

**Comparing the Social Capital and
Occupational Balance of Mothers with
and without Postnatal Depression
Symptomology**

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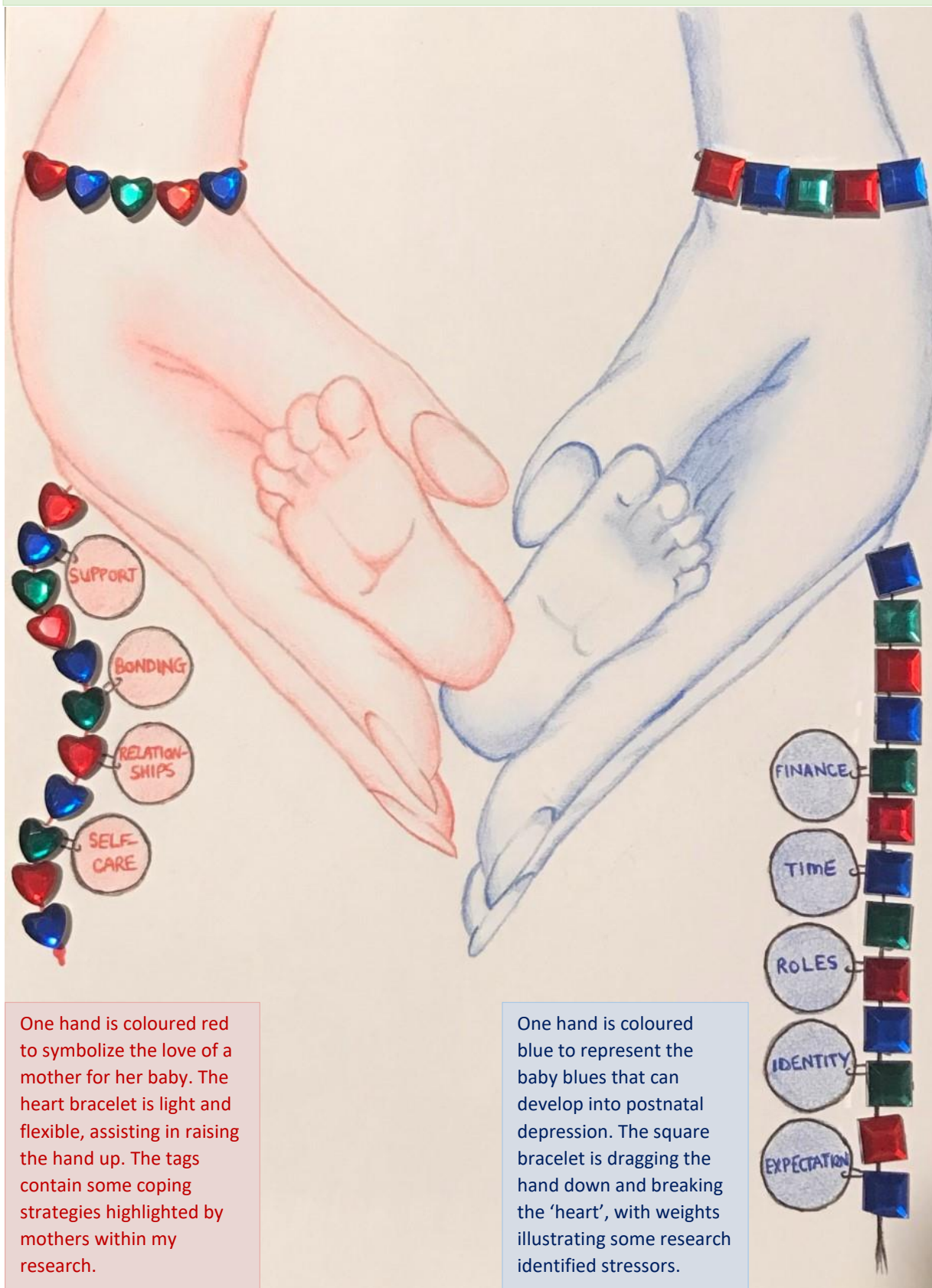
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A visual representation of the conflicting emotions experienced by mothers with postnatal depression. The hands, which would commonly represent a heart shape if connected, are slightly broken.



One hand is coloured red to symbolize the love of a mother for her baby. The heart bracelet is light and flexible, assisting in raising the hand up. The tags contain some coping strategies highlighted by mothers within my research.

One hand is coloured blue to represent the baby blues that can develop into postnatal depression. The square bracelet is dragging the hand down and breaking the 'heart', with weights illustrating some research identified stressors.

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Abstract

Over 70,000 mothers in the UK suffer from postnatal depression, costing the NHS over £70,000 for each case. In Wales, 70% of women have no access to specialist perinatal mental health services. Women with postnatal depression experience debilitating symptoms which lead to multiple adverse outcomes. The biological and psychological causes are well established. Reduced social capital (quality and quantity of social interactions) and occupational imbalance (unequal distribution of daily activities) also increase the risk of postnatal depressive symptomology, but are less well understood.

Occupational therapists maximise functioning within daily occupations (categorised as self-care, productivity, leisure and rest), using coping strategies and adaptation to overcome illness associated difficulties. Currently, few occupational therapists are involved in postnatal care.

This mixed methods research aimed to explore how life experience and choices impact on the mothering role and whether daily routines affect mental health. A cross-sectional questionnaire was conducted with 212 mothers of children aged less than 18 months and living in Wales. The questions explored the social capital and occupational balance of the mothers, alongside the Edinburgh Postnatal Depression Scale used to identify depressive symptomology. Logistic regression was used to analyse the data, with no association seen between social capital and EPDS score. Women with low occupational balance were nearly 17 times more likely to have EPDS scores ≥ 9 than mothers with high occupational balance.

Subsequently, semi-structured interviews and activity diaries were completed using purposive sampling with 9 mothers. The explanatory sequential approach involved the questionnaire influencing the design of the interviews. Thematic analysis of the qualitative data highlighted three main themes: (i) identity and stigma; (ii) role transition and balance; and (iii) negotiating stereotypes.

These results identified areas of occupational therapy involvement, including transitional change, realistic role education and potential coping strategies, which may influence future occupational therapy interventions in perinatal care.

