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Psychology

School of Human & Community Development

University of the Witwatersrand

Private Bag 3, Wits, 2050

Tel: 011 717 4503 Fax: 011 717 4559

A double-edged sword: women's affective experiences of successful assisted reproduction

Tatiana Campbell

University of the Witwatersrand

Supervised by: Professor Carol Long

A research project submitted in partial fulfilment of the requirements for the degree of MA Clinical Psychology in the Faculty of Humanities, University of the Witwatersrand, Johannesburg, 15th March 2019.

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Surname: Campbell
First name/s: Tatiana Carlota
Student no.: 507427
Supervisor: Professor Carol Long

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Chapter One: Introduction and Rationale

The prevalence of infertility across the world is staggeringly high. In 2010, an estimated 48.5 million couples worldwide experienced infertility (Mascarenhas, Flaxman, Boerma, Vanderpoel, & Stevens, 2012). A more recent statistic estimated up to 186 million people worldwide are affected by infertility (Inhorn & Patrizio, 2015). A comprehensive meta-analysis investigating assisted reproductive technologies, the risk of pregnancy-related complications and unfavourable pregnancy outcomes established approximately 200,000 babies are born worldwide each year by assisted reproductive technologies, and approximately 5 million children in total across the world are born as a result of assisted reproduction (Qin, Liu, Sheng, Wang, & Gao, 2016). Children conceived through assisted reproduction currently make up 3.3% of all births in Australia, 4.2% in Israel, 1.5% in Japan, 1% in the United States, 5.9% in Denmark, and between 1.7%–2.2% in the largest European countries including Germany, France, United Kingdom, and Italy (Qin et al., 2016). Furthermore, since 1989 the International Committee for Monitoring Assisted Reproductive Technologies (ICMART) generate annual worldwide reports and offer the most extensive global statistical census and review of assisted reproductive technologies (Dyer et al., 2016). The ICMART's report for the years 2008, 2009 and 2010 indicated more than 4461309 assisted reproductive cycles are initiated, resulting in an estimate of 1144858 babies born through assisted reproduction (Dyer et al., 2016). The estimated number of the overall initiated assisted reproduction cycles and of babies born during the three year period increased by approximately 9.5% and 9.1% per annum (Dyer et al., 2016).

Moreover, data collected from the South African National Census of 2011 provide indications of the levels, trends and differentials of fertility in South Africa. The results of the South African National Census 2011 indicate that fertility has continued to decline in South Africa since the previous Census of 1996 and 2001 (The National South African Census 2011, 2015). Fertility data suggests an estimated 2.67 total fertility rate (TFR) in South Africa. The results also indicate a variation in fertility by population group and province (The National South African Census 2011, 2015). The level of fertility of Black African (2.82) and Coloured (2.57) population groups remain higher than that of White (1.70) and Indian/Asian (1.85) population groups. Significantly, for all population groups there is a decline in TFR over time (The National South African Census 2011, 2015). According to the data the national TFR indicates a decline in fertility from 3.23 children per woman in 1996 to 2.67

children per woman in 2011. This may be a reason for growth in the utilisation of assisted reproductive technologies in South Africa.

In 1978, in vitro fertilisation (IVF) became a reality as the world's first 'test-tube' baby, conceived through biotechnologies in a petri dish outside of her mother's womb, was born (Inborn & Birenbaum-Carmeli, 2008). Public interest in assisted reproduction since the birth of Louise Brown remains high as Louise's birth marked the beginning of a new era for medicine as infertility became diagnosable and treatable (Kamel, 2013). Assisted reproductive technologies refer to technologies and associated methods used to assist individuals experiencing infertility in achieving a pregnancy and offer a range of different treatments (Kamel, 2013). These technologies cover a wide spectrum of treatments and depending on the cause of infertility the following types of treatment may be suggested, including IVF, ovulation induction, artificial insemination, donor conception, gamete intrafallopian transfer (GIFT), intracytoplasmic sperm injection (ICSI), preimplantation genetic diagnosis (PGD), and zygote intrafallopian transfer (ZIFT) (Kamel, 2013). As infertility is increasingly defined as a medical condition deeply rooted in a biomedical realm (Greil, Shreffler, Schmidt & McQuillan, 2011; Greil, Slauson-Blevins & McQuillan, 2010), women's experiences of infertility have become highly medicalised (Gerrits, 2014; Gupta & Richters, 2008; Mahjouri, 2004). This coincides with a more general trend in contemporary Western biomedicine to medicalise the process of pregnancy, positioning a woman's own experience of her pregnancy within the medical realm of doctors (Squier, 1996). The rapid development and evolution of assisted reproduction parallels the pervasive expansion of medicalisation (Kamel, 2013; Khanday, 2013; Martin, 2018). Literature addressing the medicalisation of infertility places heavy emphasis on the advances of biomedicine and technologies (Greil et al., 2010; Hofmann & Svenaeus, 2018; Martin, 2018; Squier, 1996). Medicalisation however increasingly deprives a mother of her subjective experience of infertility and the process of IVF while positioning this subjectivity exclusively in the medical realm.

Literature addressing the psychological strain evoked in mothers during IVF treatment is vast and emphasises the psychological consequences of the treatment itself (Boivin, 2003; Domar, Gross, Rooney, & Boivin, 2015; Greil et al., 2011; Podolska & Bidzan, 2011; Verhaak et al., 2007). Much of this psychological literature, however, tends to investigate pathological emotional responses to IVF treatment rather than addressing subjective experiences more broadly from the perspective of those undergoing IVF treatment (Ockhuijsen, van der

Hoogen, Eijkemans, Macklon & Boivin, 2014; Payne & Goedeke, 2007; Podolska & Bidzan, 2011). Consequently, the experience of a successful IVF treatment in the context of infertility is largely investigated in relation to diagnostic issues, and is framed as either maladaptive or pathological. Notwithstanding the abundance of helpful literature investigating the considerable psychological strain experienced by women during IVF treatment, there is a paucity of research aimed at gaining insight and understanding into women's internal, emotional worlds from their own perspectives.

In response to the increasing medicalisation of infertility, feminist literature challenges the notion of biomedical infertility, foregrounding instead the politics surrounding the maternal body and the maternal subject (Neyer & Bernardi, 2011). Early feminist literature proposes that there is a strong social pressure on women to see motherhood as the pinnacle of what it means to be a woman (e.g., Beauvoir, 1953). Motherhood is constructed as natural and innate to women, and is presumed to be the biological essence of womanhood (Neyer & Berandi, 2011). This biologisation of motherhood positions mothers as objects with the function of reproduction and childbearing. As such the gestating woman is represented as an object rather than as a unique subject (Squier, 1996). The objectification of the maternal subject is heightened in the context of assisted reproductive technologies (Aristarkhova, 2005). As motherhood and reproduction are at the centre of feminist discourse addressing women's rights, choice and equality (Neyer & Berandi, 2011), the broader social and political implications of motherhood are fundamental in understanding the subjective experiences of women who undergo successful assisted reproduction.

Moreover, maternal subjectivity has similarly been largely absent from early psychoanalytic formulations of what it means to be a mother (Raphael-Leff, 2010). In more contemporary psychoanalytic theory, being a mother is defined in the context of a relationship, foregrounding the dynamic and dyadic interaction between a mother and her infant (Raphael-Leff, 2010). When a child is conceived, the self is forced to accommodate another self and is transformed from one state to another (Baraister, 2006). This poses a dilemma for a mother who then needs to choose between her own and her infant's needs (Baraister, 2006). A small contemporary body of psychoanalytic literature emphasises the importance of a mother's lived experience and explores mothers' subjectivity from their own perspectives (e.g. Raphael-Leff, 2010; Parker, 1995, 1997; Hollway, 2001) but to date this perspective has not been specifically applied to the context of assisted reproductive technology.

This study is interested in exploring women's affective experiences of a successful IVF treatment in the context of infertility. Particular focus is placed on the feelings, fantasies, hopes and fears experienced by the participants. By conducting one-on-one, face-to-face psychoanalytically informed semi-structured interviews, this research aims to gain an understanding of participants' internal, emotional worlds, including the birth of themselves as mothers, from their own perspective.

The birth of a mother, rather than taking place in one dramatic, defining moment, "gradually emerges from the cumulative work of the many months that precede the actual birth of a baby" (Stern & Bruschweiler-Stern, 1998, p.3). Motherhood, beginning when a child is first thought of and conceived in a mother's mind, is a phenomenon in which the self is forced to accommodate another self which is then drastically transformed from one state to another (Baraister, 2006). Stern and Bruschweiler-Stern (1998) describe this transformative potential as a woman giving birth to a new identity resulting in a motherhood mindset, the motherhood constellation (Stern, 1995). Stern and Bruschweiler-Stern (1998) argue the motherhood mindset is fundamentally different from the one a woman held before. Her pre-existing mental life is pushed aside and this constellation takes centre stage of her innermost, deepest and most private realm of internal experience (Stern, 1995). Baraister (2006) describes this process of maternal reconfiguration as a move from who the woman once was towards an ideal of who she would like to be. Notably the motherhood constellation, a unique maternal reconfiguration, becomes a new and permanent part of a mother existing alongside a mother's previous mental life (Stern, 1995). Stern and Bruschweiler-Stern (1998) beautifully describe the motherhood mindset as the "North Star" (Stern & Bruschweiler-Stern, 1998. p. 6) with the purpose of orientating a mother's path of life. The motherhood mindset is used extensively at first, thereafter only selectively called upon as the baby grows older and develops. However, as with the ever-present North Star in the sky, the motherhood mindset is ever-present, guiding and accompanying a mother throughout her life, whether in the foreground or the background of her internal world (Stern & Bruschweiler-Stern, 1998). This fundamental transformation is however filled with uncertainty and difficulties as a woman experiences shifts from a self that once was stable, unified and singular to a self that is now unstable, interdependent and unclear (Baraister, 2006). This transformative potential may result in psychic crises which in turn may prompt a new maternal reconfiguration of self – introducing a woman to new and necessary parts of herself (Kraemer, 1996). Motherhood

challenges and interrogates the notion of subjectivity itself, as the reconfiguration of the self causes mothers to radically rethink who they are (Baraister, 2006).

This study is informed by psychoanalysis both theoretically and methodologically. A psychoanalytic lens foregrounds the importance of the unconscious and an individual's internal, emotional world (Shedler, 2010). Lemma (2003) states, "…listening with an analytic ear involves taking nothing for granted." (p. 176). Furthermore, relational psychoanalytic traditions emphasise relationality and intersubjectivity (Hollway, 2009). This principle is cardinal to this study as the importance of placing emphasis on "the subjectivity of women by advocating that women themselves speak of and reflect on their own experiences of motherhood" (Kruger, 2003, p. 198) – listening to their stories of becoming mothers occurs *in a relationship* in research (van Ewyk & Kruger, 2017). This co-created space between the researcher and the researched is referred to as the 'research encounter', an analytic third (Elliot, Ryan and Hollway, 2012; Hollway, 2008; Ogden, 1994). Crucial to understanding women's subjective experiences of a successful IVF treatment in the context of infertility from their own perspective, is in understanding the participants' and my experiences of the relationship, as well as the relation of these experiences to each other (Hollway, 2009). Thus, this study offers rich and detailed descriptions of the participants' experiences, and in-depth and comprehensive understandings of the affective experiences of a successful IVF treatment in the context of infertility, and of motherhood.

The bulk of literature on assisted reproductive technologies, focusing on medical issues, psychological strain or feminist reinterpretations, does not focus on women's lived experiences of IVF and, if the treatment is successful, of motherhood from their own perspectives. This study hopes to contribute to this gap.

1.1 Structure of the thesis

Chapter Two provides an understanding of existing research and debates relevant literature to infertility, assisted reproduction and women's affective experiences of undergoing successful IVF treatment. Thereafter, Chapter Three describes and explores the methodological facets of this research. It outlines the research design, sample selection, method of data collection, data analysis, researcher reflexivity, and pertinent ethical considerations relevant to the current study. Chapter Four presents the findings of analysis. Two main themes are presented: the medicalisation of infertility and the culpable mind. Within each main finding relative subthemes emerged and are presented accordingly. Direct quotations by the participants are

used to ensure the integrity of the data is protected. Finally, Chapter Five provides a discussion and aims to interpret and describe the significance of the current study's findings in light of what was already known about infertility, assisted reproduction and women's affective experiences of undergoing successful IVF treatment. Thereafter, considerations of recommendations for future research are explored as well as the limitations of the current study.

Chapter Two: Literature Review

The literature review focuses on how women experience successful assisted reproduction and motherhood in the context of infertility. As an attempt to understand how women's experiences are framed, it firstly explores the conceptualisation of medicalisation and the multifaceted ways the medicalisation of infertility is fundamental in understanding women's experiences of assisted reproduction. Secondly, it reviews the psychological strain evoked within women at various phases of IVF treatment. Thirdly, it discusses feminist literature with a keen interest on the relationship between motherhood and technology, and the broader social and political implications of motherhood in the context of assisted reproduction and infertility. Finally, psychoanalytic understandings when investigating motherhood in the context of infertility are evaluated.

2.1 The medicalisation of infertility

Infertility is defined in the biomedical realm as the inability to conceive after twelve months of regular, unprotected sex. More specifically, female infertility pertains to the inability to become pregnant; an inability to maintain a pregnancy or an inability to carry a pregnancy to full-term (Greil et al., 2010; Templeton, 2000). Pines (1990) states childless couples in the past were faced with either the conscious acceptance of their childless state or alternatively, considered the adoption of someone else's child. IVF and other assisted reproductive technologies have transformed the likelihood of a pregnancy for many infertile couples as these procedures offer medically assisted conception (Hofmann & Svenaeus, 2018; Templeton, 2000).

IVF is a fertility treatment defined simply as a medical process in which ova are removed from a woman's ovary, fertilised externally and then implanted into a woman's endometrium - the mucous membrane lining the womb. The endometrium is crucial in the IVF process as the endometrium's thickness during the menstrual cycle prepares for, and in many ways determines, the possibility of the implantation of an embryo (Conrad & Leiter, 2004). Simon and Laufer (2012) describe a successful embryo implantation as dependent on a well-functioning endometrium, in addition to a normal and healthy embryo. A successful implantation is a highly complex, biomedical procedure (Simon & Laufer, 2012). Various deficiencies may be present in the mother's biological anatomy. Similarly, the endometrial–embryo interaction may experience interferences if the embryo presents with various deficiencies or abnormalities. Ruiz-Alonso et al. (2013) emphasise the harmony between the

embryo and the receptive endometrium as crucial for a successful implantation. Deficiencies and abnormalities present in either the 'biological host environment' or present in the embryo may result in repeated implantation failure - an unsuccessful embryo implantation (Ruiz-Alonso et al., 2013; Simon & Laufer, 2012). Repeated implantation failures are determined when transferred embryos fail to implant in the endometrium after several IVF attempts. Clinically, there are no formal criteria defining an unsuccessful embryo implantation. However, failure of embryo implantation typically consists of at least three consecutive IVF attempts. In these attempts, either one or two embryos are transferred but do not progress to a successful implantation in the endometrium (Ruiz-Alonso et al., 2013; Simon & Laufer, 2012).

Having said that, medicalisation is often associated with forms of social deviance, deviant behaviours previously understood as immoral, sinful or criminal including mental health disorders such as substance use disorders, sexual and gender differences, sexual dysfunctions, learning disabilities, mood disorders as well as menstruation, and childbirth to name a few (Khanday, 2013). Authors argue key to medicalisation is the control of 'deviance' as these 'deviant' behaviours pose a threat and danger to societal integrity (Ballard & Elston, 2005; Conrad, 1992; Khanday, 2013). This understanding of medicalisation is widely employed by social scientists and is particularly associated with medical sociology. However, medicalisation is a concept present in other academic disciplines including psychology, medical anthropology, the biomedical sciences, law and ethics, for example (Ballard & Elston, 2005). Medicalisation is also understood as a process transforming previously non-medical characteristics of human life into medical conditions bringing them under the 'medical gaze' (Foucault, 1977; Martin, 2018) - infertility previously being one of the non-medical characteristics of human life. Thus, the medicalisation of infertility positions infertility within the biomedical realm of assisted reproduction (Hammons, 2008). As diagnosis and disease labelling is an essential part of the medicalisation process (Martin, 2018), the medicalisation of infertility also sharpens a perception that the source of infertility can be diagnosed and can be treated (Scritchfield, 1995). Notably, a trend within literature of the medicalisation of infertility when describing assisted reproduction is an emphasis on the development of biomedical jargon. This jargon is characterised by medical language and impersonal processes. While this may be true, Becker and Nachtigall (1992) offer an alternative viewpoint suggesting deeply rooted cultural phenomena contribute to the social production of disease and thus to the medicalisation of infertility. Moreover, Becker and

Nachtigall (1992) explore the cultural and social basis of medicalisation through an examination of infertility, and argue infertility is defined by the noncompliance of cultural norms and is thus a social condition. Becker and Nachtigall (1992) further argue infertility has been inadequately medicalised and falsely reconstructed as a disease. Khanday (2013) too speaks to the sociology of health and illness and argues medicalisation is not simply a scientific endeavour, but a social endeavour too. These critiques of medicalisation originate from earlier understandings pertaining to the control of 'deviance' (Ballard & Elston, 2005; Conrad, 1992; Khanday, 2013). Some argue the medicalisation of infertility is a way of imposing control on the 'deviance' of involuntary childlessness due to the social organisation of society and pivotal roles women and children play in society (Beauvoir, 1953; Becker & Nachtigall, 1992; Khanday, 2013).

Furthermore, to understand medicalisation it is essential to recognise the ambiguity in the definition of disease. Accordingly, the disease status of infertility as a diagnosable and treatable bodily condition is clearly contested as emerging critiques and debates are evident within this body of literature. Philosophical theories of disease centre around three broad schools of thought namely, the naturalistic, the normativistic and the hybrid school (Maung, 2016). Naturalistic theories maintain disease is absolutely biological fact and evidence. Conversely, normativistic theories maintain disease depends on societal value judgements while hybrid theories maintain both biological facts and societal value judgements are required to determine disease status (Maung, 2016). According to Maung (2016), different philosophical theories of disease fundamentally disagree over which subcategories of infertility are eligible to be considered a disease (Maung, 2016). A challenge of ascertaining the disease status of infertility is that infertility is not homogenous but rather a highly heterogeneous category (Maung, 2016). The disputed disease status of infertility is paralleled by debates addressing the concept of over-diagnosis (see also Carter, 2017; van Dijk et al., 2016; Wardrope, 2017).

Accordingly, perhaps the least controversial subcategory of infertility is anatomical infertility, broadly referring to an inability to conceive attributable to a unique biological or physiological condition or process originating within the individual's body (Maung, 2016). Due to the medicalisation of infertility, unexplained or idiopathic infertility is now diagnosable too. This subcategory of infertility is commonly made when biomedical investigations fail to ascertain and identify any biological obstacles to conception which encompass inadequately diagnosed organic disorders (Somigliana et al., 2016). However,

unexplained infertility is often misunderstood by individuals experiencing infertility and is often equated to psychogenic infertility by medical personnel (Somigliana et al., 2016). Psychogenic infertility is significantly different to a diagnosis of unexplained infertility as "psychogenic" refers to potential psychic causes (Wischmann, 2003). This subcategory of infertility is highly controversial particularly within psychoanalytic literature pertaining to assisted reproduction and motherhood. A number of authors investigate unconscious conflicts as a possible factor affecting or preventing pregnancy (see Allison, 1997; Jacobson, 1843; Knight, 1943; Langer, 1958; Pines, 1990). Psychogenic infertility is reviewed at a later stage of this literature review. A separate subcategory, age-related or senescent infertility refers to the decline in reproductive probability associated with aging which is diagnosable too due to the process of medicalisation (Maung, 2016; Somigliana et al., 2016).

Moving away from debates addressing the disease status of infertility, Hofmann and Svenaeus (2018) explore how medical technologies, particularly diagnostic and therapeutic technologies, shape the lived experiences of 'illness' for patients. Medical technologies have not only transformed the way the medical realm specifies and treats any disturbance in the functioning of human bodies, but also transformed the way individuals experience their physiological state (Hofmann & Svenaeus, 2018). This research relies on the first-person perspective of what Hoffman and Svenaeus (2018) describe as bodily suffering. This phenomenological understanding emphasises that a suffering individual does not only have a body, but also exists as a body in the world. As such, the suffering individual experiences illness as and through their *lived bodily being-in-the-world* (Hofmann & Svenaeus, 2018). Hofmann and Svenaeus (2018), although not explicitly, appear to engage with the conceptualisation of the human body as a social body (Booth, 2016). This suggests if a suffering individual experiences infertility as and through their *lived bodily being-in-the-world* (Hofmann & Svenaeus, 2018), the experience in the human body will be significantly affected by the social body. A social body is positioned by race, gender, socio-economic status, historical and political contexts (Booth, 2016). Critiques addressing medicalisation interrogate the gendered aspects of medicalisation as infertility and assisted reproduction largely focus on women (Khanday, 2013). Gender performs as a function of an aspect of identity which informs the way an individual perceives and experiences the world, as well as the way the world perceives and experiences this individual. As a woman, with a particular interest in infertility and assisted reproduction, social roles and cultural expectations are impossible to avoid. Literature suggests women's social roles and cultural expectations are

shaped more broadly by their child-bearing capacity (Beauvoir, 1953; Becker & Nachtigall, 1992; Khanday, 2013). Thus, the inability to biologically reproduce represents a failure to meet cultural norms (Becker & Nachtigall, 1992). The value of children and women, and their pivotal place in the social organisation of society is also a driving force central to medicalisation. Becker and Nachtigall (1992) argue the social condition of 'involuntary childlessness' is medicalised, not infertility itself. This suggests biomedical advances offer hope of overcoming a childless state which reflects an increasing tendency to turn to medicine for solutions to social problems.

