take between one and one and a half hours each. These interviews will be held at the Rahima Moosa Hospital, at a time of your convenience.

As part of the study, you will also be asked for your permission for me to observe you and your baby in the NICU on two occasions for approximately an hour each time, however, the time frames of this will be up to you.

Should you want to take part in this study, you will be asked to sign consent forms, agreeing to participate in both the interviews and the observations.

Taking part in the interviews will not advantage you in any way. You will not receive any compensation, monetary or otherwise, for participating in the study. No risks to participation in this study are anticipated. Participation will be completely voluntary and you may withdraw from them at any point. Choosing not to be part of the study at any time will have no benefit or risk for you if you choose to do so. You may also choose not to

answer any question(s) with no negative consequences. You will be treated with sensitivity and respect in all aspects of the interviews.

Your identity as a participant will only be known to me and my supervisor. The audio recordings and the transcriptions of them will be kept safe in a password protected computer file. Only my supervisor and I will have access to these files. To protect your confidentiality and anonymity in the write up of the research, your name and other personal information will not appear anywhere. Instead, pseudonyms (made-up names) will be used. Any information you give me that might identify you to others, will be removed or disguised. Some parts of the interviews will be directly quoted in the research report, however, this will be done under the pseudonym given to you and with identifying material removed or disguised.

If you agree to participate, you will be asked for additional permission to video one or two small clips of you and your baby. These clips will be for 2-3 minutes. You don't have to consent to this in order to take part in the study. The video-recordings of you and your baby will also only be seen by me and my supervisor, unless you give your permission for me to use these video-recordings at any presentations I might make about this research. If you give permission for this, please note that your face and your baby's face will be visible, so other people might then be able to identify you.

Once the study has been completed, the PhD thesis resulting from this research will be available on the internet. The findings will also be presented at academic conferences and published in scientific journals or book chapters. Your name will never appear in any form in any written report or publication. However, if you give permission for your video-recordings to be used for presentationsIf you wish to have access to a summary of the results, let me know and I will arrange this.

If during and/or by the end of the interviews you feel that you would benefit from counselling, you are advised to contact the free counselling service below for emotional support:

Emthonjeni Centre (University of the Witwatersrand): 011 717 4513

Prior to participating in the interviews it is required that you complete the consent forms attached to this sheet. These will be kept separate from the rest of the data for the purpose of confidentiality.

If you have any questions about this research please do not hesitate to contact myself or my supervisor. You can contact me via email at nic.canin@gmail.com, or telephonically on 0833817803. You can contact my supervisor, Dr. Katherine Bain, via email at Katherine.Bain@wits.ac.za. You may also contact the chair of Human Research Ethics Committee (Medical), Dr Penny, or the administrative officer, Mr Rhulani Mkansi at HREC-Medical.ResearchOffice@wits.ac.za or telephonically at 011717-1234.

Warm Regards,

Nicole Canin

7.6 Appendix B: Informed Consent for Participants for Interviews and Observations

I, _____, consent for myself and my infant, _____, to take part in the three interviews and two observation sessions conducted by Nicole Canin, for her study exploring the experiences of premature infants and their mothers in the context of a neonatal intensive care unit.

The research study has been explained to me.

As a participant in her study, I understand that:

- My participation is voluntary.
- I am able to withdraw from the study at any time.
- I may choose not to answer any question(s) I do not wish to answer.
- I may choose for myself and my baby not to be observed at any time.
- There are no risks or benefits associated with participating in this study.
- All my personal details will remain private and confidential.
- The transcripts (typed up versions of the interviews), audio-recordings and video-recordings will be kept on the researcher's password protected computer and will only be seen by the researcher and her supervisor.
- Although I may be directly quoted in the PhD thesis, I will be referred to by the pseudonym given to me, and thus my identity will be protected. No material which would allow others to identify me will appear in the reporting of results, unless I give my permission for my video-recordings to be used for conference presentations, in which case, although my name and my baby's name will not be used, we may be identifiable in the video.
- The results of the study will be used in the research thesis that is required for the completion of Nicole's PhD in Psychology.
- The results of the research may also be presented at a conference(s) and/or published in a journal and/or book chapter.

- After the study, the anonymised transcripts of the interviews will be stored on the researcher and her supervisor's computers for possible further research.

Participant's name: _____

Participant's signature: _____

Date: _____

7.7 Appendix C: Audio-recording Consent for Participants

I, _____, consent to the audio recording of the three interviews conducted by Nicole Canin, for her study exploring the experiences of premature infants and their mothers.

I understand that:

- The audio-recordings and transcripts from the individual interview conversations will be accessible to Nicole Canin and her supervisor only.
- The audio-recordings and transcripts will be kept in a safe place (a password protected computer file).
- No identifying information about any of the participants will be used in the transcripts or in the final research report or publications which arise.
- Although I may be directly quoted in the PhD thesis, I will be referred to by the pseudonym given to me, and thus my identity will be protected. No material which would allow others to identify me will appear.

Participant's name: _____

Participant's signature: _____

Date: _____

7.8 Appendix D: Consent for Filming for Participants

I, _____, consent to the taking of one to two short videos during the scheduled observations conducted by Nicole Canin, for her study exploring the experiences of premature infants and their mothers. These videos will be taken on the researchers' cellphone.