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Abbreviations

EPDS	Edinburgh Postnatal Depression Scale
HWW	Health Wise Wales
MeSH	Medical Subject Headings
MOHO	Model of Human Occupation
NCT	National Childbirth Trust
NICE	National Institute for Clinical Excellence
OTs	Occupational Therapists
PND	Postnatal Depression
STROBE	Strengthening the Reporting of Observational Studies in Epidemiology
UK	United Kingdom
US	United States
WHO	World Health Organisation
WIMD	Welsh Index of Multiple Deprivation

Academic Contributions

Conference Presentations

Cavill, S. 2022. Mother's Matter: Does occupational balance and social capital affect the risk of developing postnatal depression symptoms? [Poster]. *The International Marce Society Conference*. London, 21st September 2022.

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1 Chapter One: Background and Aims of Research

1.1 Introduction

This chapter introduces the phenomena under investigation within this thesis, which is postnatal depression. An overview of mental health conditions is given, leading to exploration of specific maternal mental health conditions that require attention. This leads to the overall aim of the study and research questions for this project. In the last section, an overview of each chapter is presented to provide guidance on the layout of the thesis.

1.2 Definition and Prevalence of Mental Health Conditions

The World Health Organisation (2014) define mental health as the 'state of well-being in which every individual realizes his or her own potential, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to her or his community'. Although, this is a contested term due to complexities of definition and cultural differences. This is reinforced by Creek and Lougher (2008) and Wilcock and Hocking (2015), describing mental health as the ability to adapt, manage life transitions and stressors, create and achieve goals, become well-balanced and maintain life satisfaction.

Globally, it is estimated that 1 in 8 individuals are living with a mental health condition (World Health Organisation 2022). The definition of a mental health condition pertains to a significant disturbance to the daily functioning of an individual, inclusive of cognitive processing, emotional regulation and behavioural responses. A mental health condition extends to include psychosocial disabilities, increased risk of harm, significant distress and impairments to daily functioning (World Health Organisation 2022). Within this thesis, the terminology mental health conditions will be used. This relates to the focus of this research on mothers who may not have a formal diagnosis, but still encounter prolonged mood fluctuations, difficulties with daily functioning and/or social isolation.

Within the UK, roughly 30% of the population were suffering from at least one mental health condition during a 2020 study (Statista 2022a). Mental health is disrupted when an individual is not able to process daily life in their normal ways and their sense of well-being is affected (Creek and Lougher 2008). Mental illness can create a barrier to occupational identity, occupational engagement and recovery, with occupations defined as a grouping of daily

activities (Kielhofner 2008). Occupational therapists (OTs) classify occupational dysfunction as an inability to perform required or expected daily functioning due to an absence of skills to cope with the situation and/or environment (Bryant et al. 2014). Occupational therapy concepts will be further explored in chapter three.

1.3 Definition and Prevalence of Maternal Mental Health Conditions

Motherhood is a time for change to routine, adaptation of lifestyle and increased stress from additional dependency of a baby. Undoubtedly, not all mothers can achieve or sustain positive mental health and may be impaired by a mental health condition. Potential mental health conditions for women around childbirth include depression, anxiety, obsessive compulsive disorder, post-traumatic stress disorder and postpartum psychosis (Witcombe-Hayes 2018). An estimated 80% of women will experience the 'baby blues' shortly after birth, with symptoms of emotional instability and anxiety (National Childbirth Trust 2018). Mothers will usually report that symptoms subside within fourteen days. However, if these symptoms persist or develop at a later postnatal stage, this could develop into a postnatal mental health condition (National Childbirth Trust 2018). Postnatal depression (PND) has the corresponding characteristics of depression, but also encompass specific features related to the mothering role. These may include: hormonal instability; disinterest in the infant; feelings of guilt from societal expectations; reduced confidence with infant; incessant worrying behaviours; and reduced bonding with the infant (Cox 2004; Jolley and Betrus 2007; Kleiman 2008). In severe cases, mothers can experience postpartum psychosis, with symptoms including: elated and depressed mood swings; disorganised behaviour; confusion; disorientation; hallucinations; and delusions including the baby, with potential risk of infanticide (Witcombe-Hayes 2018). These behaviours correlate with Giddens (1991a) and Laing (1965) explanation of diminished ontological security, dehumanising other social actors and losing sense of the reality to which other social actors observe. These concepts will be explored in-depth within chapter two.

Highlighted as a worldwide concern, comparable presentations of maternal mental health conditions have been recorded across the world, with mothers in low-, middle- and high-income countries experiencing similar symptoms (Oates et al. 2004; Almond 2009; World Health Organization 2019). The prevalence of maternal mental health conditions in the UK is high, affecting one in four women (Witcombe-Hayes 2018; Howard and Khalifeh 2020). PND

is the most common maternal mental health condition following childbirth, affecting roughly one in ten new mothers, and can develop in pregnancy or following the birth of the child, up to one year. The development of prenatal depression or anxiety is the strongest risk factor for developing PND (Mental Health Foundation 2016; Royal College of Psychiatrists 2018; Witcombe-Hayes 2018).

There is currently limited research on the psychological and psychosocial influences on PND within the UK, and even less within Wales. This research was designed to focus on a Welsh context, noting a high prevalence of mothers being diagnosed with a perinatal mental health condition but restricted specialist service provision or associated research to support service expansion. In 2015, it was estimated that roughly 9,000 mothers suffered a maternal mental health condition of the 33,000 women that gave birth in Wales (Witcombe-Hayes 2018) . There are seven health boards funded by the Welsh Government but only six have a specialised community perinatal mental health service, with specialist perinatal mental health OTs not available in every health board (Witcombe-Hayes 2018; Maternal Mental Health Alliance 2020). Funding for specialist community perinatal mental health services was announced in 2015 and the Together for Mental Health Delivery Plan 2019-2022 was devised in 2019. Wales has made improvements from 5 health boards with no specialist perinatal mental health provision in 2015, to all 7 health boards having some form of perinatal specialist in post in 2019 (Maternal Mental Health Alliance 2020). A mother and baby unit was opened in 2021, after Wales not having its own unit since 2013 (BBC 2021). Despite the improvements made, only one health board is meeting the Perinatal Quality Network Standard Type 1 (Maternal Mental Health Alliance 2020). Additionally, there are rural parts in Mid and West Wales that have a population density below the Welsh average of 140 persons per square kilometre, which can have an impact on access to mental health services (Statistics for Wales 2008; Witcombe-Hayes 2018). Dennis and Dowswell (2013) and Cantwell (2022) identify the improvements made within the UK surrounding perinatal mental health services but agree that significant improvements still need to be made. The high prevalence rates of PND illustrate the importance of identifying external causes of PND and potential effective interventions. PND will be the focus of this thesis.