Moreover, Hofmann and Svenaeus (2018) propose individuals who make use of assisted reproduction view their bodily self-conception differently as a result of the medicalisation of infertility. A diagnosis of infertility is highly dependent on various laboratory testing, imaging and medical procedures to determine the presence of bodily dysfunctions (Hofmann & Svenaeus, 2018). IVF treatments too are highly reliant on medical imaging, measurement and procedures which typically include the microscope, an ultrasound, X-Rays, a laparoscopy, a hysteroscopy, as well as various other laboratory technologies (Gerrits, 2008). Gerrits (2008) conducted a comprehensive ethnographic study carried out in Nijmegen, the Netherlands at the Radboud University Medical Centre's Clinic for Reproductive Medicine. The study examined the impact of how daily clinical practices affect the use of assisted reproduction. Ethnographic observation was utilised and followed 23 couples experiencing fertility difficulties. The couples were followed over a period of one to two years and data was collected through multiple and extended in-depth interviews. The interviews explored the couples' thoughts, feelings and experiences of infertility and IVF treatments, and how these changed over their respective treatment trajectories (Gerrits, 2008). The study's findings suggest an individual's 'illness' and experience of infertility is changed as conception is viewed as a biomedical process broken down into and split up into many small steps. Each step of the IVF treatment is carefully monitored by medical personnel and 'seen' by the couples through means of visualizing medical technologies (Gerrits, 2008).

Squier (1996) postulates contemporary Western biomedicine pertaining to the medicalisation of infertility positions a woman's own experience of her pregnancy in the medical realm of doctors. Contrariwise, in earlier historical periods, a pregnant woman's experience was central to determining the existence or the course of pregnancy (Squier, 1996). A woman's own experience, her testimony of internal foetal movements throughout her pregnancy was privileged as an indicator of the foetus' health, and the duration and outcome of the

pregnancy (Squier, 1996). Greil et al. (2010) share similar views and argue the medicalisation of infertility has become subject to the authority of medical institutions wherein the body is investigated as a biological organism and studied by medical science and technologies. Using the data collected from the abovementioned study Gerrits (2014) explored the effects of patient-centred practices at the clinic and discovered unintended effects which are pertinent to this research study. Gerrits (2014) discovers women and men who attended the clinic understand what is going on in their bodies in an exceptionally biomedical manner. Participants noticeably begin to consider and express their fertility problems and possible solutions in predominantly biomedical terms. Gerrits (2014) argues this enabled them to track, understand and assess the outcomes of each step of the IVF treatment cycle. As such, the medicalisation of infertility serves to strengthen the 'medical gaze' under which infertility now falls (Foucault, 1977). Gerrits' (2014) finding highlights the medical profession's dominant position in society and brings into question the entrepreneurial endeavours of pharmaceutical companies, the complicity or willingness of the medical profession, and the medical profession's control over monopolies of medical knowledge and skills (Ballard & Elston, 2005; Busfield, 2017; Clarke, Shim, Mamo, Fosket & Fishman, 2003; Conrad, 1992; Conrad & Leiter, 2004). Pertaining particularly to infertility and assisted reproduction, biomedicine appears to be integrated into individuals' narratives, their stories and their identities in the world (Gerrits, 2008, 2014; Hofmann & Svenaeus, 2018). Simon and Laufer (2012) postulate assisted reproduction increasingly permits the foetus as a subject while the mother increasingly becomes an obstacle to foetal health, the 'biological host environment' in which various deficiencies may be present.

This review highlights disparities and debates regarding the nature of medicalisation suggesting there is no agreement about the cause or the origin (Khanday, 2013). It is clear the term medicalisation is dynamic and the process of medicalisation can frequently expand in new directions. Arguments address the expansion of medical jurisdiction as a consequence of the medical profession and pharmaceutical companies exercising power to define and control what determines health and illness (Busfield, 2017; Clarke et al., 2003; Conrad & Leiter, 2004; Greil et al., 2010; Khanday, 2013). Others have considered medicalisation as the result of broader social processes, challenged the legitimacy of labelling infertility as a disease and critiqued medical professionals as responding to unsuitable and inappropriate reification of biomedical representations of human phenomena (Maung, 2016; Becker & Nachtigall, 1992; Wardrope, 2017). While it is important to reassess the concept of medicalisation, engage with

the current debates and critiques and consider whether it still has value in present-day society (Busfield, 2017), pertinent to this study is exploring women's emotional experiences of infertility and assisted reproduction. Markedly within this body of literature, a woman's lived and subjective emotional experience of infertility is largely neglected. The way women affectively and internally experience infertility becomes lost within the biomedical and/or social realm of assisted reproduction as a consequence of medicalisation.

2.2 Feminist literature addressing motherhood and assisted reproduction

Another body of literature inescapably related to assisted reproduction is feminist literature addressing motherhood in the context of infertility. Feminist interpretations express interest in the meanings, experiences and broader social and political implications of motherhood. It must be noted interpretations of motherhood and waves of feminist literature vary and are conflicting at times (Franke, 2016; Hammons, 2008; Miceli, 2018; Neyer & Bernardi, 2011). However for the purpose of this literature review feminist literature addressing motherhood is reviewed focusing on infertility; the relationship between motherhood and infertility; as well as exploring the ways in which assisted reproduction juxtaposes motherhood and technology.

An important and relevant contribution of early feminist literature to this study is the challenge to the notion that motherhood is an intrinsic, uniting constituent for adult, female identity (Hammons, 2008; Kruger, 2003). Early feminist literature proposes women are made to see motherhood as the pinnacle of defining the meaning of being a woman (Beauvoir, 1953). Furthermore, a woman and her capacity for reproduction is a primary feature of what it means to be a woman (Beauvoir, 1953). The new era of assisted reproduction revolutionised medicine as infertility is defined as a diagnosable and treatable medical condition (Greil et al., 2010). Squier (1996) argues the notion of 'mother' in contemporary Western biomedicine implicitly carries the assumption of a successfully completed gestation and birth period. Moreover, motherhood is conceptualised as innate in women, reduced to what is constructed as biological with childbearing as a reproductive function at the very core of womanhood (Neyer & Berandi, 2011). Mahjouri (2004) shares similar views and argues new biomedical technologies generate a reproductive imperative wherein motherhood is the natural state for all women as assisted reproduction enforces the need for women to reproduce. With that said, a key trend of literature from this early work relevant to this study addresses the arguments and debates that motherhood is possibly the most idealised, exclusive and defining identity associated to womanhood (Beauvoir, 1953; Franke, 2016;

Majumdar, 2014; Rich, 1995). Kruger (2003) posits motherhood has attained a special significance for women in contemporary Western society – "women are expected to find fulfilment and satisfaction in the role of the 'ever-bountiful, ever-giving, self-sacrificing mother'" (p. 198).

Accordingly, the notion of motherhood as something innate to women is contested and the consequences of positioning reproduction solely in the realm of medicine and technology are reconsidered (Aristarkhova, 2005; Inhorn & Birenbaum-Carmeli, 2008; Squier, 1996). As women's cultural expectations and social roles are rigidly circumscribed and bounded to women, other feminist authors interrogate notions of the myth of motherhood and the fantasy of the perfect mother (Franke, 2016; Kruger, 2003; Miceli, 2018). For this reason, later feminist literature insists on a distinction between biological and social motherhood as the meaning and significance connected to motherhood is not universal (Aristarkhova, 2005; Kruger, 2003; Neyer & Berandi, 2011). Kruger (2003) addresses the assumed universality of motherhood by discussing the transformative potential of individual stories. The current study assumes a mother as a subject, an individual with her own set of needs and feelings, following Kruger (2003). Kruger (2003) however positions this assumption within a feminist phenomenological framework, and insists collecting alternative voices on motherhood is vital in fighting against the devaluation of women fixed within a predominantly Western myth of motherhood. Aristarkhova (2005) shares similar views and argues there is an undeniable absence in scholarship of the diversity and uniqueness of women's subjective experiences of transitioning into motherhood in the context of infertility and successful assisted reproduction. Kruger (2003) proposes when women's own emotional "experiences of motherhood are foregrounded in their own stories" (p.198), these narratives can serve to adjust myths and transform social reality.

Feminist literature emphasises not only that infertility has morphed into a medical and biological process; the maternal body too has subsequently undergone a process of medicalisation (Aristarkhova, 2005). Inhorn and Birenbaum-Carmeli (2008) posit assisted reproduction as gendered technologies in which differentiated applications and medical procedures are administered to men's and women's bodies. Assisted reproductive technologies are administered more invasively to women's bodies. For example, inducing an over-stimulation of ovulation occurs by injecting powerful hormones into the body and invasive and painful procedures are administered to harvest ova and to transfer embryos back into the uterus (Inhorn & Birenbaum-Carmeli, 2008; Templeton, 2000). Inhorn and

Birenbaum-Carmeli (2008) refer to this as enactments of assisted reproduction on the female body as it facilitates the view women are solely responsible for reproductive functions. The embodiment of this enactment on a female body brings to life the notion of a maternal object (Inhorn & Birenbaum-Carmeli, 2008; Squier, 1996). As such, some argue motherhood is mediated by technology and a mother becomes redundant in the reproductive process (Aristarkhova, 2005; Gupta & Richters, 2008; Inhorn & Birenbaum-Carmeli, 2008). Mahjouri (2004) proposes the construction of the female body as a maternal object in the context of infertility and IVF treatment leads to the perception of the female body as a body 'at risk'. The maternal body represents an unstable, dangerous place which may potentially harm the foetus (Mahjouri, 2004). Subsequently, assisted reproductive technologies reduce the maternal subject to quantifiable chance and probabilities which require ongoing risk and/or benefit analyses. This objectification of the maternal body begins from pre-conception up until post birth. Mahjouri (2004) further argues although the maternal body is the focus of the risk and/or benefit analyses, the foetus increasingly becomes the subject as medical discourse depicts a situation in which risks to the mother lead to benefits to the child. Moreover, Jeremiah (2006) emphasises assisted reproduction destabilises reproductive norms and shifts agency from biological parents to medical practitioners. Jeremiah (2006) further argues power and agency relating to assisted reproduction is transferred from parents to medical institutions and regulatory bodies.

Nonetheless, biomedical advances of assisted reproduction have opened up new avenues of feminist discourse. Motherhood and reproduction are at the centre of feminist discourse addressing women's rights and equality (Neyer & Berandi, 2011). However, gender and reproduction, women's choice and feminist bioethics occupy controversial terrain within this body of literature (Franke, 2016; Klein, 1990; Majumdar, 2014). Majumdar (2014) posits the notion of choice in relation to reproduction as a kind of 'rhetoric'. The rhetoric of choice advocates the right for woman to control their biological body and its reproductive resources. As such, women's right to bodily integrity, liberty, and autonomy are identified with the idea of choice (Majumdar, 2014). Thus, choice becomes a "rhetorical device symbolising women's control over their reproductive destiny" (Majumdar, 2014, p. 282). However, despite the rhetoric of choice and assisted reproduction some argue it has not increased women's reproductive freedom, but has rather established new means of control over female reproduction (Drezgić, 2012; Gentile, 2015; Ghoshal, 2018; Neyer & Berandi, 2011). Referring specifically to IVF, Ghoshal (2018) proposes assisted reproductive technologies

create reproductive markets which thrive by criticising the very constituency that helps sustain it. Interestingly, Ghoshal (2018) argues within this market women's reproductive potential is positioned as perpetually on a decline thus sustaining itself on "the 'irresponsibility' of women who delay their childbearing plans" (p. 95), and not on the conditions of a diagnosis of infertility. This implies the rhetoric of choice as just that, rhetoric. Furthermore, Franke (2016) emphasises the rhetoric of choice as just rhetoric when she states, "only women who are not parents are regarded as having made a choice - a choice that is constructed as non-traditional, nonconventional, and for some, non-natural" (p. 185) and raises questions around how 'choice' is conceptualised and perpetuated within Western society. With that said, Van de Weil (2015) discusses oocyte cryopreservation the reproductive technology of egg freezing, and proffers this technology offers a new negotiation of reproductive finitude. The decline in a woman's fecundity, in essence, the quality and size of a woman's ovarian reserve, parallels the natural process of ageing resulting in the decrease of a woman's reproductive function over time (Azhar et al., 2015). This decline is irreversible. Van de Weil (2015) argues oocyte cryopreservation, seeks to anticipate and treat the potential of future fertility. However, rather than offering choice, oocyte cryopreservation instils apprehension and angst among women as age conventions and the notion of the 'biological clock' represent an established new form of control over female reproduction (Neyer & Berandi, 2011; van de Weil, 2015).

A vehement emerging body of feminist literature opposing arguments of assisted reproduction disempowering women explores the capacity of reproduction to transcend individual bodies through biomedical advances (Michelle, 2006). Franke (2016) proffers an imperative reflection and considers the complex ways in which reproduction may provide women with choices. Franke (2016) juxtaposes heteronormativity and "repronormativity" (p. 185) suggesting the normativity of reproduction continues to be implicitly defined by heteronormativity despite the prevalence of childlessness and lesbian, gay, bisexual, transgender, queer and intersex individuals who unequivocally have a choice to become mothers and/or parents too. Biomedical advances do not only offer hope to heterosexual individuals and couples facing infertility, and provide an alternative to an undesired childless state; the medicalisation of infertility and the choice of assisted reproduction has re-established cultural negotiations around who can become a mother and/or a parent, and under what circumstances (Michelle, 2006). The medicalisation of infertility and the choice of assisted reproduction offer the opportunity of deciding to become parents to a variety of

different kinds of families, including single-parent families, stepfamilies and same-sex families - both gay- and lesbian-headed (van Ewyk & Kruger, 2017; see also Donovan, 2008; Ehrensaft, 2002, 2007; Hayman, Wilkes, Halcomb & Jackson, 2015; Hayman, Wilkes, Jackson & Halcomb, 2013; Lubbe, 2007; Malberg, 2017; Wojnar & Katzenmeyer, 2014). Within this emerging body of literature, new feminist discourses investigate what it is like to establish an identity of being a mother with a focus on the "other" - a sperm donor, egg donor, surrogate or non-biological mother – and how creating this identity is reconciled in the context of social ideals of what it means to be a mother (Ehrensaft, 2007; Gentile, 2015; van Ewyk & Kruger, 2017).

The heightened tensions surrounding motherhood in the context of assisted reproduction and within the broader body of feminist literature are intense, evocative, impassioned and quite difficult to negotiate leaving a reader feeling ambivalent. Interestingly, earlier feminist authors and viewpoints addressing the medicalisation of infertility are still ubiquitous today, such as Rich's (1995) argument that the only way to resist the medical institutionalization of motherhood is to revert to pre-technological modes of childbirth; and Beauvoir's (1953) view that biology is inherently oppressive for all women, as differences between women are constrained and subject to the authority of medical institutions. Feminist debates addressing the maternal object (Aristarkhova, 2005; Inhorn & Birenbaum-Carmeli, 2008; Squier, 1996), the perception of the female body as a body 'at risk' (Mahjouri, 2004), a mother becoming redundant in the reproductive process (Aristarkhova, 2005; Inhorn & Birenbaum-Carmeli, 2008), and destabilising reproductive norms (Jeremiah, 2006) imply the risk of returning to a patriarchal society where women have no rights and are bound to return to the roles assigned to them by men (Levaque, 2017; Miceli, 2018). Although this may sound rather dramatic, women's subjective experiences of successful assisted reproduction and transitioning into motherhood are neglected as mothers are often viewed an objects (Aristarkhova, 2005; Inhorn & Birenbaum-Carmeli, 2008; Mahjouri, 2004; Simon & Laufer, 2012; Squier, 1996). On the other hand, a body within feminist literature considers the complex ways in which reproduction may provide women with choice (Franke, 2016; Michelle, 2006). Considering current biomedical advances, Farquhar (1996) proposes assisted reproduction makes different experiences of maternity and family possible which allows the complex interaction between different women's geographic locations, socioeconomic statuses, psychology, cultures, and unique stories to be explored. Accordingly, paramount when exploring women's subjective

experiences of assisted reproduction and infertility is to keep in mind even the most individual stories are inevitably shaped by socio-political realities (Kruger, 2003).

2.3 Psychological literature on IVF treatment

Recent years have seen a substantial expansion of research efforts into women's emotional adjustment to IVF. The IVF treatment itself comprises the principal stressor as most likely to evoke distress and coincides with the development of psychopathological presentations (Boivin, 2003; Domar et al., 2015; Greil et al., 2011; Podolska & Bidzan, 2011; Verhaak et al., 2007). When embarking on assisted reproduction for the first time, women are confronted with incredibly complex medical procedures which require strict adherence to specific instructions from various medical personnel. Various interventions fall under the umbrella term of 'IVF treatment'. These include vigilantly monitoring your body; administering various medications on your own; adjusting to the medication; regularly attending consultations with the laboratories; and regular consultations with different medical personnel at the clinic or hospital (Payne & Goedeke, 2007). The weight of IVF treatment is viewed to be psychologically and physiologically significant (Domar et al., 2015). Verhaak et al. (2007) reviews how women adapt emotionally to the different phases of the IVF treatment and emphasises there is an emotional response to the IVF treatment *regardless* of whether the treatment was successful or unsuccessful. Pertinent to this research study is the evidence of psychological strain evoked in women who undergo IVF treatment.

Notably, the unpredictability of IVF treatment outcomes are correlated to increased distress experienced by women during the course of IVF treatment (Ockhuijsen et al., 2014). The period of time between an embryo transfer and the pregnancy test is reported by IVF patients as the time of greatest distress, primarily due to the unpredictability of the outcome (Domar et al., 2015). Studies also investigate the pre-treatment emotional adjustment to IVF treatment. Results indicate levels of anxiety are significantly increased before the IVF treatment begins (Boivin, 2003; Verhaak et al., 2007). Boivin (2003) reviews 25 studies which investigate the relationship between pre-pregnancy distress and pregnancy rates of women who undergo IVF treatment. In total 151 women were assessed with various psychological questionnaires. The assessments were administered prior to undergoing an IVF cycle at their first clinic visit at respective fertility clinics, and at different phases over the duration of the IVF treatment. Outcome measures included the diagnosis of infertility; the number of previous IVF cycles; the number of ova retrieved; fertilisation rates; the number of embryos transferred; the quality

of the embryos; the presence or absence of a confirmed pregnancy and pregnancy outcomes (Boivin, 2003). Significantly, results indicated baseline levels of stress of women undergoing IVF treatment are related to the number of ova retrieved and fertilized, pregnancy, birth rate and birth weight. Another finding suggests levels of stress on the day of a retrieval procedure only relate to the number of ovum retrieved and fertilized (Boivin, 2003). Furthermore, Noorbala, Ramezanzadeh, Abedinia and Naghizadeh (2008) investigated the prevalence of psychiatric disorders and predisposing factors among infertile and fertile women. Results indicate infertile women obtain higher scores for paranoid ideation, depression and interpersonal sensitivity compared to fertile women. Moreover, Verhaak et al. (2007) stated the most consistent finding across the studies reviewed is an increase in depressive episodes after one unsuccessful IVF treatment cycle. Interestingly, women who undergo a successful IVF treatment present with depressive symptoms too (Ockhuijsen et al., 2014). Podolska and Bidzan (2011) postulated this may be as a result of women experiencing disruptions in self-acceptance and self-image due to facing the prominent threat of the inability to conceive children. Considering the abovementioned studies thus far, a trend within this body of literature demonstrates and frames women's experiences of IVF treatment as pathological or maladaptive. Furthermore, stress and distress are emotional experiences significantly different from psychopathology (Siegel, 2017). In addition, it is important to note that women experiencing infertility are not characterised by a specific character disorder (Siegel, 2017). Thus, the use of psychiatric diagnoses or terms fails to offer further insight and understanding into women's internal, emotional worlds and perhaps contributes to feelings of shame and humiliation.