I understand that:

- The videos will be taken on the researchers' cellphone.
- I can agree to being filmed and insist that my identity remain protected and anonymous. In this case, the video material will only be used for the purposes of research.
- I can give further permission for these video clips to be used by the researcher at conferences and for training purposes. I am aware that my baby's face and my face will be visible and therefore my identity cannot be protected if I agree to this.

Please check the boxes below if you agree to the following:

☐

I agree to allow myself and my baby to be filmed in one or two short video clips.

☐

I agree for these video clips to be used by the researcher at conferences and for training purposes.

Participant's name: _____

Participant's signature: _____

Date: _____

7.9 Appendix E: Psychoanalytic Research Interview Outline

Interview 1

1) Personal details of the participants:

1. Age
2. Ethnicity
3. Marriage/relationship status and length of relationship
4. Employment
5. Number of children
6. Birth order of your child currently in the NICU
7. Sex of the infant

2) Participants are then to be briefed in the following unstructured way:

'I am interested in learning about premature babies, what they experience and how they communicate. I am also interested in the experience of mothers here in the neonatal ICU. I would love to hear about your baby's journey since s/he was born. What has s/he been through here in the hospital? I would also like to hear about your experience since his/her birth, in as much detail as you would like to give. You can be as honest and open as feels comfortable for you. Please feel free to tell me anything that comes to mind; or that you may wish to share, however small or irrelevant you may feel it is'.

3) The researcher will however have follow-up questions to be used in cases where participants struggle to free-associate around the topic.

Follow-up questions/prompts:

1. What have you been you told about your child's early birth?
2. Who was with you when you were told?
3. What were your initial thoughts and feelings?
4. How do you feel about your child being here in the NICU?
5. Do you have any fears or concerns?
6. How did your partner/husband/the child's father react? What was this like for you?
7. How did the rest of the family respond? What was this like for you?
8. What has your experiences been like with the medical professionals?

9. What kinds of support systems do you have?

4) Questions to be asked at the end of each interview:

1. What was it like for you talking to me about your experiences as well as your baby's experiences today?
2. Was there anything that you found surprising or unexpected in your responses?
3. Is there anything else you wish to add before we end this interview?

5) Debriefing at the end of each interview:

4. Are you okay to stop for today?
5. How are you feeling?
6. Do you have any questions for me?

Interview 2

1) Questions about the participant's previous experiences

1. How have you and baby been since we last met?
2. How did you experience the previous interview?
3. Do you have any questions or thoughts after the previous interview?
4. What was it like talking about your experiences?
5. Has anything come to mind since your last interview?
6. I was also wondering what the observation was like for you? Did you have thoughts or feelings about that experience?

2) The researcher may use this opportunity to ask about any contradictions, conflicts and observed psychological defences that may have arisen in the previous interview. Anything that needs clarification might also be brought up.

3) Semi-Structured Interview Schedule

Question 1

Tell me about your pregnancy with ... (child's name).

Follow up Questions or Prompts:

- Was the pregnancy planned?
- Did you experience any difficulties or complications during the pregnancy?
- How did you feel during the pregnancy - physically and emotionally
- Had you ever been pregnant before?
- When did the pregnancy seem real to you?
- What were your impressions about the baby during pregnancy?
- What did you sense the baby might be like (including gender, temperament/personality)?
- How do you feel that the baby came early?
- What fantasies and images did you have about how you would be as a mom before your child was born?
- Have these dreams changed at all?

Question 2

Tell me about labour and delivery. (This may have been addressed sufficiently in the first interview)

Follow up Questions or Prompts:

- When did you realise that you were going to deliver?
- How did you feel and react at the time?
- What was your first reaction when you saw the baby?

Question 3

How would you describe your baby now?

Follow up Questions or Prompts:

- Do you have an impression of your child's personality now.
- Have you noticed anything about your child during this time in the NICU?
- Does your child seem to react negatively to anything specific?
- How do you feel when your child reacts that way?
- Does your child seem to react positively to anything specific?
- How do you feel when your child reacts that way?

Question 4

Does your child remind you of anyone?

Follow up Questions or Prompts:

- In what ways do they remind you of this person?
- When did you first think about the similarity?
- Does your child make you think about any aspects of yourself?
- Have you given your child a name?
- How did you come to choose your child's name?
- Does the name seem to fit?

Question 5

How do you feel about your baby?

Question 6

How would you describe the interactions, if any, that you've been able to have with your child?

Follow up Questions or Prompts:

- How do you feel when you interact with your child?
- Are there behaviours that worry you?
- How do you feel about your child's appearance?
- Do you have any fears when interacting with him?

At this point, the film clip will be shown to the mother. Questions might be asked pertaining to specific aspects of the observation, and interactions observed.

Question 7

How do you feel about your baby now?