1.4 Causes and Symptomology of Postnatal Depression

PND can affect the mother's well-being, impacting on cognition, mood and sleep. The symptoms of depression can lead to the development of further mental health conditions, such as eating disorders (Grier and Geraghty 2015). The PND symptoms experienced by the mother can disrupt interaction with the baby via decreased sensitivity and responsivity, which can compromise caregiving duties (Grier and Geraghty 2015). Despite episodes of recovery from PND, an estimated 25% of women will be at risk of recurrence of symptoms (Meltzer-Brody et al. 2013), which can decrease the quality of the mother-child bond over time (Myers and Johns 2018). Following an episode of PND, the woman is also at higher risk of experiencing further episodes of depressive relapses throughout her life (Habel et al. 2015).

Emotional responses and connectivity with the child are affected by PND, with reduced bonding and interaction apparent (Esdaile and Olson 2004). For some mothers with depression, their sense of self-efficacy is negatively affected, which can encourage the thought process that the child is challenging. These can influence the willingness to respond to the child, withdrawing from the mothering role and projecting hostile reactions towards the child. These symptoms can impact on all co-occupations (activities that include both mother and child), including feeding, comforting and getting the child to sleep (Esdaile and Olson 2004). A systematic review of 19 articles (Tsivos et al. 2015) highlighted a clear association between maternal well-being and child development but also a scarcity of longitudinal studies examining child development outcomes when maternal mental health improves. Righetti-Veltema et al. (2003) found a delay in child cognitive development and reduced quality of interaction between mother and child, when compared with children of mothers without PND, in a case-control study of 70 mothers in Switzerland. Netsi et al. (2018) explored the relationship between severe long-term PND and child outcomes with 9,848 mothers in the UK, with a mean age of 28.5 years at delivery, using the Avon Longitudinal Study of Parents and Children. Results identified substantially increased risks of adverse outcomes for children whose mothers suffered with severe and persistent PND: (i) child behavioural problems at 3.5 years; (ii) lower GCSE mathematics scores; and (iii) offspring depression during adolescence. Additionally, mothers with persistent and/or severe PND were more likely to continue to experience higher levels of depressive symptoms, even up to

eleven years after the birth. PND interventions may not just be beneficial for the mother but could improve child development outcomes.

The causes of PND remain ambiguous, with a combination of biological, psychological and/or social influences affecting the mother's mental health (Abdollahi et al. 2016). Edwins (2008) and Abdollahi et al. (2016) explain that reproductive hormones increase throughout the pregnancy but significantly drop after childbirth. The sudden reduction of oestrogen and progesterone levels with changes in thyroid hormones is suggested as the main cause of PND because emotional and cognitive processes are influenced by neurotransmitters, which are affected by oestrogen and progesterone levels. A previous history of depression can increase the sensitivity to this hormonal withdrawal. The biological causes of PND are usually treated pharmacologically with anti-depressant or anti-psychotic medication. It is unclear why some women go on to develop PND, whilst others do not (Almond 2009). Psychological and social factors impact on top of the biological changes (Edwins 2008; Almond 2009; Abdollahi et al. 2016). Therefore, these conditions can develop in any woman, with previous mental health conditions, stressful life experiences and social isolation highlighted as increasing the risk (Chojenta et al. 2012; World Health Organization 2019).

Research exploring current services available to women during the perinatal period have highlighted environmental, staffing and resource constraints that prevent care provisions, despite an expressed desire by professionals, including midwives, to improve mental health support (Higgins et al. 2018; Regan and Brown 2019). A qualitative exploration of questionnaire responses from 139 mothers experiences of acute perinatal services in Wales and England was conducted by Powell et al. (2020). Findings suggested that non-coercive relationships, with both staff and family, were beneficial for recovery but often not encountered within inpatient services, affecting feelings of autonomy and involvement in care. Findings suggested mother and baby units were preferable to avoid separation from their baby and inclusion of family members in the recovery process was important.

The psychological and psychosocial changes that occur during the perinatal period are less well understood but once uncovered, may be used to develop additional interventions for PND prevention or minimisation. The identification of potential psychosocial factors that have

an effect on PND symptomology, whether positive or negative, would be beneficial for both mothers and healthcare professionals. The exploration of psychological and psychosocial factors associated with pregnancy and the postnatal period will be the focus of this thesis.

The limitation of UK research, especially specific to Wales, exploring the psychological and psychosocial impacts on perinatal mental health conditions has meant that research from different countries is considered and referred to throughout this thesis. The research referred to is from mid- to high-income countries that are relatable to the UK healthcare system, unless otherwise specified.

1.5 Aim of Research

This introduction has highlighted some issues within the delivery of current specialised services for mothers with a mental health condition, alongside the limited research of psychological and psychosocial factors that influence PND symptoms. The aim of this study is to understand how the concepts of social capital, occupational choice and occupational balance manifest within motherhood and impact on PND symptomology.

The following research questions will be answered using different methodological approaches that will combine to answer the overall aim of the research.

Research Question 1: How can social capital and differences in daily occupational engagement and balance help us to better understand postnatal depression?

Research Question 2: Which elements of social capital and occupational choice influence the sense of self and postnatal depressive symptoms?

Research Question 3: How can social capital, occupational choice and occupational balance influence occupational therapy interventions?

This thesis describes a mixed-methods study with use of a quantitative cross-sectional questionnaire with 212 mothers and qualitative semi-structured interviews and activity diaries with 9 mothers. The data collected through these methods was analysed with the use

of logistic regression and thematic analysis. Findings are presented over four chapters followed by an overall discussion. The layout of the chapters is described below.