Given the evidence of the psychological strain evoked in women who undergo IVF treatment, the normalisation of the side-effects, pain and stress of IVF treatments among women is profound (Gerrits, 2014). Investigating the normalisation of the side-effects, physical pain and emotional stress women experience is a significant yet sparse body of literature within psychological literature on IVF treatment. Having said that, couples at the Radboud University Medical Centre's Clinic for Reproductive Medicine are well prepared for the possible difficulties and disappointing outcomes of treatments with assisted reproduction (Gerrits, 2014). Gerrits (2014) posits as a result of being so well prepared for possible difficulties and disappointing outcomes of IVF treatments, experiencing physical pain and emotional stress is unremarkable as IVF treatment is not expected to be experienced without suffering. Furthermore, women in particular compare and relate their own experiences of pain

and suffering "with what they have heard and read, often concluding that it 'could be worse'" (Gerrits, 2014, p. 132). Although Gerrits (2014) speaks to the normalization of the side-effects, pain and stress of IVF treatments, women also appear to minimise the psychological strain they experience which raises questions surrounding how women 'cope' under such immense psychological strain. That being said, Apfel and Keylor (2002) argue the psychological needs of women undergoing IVF are minimally acknowledged by medical personnel administering IVF procedures. Furthermore, women at different phases of their IVF trial often criticise the lack of support systems at fertility clinics and perceived harshness and coldness of staff (Apfel & Keylor, 2002). Apfel and Keylor's (2002) argument can be perceived as 'blaming' medical personnel and fertility clinics. However, Apfel and Keylor (2002) are not only emphasising the psychological consequences of IVF treatment itself but emphasise medical personnel and fertility clinics are also experienced by women undergoing IVF treatment as significantly stressful, thus further contributing to the psychological distress experienced. This further emphasises the psychological distress women experience in the context of infertility and indicates the need to attempt to 'cope' as a way of surviving the experience of assisted reproduction. Kee, Jung, and Lee (2000) propose individuals experiencing prolonged contact with distress may be desensitised to the distress and perceive less distress as a means of coping with prolonged exposure to IVF treatment. Even so, there is a paucity of literature exploring the 'desensitisation' to distress of women who undergo infertility treatment.

In addition to emphasising the psychological consequences of the treatment itself, psychological studies also provide significant insight into the experiences of women who undergo assisted reproduction. These significant insights provide medical health practitioners working with individuals experiencing infertility opportunities to empower their patients (Shreffler, Greil, & McQuillan, 2017). Gameiro, Boivin, Peronace and Verhaak (2012)'s paper is the first study to explore the relationship between infertility controllability perceptions and coping strategies of women undergoing infertility treatment. Results indicate the perception of treatment controllability is a variable not significantly associated with levels of stress and anxiety for women undergoing fertility treatment. This is a surprising finding as one may assume the perception of treatment controllability is a variable significantly associated with levels of stress and anxiety. Gourounti et al. (2012) propose as participants decided to undergo assisted reproductive technologies, participants' perceived fertility treatment as an effective way of dealing with infertility. Furthermore, Gourounti et al. (2012)

postulate participants seek assisted reproductive treatment as they perceive fertility treatments as an effective way of dealing with infertility. However, Gourounti et al. (2012) do also emphasise results which indicate that women with higher levels of fertility-related stress and anxiety have lower perception of personal control. Subsequently, these women are found to be more likely to employ avoidance and emotion-focused coping strategies, and experience significant psychological distress (Gourounti et al., 2012). Gourounti et al. (2012) hypothesises low perception of infertility controllability and maladaptive coping strategies are positively associated with psychological distress. Results indicate low perception of controllability is positively associated with avoidance coping. Significantly, Gourounti et al. (2012) provide insight to medical health professionals addressing the perception of treatment controllability of women who undergo fertility treatment. Based on the results of this study, medical health professionals have the opportunity to enhance the implementation and treatment plans of psychological interventions for women undergoing infertility treatment to perhaps enhance individuals' sense of control, and target coping skills of those women identified at risk, thus empowering their patients (Shreffler et al., 2017).

Furthermore, Rockliff et al. (2014) provide a comprehensive systematic review of 25 studies which explores psychosocial factors associated with emotional adjustment in IVF patients. Coping strategies are a significant finding of this review and four coping strategies are identified namely, avoidance, escape, distraction and disengagement strategies. Significantly, Rockliff et al.'s (2014) review indicates emotionally-focused coping strategies are also positively associated with distress. Although this study is theoretically positioned as psychoanalytic, it does more broadly examine the association between perceptions of infertility controllability and coping strategies to psychological distress. A finding pertinent to this study strongly indicates high use of escapist and/or avoidant coping strategies are associated with higher distress levels (Rockliff et al., 2014). Results from both the abovementioned studies also provide insights to enhance the implementation and treatment plans of psychological interventions from a psychoanalytic lens too. When thinking about women experiencing infertility and undergoing assisted reproduction, cardinal to their treatment is the combined and close work of both medical personnel and psychologists (Boivin & Gameiro, 2015; Malina & Pooley, 2017; Noorbala et al., 2008).

Moreover, while assisted reproduction provides many couples with new opportunities for pregnancy, the techniques and procedures can also prolong the agony of disappointment (Kee et al., 2000). A colossal tragedy disguised and hidden in the wake of a successful IVF

treatment are the more than likely multiple unsuccessful IVF trials. However, despite unsuccessful IVF trials, women often persistently pursue their wish to become mothers (Bassin, 2001; Mann, 2014). Domar et al. (2015) propose women who undergo IVF treatment continue with treatment until a viable pregnancy is achieved or until their respective doctors give a recommendation to stop treatment due to a poor prognosis. On the other hand, the review of 22 studies on patient discontinuation conducted by Gameiro et al. (2012) found the most common reasons provided by patients who chose to postpone IVF treatment or to discontinue IVF treatment are the significant psychological burden of the treatment in particular, or due to personal and relational problems. Investigating why women persistently pursue their wish to become mothers in the face of multiple unsuccessful IVF trials is an under-researched area within this body of literature. Siegel (2017) states the intensity of the pursuit for pregnancy is often misunderstood and contributes to couples experiencing infertility feeling stigmatised, isolated and estranged from their social circles. This further emphasises the need for the combined and close work of both medical personnel and psychologists, as psychologists can provide medical personnel with insight into internal processes associated with pursuing assisted reproduction (Boivin & Gameiro, 2015; Malina & Pooley, 2017; Noorbala et al., 2008).

Wong, Chan, and Tam (2015) emphasise women experiencing infertility significantly struggle with ambivalence surrounding the decision to undergo assisted reproduction and initial treatment goals. Thus, the importance of initiating discussions exploring the meanings linked to parenthood, and how those meanings dovetail couples' desires to either have a biological child, parent a non-biological child, or deciding to stop efforts to have a child cannot be emphasised enough (Shreffler et al., 2017). Furthermore, the meanings of infertility and the consequences of infertility are shaped by women's reproductive experiences including family fertility histories, values and attitudes towards fertility and infertility (Shreffler et al., 2017). Most importantly, the differences in the experiences and outcomes of infertility and the diversity of infertility experiences cannot be emphasised enough (Shreffler et al., 2017). Apfel and Keylor (2002) posit the immediate stress caused by infertility is alleviated at the site of the problem – either in the body or at the fertility clinic. Perhaps this can be done by providing non-prescriptive information, wherein individuals experiencing infertility, determine the limits of assisted reproductive technologies and the goals of the decision-making process (Shreffler et al., 2017; Wong et al., 2015). The ambivalence

experienced by women surrounding the decision to undergo assisted reproduction and initial treatment goals is pertinent to this study.

Although psychological literature on IVF treatment is helpful in understanding the stress evoked in women who undergo this process, as well as the ways in which women cope in response to IVF treatment, this literature has its limitations. A trend within this body of literature demonstrates and frames women's experiences of IVF treatment as pathological or maladaptive (Boivin, 2003; Noorbala et al., 2008; Ockhuijsen et al., 2014; Verhaak et al., 2007). The use of psychiatric diagnoses or terms fails to offer further insight and understanding into women's internal, emotional worlds. Furthermore, investigating the normalisation of the side-effects, physical pain and emotional stress women experience is a significant yet sparse body of literature within psychological literature on IVF treatment (Gerrits, 2014; Kee et al., 2000). However, having said that, psychological studies also provide significant insight into the experiences of women who undergo assisted reproduction including psychological interventions of women believed to be at risk (Gourounti et al., 2012; Rockliff et al., 2014). Significantly, the combined work of both medical personnel and psychologists is cardinal to treating women who undergo assisted reproduction (Boivin & Gameiro, 2015; Malina & Pooley, 2017; Noorbala et al., 2008).

2.4 Psychoanalytic literature of motherhood and assisted reproduction

Psychoanalytic literature foregrounds the importance of an individual's internal, emotional world (Shedler, 2010). Complex dynamics of an internal world are accessible through several distinctive features of psychoanalytic techniques. Shedler (2010) emphasises focusing on affect and the expression of emotion; exploring attempts to avoid distressing thoughts and feelings; identifying recurring themes and patterns; discussing past experiences; focusing on interpersonal relations and exploring the fantasy life of individuals provides access into their internal, emotional worlds as key characteristics. As such, psychoanalysis provides comprehensive considerations when investigating motherhood in the context of assisted reproduction and emphasises the complexities of the affective and internal experiences of women who undergo assisted reproduction in the context of infertility.

Simon (2013) emphasises that assisted reproductive technologies are largely unexplored in psychoanalytic writing, despite the prevalence of infertility and the widespread use of such technologies (Dyer et al., 2016; Inhorn & Patrizio, 2015; Qin et al., 2016). The current psychoanalytic literature of motherhood and assisted reproduction in the context of infertility

is sparse; however there is an emerging body of literature focusing on understanding women's affective experiences of successful assisted reproduction from their own perspectives, in order to gain further insight into how these experiences channel and shape women's internal worlds.

In a critical review of psychoanalysis and infertility Apfel and Keylor (2002) argue psychoanalysis has made many claims concerning infertility which require revision. Beginning in the 1950s, a number of early analytic authors hypothesise that if no organic cause is found to explain the inability to achieve pregnancy, unconscious psychic conflicts should be considered and treated as a possible source affecting or preventing pregnancy (Siegel, 2017; Wischmann, 2003). Psychoanalytic authors in the past have also focused on the immense stress infertility causes and propose this may trigger regressions to earlier stages of psychological development (Zalusky, 2017). Similarly to Apfel and Keylor (2002), Zalusky (2017) argues past psychoanalytic understandings of infertility require revision as this literature reinforces the notion that infertility originates from early developmental pathology. Early formulations addressing infertility posit that infertile women unconsciously reject motherhood and femininity because of a deeply unconscious and conflicted relationship with their mother; interference with the ability and wish to conceive particularly related to conscious and unconscious guilt towards a defective or deceased male sibling; family constellations with a predominating mother figure and a rejecting, absent and weak father figure; oral frustrations; a mother's death during delivery; and early anxieties and envy as causing underlying psychosomatic mechanisms of female procreation disorders, for example (see Allison, 1997; Jacobson, 1843; Knight, 1943; Langer, 1958; Pines, 1990). This is not to say earlier psychoanalytic theorising surrounding assisted reproduction and infertility was not helpful in contributing to psychoanalysis' understanding of this topic. However, a psychoanalytic shift from focusing on uncovering the etiology of infertility to understanding how women who undergo assisted reproduction make meaning of the complexity of this experience is far more useful.

Abbasi (2011) refers specifically to the theory of psychogenic infertility as unhelpful when treating individuals with infertility. Since the beginning of the 1980s, a large number of studies have been carried out in order to investigate the relationship between stress and infertility, with a particular focus on couples undergoing IVF (Wischmann, 2003). As demonstrated earlier in this review, the effect of infertility and biomedical procedures of IVF treatment arouse considerable emotional distress for many women. Despite the psychological

literature on infertility and assisted reproduction, the association of stress and infertility is ambiguous as many of the earlier formulations abovementioned are present in women who are fertile too and who are able to fall pregnant and carry until full-term (Siegel, 2017; Wischmann, 2003). While ambiguity and controversy remains surrounding the theory of psychogenic infertility, current psychoanalytic literature shifts its focus from searching for potential psychic aetiologies of infertility and focuses rather on understanding the meanings and complexities of the affective and internal experiences of women who undergo assisted reproduction (Bassin, 2001; Blum, 2017; Kite, 2007; Leon, 2010; Levaque, 2017; Malberg, 2017; Shelby, 2017; Siegel, 2017; Simon, 2013).

It is difficult to tease out and delineate the internal struggles and affects women who undergo assisted reproduction in terms of making a decision to undergo assisted reproduction and in terms of a diagnosis of infertility. A decision to undergo assisted reproduction brings with it a set of contradictory feelings (Siegel, 2017). Levaque (2017) explores the risk of perceiving oneself as omnipotent in the face of infertility with the hope to overcome what nature has deemed can never happen. However, with feelings of omnipotence and hope come feelings of profound fear, both conscious and unconscious (Levaque, 2017; Siegel, 2017). Furthermore, in relation to the diagnosis of infertility a prominent disruption to the sense of self occurs (Leon, 2010). Kite (2007) proposes infertility more often than not precipitates a crisis in which a familiar sense of oneself collapses. Leon (2010) shares similar views and posits a once continuous and stable sense of self is threatened upon a diagnosis of infertility as the ability to reproduce is a fundamental assumption of the function and identity of women (Leon, 2010). Notably, this literature is driven by understandings of 'nature' determining lived experiences and is exceptionally un-feminist. Additionally, the traumatic impact of learning of infertility may include reactions such as shock, dismay and disappointment as the narcissistic organisation of a woman who is trying to become a mother is subsequently disorganised due to the meaning of a diagnosis of infertility (Leon, 2010). Mann (2014) posits facing reproductive failure is experienced as a deep narcissistic injury which threatens belief and value systems about self-representation and body image. Depressive dynamics too may be present in relation to the diagnosis of infertility and is apparent in individuals' narratives. This narrative is alive with self-loathing attacks and centres on a reproductive story surrounding experiences, memories and a desire relating to what it means becoming a mother or a parent (Fraiberg, Adelson, & Shapiro, 1975; Leon, 2010).

With that said, Leon (2010) argues the experience of infertility is different for each individual as it is experienced in relation to an individual's history, psychic organisation, resilience and vulnerabilities. Assisted reproduction is a complex and biological process however, Shelby (2017) emphasises the powerful involvement of the human psyche. A significant tension explored in psychoanalytic literature centres on the desire of having a baby and the process of choosing to undergo assisted reproduction (Shelby, 2017). Shelby (2017) describes the desire of having a baby and the process of choosing assisted reproduction as originating from the depths of our psyches wherein hopes, fantasies and archaic anxieties surrounding choice emerge. Although Shelby's (2017) paper illustrates complex emotional processes arising from women who seek known individuals to donate sperm cells, he proffers a significant reflection relevant to this study. Shelby (2017) proffers beginning with the decision to have a child through assisted reproductive technologies brings about a psychic shift in which a cell is no longer "just a cell" (p. 530), but a potential of creation - a child - charged and loaded with affect, hopes and fantasies, fears, dreams and wishes, and memories and ghosts (Fraiberg et al., 1975). For example, Pines (1990) works extensively with women who are infertile and presents a patient she refers to as 'Mrs B' in the beginning stages of IVF treatment. Mrs B has three ova extracted. Unfortunately, two of the ova are not 'viable' and could not be fertilised. Pines (1990) demonstrates Mrs B's mourning process of the two ova she lost as if they are two dead babies. The process of mourning Pines (1990) describes is perhaps speaking to what Shelby (2017) proffers, a cell is not just a cell once a woman decides to undergo assisted reproduction. Through assisted reproduction, Mrs B is able to fall pregnant as the third ovum was 'viable' and implantation was successful (Pines, 1990). Interestingly, Pines (1990) recalls Mrs B during her pregnancy as exceptionally preoccupied with the technicalities of her fertilisation and proposes this as a way of Mrs B avoiding the emotional aspects of her pregnancy. Although not explicitly stated, Shelby (2017) alludes to an experience of *tension* between the wish and desire to have a baby and choosing to undergo assisted reproduction. As such, perhaps Mrs B's preoccupation surrounding the technicalities of her fertilisation may also be a way of managing the ambivalence of wanting to have a child, choosing IVF, yet losing two of her babies and then falling pregnant having undergone assisted reproduction. The difficulty of negotiating this complex ambivalence is no easy task for any woman as, having chosen to undergo assisted reproduction, the journey to motherhood is burdened with psychical and emotional trauma (Blum, 2017).

2.5 Research Questions

What are the subjective, lived experiences of women who have undergone a successful IVF treatment in the context of infertility?

a. What are the feelings, fantasies, hopes and fears experienced by women who undergo a successful IVF treatment?
b. What feelings, fantasies, hopes and fears are associated with their experiences of IVF trials, procedures and treatments?
c. What feelings, fantasies, hopes and fears are associated with their infertility?
d. What are the internal metaphorical representations of women who have undergone a successful IVF treatment in the context of infertility?

Chapter Three: Methods

3.1 Research Design

A qualitative research design was considered to be suitable for this research as qualitative research is well positioned to explore the meanings that individuals have created and assigned to their world and their experiences (Merriam, 2002). Broadly speaking, a qualitative approach enabled me to perform an in-depth and comprehensive study, providing rich and detailed descriptions of participants' experiences (Merriam, 2002). It is important to clarify the way in which qualitative research was undertaken in this research study as the term 'qualitative' is associated with a range of epistemologies and methodologies (Midgley, 2006).

Ontologically, this study assumed there is no single reality or truth thus an individual's reality is fluid, subjective and differs from person to person (Scotland, 2012). Furthermore, reflecting the meanings individuals have created and assigned to their world and their experiences is a unique and complex, psychological reality (Midgley, 2006). This research aimed to develop an in-depth and rich understanding based on psychoanalytically informed semi-structured interviews which explored the lived experiences of women who underwent a successful IVF treatment in the context of infertility (Merriam, 2002). Thus, epistemologically this study was interpretive in order to discover the underlying meaning of individually constructed events and experiences of participants (Scotland, 2012). Emphasis was placed on human interpretation of the social world and significance was placed on both the participants' and the researcher's interpretations and understanding of the lived and affective experiences of women who underwent successful assisted reproduction (Scotland, 2012).

Furthermore, this study was theoretically and methodologically informed by a psychoanalytic paradigm in order to gain an understanding of the internal, emotional worlds of women who underwent successful assisted reproduction. More specifically, one-on-one, face-to-face psychoanalytically informed semi-structured interviews, drawing on Hollway and Jefferson's (2009, 2008) free association narrative method, was used. This method assumes both a phenomenological and hermeneutic position (Scotland, 2012; Sloan & Bowe, 2014): phenomenological in that experience created by stories is essential to the construction of both social and individual realities; and, hermeneutic as a means of understanding these stories through interpretation (Scotland, 2012; Sloan & Bowe, 2014).

3.2 Sampling and Sample

The sample was selected using volunteer, non-probability convenience sampling using word-of-mouth and snowball strategies (Atkinson & Flint, 2001). To begin with, for the purpose of obtaining the sample, I created a participant information sheet in order to invite potential participants to participate in this research. This information sheet outlined the research area of interest of this study, my ethical obligations to participants and provided my personal contact details (Atkinson & Flint, 2001). Initially, an acquaintance interested in this study contacted a friend of hers who had undergone a successful IVF treatment, raised this research topic with her friend and asked if she would be willing to participate. She agreed and was happy for me to contact her. My acquaintance then provided me with her friend's contact details. I sent this potential participant an email explaining who I was and attached the Participant Information Sheet (Appendix B). Thereafter, telephonically she agreed to participate and a time and date were scheduled for an interview shortly after. Additionally, a colleague provided me with the contact details of a member of a support group for women struggling with infertility in Johannesburg who she knew personally. As above, I sent this potential participant an email explaining who I was and attached the Participant Information Sheet (Appendix B). Thereafter, telephonically she agreed to participate and a time and date were scheduled for an interview shortly after.

As the desired sample size was not achieved, a snowballing technique was used with the existing sample after each interview was conducted. The snowballing technique undertaken resulted in nine women volunteering and the researcher contacted them all electronically (Marshall, 1996; Atkinson & Flint, 2001). This was an appropriate technique as the sample of this study was limited to a small subgroup of a population (Marshall, 1996, Atkinson & Flint, 2001). Of the nine contacted, another four were confirmed. Although the researcher attempted to acquire the largest possible sample, seven of the identified sample of 13 were not comfortable to take part in the research and their privacy was respected. At this stage, the final sample consisted of six participants. One participant chose to withdraw from the study once a date and time was scheduled for the interview. She reconsidered her decision to participate and subsequently chose to not participate in this study as she was not comfortable. This decision and her privacy were respected by the researcher. The low response rate encountered in this research suggests that the population may be difficult to access because the issues are uncomfortable to talk about. The final sample consisted of five participants. The final sample size was determined during the data collection process. Once data saturation

had been reached, and snowball sampling had not generated any new participants, no further participants were sought (O'Reilly & Parker, 2013).