4) Questions to be asked at the end of each interview:

1. What was it like for you talking to me about your experiences as well as your baby's experiences today?

2. Was there anything that you found surprising or unexpected in your responses?

3. Is there anything else you wish to add before we end this interview?

5) Debriefing at the end of each interview:

1. Are you okay to stop for today?

2. How are you feeling?

3. Do you have any questions for me?

Interview 3

1) Questions about the participant's previous experiences

1. How did you experience the previous interview?
2. Do you have any questions or thoughts after the previous interview?
3. What was it like talking about your experiences?
4. Has anything come to mind since your last interview?
5. I was also wondering what the observation was like for you? Did you have thoughts or feelings about that experience?

2) The researcher may use this opportunity to ask about any contradictions, conflicts and observed psychological defences that may have arisen in the previous interview. Anything that needs clarification might also be brought up.

3) Semi-Structured Interview Schedule

Question 1
Please tell me about your family growing up.
Question 2
Please tell me about your mother

Follow up Questions or Prompts:

- What memories do you have about your mother?
- What was she like when you were growing up?
- Is she still alive?
- What kind of relationship do you have with her now?

Question 3

Please tell me about your father

Follow up Questions or Prompts:

- What memories do you have about your father?
- What was he like when you were growing up?
- Is he still alive?
- What kind of relationship do you have with him now?

Question 4

How would you describe your childhood?

Follow up Questions or Prompts:

What kind of child did your parents feel you were? Have your parents spoken to you about your birth. What kind of baby were you?

Question 5 (This question will only be asked if the interviewer, based on the entirety of her experience with the interviewee, feels the interviewee will manage emotionally with this question)

Have you experienced any other traumas before the premature birth of your infant?

Follow up questions or prompts:

Can you tell me a little about what your experience was like? Did you have support?

4) Questions to be asked at the end of each interview:

1. What was it like for you talking to me about your experiences as well as your baby's experiences today?

2. Was there anything that you found surprising or unexpected in your responses?

3. Is there anything else you wish to add before we end this interview?

4. Thinking the process as a whole, how has this experience been for you?

5. Would you like to share any thoughts about your experience with me?

6. What was it like to be interviewed by a woman of different colour? Did you worry I might not understand things?

5) Debriefing at the end of the interview:

1. Are you okay to stop for today?

2. How are you feeling?

3. Do you have any questions for me?

7.10 Appendix F: Medical Ethics Clearance

UNIVERSITY OF THE WITWATERSRAND, JOHANNESBURG	HUMAN RESEARCH ETHICS COMMITTEE (MEDICAL)

Office of the Deputy Vice-Chancellor (Research & Post Graduate Affairs)

TO: Ms N Canin
School of Human and Community Development
Department of Psychology
University

E-mail: nic.canin@gmail.com

CC: Supervisor: Dr K Bain <Katherine.Bain@wits.ac.za>
and <HREC-Medical.ResearchOffice@wits.ac.za>

FROM: Iain Burns
Human Research Ethics Committee (Medical)
Tel: 011 717 1252

E-mail: Iain.Burns@wits.ac.za

DATE: 05/04/2019

REF: *R14/49*

PROTOCOL NO: **M1811108** *(This is your ethics application study reference number. Please quote this reference number in all correspondence relating to this study)*

PROJECT TITLE: *The experience of premature infancy within the mother-infant dyad in neonatal intensive care units: A psychonalytic and attachment theory-based exploration*

Please find attached the Clearance Certificate for the above project. I hope it goes well and that an article in a recognized publication comes out of it. This will reflect well on your professional standing and contribute to the Government funding of the University.

MSWorks2000/Iain0007/Clearscan.wps

7.11 Appendix G: Approval Letter from Rahima Moosa

GAUTENG PROVINCE
HEALTH
REPUBLIC OF SOUTH AFRICA

RAHIMA MOOSA MOTHER AND CHILD HOSPITAL

Enquiries : Karen Marshall
Tel : (011) 470 9284
Fax : 086 553 4623
Email : Karen.Marshall@wits.ac.za

TITLE OF RESEARCH PROJECT:
"Qualitative research including semi structured interviews and infant observation"

NAME OF RESEARCHER:
Ms. Nicole Canin
Psychology
Department
University of the Witwatersrand

NAME OF SUPERVISOR:
Ms. Katherine Bain

DEPARTMENT WHERE RESEARCH WILL BE CONDUCTED:
Paediatrics and Child Health

NHRD REF NO: GP_2019_013

Dear Ms. Canin,

Permission is granted for you to conduct the research as indicated in the title above.

The terms under which this permission is granted is contained in the Researcher Declaration form that you have signed. Failure to comply with these conditions will result in the withdrawal of such permission.

It is crucial for you to inform the Research Coordinator, Karen Marshall of the actual start and end dates of your study. This could be done by e-mail.

Should the study commence more than 12 months after receipt of this approval letter you will have to go through the process of applying again.

You are strongly advised to keep a signed copy of the declaration form so as to ensure that the terms of this agreement are complied with at all times.

Yours sincerely,

DR FREW BENSON
ACTING CHIEF EXECUTIVE OFFICER
2019:03:08

ADDRESS: Cnr FUEL & OUDSTHOORN STREET CORONATIONVILLE 2093 / PRIVATE BAG X20 NEWCLARE 2112 JHB