The initial literature review chapter examines the contextual theories related to the population under investigation. The chapter begins by exploring the social world and the formulation of identities before exploring the phenomenon of motherhood. Feminist debates are integral within the discussion of the mothering role, societal expectations and the multiple commitments and responsibilities held. The intricacies of motherhood are discussed in relation to the importance of the antenatal period for preparation, the differences between expectations and the reality of parenting, and how routine plays a major part in this. The dynamics of the family, employment and the decision to have more than one child are also discussed. The chapter examines stigma and its association with motherhood and maternal mental health conditions impacting on access to support. Chapter three explores the literature on the two concepts under investigation, social capital and occupational balance. The profession of occupational therapy will then be discussed, with the main aims of occupational therapy intervention explored and how well-being is defined within the scope of this research project. The concept of occupational balance will be discussed in depth with a general overview of how this impacts on individuals. Epidemiological evidence will be presented on currently available research, highlighting a research gap which this research project aims to address.

The methodology chapter explores the philosophical underpinnings of the critical realism approach taken in this thesis and why other paradigms were not suitable. The chosen methods will be discussed including the design, sampling, access and recruitment for both phase one, an online questionnaire, and phase two, interviews and an activity diary. This section will include all information of alterations made to original planned data collection due to the COVID pandemic restrictions during the data collection phase. Details on the ethical considerations of the study are explored and how potential risks were mitigated through careful planning and consideration.

The quantitative chapter contains full details of the quantitative analysis methods, results from the cross-sectional questionnaire and a discussion section regarding these results. The

chapter will cover the whole quantitative process, inclusive of an overview of the variables, statistical methods, results and discussion, for ease of understanding and presentation. The discussion will highlight the strengths and weaknesses of the quantitative aspects of the study, the potential biases, how the findings fit with existent literature and research and the implications for further research, practice and policy.

The first qualitative chapter provides information on the analysis methods used, information on the participant sample and an introduction to the layout of the qualitative findings chapters. Throughout the qualitative chapters, there will be continual reference to the relevant theory and research that correlates or opposes the research findings from this study. The first theme of identity and stigma will be explored in relation to identity transformations and the impact from pre-existent knowledge, personality and environmental factors. Stigma will be explored surrounding the mental health of mothers with a mental illness and why mothers struggle to seek professional support. The stigma surrounding the professional services available and the timeliness and accuracy of the service provision will also be explored.

The theme of role transitions and balance is further discussed with respect to the additional responsibilities on the woman once in the mothering role, how this impacts on routine and how support networks are regarded. Support networks are explored, which can be influenced by environmental situations, relationship dynamics or personal circumstance. The importance of relationships and for some mothers, group engagement is discussed. Additionally, mothers' understanding of occupational balance will be examined and how they would categorise their own lifestyles and occupational engagement. The financial constraints that impact on occupational choice are considered.

The final theme of negotiating stereotypes is examined surrounding the division of labour between partners and how this can benefit or hinder the woman to engage in occupations outside of her mothering role. The negotiation of the mother's own expectations and self-stigmatisation is an important consideration for improvements to mental health. This can increase self-efficacy and reduce the impact of societal and media expectations on the

mother. The mental load on mothers and the desired activities of the women is touched upon to provide insight into the areas of their occupational lives that are missing.

The concluding chapter provides a discussion and conclusion of the presented research. It explores how the results from phase one and phase two of this research project have assisted in answering the research questions. The strengths and limitations of the study are examined and addressed. There are recommendations on how occupational therapy could assist in offering tailored interventions that would address the issues raised within the study. These recommendations are fitted within an occupational therapy model of practice to illustrate the benefit of the professional input within perinatal care. The findings of this research are considered for future practice and policy. Further recommendations for research are also discussed.

[Terminology used within this Thesis](#)

Through the thesis, the meaning of terms does vary slightly based on the context of the discussions as well as the phrasing used by participants and in wider literature. For the purposes of continuity, and unless otherwise advised, the following terms should be understood as follows: Mothering will refer to the role of the mother in relation to the child, whereas caregiving will refer to the mother and/or father role, inclusive of same sex partnerships. The term woman will also be used to refer to the woman in different roles outside of mothering. Peers will represent individuals experiencing the same phenomena, for example, other mothers. All chapters will refer to these terms to ensure the thesis remains pertinent to the problem under investigation.

2 Chapter Two: Contextual Exploration of Motherhood Within the Social World

2.1 Introduction

This chapter will firstly explore the sociological underpinnings of the social world, social actors as reflexive beings and the values of interaction. These aspects contribute to the overall self-identity of each individual, which creates a stable ontological security when unthreatened and this will be discussed. The ontology of a socially relevant existence is consistent with the critical realism paradigm, the approach that informs this research study. An individual does not exist without their world and that personalised perception of the world cannot exist without the individual (Laing 1965). The critical realism paradigm will be explored in further depth in chapter four.

The chapter then addresses the transition to motherhood, the multiple roles that women undertake during motherhood and any challenges that may arise throughout this life stage. Feminist theories are intertwined within this discussion to further explain the phenomena that has an impact on sense of self, autonomy and the dynamics of relationships. The effect of stigma on both the mother and service access/provision will be discussed, alongside the additional pressures of social media within modern society.

2.2 Understanding the Social World

Humanity is made up of social actors who portray themselves within daily life as a character with particular attributes, performing appropriate actions to conform to the intended portrayal (Goffman 1959; Giddens 1984). Within motherhood, women seek to portray themselves as coping with multiple roles (Choi et al. 2005). The performance will differ dependent on the audience, environment or context of social interaction, which can both highlight and hide performance insincerity dependent on the actor. For example, mothers may actively conceal mental health symptoms from family or during healthcare professional visits for fear of the consequences (Choi et al. 2005). Each performance is derived from individual awareness of social interaction, societal norms and previous life experience (Goffman 1959), which will be explored further in chapter three under social capital. Social establishments will thus contain a team of actors performing in a social situation, within defined societal constraints.

There are certain social rules that are abided by in the 'frontstage' that are in-keeping with the setting, including appearance and manner, to ensure the social situation is acceptable to participants within the group. Each different location with its different social actors will have an impact on the behaviour displayed (Goffman 1959). The implications are a reciprocal dependence on behaviour or conduct within each group of performers, until a familiarity grows of social position in groups that are frequented often. Mothers may learn to feel more comfortable within group situations or within new friendships with peers. Mothers may feel less pressured when in the company of peers, when compared to healthcare professionals, and interventions have been trialled that use peer support and have found associations with reduced PND symptomology (Dennis et al. 2009; Kamalifard et al. 2013; Cust 2016). It is only in the 'backstage' area that social actors can stop performing, for instance, when alone (Goffman 1959; Giddens 1991a). Goffman (1959, p. 236) explored how performances consist of personality, interaction, and social structure. These aspects of performance will be examined within the next section discussing identity, identity negotiation and interactions.