The final sample consisted of five White, adult, female participants with their age ranging between 35 – 50 years of age. The number of attempted IVF treatments ranged between two - 15 trials per participant. The duration of the interviews ranged between one - two hours. Several inclusion sampling criteria were defined and two exclusion sampling criteria were defined. Potential participants had to have undergone a successful IVF treatment. As this study initially aimed to explore maternal subjectivity and the transition into motherhood within the context of infertility, a successful IVF treatment was cardinal as women who underwent successful assisted reproduction had subsequently given birth to a baby and were mothers. This aim thus informed the study and the sampling criteria. The topic of infertility and assisted reproduction is difficult regardless of whether the outcome was successful or unsuccessful. Women who had undergone unsuccessful assisted reproduction were excluded from the study, however, in order to minimise the risk of retraumatisation.

Potential participants had to have given birth more than six months prior to the interview, but no more than four years prior to the interview. This would mean their child(ren) was between the age of six months and four years old. Thus potential participants would have had some time to adjust to motherhood and have some opportunity to make meaning but their experience of IVF would be recent enough to be present in mothers' minds. Mothers whose children presented with any abnormalities including disease and/or disability were excluded from the study as it was expected that this would significantly influence participants' subjective experiences. Participants with more than one child were not excluded, and participants with both single and multiple births were included. The inclusion criterion regarding multiple births was considered significant as women who undergo IVF treatments are more likely to have multiple births than women who conceive naturally. As abovementioned, individually constructed realities are fluid and differ from person to person (Scotland, 2012). Each woman's experience of infertility and successful IVF treatment were unique, complex psychological experiences (Midgley, 2006). Thus including participants with more than one child and participants with both single and multiple births was appropriate as this would significantly influence a mother's subjectivity, and her transition into motherhood in the context of infertility.

3.3 Method of Data Collection

Data collection involved one-on-one, face-to-face semi-structured interviews. The instrument of data collection utilised for this research was psychoanalytically informed semi-structured interviews which drew upon Hollway and Jefferson's (2009, 2008) free association narrative method.

There is no universally agreed method of ascertaining when data saturation is reached and it is unclear what this means for the practice of research (Francis et al., 2010). Francis et al. (2010) explore the possibility of a point in data collection when no new additional data are found. Francis et al. (2010) propose in the context of interview based research studies where the conceptual categories, or constructs are pre-established on the basis of existing theory; if sampling is adequate; and if the interviews have been effective in eliciting participants' experiences or views within these conceptual categories; it is then likely that the content domain of the construct is adequately saturated (Francis et al., 2010). Considering this study's psychoanalytically informed theoretical framework, the context of the interviews were pre-established on the basis of existing theory. Additionally, the psychoanalytically informed semi-structured interviews, drawing on Hollway and Jefferson's (2009, 2008) free association narrative method were sufficient and effective in eliciting participants' experiences and views within this study's conceptual categories. According to Francis et al. (2010), it is therefore likely the content domain of the construct, due to the richness and in-depth nature of the data, is adequately saturated. Although the sample size is small, the richness and in-depth nature of the data allows for meaningful findings and discussion (Francis et al., 2010).

The free association narrative method is informed by a psychoanalytic framework based on Freud's idea of free association as a means of unearthing and detecting unconscious wishes (Hollway, 2009). Hollway and Jefferson (2008) argue by asking participants to share whatever comes to mind, a narrative is elicited. The free association method aims to access latent meaning through eliciting and focusing on the participants' associations between ideas (Hollway, 2009), and follows pathways defined by emotional motivations rather than rational intentions (Hollway & Jefferson, 2008). Importantly, the narrative elicited is not structured according to conscious logic but rather according to unconscious logic (Hollway & Jefferson, 2008). The free association narrative method is semi-structured in nature as semi-structured interviews provide guidelines for possible questions while simultaneously not limiting and constraining the data collection process to what the researcher may assume as important

(Barriball & While, 1994). Furthermore, semi-structured interviews are less intrusive compared to structured interviews and facilitate the process of meaning making. Participants largely drove the direction of interviews within the broad theme of the lived experiences of women who have undergone a successful IVF treatment in the context of infertility (Barriball & While, 1994).

Accordingly, the interview schedule was psychoanalytically informed and aimed to explore and gain an understanding of the internal, emotional worlds of women who have undergone a successful IVF treatment. I asked the participants' to share the story of how they became a mother; about their experiences of infertility and their experiences of IVF trials, procedures and treatments. I then followed the participants' associations wherever these happened to take them (Barriball & While, 1994; Hollway, 2009; Hollway & Jefferson, 2008). As the nature of this topic evoked difficult feelings, I emphasised an interest in the participants' own thoughts and associations. The semi-structured nature of the interviews also allowed the participants to flexibly talk about what they felt most comfortable in revealing (Barriball & While, 1994).

Questions were derived from relevant literature and drew upon Hollway and Jefferson's (2000) adaption of the biographical-interpretive method, a strategy for eliciting narratives consisting of four key principles. Each principle was informed by the gestalt principle which emphasises the idea that the whole is greater than the sum of its parts. Significantly, this stresses that meanings could only be understood in relation to a larger whole. The 'whole' that was the unit of analysis in this study was not the 'whole' participant. Rather it was all that the researcher accumulated relating to a particular participant such as, my experience-near field notes, reflexive notes, audio-recordings, transcripts, memories of meeting with the participant, inchoate feeling states and perceptions evoked in relation to a participant, and the notes made after the interview as well as discussions in supervision (Hollway & Jefferson, 2001).

The four key principles included open-ended questions, eliciting stories, avoiding "why" questions and following up using respondents' ordering and phrasing. These key principles are designed to facilitate the production of the interviewee's meaning frame, or gestalt (Hollway & Jefferson, 2000). Crucial to this study was the manner in which the interviews were conducted. Firstly, open-ended questions were utilised in the interview schedule with the purpose of assisting the participants on a path of self-disclosure, to facilitate continued communication, and a collaborative interaction between the researcher and the participants

(Brems, 2001). Secondly, Hollway and Jefferson (2000) state eliciting stories anchors individual's accounts to events that have actually happened, prompting a participant to engage with reality. Of significance was the particular story the participants in this study chose to tell, the manner and the detail of the telling and the points emphasised, for example. The interviews were conducted with this principle in mind as all corresponding choices made by the story teller were revealing and contained significance beyond the participants' intentions (Hollway & Jefferson, 2000). Thirdly, Hollway and Jefferson (2000) also state utilising "why" questions may elicit an intellectualisation from the participants and do not encourage self-disclosure effectively nor facilitate continued communication between the research and the participants. Closed questions and "why" questions thus were not utilised in the interview schedule (Brems, 2001). Fourthly, following up using respondents' ordering and phrasing was employed while conducting the interviews in order to respect and retain the participants' meaning frames so as to elicit further narratives (Hollway & Jefferson, 2000). Furthermore, the interview schedule was piloted with two expert reviewers (my supervisor and an academic reader). This was done in order to assure the relevance of the questions and to ascertain the quality and appropriateness of the questions in relation to the aims of this research and in line with the abovementioned principles. Additionally, interviews were conducted in a private setting and carried out at a time and a place most convenient for the participants. The time and place was agreed upon collaboratively. Interviews were non-intrusive and non-directive, proceeded in an open manner led by the participants' free associations; the researcher listened attentively to both verbal and nonverbal communications, and provided thoughtful reflections (Lemma, 2003; Midgley, 2006). Interviews were conducted in such a manner so as to advocate and emphasise the subjectivity of the participants. Furthermore, women themselves spoke of and reflected on their experiences of motherhood with minimal interference from the researcher (Kruger, 2003).

Field notes were used as a supplementary data collection method in order to capture detailed impressions of each interview (Mulhall, 2003). Field notes were recorded in a research journal after each interview. Field notes systematically recorded and noted my own inchoate feeling states (Cartwright, 2004) as well as of the participant; and reflected on the content as well as the process of each interview. This was particularly important as the research design of this research was interpretive. Field notes provided a disciplined way of recording my subjectivity and my own responses. Field notes were also used to enhance the productive use of reflexivity and to address the emotional work of this research; as well as the emotional

demands of the reflexive use of self in data analysis and in supervision (Elliot, Ryan, & Hollway, 2012; Mulhall, 2003).

3.4 Method of Data Analysis

Interpretive thematic analysis was the primary method of data analysis utilized for this research (Braun & Clarke, 2006). I chose this method of data analysis on the basis of the aims of this research and due to the theoretical flexibility of thematic analysis (Braun & Clarke, 2006). This research aimed to primarily explore the internal, emotional world of women who have undergone a successful IVF treatment pertaining to their feelings, fantasies, hopes and fears of the IVF process and of their own infertility. Boyatzis (1998) notes thematic analysis may have previously been limited to the manifest content of the research data. However, interpretive thematic analysis allows for the exploration of both manifest and latent material in the research data. Interpretive thematic analysis moves beyond the descriptive and manifest process of thematic analysis to an interpretation of the themes and what the themes mean within the data. The process of thematic analysis of this study identified the main themes which emerged from the data. Subsequently, a more in-depth interpretative analysis of the data was adopted which explored the finer nuances and richness of the data in relation to the affective experiences of women who have undergone a successful IVF treatment in the context of infertility, and to their internal, emotional world and dynamics (Boyatzis, 1998; Braun & Clarke, 2006). The two main themes presented in the findings chapter and their respective subthemes were present across all participants' interviews in this study. The choice of quotes presented exemplified the findings of this study.

This research was informed by a psychoanalytic theoretical framework and was analysed with the following principles in mind (Cartwright, 2004; Hollway & Jefferson, 2008, 2001). First and foremost, data analysis of the participants' accounts was informed by a fundamental proposition in psychoanalytic theory, namely the premise of conflict and that anxiety is inherent in all of us (Hollway & Jefferson, 2008, 2001). Hollway and Jefferson (2008) describe human beings are continuously faced with and confronted by threats to the self which then creates psychic anxiety. Defences are then mobilised, largely unconsciously, in order to internally manage this experience of psychic anxiety. As the nature of this topic evoked anxiety provoking and difficult feelings and memories for the participants, data analysis assumed the theoretical premise of participants as defended, rather than as unitary and rational (Hollway & Jefferson, 2008). Pertinent to this study's data analysis was the

theoretical premise that the participants' defences will affect the meanings that are available to themselves in a particular context and to the researcher, who too is defended (Hollway & Jefferson, 2008). Accordingly, careful attention was paid to my inchoate feeling states and corresponding thoughts or perceptions (Cartwright, 2004). As the nature of this research was interpretive, it was essential for me to recognise that analysis did not begin during or after the interview, but before it (Cartwright, 2004). As such, I was conscious of any personal bias that may have intruded on the interview. This included paying close attention to the evocation of my inchoate feeling states and associated perceptions during the interview. Importantly, Cartwright (2004) suggests the researcher's feelings and associated perceptions should not be used as independent evidence but that they should rather be used to corroborate findings that emerged during the process of analysis. Furthermore, field notes and supervision were utilised while analysing data in order to engage with my subjectivity with the purpose of enhancing the productive use of reflexivity and to appropriately engage with the emotional work of this research study (Elliot et al., 2012). As with Cartwright (2004), Elliot et al. (2012) suggest the use of experience-near field notes and reflexive field notes could further research knowledge by corroborating findings which emerged during the process of analysis.

A second principle informing this research was an emphasis on relationality and intersubjectivity (Hollway, 2009). This principle was adopted when approaching data analysis in order to understand the participants' and my experience, as well as the relation of these to each other (Hollway, 2009). Elliot et al. (2012) refer to this co-created space between the researcher and the researched as the 'research encounter', an analytic third (Hollway, 2008; Ogden, 1994), in which the researcher and the research activity are seen as a "production of knowledge with research subjects being reflexively constituted between the researcher and the researched" (as cited in Elliot et al., 2012, pp. 433).

Thirdly, this research was informed by the search for core narratives (Cartwright, 2004). Hollway and Jefferson (2001) propose language as a constitutive of subjectivity and a means of conveying internal experiences to a listener, in this case, myself. Analysis thus was interested in what investments unconsciously motivated particular participant's accounts while importantly leaving space for influences other than linguistic, such as the influence of defences on participants' accounts (Hollway & Jefferson, 2001). Additionally, this study was informed by the assumption that narratives served as metaphorical representations of the different aspects of participants' internal worlds (Cartwright, 2004). As this study was informed by a psychoanalytic theoretical framework, the process of data analysis was also

interested in how the individual located the self in the narratives constructed. This was in relation to how the self had internalised and appropriated various experiences (Cartwright, 2004).

A fourth principle informing this research was the gestalt principle. Hollway and Jefferson (2001) illustrate working with the *whole* of the data while prioritising making links within a core narrative of a participant (Cartwright, 2004). The 'whole' unit of analysis referred to all I accumulated relating to a particular participant such as, my experience-near field notes, reflexive notes, audio-recordings, transcripts, memories of meeting with the participant, inchoate feeling states and perceptions evoked in relation to a participant and the notes made after the interview as well as discussions in supervision (Hollway & Jefferson, 2001). I was cautious of simply summarising the transcribed text, as the very nature of a psychoanalytic approach meant that careful attention needed to be given to what is often considered irrelevant to data analysis. Subsequently, I paid close attention to associations, repetition, seemingly meaningless digressions and omitted information, for example – inconsistencies in a participant's interview (Cartwright, 2004; Hollway & Jefferson, 2001). I aimed to make sense of and to develop a coherent account of these inconsistencies as they provided important clues to a woman's internal experience of having undergone a successful IVF treatment in the context of infertility. As I transcribed the audio-recordings, the interviews were supplemented by my recorded experience-near field notes and reflexive field notes. Each participant's audio-recording was carefully listened to paying particular attention to the 'research encounter' (Elliot et al., 2012; Hollway, 2009). Importantly, whilst listening to each audio-recording and transcribing, I held in mind my own experience of the 'research encounter' in order to reflect upon the ways I was emotionally affected by it. This process of analysis heavily included my own associations, thoughts, affective responses and inchoate feeling states aroused as well as perceived feeling states of each participant. The first draft of the analysis included a strong emphasis on my subjective responses. This was then revised and thoroughly edited once I had met with my supervisor. In this way the intersubjectivity of the encounter was at the core of data analysis but analysis was then refined so as to focus on the narratives of participants. I also worked with the audio-recordings alongside the transcripts whilst analysing the data. At points during analysis when data selected for the findings chapter from particular participants were not clear in my mind; listening to the audio-recording as needed was pertinent in immersing myself in the 'research encounter' once again. This allowed me to simultaneously gain access to both conscious and

unconscious self representations, as well as metaphorical representations of women who have undergone a successful IVF treatment in the context of infertility and their internal, emotional world and dynamics.

Furthermore, supervision proved to be invaluable throughout the data analysis process. Supervision provided a space in which the emotional demands of this research study were explored and contained. My supervisor and I met after each interview was conducted and discussed my experience of the 'research encounter'. This provided a space to detoxify the impact of what was experienced by myself as powerful unconscious communications, such as projections and projective identifications (Elliot et al., 2012). Once each interview was transcribed and analysed in the abovementioned manner, myself and my supervisor met to discuss each participant at separate occasions too.

That being said, psychoanalytically informed methodologies and psychoanalytic approaches to data analysis often face scrutiny, suspicion and at times animosity within the field of qualitative research (Midgley, 2006). A frequent criticism of psychoanalysis within qualitative research refers to the balance of power between the researcher and the researched. The researcher/analyst is criticised for maintaining an unequal power relationship as the researcher/analyst is assumed to have hidden access to an unconscious truth that the researched could not know about. Thus, the researcher is placed in a position of power as her own subjectivity is drawn upon as an instrument of knowing. Parker (2015) warns this may result in disempowering the participants which significantly impacts upon the research process and states, "psychoanalysis is culturally and historically grounded and should not be wielded as if it were a 'metalanguage', a privileged perspective" (p. 78). As this study relied on experience-near interpretations informed by psychoanalytic theory and methodology, the findings and the discussion of this research must not be taken or understood to be universally true (Parker, 2015). Throughout the process of creating this study, changing and evolving understandings were developed out of a constant interplay between data and the emerging hypotheses (Midgley, 2016). Recognising no observation or no experience-near interpretation is ever 'neutral' is cardinal to research informed by psychoanalysis theoretically and methodologically (Midgley, 2016). That being said, reflexivity is a significant part of the research process as it offers researchers opportunities to recognise and use the inevitable participation of the researcher's subjectivity in the process of understanding and representing the particulars of human experience thoughtfully (Elliot et al., 2012; Parker, 2005). Furthermore, the importance of relational thinking in the practice of psychosocial research

cannot be emphasised enough (Elliot et al., 2012). Adopting a relational and intersubjective approach to psychosocial research challenges the critique of psychoanalysis within qualitative research referring to the balance of power as it provides researchers a way of managing the critique of an unequal power relationship. A consideration of the critiques of psychoanalytically informed research is paramount as theoretically we think in a very particular kind of way and have to push ourselves as researchers, "to think about what we are thinking" (Parker, 2015, p. 81).

3.5 Researcher Reflexivity

Researcher reflexivity is a valued process in qualitative research that acknowledges the researcher as an important part of the research process. Researchers are required to be conscious and mindful about their internal and external responses and aware of their relationship to the research topic and to the participants (Etherington, 2004; Kleinsasser, 2000). Given the emotive nature of the topic as well as the research focus on internal experience, researcher reflexivity was of particular importance in this project. Given the psychoanalytic nature of this research, a further level of self-reflexivity and self-scrutiny was required. I documented any thoughts and feelings both before and after the interviews, any inchoate feeling states and associated perceptions during the interview, as well as any potential bias that may have intruded on the interview in a research journal (Cartwright, 2004).

At the outset of the development of this research proposal, I was a student psychologist in my first year of clinical training at the University of Witwatersrand. I chose to apply to the MA Clinical Psychology programme at the University of Witwatersrand as I positioned myself within a psychoanalytic paradigm. Thereafter, I was psychoanalytically trained which consolidated and enhanced my way of understanding people. Long and Eagle (2009) interrogate the interface of a psychodynamically trained therapist as a researcher and argued that there is a point during which their clinical identity comes into conflict with their researcher identity. The point at which I experienced my clinical identity conflicting with my researcher identity was when data collection commenced and most poignantly during the process of data analysis due to the psychoanalytic nature of both. This particular tension is further discussed in this study's discussion chapter.

I was aware of the impossibility of truly knowing and understanding my own unconscious material and anxieties which may have influenced and informed the data collection process as

well as the data analysis process. Nevertheless, I was mindful of how my own interest in mothers may have influenced my orientation to the research and data collection. In particular, I acknowledged my own personal interest in what it means to be a mother and the challenges experienced in the transition to becoming a mother; perhaps as a result of wanting to further understand my own relationship with my mother. In the forefront of my mind were also perhaps questions and curiosity concerning my own fertility and becoming a mother myself. Perhaps choosing this research topic was a way of managing my own anxiety and fears around the frightening potentiality of being infertile. Upon reflection, I experienced a significant over-identification with the participants' experiences of loss. I was particularly interested in the ways the participants attempted to manage such painful affect, perhaps as a means of exploring how to manage my own pain. Another consideration incited by reflection was my own relationship with my superego. This may have prompted an over-identification with the participants' experiences of guilt, locating blame internally and the consequent punishment of the self. This may have resonated with me as my relationship with my superego is experienced as harsh and unrelenting at times.

I was also aware that personal characteristics may influence the mothers' experiences of myself and of the interviews. For example, I am a young, single woman who does not have children. Participants may have particular thoughts, feelings and fantasies about my age in particular and may have either identified with me or may have distanced themselves from me, for example. The participants may have wondered about my own fertility; whether or not I was a mother; perhaps wondered if I had lost a child; perhaps wondered why someone so young would be interested in infertility; perhaps wondered about my capacity to empathise if I was indeed not a mother, for example. This may have influenced what participants felt comfortable sharing with me. In order to account for this potential difficulty, I created a comfortable environment for the participants to speak freely, whilst acknowledging the difficulties that particular topics caused. It was however inevitable certain factors, which were unknown to me, intruded on the interviews. As such, I attempted to be reflexively aware of such factors and this was kept in mind during the analysis of the interview material.

Importantly, the data analysis process occurred alongside my personal psychoanalytic psychotherapy which explored the immense complexity of identifications with participants; resistance to engaging with the data; processing powerful unconscious communications; and negotiating distancing and ways of allowing myself to be affected by the other whilst maintaining appropriate reflexive distance (Elliot et al., 2012; Harvey, 2018). Research

supervision sessions with a psychoanalytic-researcher too were invaluable and assisted me with making sense of in-articulated, embodied unconscious material as well as to explore any 'unhelpful' reactions of myself such as, resistance and avoidance of the data. This particular tension is also further discussed in this research study's discussion chapter (Elliot et al., 2012; Harvey, 2018).