2.3 Ontological Security and Identity Formulation

Ontological security arises when an infant develops self-actualisation in the social world and interacts within it, forming trust with caregivers (Laing 1965; Giddens 1991b). This progresses to self-consciousness, being aware of oneself and also being aware of oneself as an object of observation to other social actors (Laing 1965). The infant learns to trust the caregiver will provide for his/her needs but there is also an expectancy of appropriate behaviour from the child by the caregiver (Giddens 1991a). Over time, the familiarity and constancy of social and physical environments that surround an individual encourages a confidence towards their own self-identity and conveys ontological security. To be ontologically secure is to 'answer' the existential questions concerning human life: the nature of existence within the environment; the separation of humans as reflexive beings; the experience and interpretations of others; and the continuity of self-identity (Giddens 1991b). Thus, ontological security is primarily an unconscious experience, though role negotiation and social interaction inherently necessitate elements of conscious reflexivity. This creates a sense of 'being' within the social world, when autonomy and identity are not threatened (Giddens 1991a). This often occurs when there is a distinct lack of dependency from others, for

example, prior to children. An individual will struggle to interact with the same social world as other social actors if they cannot be secure in their own existence, the reality of their world perceptions or whether more than one self exists. The inability to be certain of these existential questions of human nature can exhibit as mental health conditions (Giddens 1991a). However, there is a duality to the label of mental health conditions, with a reliance on the social sanctioning by others within society, and to fit within the constraints of social construct. Thus, there may be a fear of self-identity being impinged upon, which can create dehumanisation of others and instinctively destroy a person's own ontological security. There is a need to explore the individuality of the human condition due to the unique complexities of self-identity and familiarity of environments (Laing 1965). The transition to motherhood or the constraints created by additional children can have an impact on self-identity and autonomy, ultimately affecting ontological security (Harwood et al. 2007; Laney et al. 2015).

Self-identity relates to the thoughts and feelings about the self and the accompanying views of the world, inclusive of personal views and group integrated views of social beings around them (Goffman 1959; Swann Jr. and Bosson 2008). Ergo, identity comprises of both the social actor's presentation to the social world and how the other actors perceive that individual. Mothers have reported comparisons of themselves to other mothers and their perception of the similarities and differences in caregiving, to promote identity affirmation within their own mothering role (Amaro et al. 2019). Therefore, self-identity is a culmination of individualised roles that are devised from societal norms and expectations, establishing a set of tasks to be performed by each individual within each role category (Creek and Lougher 2008). Social actors are able to consciously describe and rationalise their day-to-day activities and routines in which they engage, illustrative through diary extracts. The ability to discuss their actions reflexively infers the continual monitoring of actions, activities and environments in which they move. This provides the actor with a sense of agency (control) over actions, to monitor and adapt performance as necessary, dependent on societal observation (Goffman 1959; Giddens 1984,1991a; Moore 2016). Caregiving is described as a role full of reflection and adaptive behaviour/teaching due to unexpected situations and behavioural responses from children (Francis-Connolly 2002; Staneva and Wittkowski 2013).

Motherhood is seen in its most basic form as keeping the child healthy and thriving, though societal expectations have added complexities to this role (Choi et al. 2005). The basic trust with caregivers that developed through ontological security creates the link between self-identity and the appraisal of other beings (Giddens 1991b). Self-identity is not just given but requires continual reflexive practice to develop and enhance, which influences actions (Giddens 1991b). The conscious thought and reflection based on understanding and experience will ensure accountability of the social actor, which shapes identity (O'Mahoney and Marks 2014). There is an expectancy that each social actor will be accountable for their own reflexive practice and self-identity will adapt and develop over the life course, in line with the social contexts of the social actor (Giddens 1991b). As the process is dynamic, an individual may possess multiple roles at one time, which together formulate self-identity and self-image. For mothers, this includes the dynamics of relationships and the increased level of responsibility affecting the stability of each role, in addition to the physical changes to the body (The Social Issues Research Centre 2011; Laney et al. 2015). Though naturally, multiplicity assumes the individual prioritises particular roles over others at any given time, the demands of each role must be managed, simultaneously if necessary (Giddens 1991b; Kielhofner 2008). Mothers are often expected to perform childcare responsibilities and household chores alongside employment, for example. This creates both rights and obligations within society, accepting the corresponding actions and responses of others alongside personal interpretations of the role/s (Kielhofner 2008). Mothers can feel they fall victim to judgement from others if their own parenting style is not reflective of mothering portrayals (Grant et al. 2018; Mannay et al. 2018).

There are certain social rules that are embedded in practices of interaction and abided by in both behaviour and language to ensure the social situation is acceptable for all participants within the group (Goffman 1959; Giddens and Turner 1987). However, controversial topics, such as breastfeeding in public, can create opposition to these societal unwritten rules (Amir 2014). Each social establishment contains a team of individuals acting out a social situation within the defined societal structures, inclusive of class relations, cultural influence and constraints. Mothering groups are an example of an environment that includes an eclectic mix of social actors from differing backgrounds (Goffman 1959; O'Mahoney and Marks 2014; Sims-Schouten and Riley 2014). Each location with its different social actors and discourse will

have an impact on the behaviour displayed and the interactions encountered, such as healthcare professionals, peers or family members. Decisions made are based on previous experience and social constraints (O'Mahoney and Marks 2014; Sims-Schouten and Riley 2014). The socio-cultural background of each woman will impact on their perception of the mothering role and how to best engage in it. Mothers will use their own personal experiences of their childhood upbringing, whether positive or negative, as an underlying influence on their own parenting technique and style (Dunbar and Roberts 2006).

Initial identity assumptions from others are heavily reliant on the environment in which the individual is encountered. This can be positive or negative, with assumptions made based on the appearance and location of an individual with no awareness of the context or personality. Mothers have reported feelings of judgement from members of society and media if perceived as too young or old for the role (Shaw and Giles 2009; SmithBattle 2013). This can lead to individuals experiencing fear of stigmatisation, which will be further explored in chapter two. Goffman (1959, p. 236) explored how performances are made up of three levels: personality, interaction and social structure. The differences between social structures, environments and social actors will alter the performance in these three areas. For example, children taken on public transport in view of others versus traveling in own car, where unwanted behaviours can be handled privately. There may be compromises within identity formulation until the identities of both social actors are confirmed. The identity negotiation process concludes with an interaction with set interpersonal tasks outlined and the social actors attempting to attain these set goal outcomes from the social situation (Goffman 1959; Weistein and Deutschberger 1963). For example, mothers may have different expectations of advice, support or education from healthcare professionals, group leaders and peers, which alters the exchange. This interactional play occurs in all social situations, inclusive of personal relationships, family dynamics, working environments, group settings and public locations. This creates a distinct differentiation between personal identity from others and attributes associated with the social group an individual is a part of (O'Mahoney and Marks 2014; Sims-Schouten and Riley 2014).

This change in identity presentation within varying social and physical environments requires the negotiation of identity between the individuals interacting. The dynamics of exchange

within the interaction will construct specific personas for all social actors in relationship development (Swann Jr. and Bosson 2008). For example, relationship boundaries of mother to healthcare professional, mother to peers or mother to partner. The three requirements for identity nourishment from social interaction are suggested by Swann Jr. and Bosson (2008) as: agency (autonomy and self-efficacy); communion (sense of 'belonging'); and psychological coherence (familiarity, predictability and control). The similarities to the development of ontological security are apparent and support the interconnectivity between these two core psychological needs. For the most part, identity negotiation occurs subconsciously when the three aspects of identity have already been adequately negotiated, returning during times of disruption, transition, distress or role conflict (Swann Jr. and Bosson 2008).

Laney et al. (2015) proposes that when a woman takes on the additional role of 'mother', for the first time or subsequent times, this shifts the way a woman defines herself, with many women experiencing self-loss. This is described as a "fracturing of identity", in which the mother is required to lose a part of her sense of self to raise awareness of the child's needs (Laney et al. 2015, p.138). This adds a new dimension to Giddens' theories around multiple identities always present and at play, to the actual temporary loss of individual identity. This was also observed by Horne et al. (2005), in a mixed methods UK study of six first-time mothers, aged 28-42. Standardised checklists and semi-structured interviews were used to explore occupational change in motherhood. It was found that the mothers' occupations appeared to be dominated by productive and compulsory occupational engagement, where the main sources of time expenditure are on the family needs and paid employment. This illustrated the minimisation of activities for self-care or leisure. This was also highlighted by Wheatley (2017), who examined the importance of time use within the UK and how it has transformed in the preceding decade. He claimed leisure activities are considered the least important and thus the first types of activities to be stopped when time constraints are present. This can result in a period of occupational restriction and disruption, often leading to occupational imbalance. Dunbar and Roberts (2006) found similar results from their US study of 7 mothers, aged 24-42, regarding their perceptions of mothering occupations using focus groups, journals and author notes. The mothers reported higher levels of demands on their time within their multiple roles. This stressful period of multiple responsibilities and obligations has led to a "time-squeeze" for mothers (Sullivan and Gershuny 2017, p. 16).

However, Laney et al. (2015) then explains how the woman will accept the identity changes and redefine and adjust to reunite with the core sense of self. Horne et al. (2005) concurred, finding that over time there is often an alteration in the mother's occupational performances, with meaningful leisure activities achieved with inclusion of the child, so their perception of balance is achieved.

Kielhofner (2008) speculates that there are roles in which individuals feel inexperienced to perform and there is a need to engage in socialisation for validation of their role interpretation. Multiple roles can cause stress during the transition to motherhood for new mothers or the additional dependency for mothers of more than one child. Role overload (insufficient time for excessive demands) can influence negatively on women's mental health and well-being (Glynn et al. 2009). However, the assertion that role overload is always a burden is challenged by Bar and Jarus (2015), who suggest it is very dependent on the type of roles the mothers are engaged in. Social support inevitably increases the expectations to engage in occupations but this participation can increase life satisfaction and well-being, despite any additional roles encountered (Bar and Jarus 2015). Self-identity is compromised if nourishment is not received from those social actors within their environments, which can cause mothers to have difficulties in daily function, risk of social isolation and issues around emotional regulation of the mother. This can destroy the built identity and the social actor will attempt to create a replacement identity through new negotiation, seeking out new social connections or support (Swann Jr. and Bosson 2008). The negotiation process defines the success of relationships and whether they establish a stable foundation for organised social activity and a sense of 'belonging' (Swann Jr. and Bosson 2008).

Smith (1999) identified interpersonal relationships as a key development for women during the identity transition to motherhood, seen to enhance confidence within the new role and therefore assist with preparation. Smith (1999) found social connections made with other mothers during pregnancy had beneficial effects, enabling contact with children to practice the role and enhance self-concept prior to the birth of their own child. Tani and Castagna (2017) identified that mothers' perceived social support during pregnancy reduced the risk of PND and the effects of a negative birth experience, in a longitudinal quantitative study of 179 first time mothers. A cohort study of 494 women in Japan by Ohara et al. (2017) showed the

results of mothers who completed the Mother-Infant Bonding Questionnaire and the Social Support Questionnaire. It was suggested low levels of supportive persons or poor perceived quality of these relationships (by the mother) during pregnancy impacted on bonding failure between mother and child and increased the risks of developing depression. Kearns et al. (1997) discusses the need for social support accumulation antenatally when after childbirth, there is potential for a lack of social contact. This follows a temporary break from employment for maternity leave and less perceived postnatal support from family and friends, which can leave the mother with a social vacuum and feelings of isolation (Kearns et al. 1997).

Social support and building a social network, has been associated with a decrease in PND symptomology in multiple research studies (Eastwood et al. 2012; Feeney and Collins 2015; Cornish and Dobie 2018; Lefkovic et al. 2018). During the transition to motherhood, some mothers can feel isolation/loneliness from a perceived loss of support or guilt affecting the sourcing of support (Eastwood et al. 2016; Cornish and Dobie 2018; Hesse Tyson et al. 2021). Mothers have also reported a focus on the baby and feelings of being overlooked as a new mother (Cornish and Dobie 2018; Powell et al. 2020). Social support has been associated with a reduction of distress and increase in satisfaction (Pancer et al. 2000). Social networks can increase access to information, assisting in the self-efficacy of the mother and promotion of more positive perceptions of the child (Lefkovic et al. 2018).