3.6 Validation of Data Analysis

Elliot, Fischer, and Rennie (1999) present a set of tentative and evolving guidelines for the publication of and reviewing qualitative research with the aim of aiding a process of legitimising qualitative research. The set of guidelines presented are pertinent and applicable to psychoanalytically informed methodologies. These specific guidelines include owning one's perspective, situating the sample, grounding in examples, providing credibility checks, coherence, accomplishing general vis. specific research tasks, and resonating with readers (Elliot et al., 1999). Considering these guidelines, I was transparent and specified my theoretical orientation and personal anticipations in relation to the research topic. In developing and communicating my understanding of the research topic, I attempted to recognise my values, interests and assumptions, as well as the role these played in advance and as they became apparent during the research. I situated the sample of this study by providing basic descriptive data. In order to illustrate both the analytic procedures used in this study and how my understanding developed in light of these procedures, data which exemplified the findings were chosen. The credibility of the findings and their respective sub-themes, in addition to my understanding of the findings was checked with a woman who had also undergone successful IVF. Furthermore, two or more varied qualitative perspectives were explored before deciding which perspective was most appropriate for this study. My understanding of the data was represented in a coherent and integrated manner while preserving the nuances in the data. As this study intended to convey a general understanding of women's affective experiences of assisted reproduction in the context of infertility, the limitations of extending the findings to other contexts and samples are specified and discussed. Lastly, this study aimed to stimulate resonance in readers and reviewers (Elliot et al., 1999).

3.7 Ethical Considerations

Potential participants who fit the sampling criteria were provided with a participation information sheet and invited to participate in the research (Appendix B). Informed consent was obtained from all participants. A signed consent form (Appendix C) was required of those who choose to partake in the study. Furthermore, a separate, signed audio recording consent form (Appendix D) was required from the participants. The audio recordings and transcripts will be kept in a password secure laptop for five years and will be destroyed thereafter to safeguard raw data (Babbie & Mouton, 2001).

Potential participants were informed that participation in the study was completely voluntary. Participants were fully informed of their obligations and responsibilities before the research began. Participants were informed that they had the right to withdraw from the research at any stage, without penalty. One participant chose to withdraw from the study once a date and time was scheduled for the interview. She reconsidered her decision to participate and subsequently decided she was not comfortable participating in this study. This decision and her privacy were respected by the researcher. There were no direct benefits involved in this research however it was likely to offer participants the benefit of reflecting on their experience, and the opportunity to contribute to the understanding of the lived experience of having undergone a successful IVF treatment in the context of infertility within the field of psychology. There were no foreseen risks associated with participation however I was mindful that this was a potentially sensitive topic for participants. Additionally, I debriefed participants after the interview. Debriefing included providing a space for the participants with the opportunity to ask any questions they have about the study or the research process. In the event that participation in the research evoked any distress, participants were provided with details of free counselling services at Helen Joseph Hospital, Lifeline or FAMSA on the participant information sheet (Appendix B). No participant requested follow-up counselling.

Given the qualitative nature of this research, the limitations of confidentiality and anonymity were explained to participants. Confidentiality was guaranteed as I was conducting one-on-one semi-structured interviews. Pseudonyms were used and I made every effort to ensure no identifiable information was reported in the transcripts, final research report or any other published papers and in presentations at academic conferences. However, as I conducted the interviews the complete anonymity of the participants cannot be guaranteed. At least one individual knew the identifying information of the participants. In addition, I used direct

quotes in the transcripts, final research report or any other published papers and in presentations at academic conferences and made every effort to ensure no identifiable information was reported. The audio-recordings and transcripts were only accessible to myself and my supervisor and were safeguarded while the research was in progress in a password secure laptop whose password only I knew. Participants were informed of this in advance in the participant information sheet (Babbie & Mouton, 2001). Finally, external ethics was obtained for the study (Appendix F) and approved by the HREC (non-medical) of the University of the Witwatersrand.

Chapter Four: Findings

In the following chapter the findings of the analysis are presented. Two main themes are presented: the medicalisation of infertility and the culpable mind. The medicalisation of infertility and of the infertility treatment was experienced viscerally by the participants. This finding illustrated how women who undergo a successful IVF treatment, and who become mothers, affectively and internally experienced becoming the object of the medical diagnosis of infertility, and their experiences of being defined and treated as a medical condition. Importantly, this finding highlighted the interference of the *outside* world. The 'culpable mind' section explores participants' fantasies of what the mind could do to the body. This findings illustrated how reproductive difficulties casted doubt on participants' way of being and way of experiencing the world. A process unfolded wherein participants sought a causal explanation for their infertility not within the medical realms of biotechnology and assisted reproduction but within the intrapsychic realm. Within each main finding relative subthemes emerged and are presented below. Direct quotations by the participants are used to ensure the integrity of the data is protected.

4.1 The Medicalisation of Infertility

This finding aimed to demonstrate the medicalisation of infertility and of the IVF treatment the participants experienced. As this research study was informed by a psychoanalytic theoretical framework, I hope to capture and explore the complex processes through which the medicalisation of infertility and treatment dovetailed a woman's subjective experience of having undergone a successful IVF treatment. Additionally, I hope to illustrate how the participants' experiences of medicalisation of infertility and of the IVF treatment has channelled and shaped their internal worlds.

I asked Caitlin to tell me the story of how she became a mother. Her first pregnancy was naturally conceived and she experienced significant difficulties adjusting to her newborn baby and to becoming a mother. While exploring this in our interview, Caitlin began thinking about her second pregnancy. It was whilst attempting to fall pregnant for the second time that Caitlin's infertility journey began. When Caitlin began talking in her interview about her difficulties falling pregnant the second time, she lost her words and her thoughts.

Caitlin: It was hard. Umm, and then yeah we moved to Joburg and decided to try again and I thought it would be just as easy and umm, yeah. When it [Falling pregnant] *suddenly wasn't – it was, yeah, a huge shock. Umm, what was the question again?*

Tatiana: How did you become a mother, the story of how you became a mother?

*Caitlin: Oh yes! Ok. So *laughs* losing my track of thought. Umm, *clears throat* so then umm, I suppose in this day and age it's getting more and more common…*

This was how Caitlin began to talk about her experience of becoming a mother in the context of infertility and a successful IVF treatment. The quotation illustrated her difficulty in talking about this. Losing her words as well as her train of thought may indicate an unconscious process prompted by the pain of her experience. Once I repeated the question, Caitlin's experience of how she became a mother was suddenly brought back into her consciousness. In that moment, Caitlin laughed. In the interview her laugh felt urgent and manic, as if she were attempting to keep her internal experiences of medicalisation at bay. Caitlin then cleared her throat and normalised her experience by commenting on how common IVF is increasingly becoming. Perhaps she experienced shame in that moment, and cleared her throat as if to rid herself of her shame and push down her internal experiences welling up.

This moment in Caitlin's interview illustrated how she needed to prepare herself to share with me the story of how she became a mother in the context of infertility and medicalisation. Maxine expressed a sense of preparation differently: throughout her interview she used metaphors of going to war. For example, when asked to describe her experiences of IVF, Maxine made a striking comment:

Maxine: …it's like, we're going into battle when you start an IVF. You've got to put on an armour and you've got to like have a helmet and you've just got to go balls to the walls, like do this...

The words Maxine chose to describe her IVF process were very militaristic. This suggested a hostile internal world in which Maxine needed to aggressively arm herself in order to protect herself from the belligerent, brutal and antagonistic experience of infertility treatment. I wondered about 'weapons' as a means of gaining an advantage or defending oneself and wondered what weapon or weapons Maxine needed in order to shield and armour herself. It appeared that Maxine's experience was that her internal world was under siege, attacked and threatened. It appeared that the medical process of IVF was experienced as an aggressive act

against, and a disruption to, her internal world in what appeared to be an attempt to breach and harm.

4.1.1 The experience of the body transformed into an object

The medical process of IVF was a bodily one for participants. A significant experience which emerged across all the participants' interviews appeared to be an awareness of their bodies transformed into objects. For example, Amy reflected on one of her experiences at a fertility clinic, whilst waiting at reception for an appointment with her fertility specialist. She described being surrounded by many women who too were waiting for their appointment with their fertility specialist:

Amy: …And so I just remember sitting there, in my work clothes, waiting for this whole, to you know, for them to call your name. It was ages to sit there and wait. You've got these hectic florescent lights and everybody just reading magazines and looking down. And that's it. Like super quiet and the secretary is always very formal and sort of you know, kind of strict and professional…

The words Amy chose to convey her experience – such as "*procedural*", "*florescent lights*" and "s*trict and professional*" – brought to mind a particular jargon characterised by medical language and impersonal processes. Amy's interaction with the fertility clinic appeared to be experienced internally as cold, indifferent and harsh. Her words also held associations of an established way of actions conducted in a certain order or manner: "*always very formal and sort of you know, kind of strict and professional"*. I wondered if Amy experienced the fertility clinic as demanding that 'rules' were obeyed and adhered to. This suggested the fertility clinic was a space Amy experienced as highly medicalised.

Maxine recalled one of her most potent experiences at a fertility clinic, whilst waiting at reception for an appointment with her fertility specialist, as with Amy, surrounded by many women who too were waiting for their appointment with their fertility specialist:

Maxine: …They [Women waiting for their respective appointments] *sit there, everyone's on an iPad, everyone's on a computer, everyone's on a phone. Nobody talks to anybody. It's the most terrible thing. "Sue Smith?" - and then you see someone goes off and then, "Mary Jane?" – and then if it's scans they're calling like six at once it's just, it's a terrible, terrible place.*

Maxine described a cold, indifferent and harsh environment, perhaps longing for human contact and connection within this environment. Even the names that came to mind for Maxine (Sue Smith and Mary Jane) are impersonal and reminiscent of "*Jane Doe*": a fictitious name used to identify an unknown woman or body. Maxine appeared to internally experience namelessness or identitylessness, an internal experience which Maxine repeatedly described as "*terrible*". It is clear from the above quotation that Maxine wished for something different – perhaps something more personal and intimate – but there appeared to be no space for such possibilities.

Amy's account echoed Maxine's longing to have had an opportunity to experience something more personal and intimate:

Amy: …even in the waiting room you don't get that feeling of like shared stories and this comradery between the women – not at all. It's all very like quiet…

This wordlessness that Amy described suggested a silencing of experience. Themes of shame pervaded the interviews and were often expressed as a painful moment of being seen and feeling vulnerable. Perhaps the experience Amy was describing was situated in an awareness of the shared shame – rather than the shared stories – of the women in the waiting room. This silence is framed by the medical feel of the environment: established actions conducted in a certain order or manner, a sense of demanding that 'rules' were obeyed and adhered to. There appeared to be an unspoken 'knowing' which may have been driven by an internal experience of the medicalisation of the IVF process, even whilst surrounded by the potential of "*shared stories*" and "*comradery*".

4.1.2 Viscerality of the bodily invasion of IVF treatment

Michelle underwent thirteen IVF trials and whilst reflecting on her experience, a metaphor came to mind which seemed to represent how infertility and the IVF process was experienced internally as medicalised:

Michelle: …and you feel like you're in a factory after a while – that you're just going through and they're taking eggs – because it is! You sit there in the mornings, people just go in and they go out and in and out...

The same metaphor came to Amy's mind:

Amy: …you're one of many going in there. Yeah. It felt a little bit like a sausage factory I must admit…

And to Maxine's mind:

Maxine: *…It* [The fertility clinic] *opens at like six in the morning and it's a sausage factory and you're in and out of there all day long. Um, so that was horrific.*

"*Factory*": the power and complexity of this word struck me as a researcher. It appeared that internally the participants experienced a potent sense of being one of many, as if part of an assembly line passed through a set, linear sequence of mechanical or manual operations. What came to mind was manufacture, a sense of making or producing 'something' in large quantities. I wondered about the 'something' that was manufactured and how this internal experience of medicalisation was negotiated. A part of yourself was taken from you and was used as a material to produce an output, a product, an article. What the metaphor of the "*sausage factory*" does not convey – what it painfully leaves out – is that a part of oneself is taken from you with the hope of creation, being, bringing into existence a baby with no guarantee that this would be the outcome.

The manufacture of a hoped-for baby was often described in very bodily terms. Caitlin shared one of her experiences:

Caitlin:…But you do feel like a "lab rat". And like you're lying there with your legs in stirrups and like this huge spot-light, there's one or two of the senior doctors there… and they just walk by and everything is exposed…

The metaphor Caitlin chose to represent her internal experience was evocative for me in the interview. Unsettling fantasies of prodding and probing, being encaged, confined and trapped came to mind. What Caitlin appeared to experience internally was the bodily invasiveness of IVF procedures. Caitlin's description of herself "*lying there*" with her "*legs in stirrups*" and "*everything is exposed*" exemplified the experience of medicalisation - a brutal invasion, an unwelcome intrusion into her internal world. She also echoed the impersonal nature of the experience in her description of doctors walking by her exposed body.

The following quotes hope to capture the visceral bodily invasion which characterised Caitlin's experience of feeling as if she were a "*lab rat*". Participants often described this experience in graphic, explicit and uninhibited language. For example:

Caitlin: …Umm, and then I mean the process of all like the injections and you, the drugs that you're on make you put on weight, you feel like shit – they are horrendous… So then my whole stomach was bloated and I wish, actually I do have a picture somewhere, I can show you but just like completely bruised from all the injections…

Maxine: … Yeah you've got to put suppositories up you, vaginal suppositories so you're leaking all day long…

Caitlin: … So this is what we're going to stick up you and this is going to scrape here and be sore or this is what you're going to feel afterwards…

Amy: …there was lots of cortisone so I put on a lot of weight. A lot. In my face, in my joints, very puffy… my joints and everything was just really puffed up, my hands, my feet – I remember my toes like being these little sticks on this like fat, foot. It was hideous…

All of these quotes described experiences of a brutal invasion, an unwelcome intrusion into one's internal world: a sense of being breached by a medicalised procedure and experience. The graphic, explicit and uninhibited language used evoked the viscerality of the experience and illustrated the extremity of bodily invasion: women forcefully described these experiences in a way that left me with an emotional feeling of graphic bodily invasion.

Despite the overpowering descriptions of painful, nameless medicalised experience in interviews, there were moments where something else was expressed. Caitlin described one such experience:

Caitlin:…when he [Fertility specialist] *put them* [Embryos] *back, we'd done everything and then he sat me up in my little gown and after having your legs displayed in that huge, horrible spotlight. And then he said like, "Just one more, very important thing" and he gave me a hug. And he was like, "This is going to make the baby stick" and it did and it was so cute* [Begins tearing up] *so like those little things were amazing.*

Tatiana: That sounds like such a powerful moment.

Caitlin: Exactly and I don't think he realises as well what that meant. Like in all this sterile, technical, this, that whatever. Just to do that. That meant a lot. It was amazing [Begins crying]

At this point in the interview, I began to tear up. What moved me was the moment of human contact Caitlin described with her fertility specialist. Amid the cold, indifferent and harsh environment human contact and closeness appeared to access an abyss of emotion.

4.1.3 Experiences of loss in IVF treatment

A colossal tragedy disguised and hidden in the wake of a successful IVF treatment are the more than likely multiple unsuccessful IVF trials. Loss, the fear of loss and impending death were prominent themes which emerged across all the participants' interviews. Importantly, feelings of loss too appeared to be medicalised.

4.1.3.1 *The medicalisation of the loss of a baby*

Michelle summarised her multiple losses:

Michelle: … And then I did another… three IVFs with my own eggs. Umm, also fell pregnant – lost. Fell pregnant – lost. But like seriously early.

What was so distinct when the participants recalled their experiences of loss was the manner in which they spoke. Michelle spoke of her losses in an exceptionally brief and emotionless manner, as if simply describing the order of things. In contrast, I was aware of an unbearable pain that was suddenly welling up inside of me. There appeared to be no way to escape until Michelle said, "*But like seriously early*". I suddenly felt relief, as the idea of "*seriously early*" held the pain at bay. I wondered about the unbearable pain Michelle might be experiencing and perhaps her experience of unconsciously needing to ensure that her pain is held at bay. She continued and made a clear distinction between mothers who are able to conceive naturally and mothers who undergo assisted reproductive technologies:

Michelle: …Like you wouldn't, I think if you were a normal person that wasn't having IVFs you wouldn't have even known that you were pregnant. So it was that early...

Michelle attempted to manage her losses by imagining herself to be a "*normal*" person who would not even have known that she was pregnant. A pregnancy conceived through an IVF treatment is set in contrast to a pregnancy naturally conceived. Because this form of

pregnancy is so carefully medically monitored, suggested Michelle, she was confronted with losses of which she would otherwise have been unaware.

In the beginning of our interview Caitlin described the start of her infertility journey and having to undergo initial various assisted reproductive procedures, such as artificial insemination. Quite quickly, Caitlin's mind took her to an experience of loss.

Caitlin: ...the first one [IVF trial] *and I just thought that, that was going to work and it did actually take – the levels were quite low for a few days and then I miscarried. But they call it like a "chemical pregnancy" so they don't really qualify it as a pregnancy…*

The 'levels' Caitlin was referring to were the presence of human chorionic gonadotropins (hCG) in either a urine or blood sample. hCG is a hormone produced by the placenta after implantation, which occurs six to twelve days after fertilization. In layman's terms, hCG indicated a pregnancy. Caitlin stressed that "*the levels were quite low*", perhaps as a way of managing and defending against her feelings of loss. Again, I was aware of an unbearable pain welling up inside of me. Caitlin continued to explain and clarify to me that it was a 'chemical pregnancy' and therefore not a 'real' pregnancy. The medical term served to sanitise the experience and perhaps disguise the loss that was, for Caitlin, deeply felt.

Caitlin: ... Umm, and it, it [Zygote] *really didn't attach and I think it also wasn't growing properly and that's why they just call it a "chemical pregnancy" so the levels weren't so high but for you, longing desperately at any sign you know...*

Caitlin referred twice to "*they*" who deemed her loss a "*chemical pregnancy*". This pronouncement stood in stark contrast to her tagged on comment about her own experience of "*longing desperately*" for a pregnancy that was not lost. Her hope of creation, being, bringing into existence a baby, becoming a mother as well as her profound sense of loss stood in contrast to the medicalised terms that perhaps kept this painful experience at bay. The loss that Caitlin experienced was real, however "*they don't really qualify it as a pregnancy*" despite her "*longing desperately*" for what was a pregnancy, creation, and being, bringing into existence a baby and becoming a mother.

Maxine's experience echoed that of Caitlin's, and illustrated the difficulty involved in attempting to verbalise the incomprehensible losses she experienced throughout her IVF process:

Maxine: …I once calculated 7 times 12 whatever it is um, 84. 84 deaths. I basically experienced. Because it is the process of grief, it is a loss. Even if you haven't even actually had a miscarriage. In your mind, you were going for the baby. So you haven't got the baby…

Maxine highlighted how, in the realm of experience, an unsuccessful IVF treatment equates to the death of one's baby. When she says "*even if you haven't had a miscarriage*", the unspoken implication that "*even if you haven't been pregnant*" equated to loss.

4.1.3.2 *The fear of loss and impending death of a baby*

After having undergone twelve unsuccessful IVF treatments, Michelle's thirteenth IVF treatment was successful. Michelle experienced several losses throughout her IVF process. On her thirteenth attempt, Michelle fell pregnant with twins and whilst describing her pregnancy, Michelle divulged her fear of loss and the absolute terror of potentially losing her babies:

Michelle: … and bought myself one of those things that you can hear the heartbeat. It drives you crazy. I promise you, you go off your head. Because every morning you wake up and you try and find the heart beats. Complete anxiety. And then you listen to the one and then you found the one and then you think OK let me find the other one…

Michelle: I hated the pregnancy. I absolutely hated being pregnant because, the anxiety of that pregnancy. I, I was convinced I was going to lose them.

Michelle described trauma reactions to her pregnancy which were clearly related to her prior losses. What was palpable was Michelle's undeniable terror of potentially losing her babies. A trauma response was suggested by the hyper-vigilance, the hyper-arousal, intrusive thoughts of death and babies dying, fear and anxiety and feelings of helplessness Michelle described.

At 19 weeks pregnant, Michelle was hospitalised due to a miscarriage scare. Thereafter, due to the medical risks to both Michelle and her babies, her gynaecologist told her that if her babies did not survive up to 26 weeks gestation, if there were prior complications and if they had to be born premature he would not resuscitate them. The absolute terror of potentially losing her babies had become a frightening reality. Her hyper-vigilance, hyper-arousal, intrusive thoughts of death, fear and anxiety and feelings of helplessness were realised and confirmed. Michelle and her babies survived the impending loss. However, even once her

babies were deemed medically safe, Michelle was still plagued by trepidation and dread that her babies would die.