Prabhakar et al. (2017) completed a mix of surveys, open-ended questions, creative tasks and discussion, to explore the support needs and sources of 30 pregnant and 18 postnatal women in the US. Findings suggested the support system required by mothers needed to evolve and adapt at various stages of their mothering journey. Issues arose when expected support did not equate to the support received. Leahy-Warren et al. (2018) suggests support needs to be personalised and aligned with the mothers' own expectations and needs. Chodorow (1989) suggests there is a sense of isolation within the role which means that despite company, the burden of childcare can overpower the mother and she can still feel isolated. Women seek relationships with women in daily work and in the community, however due to industrial capitalisation, they are more physically isolated and mobile. More woman are geographically separated from family, becoming part of the neolocal nuclear family. This can make it difficult to formulate relationships on a routine or daily basis (Chodorow 1989).

Law (2002) and Bar and Jarus (2015) found that creating the right environment to promote comfort and healthy relationships enabled mothers to successfully thrive and feel more life satisfaction, subsequently improving mental health. As Putnam (1993) proposes, individuals thrive on economic stability and prosperity, so it is important to consider the wider societal impacts on each mother from her external environment. Wilcock and Hocking (2015) reinforce the importance of social engagement, with environments of alienation created within changing occupational structures and technologies. Giddens (1991b) also highlighted that the ability to expand geographical lifestyles has caused segregation within communities, reducing social opportunities. This has been increasingly seen for mothers, due to the geographical mobility of modern families (The Social Issues Research Centre 2011). Social alienation can be described as loneliness, powerlessness and purposelessness, which can lead to poor mental health outcomes, often requiring professional support (Wilcock and Hocking 2015). This further suggests human sociability and affiliation impacts not only on the individual but the social structures on a greater collective level (Tzanakis 2013).

Routines are formulated for a sense of security and ontological stability (Giddens 1991a). The routine becomes an unconscious flow of activities that allow the social actor to maintain their position within the social boundaries they have created. Therefore, the context of the activities engaged in is imperative to the success of the social interactions (Giddens 1991a). An example of this may be seen within the context of mothers attending mother-baby/toddler groups. There may be a sense of security in being around individuals at the same stage of life, with similar experiences, to reduce anxieties felt about self-competency (Hanley and Long, 2009; Strange et al., 2016). Giddens (1991a) emphasises the importance of establishing habits and routines to the mothering role, to encourage a relationship between mother and child. This nurturing environment should initiate development of the child's sense of reality, social understanding and 'being' at a time of high anxiety. The mother's role requires the maintenance of responsibility and care for the child and if that the role is not performed sufficiently, there will be input from external services to support and upskill the mother within her role. In severe cases, where the role is not performed safely, the child may be removed from the mother (Creek and Lougher 2008).

Despite the sense of 'becoming' (transcending into the next life stage) during pregnancy (Wilcock and Hocking 2015), the complete transformation of daily routines and demands during motherhood can result in threatened ontological security, with women feeling detached from their lives. This resonates with an ambiguous identity between the pre-motherhood and postnatal self (Horne et al. 2005) and may develop into mental health conditions (Giddens 1991b).

These theorists claim there is a necessity for social actors to maintain a stable self-identity, negotiation of identity within different social environments and the control of interaction, all within the constraints of societal norms. The diverse nature of social engagement can be influenced by the multiple roles a social actor upholds. Major life events, such as the transition to motherhood, will alter the woman's identity. This may be in ways that were unexpected or unprepared for, which can cause difficulties in adapting to the new role. The inability to create a solid self-identity from a successful social environment can impact on the ontological security of the individual and may lead to mental health conditions (Giddens 1991b,a). The theoretical underpinnings of social capital build upon these theories, examining how the accumulation of successful interactions, social connections and life experiences can influence individual values and guide future performances.

2.4 Conceptualising Motherhood Within the Parameters of Feminist Theory

The aim of this thesis is to explore the psychosocial and psychological influences on PND symptomology. Feminist theory examines stereotyped gendered roles, women's experiences, gender inequalities and politics. Motherhood can be affected by all of these factors, which formulate self-identity and self-image within society. Motherhood is mostly viewed as a positive life experience and a goal to aspire to, and this view has persisted as women have become increasingly independent (Delmore-Ko et al. 2000; Kohler 2013; Nelson-Coffey 2018). Kohler (2013) suggests overall, adults of childbearing ages have expectations that a child/children will increase their subjective well-being, and this is especially true of potential first-time parents. Motherhood is generally anticipated with feelings of excitement and happiness by most prospective parents (Harwood et al. 2007).

However, Laney et al. (2015) completed thirty semi-structured interviews with women in the US who identify as Christian and found the reality of the mothering role was different to their expectations. The highlighted challenges were an alteration of physical appearance, sexuality, autonomy and occupations that influence identity structures and require sacrifice (Laney et al. 2015), aspects previously discussed by Ruddick (1995). Similarly, Read et al. (2012) research explored the experiences of 26 women aged 25-44 in Australia, through a mix of semi-structured interviews and focus groups, aptly titled "It was a horrible shock". The findings indicated the women wanted fewer children after experiencing the physical, financial and social changes of their first child, with choice dependent on personal circumstance. Lazarus and Rossouw (2015) received responses from 176 mothers, aged 31-40 in Australia, to their questionnaire exploring the impact of prenatal expectations. Within their study, the mothers with self-expectations that did not equate to the reality of their experience within motherhood had higher depressive scores. The realities of the mothering role can conflict with the idealised mothering role envisioned during pregnancy, which can impact on a mother's mental health and encourage self-stigmatisation, inclusive of blame and guilt (Choi et al. 2005; Laney et al. 2015). Harwood et al. (2007) conducted questionnaires with 71 first-time mothers over the age of 18 in Australia, to explore the realities of motherhood following optimistic expectations. Alongside the considerable lifestyle alterations and sleep deprivation, the disapproval of the new parents' prenatal expectations had a negative effect on the mental health of the participants in this study (Harwood et al. 2007).