Michelle: …[Psychologist] *called* [Husband] *and said, "Have you done anything about the nursery, buying any clothes" and he said, "No", he says, "Michelle refuses to buy anything". I refused to buy a single thing because I was convinced these babies were going to die. And I wasn't going to have this kitted-out nursery and clothes and stuff like that and then…*

The impact of loss on Michelle's experience was profound and traumatising, and interacted with the medicalised process of evaluating the viability of her unborn babies. However, even when medical opinion pronounced safety, the fear of loss prevailed.

4.1.4 Reflecting on the medicalised experience of IVF treatment

When asked if Amy was surprised by anything that had come up during her interview, she made the following reflection:

Amy: …yeah it just brings you back to that point of like – it was like another whole chapter in my life. It doesn't feel like it was – it was a part of me obviously but it feels like another part of me as well…

Unprompted, Michelle reflected on how she negotiated, managed and coped with the IVF process:

Michelle:… I've actually blocked it out of my mind. Because I actually – also my fertility and all my years that I went through it I don't think about it ever. Because I think you get to a point... and I thought, "OK. It's now done. I reached my goal. It's now done. I don't want to think about it. I don't want to be involved in it"...

Caitlin reflected on the disempowerment she experienced:

Caitlin: …So. I don't know. In a way it's, it's double-edged – not double-edged sword but it's got two sides… it's a weird thing. As I said, it's quite a mind-fuck. All of it which it really is. It's weird.

Amy, Michelle and Caitlin's words exemplified the enormity and the painfulness of the IVF experience. Having gone through the experience and reached a point of success, most of the participants described a concerted effort to "block" the experience and internally isolate it as existing in the past. The discontinuity described by participants between the past and the

present – which sometimes came up as a surprise for participants to discover, as in Amy's case – points to the difficulty of holding their experience in mind.

I will leave you with something Michelle said which left me wondering about how my participants managed to keep themselves from internally "*emotionally dying*".

Michelle: ...Because at some point you also have to think of it very clinically otherwise you will die. Emotionally you will die.

I now turn to a closer exploration of how participants experienced their minds in the context of infertility and a successful IVF treatment.

4.2 The Culpable Mind – *"What's wrong with me?"*

4.2.1 One's own mind

At the beginning of our interview, Amy shared a thought she had held in her mind which appeared to have been lingering long before her journey of infertility began. She described that for her, she had always thought falling pregnant and having a baby, "*would be a bit harder*". A moment later, Amy made a link as to why, for her, falling pregnant and having a baby "*would be a bit harder*".

Amy: ...It was weird to have that feeling, there was no reason to have it um but I guess maybe because I knew I'm quite sort of A Type personality, it would be harder? I'm not quite sure. Um, it's actually quite strange. I just always kind of had a feeling it would be tough. And it turns out that it was tough so yeah, interestingly…

What was interesting was that Amy unconsciously associated her 'Type A personality' to her infertility. In the same moment, when she asked, "…*I'm quite sort of A Type personality, it would be harder?..."* she seemed to seek out my validation to confirm the link she had made between her mind and her body. Importantly, Amy appeared to experience a conflict surrounding her fantasies of what the mind could do to the body: her choice of words such as "*weird*" and "*strange thing*" suggested something unknown and foreign to her. She "*always kind of had a feeling it would be tough"* and it turned out that "*it was tough"* as her story of becoming a mother unfolded in the context of infertility and a successful IVF treatment.

Amy returned to the notion of a "*Type A personality*" throughout our interview. She seemed to have been plagued by the idea that her personality, her way of being and way of

experiencing the world, may be a causal explanation for her infertility. This idea appeared to internally rouse painful feelings and seemed to have begun an internal process in which this idea morphed into something quite malignant and invasive:

Amy: ...people just thought it was a stress thing, like it's all in your head, you're not falling pregnant because of stress. I think that's maybe a small part yes but physiologically when there is something wrong and I think being time urgent and having um, having that you know, Type A personality contributes to maybe having endometriosis. I don't think for me certainly it didn't contribute to – that wasn't the only reason why I wasn't falling pregnant –...

Amy found herself oscillating between the medical realms of biotechnology and assisted reproductive technologies and the intrapsychic realm. She appeared exceptionally torn as to where she could locate a causal explanation for her infertility which left her feeling quite conflicted. When she referred to the "*stress thing*", "*it's all in your head*" and "*you're not falling pregnant because of stress"* Amy appeared to be quite doubtful, hesitant and cautious about locating this 'idea' within the intrapsychic realm. Significantly Amy was speaking in the third person suggesting that she was attempting to other her own internal experience. However immediately after the doubt, hesitancy and caution Amy stated, "*I think that's maybe a small part yes"*, thus locating a causal explanation for her infertility – even if only "*a small part*" – intrapsychically. Thereafter she hastily moved into the medical realm of 'physiological' explanations; then hurriedly shifted back into an intrapsychic realm of "*being time urgent*" and having a "*Type A personality*"; and then swiftly moved back into the medical realm of diagnoses when referring to "*endometriosis"*. Thereafter, Amy appeared to make an unconscious link between the body and the mind which confirmed, unknowingly, her fantasies of what the mind could do to the body when she wondered whether "*being time urgent*" and having a "*Type A personality*" contributed "*to maybe having endometriosis"*.

What was significant was the intensity of Amy's internal conflict. There was no resolve. She ended by stating that clearly for her, her personality and her way of being in the world, "*certainly*" did not contribute to her infertility. The malignant and invasive process of interrogating and monitoring her mind immediately threw doubt over this certainty of locating her infertility within the medical realm when she stated "*that* [being time urgent and Type A personality] *wasn't the only reason why I wasn't falling pregnant*".

At a much later stage in our interview, Amy continued to explore her fantasies of what her mind could do to her body:

Amy: …because there's nothing you can do. Um, you know you are that way or you aren't [Referring to her Type A personality]. *Although you know it's not benefitting you in any way, especially trying to fall pregnant, there's just nothing you can do…*

As she explored her fantasies of what the mind could do to the body, a conflict became clearer. Amy was aware that "*there's just nothing you can do"* as her way of being and her way of experiencing the world was shaped and formed through a particular lens. However, she appeared to have fantasised that her 'Type A personality' – that her mind – had potentially had a causal effect on her infertility, "*especially trying to fall pregnant*". I wondered about feelings of helplessness when Amy said, *"you know it's not benefitting you in any way"*. Her way of being and her way of experiencing the world was an obstacle, preventing and hindering Amy from becoming a mother. Her mind put her at a disadvantage as she located herself within unfavourable circumstances which reduced her chances of success or effectiveness; having a baby and becoming a mother.

What resonated with me whilst thinking about Amy's experience in the context of infertility and a successful IVF treatment was the internal experience of an illusion of control. Amy appeared to be internally experiencing a fierce conflict between the unpredictability and the unknown of the IVF process and a phantom experience of perceived control. I wondered about an internal experience of a loss of control and feelings of helplessness associated with this internal experience. This was an underlying theme for every participant in their interviews.

4.2.2 The interrogation of one's own mind

Internally experiencing a loss of control and helplessness appeared to be associated with painful and damaging feelings of guilt and shame. All participants were preoccupied with a need to search for a reason – a causal explanation – as to why they were infertile, why they struggled to fall pregnant, why they struggled to carry their babies. Interestingly, the participants sought a reason not within the medical realm of biotechnology and assisted reproductive technologies but rather, within an intrapsychic realm. They began to interrogate and monitor their minds. All participants, sometimes implicitly rather than explicitly, feared that they were guilty and blameworthy for their infertility, culpable and subsequently punishable.

Whilst Caitlin shared and reflected upon her prior experiences of loss and her inability to fall pregnant, she appeared to make an unconscious link between the body and the mind:

Caitlin: ...And then when you can't [Fall pregnant] *you kind of think, "What's wrong with me?"- you do!...*

Caitlin exclaiming "- *you do!"* immediately after revealing an interrogation of the self appeared to be a way of confirming this experience. I wondered if Caitlin was anticipating a particular response from me. I cannot be sure of what response she anticipated from me, however what came to mind was reproach and contempt. At a later stage in the interview, she continued to explore her fantasies of what she had done wrong to deserve infertility:

Caitlin: ... what have I done? What have I done wrong? Even if you're not Christian, you're going to feel that like have I disappointed someone? Have I disappointed God? Me? I've done something wrong because now I'm not, He's not giving me these children...

It seemed that Caitlin's internal experience of a loss of control and feelings of helplessness evoked overwhelming feelings of shame. Caitlin repeated the question, "*what have I done*?". Caitlin appeared to internally experience a fear that she was guilty and blameworthy for her infertility, as captured when she stated, "*…I've done something wrong…"*. Caitlin not only feared that she was guilty and blameworthy but also that she – her mind and who she was in the world – was culpable and deservingly punishable: "*I'm not, He's not giving me these children…".*

Michelle shared a similar experience. She too feared that she was guilty and blameworthy for her infertility. Michelle sought a reason for a failed IVF trial not within the medical realm but rather intrapsychically. After a failed IVF trial she described how she interrogated and monitored her mind.

Michelle: ... You always think, "What did I do wrong? And when it fails you think, "Well, is it when I got up to go to the shower? Did that do something? Or umm, the glass of wine that I had? Umm, or… when I went to the shopping centre should I have not - ?" so you start analysing your life and thinking, "What did I do wrong?"...

As with Caitlin, Michelle repeated the question, *"What did I do wrong?"* which suggested an internal unresolved conflict. She too feared that she was guilty and blameworthy. As soon as she posed this question, she was led to "*when it fails*" – her experience of loss through a

failed IVF trial. As with Caitlin, instead of locating her experience within the medical realm, she located her experience intrapsychically. Beginning her interrogation of the self she stated, "…*And when it fails you think…"* and began to retrace and scrutinise her decisions. She described her doubt in engaging in ordinary, day-to-day activities and tasks: "*…you start analysing your life…*". Michelle also appeared to have fantasised that her mind has potentially had a causal effect on her infertility and her loss. She appeared to fantasise that she, her mind and who she was in the world, was culpable and deservingly punishable. She ended the interrogation of the self by stating, *"What did I do wrong?*", still searching internally for a reason why she was infertile, why she struggled to fall pregnant, why she struggled to carry her babies to full-term.

4.2.3 The mind of the other

Internal experiences of a loss of control and feelings of helplessness appeared to be exacerbated externally by others. All participants powerfully described other voices which appeared to populate their internal worlds, leaving them enraged but also bewildered by and feeling alienated by these other voices.

Amy:…and people used to say, "Agh, you just need to have a relaxed time with some pizza and wine and you'll see, it will all just fall into place"…

Maxine: …Because you know, everyone tells you, you mustn't be stressed and you need to relax and go on an island holiday but I've travelled the world friend. I did Mauritius, I did Seychelles, I did Spain - I did all of those holidays. It makes absolutely no difference. I am convinced…

For participants, internal experiences of a loss of control and feelings of helplessness were juxtaposed with, "*you just need to have a relaxed time"* (Amy) and "*you mustn't be stressed and you need to relax"* (Maxine). This juxtaposition was perhaps brought into the participants' consciousness in quite a visceral manner by an external other. What appeared to unfold was a process in which an internal experience of a loss of control and feelings of helplessness was recognized, unknowingly, by the other and turned into easy maxims for resolution. This was often experienced as an ambush in which their fears of being guilty and blameworthy for their infertility, culpable and subsequently punishable were externally confirmed by an other. These ambushes seemed to provoke rage, and perhaps provide a target for their own internal rage albeit evoking deeply painful feelings of shame and humiliation.

The following quotes exemplified rage towards an other:

Julia: …Because people, people are also stupid. They say, they say stupid stuff. "Go on holiday. Just relax and don't think about it" – I can't go on holiday again, I can't relax anymore and actually that's all I think about you know?

Maxine: …They don't realise how damaging it is because they're not in that position but their sentence of, "Just relax, go on holiday, don't worry about it, don't think about it" are the worst things you could possibly, possibly say to someone struggling...

Michelle: …"Why didn't it work?" – now could I see into my body where the egg went and why oh it didn't go there?! And then you start thinking well I must have done something wrong.

Julia described others as "*stupid*". Interestingly others were experienced as saying, "*stupid stuff*" not in an ignorant manner but in a hurtful and attacking manner. Ignorance or lack of knowledge appeared to be far more forgivable and benign to Julia. The others in her environment would "*say stupid stuff*" not as a result of a lack of knowledge; but rather as a hostile ambush, an attack loaded with hurt and judgement. These other voices which populated her internal world said "*stupid stuff*" without justification and with no concern for the consequences, not thinking of, nor concerned about her experience, leaving Julia feeling shamed and humiliated.

Maxine introduced the other as "*they*" – framing these voices as different and distinct from Maxine, as well as from her experience of infertility. "*They don't realise how damaging it is because they're not in that position*". Maxine's position was different from and unknowable to them, and the impact of this was felt as damaging, as the "*worst things you could possibly, possibly say to someone struggling*". She was left feeling immensely misunderstood.

Julia was enraged by the "*stupid stuff*" others would say such as, *"'Go on holiday. Just relax and don't think about it'"*. Maxine's rage was palpable when she stated, "*they don't realise how damaging it is"* when others say, "*'just relax, go on holiday, don't worry about it, don't think about it'"*. Michelle's rage too emanated from the other in response to the question of why her IVF trial failed. All the participants were faced with other voices populating their internal worlds in the face of their own internal experience of a loss of control and feelings of helplessness.

Julia's and Maxine's manner of speech was sardonic and full of bitterness whilst they spoke. Perhaps it was difficult for them to be in touch with powerful and overwhelming feelings of shame and humiliation. Perhaps too when an other, unknowingly, evoked their internal experience of a loss of control and feelings of helplessness it forced them to confront their fantasies of what the mind could do to the body as well as their fears of guilt, blame and culpability. For Michelle, others in her environment asking, *"Why didn't it work?"* was associated with a search for a causal explanation as to why she was infertile. Similarly, as with other participants, Michelle appeared to experience an external ambush in which her fears of being guilty and blameworthy for her infertility and the culpability of her mind were externally confirmed by an other. Michelle then commented, "*…and then you start thinking well I must have done something wrong",* which brought Michelle back to a process of interrogating and monitoring her mind. Perhaps the rage experienced in the face of an ambush by an other also served to safeguard themselves from painful and damaging internal feelings of culpability, and to keep shame and humiliation at bay.

4.2.4 Loss and the culpability of the mind

Loss, the fear of loss and impending death were prominent themes which emerged across all participants' interviews within this theme too. Participants' fears of guilt and blame appeared to be internalised and fantasies of culpability for their infertility became tangible and real. The culpability of their minds appeared to be internally experienced as resulting in deserving punishment and was metaphorically represented internally by the multiple losses they had endured.

Michelle reflected upon her first two failed IVF trials, her first two losses:

Michelle: … And I must tell you, the first two times it didn't work I thought I had done something wrong with the medication. Because as I say you start trying to think what's happening and what's – I'm not injecting myself right and that's why I'm not getting follicles and stuff like that.

Michelle attributed her failure and her loss to herself: "*I thought I had done something wrong with the medication"* and "*I'm not injecting myself right and that's why I'm not getting follicles"*.

At 19 weeks pregnant, when Michelle was hospitalised due to a miscarriage scare she recalled a friend who was superstitious. With one of her previous pregnancies, Michelle had

bought something for her unborn baby. She recalled her friend telling her that she should never have done that. Michelle subsequently lost the baby and described that during this miscarriage scare, "*that kept on going in my mind*".

Michelle: ...I bought this thing and now did it cause me to have a miscarriage, so I shouldn't buy something so it's, your mind plays tricks on you. You are completely irrational. Completely irrational...

At the time that Michelle recalled this memory, she did not yet know that her babies were safe and she was not having a miscarriage. The 'idea' that making a decision to purchase something for her unborn baby was causing her to miscarry captured her mind. Her experience of terror, guilt, blame and culpability were given voice through her friend, and these fears became tangible and real in the form of a potential miscarriage. She felt deservingly punishable as she wondered, "*I bought this thing and now did it cause me to have a miscarriage"*.

Caitlin reflected upon one of her most unbearable experiences of loss which she described as a "chemical pregnancy". Her hope of creation, of being pregnant, of bringing into existence a baby and becoming a mother had vanished:

Caitlin: ... but it's a huge, it's a huge mind fuck. It really is because you, through the whole process you are meant to cope, but you're meant to stay relaxed and not get tense but you don't want to build up false hope, it, it, it's just yeah. It's, it's crazy. I really struggled with that a lot. It was hard. Yeah.

This experience was exceptionally painful for Caitlin. She appeared to make an unconscious link in which her mind was culpable for her loss when she stated, "*through the whole process you are meant to cope, but you're meant to stay relaxed and not get tense"*. Whilst she shared this, Caitlin appeared to be lambasting herself for not coping, not being relaxed. She lost her words, unsurprisingly, as it was "*a huge mind fuck*". Caitlin's fears of guilt and blame appeared to be internalised and fantasies of culpability for her infertility became tangible and real in the form of a miscarriage. As with Michelle, the culpability of her mind appeared to be internally experienced as deservingly punishable.

4.2.5 Reflecting on the culpability of the mind

Julia warned of the danger of internally experiencing the mind as culpable:

Julia: …It takes over your head – big time. And I honestly, I think people that are going through that should definitely see somebody, every week, every two weeks whatever. They shouldn't just be left to their own devices because then you start going a bit loony…

Later in the interview, she reflected upon how she attempted to negotiate her fears of guilt, blame and culpability:

*Julia: …Umm, because I think sometimes it sits in the back of your head but you don't actually talk about it. Umm, because if you're not going through it anymore nobody actually really cares anymore *laughs* to be honest with you…*

Michelle too, reflected upon how she attempted to negotiate this experience:

Michelle: …And you kind of turn your emotions off. Like, when I was pregnant and I wasn't buying anything. I just cut my emotions – there was absolutely no emotion. And I often think maybe that was why they [Her twins] *came earlier because they just couldn't cope with it anymore *laughs* and umm, but… you protect – it's self-preservation…*

Trying not to talk about it or trying not to think about it – trying to turn emotions off – was felt by Julia and Michelle to be a way of survival in the face of unanswerable questions from within and without, as well as in the face of painful and unbearable loss.

Conclusion

This chapter has presented two dominant themes emerging from interviews. The first explored the experience of the medicalisation of infertility while the second explored the culpability of the mind. Both themes illustrate the coming together of the outside world and the inside world. The collision of two worlds – the outside medical world and the inside culpability of the mind as deservingly punishable - was exceptionally difficult for the participants to manage and negotiate. The participants either tried to turn emotions off or described a concerted effort to "block" the experience and internally isolate it as existing in the past. This chapter has examined the ways in which women experienced the collision of the outside and inside as a significant breach and disruption, and has explored some of the ways in which these experiences may have channelled and shaped the participants' internal worlds.

Chapter Five: Discussion

This chapter discusses and locates the two main findings, as well as their respective subthemes, within relevant psychoanalytic literature. This is done in order to explore the ways in which women who have undergone a successful IVF treatment experience the outside and the inside worlds as a significant breach and disruption within their internal worlds. Accordingly, this chapter explores the ways in which these experiences may channel and shape their internal worlds too. Finally, considerations of recommendations for future research are explored as well as the limitations of this study.

This study aims to explore women's affective experiences of a successful IVF treatment in the context of infertility. Particular focus is placed on the feelings, fantasies, hopes and fears experienced by the participants. By conducting one-on-one, face-to-face psychoanalytically informed semi-structured interviews, this research aims to gain an understanding of participants' internal, emotional worlds. As previously mentioned, initially this study's primary objective was to explore successful assisted reproduction with particular focus on maternal subjectivity and the emotional experience of becoming a mother. Thus, the interviews were conducted with these broader aims in mind. Through an analysis informed by psychoanalytic methodological principles, two main findings were discovered in this study namely, the medicalisation of infertility and the culpable mind.

The difficulty of talking about the experience of becoming a mother in the context of infertility and a successful IVF treatment is immediately noticeable within both themes as participants' losing their words and their train of thought frequently occurs throughout the interviews. The unconscious impact of the medicalisation of infertility and infertility treatment is experienced as an attack internally, suggesting a hostile internal world, from which participants need to aggressively arm and protect themselves. Significant attempts at keeping these internal experiences at bay are present too throughout the interviews such as, normalising how increasingly common IVF is, for example. Moreover, the medical process of IVF is experienced as a viscerally bodily one for participants. Participants are exceptionally aware of their maternal bodies transforming into objects as participants experience a powerful sense of being one of many, with the goal of manufacturing or producing 'something'. A part of yourself is taken from you with the hope of creation with no guarantee this will be the outcome. The experience of the manufacture of a hoped-for baby is forcefully described in graphic, explicit and uninhibited language. This suggests infertility

treatment is experienced as a brutal invasion and unwelcome intrusion. Furthermore, fertility clinics are experienced as highly medicalised spaces. While waiting for appointments participants also experience a powerful sense of being one of many which is associated with a sense of experiencing namelessness or identitylessness. This suggests an internal experience of wordlessness and a silencing of experience. Interestingly, participants do however long for and wish for something different, human contact and connection. This wished-for experience is however painfully sparse between the participants and other women at the fertility clinics even though affective experiences of loneliness, isolation and shame appear to be shared. However as fertility clinics are experienced as highly medicalised spaces, an experience of unspoken 'knowing' is present wherein adherence and obedience to 'rules' is demanded, similar to the practice of medicine, and internal experiences are not shared. Furthermore, a clear distinction is made between mothers who are able to conceive naturally and mothers who undergo assisted reproduction. As pregnancy is so carefully monitored, mothers who undergo assisted reproduction are confronted with losses of which they would otherwise be unaware. The hope of creation, of having a baby and becoming a mother as well as the profound loss participants face, stand in stark contrast to medicalised terms. Moreover, the medicalised process of evaluating the viability of unborn babies and the fear of the death of one's baby is associated with undeniable terror and trauma reactions to pregnancies as the certainty of life and creation cannot be guaranteed. Having gone through the enormity and painfulness of the IVF experience, and having reached a point of success, participants' efforts to internally isolate the experience in the past and "block" the experience suggests the discontinuity between past and present, and the difficulty of holding these experiences in mind.

How participants experienced their minds in the context of a successful IVF treatment and infertility centred initially on links made between the body and the mind, and fantasies of what the mind could do to the body. These fantasies raised questions and doubts within participants' minds that their way of being and way of experiencing the world may be a possible causal explanation for their infertility. Participants began to oscillate between locating a causal explanation of their infertility in the medical realm of biomedicine and in the intrapsychic realm. Participants struggled significantly with the possibility that their mind, their way of being and experiencing the world, may be a causal explanation for their infertility. The intensity of the internal conflict participants experienced was significant. Thereafter, participants began a process of interrogating, monitoring and scrutinising their

own minds. A phantom experience of perceived control was juxtaposed with the unpredictability and the unknown of the IVF process. The lack of control over their biological, reproductive capacities ignited experiences of loss of control and helplessness. This significantly aggravated the idea that their respective ways of being in the world and their ways of experiencing the world – that their minds - were obstacles preventing and hindering them from becoming mothers. Damaging feelings of guilt and shame were associated with this process as participants sought a reason for their infertility not within the medical realm but within an intrapsychic realm. The mind was scrutinised, lambasted and interrogated as participants explored their fantasies of what they had done wrong to deserve infertility and feared that they were guilty and blameworthy for their infertility – culpable and deservingly punishable. This internal experience of a loss of control and helplessness was amplified externally by others voices who appeared to populate their internal worlds. Participants were often left feeling enraged, bewildered and alienated by the other as experiences of a loss of control and helplessness were recognised by others, unknowingly, and turned into easy maxims for resolution. However, the rage participants experienced in the face of an other served to safeguard themselves from powerful and overwhelming feelings of shame and humiliation. Their fears of being guilty and blameworthy, culpable for their infertility, were experienced internally as resulting in deserving punishment. Their punishment was metaphorically represented by the multiple losses the participants endured. Their fears became tangible and real in the form of loss and impending death. Participants reflected upon ways in which they attempted to manage withstanding the unanswerable questions they were faced with. Trying not to talk about it and trying not to think about it, trying to turn their emotions off, was key to their survival during this process which further indicated the difficulty of holding their experiences in mind.

Focus now turns to five points of discussion in this study. Firstly, the unconscious consequences of the medicalisation of infertility participants experienced are explored. Secondly, how the participants experienced their minds as culpable and deservingly punishable is explored, highlighting participants' fantasies of what the mind can do to the body. Thirdly, Goldberg's (1999) conceptualisation of disavowal and the vertical split is reviewed. This is done by psychoanalytically and clinically considering the ways in which the affective experiences of a successful IVF treatment, and of becoming mothers, shapes and channels mothers' internal worlds. Fourthly, this discussion turns its focus to the experiences of loss and trauma the participants endured. Finally, the intersection of my clinical identity

and researcher identity is examined considering the countertransferential weight of the interviews I experienced. This is done to emphasise intersubjectivity between the researcher and the researched as the 'research encounter' is an integral part of research which needs to be carefully and thoughtfully considered (Gerson, 2004; Hollway, 2008).

5.1 Unconscious Consequences of the Medicalisation of Infertility

The finding addressing the medicalisation of infertility in this study demonstrates the unconscious consequences of the participants' experiences of becoming the subject of a medical diagnosis and their experiences of being defined and treated as a medical condition. Interestingly, the participants' experiences of the medicalisation of infertility highlights the interference of the *outside* world, i.e. medical personnel; medical imaging, measurement and procedures; medical IVF procedures; and fertility clinics.

Through the analysis of the interviews when talking about infertility treatment, a core narrative present in this study surrounds an experience of an internal invasion from the outside world (Gupta & Richters, 2008). That being said, participants of this study understood what was going on in their bodies in an exceptionally biomedical manner. A similar finding is present in Gerrits' (2014) study who argues this enables individuals experiencing infertility to better follow, understand and assess the IVF treatment cycle. However, rather than enabling participants' of this study to better follow, understand and assess the IVF treatment cycle, the use of medical jargon allows the participants in this study to push away and keep at bay their internal experiences of the medicalisation. As the participants internally experience infertility treatment as an external attack causing significant disruptions intrapsychically, it may be easier to medicalise their internal experiences too.

Gerrits (2014) argues individuals with infertility view their bodily self-conception differently. Furthermore, Gupta and Richters (2008) propose a phenomenological perspective on embodiment and explore how women manage a sense of self in relation to their bodies in the context of infertility. This is evident in this study as the participants internally experienced the transformation of their maternal body into an object. Biomedical technologies and infertility treatments, IVF treatment in the case of this study, transform the way participants experience their lived *bodily being-in-the-world* (Hofmann & Svenaeus, 2018). Participants experience a powerful sense of being one of many with the goal of manufacturing or producing 'something'. A part of themselves is taken from them with the hope of creation and bringing into existence a baby. However, the bodily invasiveness of IVF procedures is

experienced by the participants as visceral, brutal and unwelcome and highly medicalised (Gerrits, 2014; Gupta & Richters, 2008; Mahjouri, 2004). Gupta and Richters (2008) argue infertile women experience their bodies as machines. This is consistent with the findings of this study as participants refer to an experience of a "*sausage factory*". Significantly, this experience leaves participants feeling they are only one of many and is associated with a potent sense of experiencing namelessness or identitylessness. This suggests subjectivity and internal experience are felt to be lost within the biomedical realm of assisted reproduction. Experiences of participants in this study reveal a potent sense of wordlessness which suggests a silencing of experience as infertility has become subject to the authority of medical institutions (Greil et al., 2010; Martin, 2018; Simon & Laufer, 2012; Squier, 1996). That being said, the metaphor of "*factory*" does not convey that the part taken from themselves is invested with the hope of creation.

Considering medical imaging, ultrasonography is a crucial tool in the medical observation, supervision and management of pregnancies (Thomas, Roberts, & Griffiths, 2017). Visualising medical technologies provide mothers with a concrete appearance of their baby as well as of their baby's developmental growth throughout the duration of the pregnancy (Pines, 1990). Through the analysis of the interviews, a clear distinction is made by participants of this study between mothers who are able to conceive naturally and mothers who undergo assisted reproduction. This is a significant finding which needs to be emphasised in understanding women's affective experiences of undergoing a successful IVF treatment. In the context of infertility, the visualization of conception through all of its steps is mediated by biomedical technologies (Gerrits, 2014) and provides couples with an opportunity to "feel close to being pregnant" (p.131) – even without the guarantee that this will be the outcome. An example Gerrits (2014) provides is moments when couples see a white spot on the uterus on the screen during an ultrasound. For the couples, this appears to represent an indication "'there is really something' that has been placed in their bodies" (p.132). This is consistent with findings in this study as the participants are confronted with losses they would have otherwise been unaware of as a result of the medicalisation of infertility, specifically related to medical imaging, measuring and procedures and how pregnancy is so carefully medically monitored. Furthermore, medical terms served to sanitise and disguise the experience of loss such as, "*chemical pregnancy"* for example. Participants in this study are plagued by the fear of loss and the fear of impending death throughout their experience of IVF treatment. Participants also experience their losses *as if* it were the death of

a baby. The hope of creation, bringing into existence a baby, and becoming a mother as well as the profound loss participants' experienced stood in stark contrast to medicalised terms. Moreover, the fear of the loss and of impending death is associated with undeniable terror and trauma reactions to pregnancies as the uncertainty of life and creation cannot be guaranteed. What is clear is a highly dependable and interconnected relationship between the maternal subject and biomedicine which is exceptionally difficult to negotiate (Aristarkhova, 2005).

5.2 If Something is Wrong with My Body, What is Wrong with *Me*?

For the purpose of clarity, this study was carried out in line with a psychoanalytic shift from focusing on uncovering the etiology of infertility to understanding how women who undergo assisted reproduction make meaning of the complexity of this experience. Furthermore, this study did not aim to explore and postulate causal explanations of infertility. This study aims to contribute to the understandings of women's affective experiences of a successful IVF treatment, from their own perspectives. Women were not explicitly asked about causal explanations in interviews. Their fantasies of the culpability of their minds arose spontaneously in all instances. As such, the participants of this study experience their minds as dangerous and precarious. Rather than being able to find safety and refuge in the face of the medicalisation of infertility within their *inside* worlds, the participants experience significant conflicts surrounding fantasies of what their minds can do to their bodies.

Accordingly, the experience of the lack of control which Gourounti et al. (2012) speaks to is consistent with this study. A phantom experience of perceived control is juxtaposed with the unpredictability and the unknown of the IVF process igniting intense experiences of a loss of control and helplessness within the participants. The lack of control and feelings of helplessness participants experience significantly aggravates the idea that their respective ways of being in the world and their ways of experiencing the world – that their minds - are obstacles preventing and hindering the participants from becoming mothers. Subsequently, participants begin to interrogate and monitor their minds causing substantial psychological distress (Boivin, 2003; Domar et al., 2015; Greil et al., 2011; Podolska & Bidzan, 2011; Rockliff et al., 2014; Verhaak et al., 2007).

Findings in this study suggest a malignant and invasive process unfolds as participants doubt the certainty of locating their infertility within the medical realms of biotechnology and assisted reproduction. Participants wonder if experiencing infertility is a "*stress thing*" and

"*all in your head*" and find themselves oscillating between medical realms of biotechnology and assisted reproduction and the intrapsychic realm. The intensity of this conflict is significant and cannot be emphasised enough. Bassin (2001) emphasises these are critical internal fantasises which need to be considered as real. Significantly, findings in this study include the impact of an other. Participants in this study also experienced internal experiences of a loss of control and feelings of helplessness as exacerbated externally by others. Participants powerfully describe other voices which appeared to populate their internal worlds, leaving them enraged but also bewildered by and isolated by these other voices. Interestingly, the rage experienced in the face of an ambush by an other also served to safeguard themselves from painful and damaging internal feelings of culpability, keeping shame and humiliation at bay.

Furthermore, Kite (2007) proposes infertility initiates fantasies that one is being punished for transgressions. This is consistent with the findings in this study as the mind is scrutinised, lambasted and interrogated as participants explore their fantasies of what they have done wrong to deserve infertility. Damaging feelings of guilt and blame are associated with this process as participants sought a reason for their infertility not within the medical realm but within an intrapsychic realm. Participants associated their minds as culpable for their infertility wherein fears of being guilty and blameworthy were brought to life. Significantly, findings in this study illustrated participants internally experienced the culpability of their minds as resulting in deserving punishment. Painfully, this was metaphorically represented internally by the multiple losses they had endured.

5.3 Disavowal of What is Known to be True

As aforementioned, a significant tension explored within psychoanalytic literature is the wish and desire of having a baby and the decision of choosing to undergo assisted reproduction (Shelby, 2017). Shelby (2017) describes the wish and desire of having a baby and the decision of choosing assisted reproduction as originating from the depths of our psyches wherein hopes, fantasies and archaic anxieties surrounding choice emerge. Although not explicitly, Shelby (2017) also alludes to an experience of tension between choosing assisted reproduction and undergoing assisted reproduction. Women who undergo IVF treatments consciously choose to embark on a journey of assisted reproduction with the aim and goal of becoming a mother. However, perhaps the most poignant experience of the participants is the experience of an internal struggle between forces in opposition, the wish and desire of having

a baby and becoming a mother; and choosing to undergo assisted reproduction in the face of a diagnosis of infertility.

An appropriate way of understanding how women in this study affectively experienced successful assisted reproduction in the context of infertility is Goldberg's (1999) conceptualisation of disavowal and the vertical split. Clinically, disavowal and the vertical split offer a psychoanalytic lens to further develop our understanding of how these experiences shape and channel the participants' emotional, internal worlds. Goldberg (1999) distinguishes between two opposing forces: patients' unconscious determinants versus their conscious aims and goals. Goldberg (1999) proposes these differences – the conscious aims and goals and unconscious experience - turn an ordinary experience of ambivalence into more complex ambivalence. Goldberg (1999) posits a 'simple' ambivalence is made more complex because of "whatever unconscious factors lay claim to one decision or another" (p. 7). Based on Goldberg's (1999) conceptualisation of the vertical split, women who experience infertility and want to become mothers and who chose to undergo IVF treatments are faced with a complex ambivalence. Women who decide to undergo IVF treatment clearly and most importantly *ambivalently* want both a baby and assisted reproduction. A choice needs to be made between two equally appealing selections. Goldberg (1999) emphasises the complex ambivalence an individual is faced with morphs into an experience of separation as neither side - the conscious nor the unconscious - is able to tolerate losing. The wish and desire of a baby is usually experienced ambivalently by women. However, in the face of a diagnosis of infertility, an inability to produce a wished-for child casts doubt over the functioning of a woman's body and her state of mind which amplifies unconscious inadequacies, reactivates unconscious psychic structures and dynamics, and brings to life unconscious infantile beliefs in the dangers of the external world (Bassin, 2001). Furthermore, choosing to undergo assisted reproduction with the hope of creation - a child – is charged and loaded with affect, hopes and fantasies, fears, dreams and wishes, and memories and ghosts (Fraiberg et al., 1975). However, in order to become a mother; one must endure the unconscious and conscious consequences of the medicalisation of infertility and the experience of one's mind as culpable and deservingly punishable.

Goldberg (1999) refers to the experience of one's self as separation seemingly reflecting two opposing personalities as resulting from being unable to negotiate this complex ambivalence. For Goldberg (1999) this suggests a failure of synthesis or integration of the self; thus the self becomes and remains divided in which side-by-side individuals appear to reside in *one* mind.

However, rather than experiencing one's *self* as separation which reflects two opposing personalities (Goldberg, 1999), the internal *experience* of women who undergo assisted reproduction is the vertically split off segment; rather than opposing personalities due to a consequent failure of synthesis or integration of the self. The unconscious processes of the medicalisation of infertility and the culpability of the mind are experienced by participants as a significant breach and disruption to their internal worlds and need to be negotiated, managed and defended against accordingly. While psychoanalytic theorising suggests disavowal may be either viewed as an aspect of psychogenic infertility; or it may be viewed as a defensive response to infertility (Apfel & Keylor, 2002), this study offers a different understanding. The *experiences* the participants disavow are not related to an aspect of psychogenic infertility but rather related to the development of a survival mechanism which shapes and channels their internal worlds. Furthermore, the disavowal of their *experiences* are not a defensive response to infertility but rather an adaptive survival mechanism needed in order to be a mother who chose to undergo a successful IVF treatment in the context of infertility.

5.4 Loss and Trauma

Infertility evokes unbearably painful grief responses and involves mourning. Undergoing multiple unsuccessful IVF treatments can manifest in a range of negative feelings (Domar et al., 2015). Frequently occurring responses after an unsuccessful IVF treatment included tension, sadness, anger, as well as feelings of hopelessness, loss and guilt (Eugster & Vingerhoets, 1999).

Bain (2011) painfully explores a young mother's experience of the loss of her infant as it unfolded in parent-infant-psychotherapy. Bain's (2011) case material illustrates the complex processes which occur when the trauma of impending loss evoked experiences of prior loss and separations for the mother. Abbasi (2011) argues the emotional pain of trying to have a child and the experience of feeling as if one cannot do what comes naturally to most people also reactivates experiences of prior loss and separations of women who undergo assisted reproduction too. Similarly, Bassin (2001) highlights over time, the meaning of a baby and "its presence in absence" (p.66) confronts women experiencing infertility with prior un-mourned losses. Furthermore, Pines (1990) explores multiple losses as a particularly painful aspect of clinical work with women who choose to undergo assisted reproduction. Pines

(1990) explores the notion of mourning what has been lost. I was left with questions about what was lost for the participants in this study.

The participants in this study underwent a successful IVF treatment. A part taken from one's self, with the hope of creation, was achieved as a baby was born. The conscious goal of becoming a mother was achieved. However I was struck by the haunting presence of loss. Shelby (2017) describes a psychic shift that ensues when a part of oneself is taken with the hope of creation wherein cells, particularly the ova retrieved, are infused with meaning far beyond the biomedical procedures involved in assisted reproduction (Shelby, 2017). Shelby (2017) posits the death of reproductive cells for many people throughout one's life is barely noticed, especially when pregnancy is not desired. However, when deciding to have a baby and proceeding with assisted reproductive technologies in the context of infertility, "reproductive cells become precious" (p. 530). What I came to realise was the mothers in this study were in a process mourning the death of their babies as a result of the tragedy of the multiple unsuccessful IVF trials, and miscarriages they endured.

With that said, Freud (1917) suggests the conflict of ambivalence gives a pathological cast to mourning. According to Freud (1917) the conflict of ambivalence is forced to express itself in the form of self-reproaches, to the effect that the mourner herself is to blame for the loss of the loved object, that she wills the loss upon herself. Freud (1917) proposes the aspect of hatred in ambivalence towards a loved one is turned round upon the self and instigates self-torment. This is consistent with findings in this study as participants scrutinised, interrogated and vigilantly monitored their minds in the form of self-reproaches as they experienced their way of being and way of experiencing the world as an obstacle preventing and hindering them from becoming mothers. The fear of being guilty and blameworthy for their infertility, culpable, and deservingly punishable became tangible and real in the form of the multiple losses endured. The culpability of their minds was internally represented in deserving punishment and was metaphorically represented by loss wherein participants lambasted themselves and blamed themselves for the loss of the loved object that they experienced to have willed upon themselves.

Freud (1917) describes mourning as the reaction to the loss of a loved person. He also describes mourning as the loss of some abstraction which has taken the place of one. In the case of the participants, both ideas are appropriate in thinking about their internal experiences. This study initially aimed to explore mothers' experiences of maternal

subjectivity and the emotional experience of becoming a mother in the context of a successful IVF treatment and infertility. During the interviews and especially during data analysis it became quite clear to me that the participants were reluctant to talk about their transition into motherhood, becoming and being a mother in the context of a successful IVF treatment and infertility. Perhaps participants did not only lose loved objects, perhaps they lost an idealised transition into motherhood too. Kite (2007) refers to a prototype of "blank" mourning conceptualised as the mourning of a wished-for experience. Pines (1990) describes how the failure to conceive and create life initiates a process of mourning the wish and expectation that normal heterosexual activity between physically mature human beings would result in conception and the birth of a baby. Natural conception was not possible for the participants of this study. An idealised transition into motherhood is shattered having undergone a successful IVF treatment in the context of infertility.

Significantly, Goldberg (1999) emphasises a vertical separation and postulates the vertically split-off segment is different to repression. Repression refers to material unavailable to the conscious recall of any aspect of the individual, a horizontal split. Goldberg (1999) argues the vertically split-off segment, rather than being repressed and inaccessible, can be attended to by the individual (Goldberg, 1999). In the vertical split, the person has conscious awareness of the other state available in autobiographical memory but disavows it. Because disavowed mental content contradicts one's predominant self-image, it is kept apart from, but not out of, conscious awareness (Goldberg, 1999). I was aware participants struggled, and were perhaps reluctant to engage in their transition into motherhood, becoming and being a mother in the context of infertility. Perhaps the relentless libidinal energy demanding to be withdrawn from its attachments is firmly placed in the present, and the past is disavowed and warded off as the participants' experiences of becoming a mother in the context of infertility were so incredibly sore. The vertical split is thus reinforced, rather than the horizontal split (Freud, 1917; Goldberg, 1999).

Moreover, Malina and Pooley (2017) suggest anxieties surrounding the survival of the foetus are higher for mothers who have undergone a successful IVF treatment compared to mothers who have conceived naturally. I was left with a real sense of trauma, the participants' internal worlds had been breached and undergoing a successful IVF treatment appeared to have forced itself through, shattering the stimulus barrier (Eagle, 2000). According to Bain (2011) the single most important predictor of the intensity of a mother's grief response was the personality characteristic of ego strength. The trauma reactions and fears of the impending

loss of one's baby demonstrate the reactivation of prior experiences of loss and separation for mothers in this study. Rather than being repressed, the trauma participants experienced is disavowed and can be attended to by the individual (Goldberg, 1999).

5.5 The Therapist as the Researcher

Long and Eagle (2009) interrogate the interface of a psychodynamically trained therapist as a researcher and argue there is a point during which their clinical identity comes into conflict with their researcher identity. What is paramount when negotiating this interface is to ensure the integrity of research practice and a moral responsibility when clinical dynamics and insights become intertwined with data collection and data analysis in the research process (Long & Eagle, 2009). As previously mentioned, the point at which I experienced my clinical identity conflicting with my researcher identity was when data collection commenced and most poignantly during the process of data analysis due to the psychoanalytic nature of both. In addition to my experience of the intersection of identities, the countertransferential weight of the interviews was challenging too.

At the end of each interview, I reflected on each participant's experience of the interview by asking them various questions. The participants' responses when asked to reflect on whether they experienced anything that was difficult throughout the interview troubled and bewildered me as a researcher.

Tatiana: Was there anything that you found difficult?

Amy: No I thought everything has been fine. Yeah.

Tatiana: And was there anything that you found particularly difficult talking today or a question that I asked?

Maxine: No. Nothing, nothing. You can ask me the ins-and-outs of anything. I'll be happy to tell you.

Tatiana: Was there anything that you found difficult about the interview today?

Michelle: No. Nothing whatsoever.

Tatiana: Was there anything that you found difficult about today?

Julia: No, not at all.

When a research interview is concerned with difficult, distressing, or indigestible material Long and Eagle (2009) suggest it is very possible the interviewee may mobilize more primitive defences and forms of relating with the researcher. Long and Eagle (2009) also suggest projective identification may take place, with the researcher having to take on and experience affects and fantasies unconsciously expelled by the interviewee. Each abovementioned participant responded with, "*no*". I was perplexed and baffled. Perhaps what was so troubling and bewildering as the researcher, was what I experienced throughout the data collection process as a therapist in training. I was left with powerful unconscious communications which I experienced as unpalatable, raw and unprocessed. Perhaps this was telling of the intensity of my participants' emotional vulnerability; however I was angry that I was left with such raw and unprocessed material. The countertransferential weight of the interviews was massive. I was faced with what appeared to be a mammoth task - putting into words unconscious communications, painful and unbearable internal experiences and nameless affect. As a therapist, part of my role in the room is to put into words the unsayable and unthinkable; naming affect; thinking about painful and unbearable internal experiences; and giving unprocessed and raw unconscious material back to the patient in a more manageable and tolerable way. This is something I am able to do with confidence as a therapist in the room. The irony was that as a researcher I found myself feeling exceptionally overwhelmed and at a loss of where and how to begin to put into words what the participants were unconsciously communicating about their experiences.

A significant emotional reaction I experienced towards the participants was anger. I wondered about my anger and about ways of understanding my anger in order to best facilitate the research process. What came to mind was Bion (1962) and his concept of containment and reverie. Containment is understood by Bion (1962) as a process of the receipt of beta elements, unprocessed projections and projective identifications from a patient which are experienced by the patient as intolerable, uncomfortable and intense. These beta elements are a means of communication between two psyches and are tolerated and then "digested" by the therapist. This is an active process of engagement by the therapist which Bion (1962) refers to as reverie; a dreamy and musing internal thinking process in which the therapist lends her own mind to another. By doing so the therapist provides the patient with an alpha function in which the beta elements can then be interpreted back to the patient; and then re-introjected by the patient in a form that is accessible and bearable. As the researcher I did not have the luxury of the continuity of a psychotherapeutic relationship with the

participants. Upon reflection, there was no doubt that at points during the interviews I engaged in reverie. However, opportunities to perform the alpha function, to lend my mind to the participants, needed to be carefully monitored as I was a researcher and not a therapist during the interviews. I found myself in a conundrum. I am a psychoanalytically trained therapist and I did perform certain functions a therapist would in a psychotherapeutic relationship such as, building rapport, reverie, holding, empathetic listening and containment. I was both a researcher and a therapist. It was at this point I believe my clinical identity came into conflict with my researcher identity. Perhaps this was where my anger emanated from as the countertransferential weight of the interviews as well as negotiating the intersection of two identities was exceptionally demanding and complicated (Long & Eagle, 2009). The intersection of these two identities, the researcher as a psychoanalytically trained therapist, in addition to the massive countertransferential weight of the interviews raised unforeseen important ethical tensions. As a researcher I experienced the transcription and the data analysis process as exceptionally difficult to engage with.

Holmes (2014) cautions qualitative researchers against emphasising a narrow and strictly clinical conception and definition of 'countertransference'. Countertransference broadly refers to the phenomenon of the psychotherapist's emotional reactions to patients which include conscious and unconscious feelings towards the patient (Lemma, 2003). From the outset of the data collection process emotional reactions to participants - my feelings - inevitably surfaced, were sometimes hard to acknowledge, and were often hard to identify and manage (Holmes, 2014). As previously mentioned, a significant emotional reaction I experienced to the participants was anger. Questions concerning how to understand my anger were difficult to negotiate as a researcher who was a psychoanalytically trained therapist. What made this negotiation even more difficult were the various constructions and definitions of countertransference. These have changed markedly over time with earlier understandings existing alongside more contemporary understandings, and have been heavily debated in psychoanalytic literature (Hinshelwood, 1999; Tansey & Burke, 1989). The interface of a researcher and a therapist and my 'countertransference' to the participants raised ethical tensions concerning the use of subjectivity as an instrument of knowing. This required further ethical engagement (Hollway, 2008). Relying solely on my own 'countertransference' as a means of informing data and analysis, and using my countertransferential responses as an instrument of knowing places the researcher in a position of power. Psychoanalysis is often criticised for maintaining an unequal power relationship between researcher and subject. The

researcher/analyst is said to have hidden access to an unconscious truth the subject could not know about (Midgley, 2006).

With that said, a way in which I negotiated this ethical tension was by placing emphasis upon the co-created space between myself and each participant. Ogden (1994) proposes this co-created space cannot be defined exclusively in terms of either the therapist or the patient in a clinical setting, but only as product of their interaction which in this case, 'belongs' to neither the researcher nor the participant. As Holmes (2014) suggests, the 'research encounter' (Hollway, 2008) is therefore understood through consideration of the intersubjective dynamic between the researcher and the participant (Holmes, 2014), rather than choosing to adopt a narrow and strictly clinical conception and definition of 'countertransference' (Holmes, 2014). Furthermore, Ogden's (1994) proposition of an analytic third and the 'research encounter' also assisted with appropriately negotiating this ethical tension. As such, rather than using feelings states as independent evidence; feeling states were used to corroborate findings that emerged during the process of analysis and to further research knowledge (Cartwright, 2004; Elliot et al., 2012).

Gerson's (2004) paper exploring the relational unconscious assisted in further negotiating this ethical tension. A fundamental premise of an intersubjective orientation in psychoanalysis is the view that all subjectivity exists in a fluid state (Gerson, 2004). Subjectivity is a mental activity in which we, as individuals, find ways to represent our inner states to ourselves. Crucial to the intersubjective orientation is the idea that subjectivity alone cannot assist us in creating external realities that provide reflections, validations or justification for our affective states (Gerson, 2004). The process through which subjective perception, speech and signification is transformed into meaning is created with an other whereby subjectivity, our internal experience, is transformed into objectivity - external realities providing a sense of coherence within the individual (Gerson, 2004). The idea of an other begins to demonstrate a second premise of an intersubjective orientation. The sense of coherence within the individual aforementioned, suggests that the individual is beginning a process of organising meaning (Gerson, 2004). Significantly, this process is dynamic as it is always embedded in reciprocal influence with other minds. To elaborate, the other is engaged in a similar process whereby quickly fading and easily disappearing subjectivities are transformed into objective realities (Gerson, 2004). What an intersubjective orientation emphasises is the premise that objective realities in one individual, laden with meaning, can only be maintained, transformed and created with the active engagement of others albeit internal or external

(Gerson, 2004). Gerson (2004) captures the nuances which are involved in this process by highlighting that this dynamic process is infiltrated by context.

I wondered about what I had communicated to each participant, and subsequently how this interaction structured interrelating and the search for recognition and expression (Gerson, 2004). I believe this reflexivity also assisted in negotiating the ethical tension of placing me in a position of power and of 'all-knowing'. Thus, asking participants to share with me the story of how they became a mother, as well as the subsequent questions in the interview schedule tapped into the participants' vertically split-off experiences of becoming a mother in the context of infertility and a successful IVF treatment. I do not believe that I directly accessed the disavowed. However by asking such questions participants became conscious of their ambivalence towards a painful experience of a set of warring internal processes (Goldberg, 1999). As previously mentioned in my reflexivity section, my own personal interest in what it means to be a mother and the challenges experienced in the transition of becoming a mother; questions and curiosity concerning my own fertility and becoming a mother myself; the significant over-identification with the participants' experiences of loss; how my own relationship with my superego may have prompted an over-identification with the participants' experiences of guilt, locating blame internally and the consequent punishment of the self were present in each participant's interview and were dynamics interacting with each participant's personal dynamics too. Personal characteristics too may have influenced mothers' experiences of me and of the interviews as I was a young, single woman who does not have children. Participants may have had particular thoughts, feelings and fantasies about my age in particular and may have either identified with me or may have distanced themselves from me. They may have wondered about my own fertility; whether or not I was a mother; perhaps wondered if I had lost a child; perhaps wondered why someone so young would be interested in infertility; and perhaps wondered about my capacity to empathise if I was indeed not a mother. Participants have their own internal mental life which is more than what this study focused on. As such, the complexity of these unique relationships created an objective reality full of similarities and differences which could only be maintained, transformed and created with the active engagement of the participants. Gerson (2004) refers to this as the relational unconscious which is itself overlapped and intersected by each individual's context to which myself and each of the participants' belongs. The significance and the emphasis in this study of how the reciprocal and mutual influence of unconscious minds upon one another create an entity which transcended the

research encounter further assisted negotiating the ethical tension I was faced with. The entity which transcends the research encounter is an integral part of the research encounter too which needs to be carefully and thoughtfully considered when doing research (Hollway, 2008; Gerson, 2004).

5.6 Suggestions for Future Research

For the purpose of clarity, this research looked solely at women who underwent a successful IVF treatment and it is understood that this sample does not encompass all individuals' affective experiences of infertility. This research can be extended upon and broadened, perhaps by focusing specifically on the emotional experience of motherhood and becoming a mother in the context of assisted reproduction and infertility. Additionally, the ongoing adaptation and integration in psychoanalytic thinking about infertility is required. That being said, further exploration of disavowal, anxieties and defences perhaps more broadly is required. The experiences of the loss and trauma of women who undergo assisted reproduction is also required. More research is required to further explore the introduction of an other - a new third - in assisted reproduction including surrogates, egg donors and sperm donors, for example. This poses interesting and complex dynamics in light of the Oedipus complex and possible reconfigurations thereof. Furthermore, cultural and religious variations in the experience of infertility exist, but remain under-researched within South Africa. And finally, the absence of men within literature surrounding assisted reproduction is profound and requires more extensive research.

5.7 Limitations

There are limitations to the present study that need to be taken into consideration. Firstly, a key limitation is that the sample of this research was generated in urban Johannesburg and all participants were White females who fell within the upper socioeconomic status within South Africa. Aristarkhova (2005) proposes the issue of reproductive technologies is directly connected to questions of class, race and power. In the case of infertility, Bell (2014) argues social class is a cardinal factor shaping the experience of infertility. This homogenous sample, in terms of race, locality and socioeconomic status is not representative of all women who experience infertility and who undergo assisted reproduction. Thus, the transferability and generalisability of the findings could be argued as the main limitation of this research. A more culturally diverse sample may have resulted in different, more nuanced findings and outcomes. Furthermore, it must be emphasised this research is limited to a certain aspect of

women's experience of successful assisted reproduction, as the reluctance to talk about the emotional experiences of motherhood and becoming a mother in the context of assisted reproduction and infertility was noticeable as the researcher. Moreover, the research's sample can be argued as indicative of selection bias as it consisted of women who underwent a successful IVF treatment and were willing to participate. Although this was a prerequisite of the study, the research may have been enhanced even further had the women, who declined to participate, consented to being interviewed and included in this study.

5.8 Conclusion

This research explored what it means to be a woman who underwent a successful IVF treatment in the context of infertility. The internal, affective experiences of women undergoing successful assisted reproduction, and becoming mothers, from their own perspectives have not been extensively researched. The purpose of this research was to provide an understanding of how the experiences of successful reproduction in the context of infertility shape and channel mothers' internal worlds from a psychoanalytic perspective. This study showed how infertility is experienced as an assault on one's psychic reality from the *outside* world and from the *inside* world, and how infertility necessitates a coming to terms with a new psychic reality. The desire, wish and hope for a baby; deciding to undergo assisted reproduction; and going through the enormity and the painfulness of the IVF experience, while reaching a point of success leaves an impression of a double-edged sword. A part of one's self is taken and the hope of creation is achieved. However, choosing to undergo assisted reproduction brings with it unconscious consequences of the medicalisation of infertility and experiencing the mind as culpable and deservingly punishable.

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Appendix A: Interview Schedule

1. What did you imagine being a mother would mean for you?
2. Tell me about the story of how you became a mother? What did it feel like?
3. Tell me about your previous IVF attempts, if any?
4. Tell me about the IVF procedures? How did they make you feel?
5. What was your experience of IVF process? Please elaborate.
6. What was it like trying to fall pregnant? What did that mean for you?
7. What were your thoughts about motherhood and infertility? What did it feel like for you being told you are infertile?
8. How did you feel about your body? Has this changed since? If so, how?
9. Thinking about the IVF process, tell me about your hopes and fears about becoming a mother?
10. Tell me about your support systems? Where did you feel you were able to get the most support? Please elaborate.
11. How did you feel the medical staff treated you?
12. Tell me about a time recently, as a mother you became aware you had your child through IVF?
13. What was it like becoming a mother after the IVF process?
14. How would you describe your experience of the IVF process to other mothers? Please elaborate.
15. What was it like talking today? Was there anything that surprised you? Was there anything you found difficult?
16. What was it like talking to me as a young woman?
17. Is there anything else you would like to add?

Appendix B: Participant Information Sheet

Psychology

School of Human & Community Development

University of the Witwatersrand

Private Bag 3, Wits, 2050

Tel: 011 717 4503 Fax: 011 717 4559

An exploration of the meanings of a successful IVF treatment for maternal subjectivity

Dear Madam,

My name is Tatiana Campbell. I am currently completing my Masters of Clinical Psychology at the University of the Witwatersrand. I am interested in what it means to be a mother in the context of infertility. I would like to explore what is means for you becoming a mother through the IVF process.

I would like to invite you to participate in my research. Participation is voluntary and a consent form will be provided indicating your voluntary participation in the study. Your role as a participant involves partaking in an interview that will take approximately one hour. If necessary, a second follow-up interview may be conducted with your consent. A venue and time will be arranged that is most suitable and convenient for you. The interviews will be recorded using an audio recording device in order to allow for the transcription of your responses. If you agree to your responses being recorded, an audio-recording device consent form will be provided.

Confidentiality will be guaranteed as I am conducting a one-on-one semi-structured interview with you. Pseudonyms will be used and I will make every effort to ensure no identifiable information will be reported in the transcripts, final research report or any other published papers and in presentations at academic conferences. In addition, I will use direct quotes in the transcripts, final research report or any other published papers and in presentations at academic conferences, however I will make every effort to ensure no identifiable information will be reported, guaranteeing your anonymity in the final report. The audio-recordings and transcripts will only be accessible to myself and my supervisor and will be safeguarded while the research is in progress in a password secure laptop whose password only I know. Additionally, once the final research report has been written the data will be kept in a password secure laptop for five years whose password only I know and will be destroyed thereafter. Transcripts may however, with my permission be archived and used for future research purposes.

There are no risks or direct benefits associated with participation in the study. However participation in this research may offer you the benefit to reflect on your experience as a mother in the context of IVF and infertility, and the opportunity to contribute to the

understanding of mothers in the context of IVF and infertility within the field of psychology. You have the right to refuse to participate in the research. You have the right to refrain from answering any questions, should you wish to do so. You have the right to withdraw from participation in the study before the writing up of the project, without penalty.

Free counselling services are available should you feel you require them. Please contact Helen Joseph Hospital (Auckland Park) on 011 489 0807; Lifeline on 0861322322 or FAMSA on 011 975 7106.

Your participation in the study will be highly appreciated. You are free to contact myself or my supervisor if you have any questions.

Yours sincerely,

Tatiana Campbell

073 884 5481

tatiana.campbell91@gmail.com

Professor Carol Long
(Supervisor)

011 717 4510

Carol.Long@wits.ac.za

Appendix C: Consent Form

Psychology

School of Human & Community Development

University of the Witwatersrand

Private Bag 3, Wits, 2050

Tel: 011 717 4503 Fax: 011 717 4559

An exploration of the meanings of a successful IVF treatment for maternal subjectivity

I, _____ (full name and surname), consent to participate in Tatiana Campbell's research which explores what it means to become a mother through the IVF process.

In addition, I consent to being interviewed by Tatiana Campbell.

I understand that:

Participation in this study is voluntary.

I have the right to refrain from answering any questions during the interview process

I have the right to withdraw from the study at any time or not to respond to any questions, without penalty.

There are no risks or benefits associated with this study.

Confidentiality will be guaranteed as the researcher will make every effort to ensure no identifiable information will be included in the transcripts, the final research report or in any other published papers and in presentations at academic conferences.

I am aware that the results of the study will be reported in the form of a research report for the partial completion of Tatiana Campbell's degree, Masters in Clinical Psychology.

I am aware that transcripts will be archived and may be used for future research, with my permission (please indicate below).

Signed: _____

Date: _____

I give consent for my transcripts to be used for future research purposes (please tick):

Yes: _____

No: _____

Appendix D: Audio Recording and Transcription Consent Form

Psychology

School of Human & Community Development

University of the Witwatersrand

Private Bag 3, Wits, 2050

Tel: 011 717 4503 Fax: 011 717 4559

An exploration of the meanings of a successful IVF treatment for maternal subjectivity

I, _____ (full name and surname), give my consent for the audio recording of the interview with Tatiana Campbell for her study.

I understand that:

The audio-recording and transcript will not be heard by anyone other than the researcher and her supervisor.

The audio recordings and transcripts will be kept in a password secure laptop while the research is in progress whose password only the researcher knows. Once the final research report has been written, the audio-recordings and transcripts will be kept in a password secure laptop for five years. The password is only known by the researcher, the audio recordings and transcripts will be destroyed thereafter.

Confidentiality will be guaranteed as the researcher will make every effort to ensure no identifiable information will be included in the transcripts, the final research report or in any other published papers and in presentations at academic conferences.

Signed: _____

Date: _____

Appendix E: Demographic Information

Psychology

School of Human & Community Development

University of the Witwatersrand

Private Bag 3, Wits, 2050

Tel: 011 717 4503 Fax: 011 717 4559

Age: _____

Number of children: _____

Number of IVF treatments: _____

Appendix F: Ethics Clearance Certificate

Research Office

HUMAN RESEARCH ETHICS COMMITTEE (NON-MEDICAL)
R14/49 Campbell

CLEARANCE CERTIFICATE	**PROTOCOL NUMBER: H16/05/11**
PROJECT TITLE	An exploration of the meanings of a successful IVF treatment for maternal subjectivity
INVESTIGATOR(S)	Ms T Campbell
SCHOOL/DEPARTMENT	Human & Community Development/
DATE CONSIDERED	28 July 2016
DECISION OF THE COMMITTEE	Approved unconditionally
EXPIRY DATE	

DATE 27 July 2019 **CHAIRPERSON** _____
(Professor J Knight)

cc: Supervisor : Professor C Long

DECLARATION OF INVESTIGATOR(S)

To be completed in duplicate and **ONE COPY** returned to the Secretary at Room 10005, 10th Floor, Senate House, University.

I/We fully understand the conditions under which I am/we are authorized to carry out the abovementioned research and I/we guarantee to ensure compliance with these conditions. Should any departure to be contemplated from the research procedure as approved I/we undertake to resubmit the protocol to the Committee. **I agree to completion of a yearly progress report.**

_____ _____/_____/_____
Signature **Date**

PLEASE QUOTE THE PROTOCOL NUMBER ON ALL ENQUIRIES