Even if prepared, first-time motherhood can create drastic changes to prioritisation, responsibilities and activity engagement, inevitably resulting in the needs of the baby directing daily routines (Horne et al. 2005). Staneva and Wittkowski (2013) found there was an association between sense of agency, managing unpredictability and coping within the mothering role. Some women reported a struggle associated with the role change, feeling overwhelmed by the sudden lack of control over routines (Horne et al. 2005; Bilszta et al. 2011). Additionally, new mothers underestimated the time required to build on abilities to care for and bond with a new baby, alongside re-defining their own identity (Hanley and Long 2006; Staneva and Wittkowski 2013). Soltani et al. (2017) found some new mothers felt uncertainty towards their new role with a lack of prior experience and confidence in how to care for a new-born independently. Mothers require time to adapt to this new role and learn

to care for the child (Oakley 1979). As a result, it has been shown the women who adapt their expectations and reduced self-stigmatisation were less likely to have depressive symptomology (Choi et al. 2005). Prior social experience of assisting with childcare can have a positive influence on the complexity of predicting the mothering role, facilitating the transition to parenthood (Pancer et al. 2000). This may account for mothers with more life experience demonstrating a smoother transition to the new role. The communication with others for sharing of knowledge cannot be underestimated and may promote more complex consideration of the role and assist with the transition (Pancer et al. 2000).

Feminist theories in relation to motherhood have adapted and developed over time, originating from women highlighting male dominance within sociological arguments and the need for inclusion of women's experiences in theory and research (Appelrouth and Edles 2011). Feminist theorists then argued for women to have a choice on whether to engage in motherhood, which developed into an exploration of how mothering is completed (Hockmeyer 1988). There are numerous points of view on societal impacts of male dominance and the need for equality within society between genders around childcare and domestic roles (Oakley 1979; Rich 1984; Appelrouth and Edles 2011). A few prominent feminist authors related to motherhood will be explored in more depth within this section, that refer to the intricacies of the mothering identity formulation and role development, as related to the topics of this research study.

Chodorow (1978) explored how gender identities are formed during childhood, based on observation of caregiver roles and relationship with the child. She suggests a mother-daughter bond is created early in life due to biological gender similarities. These develop into feminine attributes within the daughter of interconnectivity, strong sense of self, empathy and a need for intimate relationships. However, the mother-son bond is more emotionally detached, encouraging independence and subsequent fear of dependent intimacy. A desire for motherhood is an unconscious reflection to replicate the mother role (Chodorow 1978).

Chodorow (1989) and Oakley (1979) explored how women are pre-defined into a sex-gendered role due to biological differences, creating a social and cultural context within which the woman is the main caregiver for the child. The wealth of a society dictates gender roles,

which in turn, have an impact on the expected roles of women. Women are often in a socially isolated environment, under-experienced and without training, expected to perform a twenty-four-hour job without pay or insurance, dependent on alternative sources for income and support (Oakley 1979).

Chodorow's theories have been challenged within feminist literature. Burack (1992) highlighted the theory was not generalisable to different cultures. Hockmeyer (1988) challenges whether Chodorow's theory adds value to the feminist literature, as it does not inspire change within the political and social structures that hold influential power over women's lives. Though feminist theory can be influential in promoting societal change, the considerations of emotional dependency of women and the internal desire for motherhood could be influential psychological factors that impact on maternal mental health. Some research suggests pregnancy can be a contrasting experience for women, with both positive and negative aspects of carrying a child impacting on the overall experience and psychological awareness of the upcoming role can be assistive to maternal mental health (Kohler 2013). Two different studies (a literature review of 33 studies and a qualitative study of 19 primiparous women in Iran) both concluded that promoting a positive experience in pregnancy requires engagement in all aspects, including preparation and acceptance of the new upcoming role. Women found adaptation was less demanding when there was preparation during pregnancy. This was often seen in women who had a planned pregnancy, manifesting as an optimistic outlook, positive attitude towards the pregnancy and purposeful life engagements (Osorio-Castaño et al. 2017; Soltani et al. 2017). Nakamura et al. (2015) longitudinal study of 215 mothers completing questionnaires in Japan concurred that women who experience a positive pregnancy will have higher maternal satisfaction postnatally. This was often seen in mothers of more than one child, due to an existent confidence in their role as a mother from personal experience. Some negative experiences were presented by women who experienced an unexpected pregnancy, uncomfortable physiological changes and those fearful of the physical childbirth experience (Soltani et al. 2017).

Giddens (1991b) discussed how an individual envisions a future trajectory across the lifespan, which is integral within self-identity formulation. Osorio-Castaño et al. (2017) suggested women can prepare during pregnancy with the acquisition of knowledge, preparatory lifestyle

adaptations, preparation for the delivery and sourcing of support systems. This equates to research and observation progressing to role-play and fantasy about the self within the new role (Mercer 2004). This assists in the prior acceptance of behaviour deemed appropriate for the personalised image of themselves performing mothering occupations, inclusive of accomplishments, attributes and attitudes. An ideal sense of self-image is formulated for the mothering role (Mercer 2004). Reflexivity of the self is a continuous and consuming task, practiced through the art of self-observation. The self-efficacy of an individual has a reciprocal relationship with outcomes and can either enhance features of identity or affect ontological security (Giddens 1991b). Additionally, the expectations present for mothers to fit into the role within the predefined social and cultural contexts, correlates with the social capital of the mothers, which will be explored further in Chapter three. The need for change to the social structures of society's perception of mothers was explored by the feminist writers Rich and Oakley.

Rich (1984) claimed the patriarchy of society has established the male as breadwinner and the female for child-rearing. The emotional, psychosocial and physical demands of the mother are understated and hidden from society (Rich 1984). Motherhood is described as one role within the identity of a woman but women should not be defined by their children or lack thereof. Additionally, mothers should not be restricted from social environments or employment prospects due to the societal view of a family unit and its associated roles (Rich 1984). Oakley (1979) explains how the transition in working role from employment to full-time caregiver can be detrimental to the mother's self-concept and self-identity. The changes include working hours and workplace, social environment and income, with a lack of recognition for the labour-intensive role from society (Oakley 1979).

There has been an increase in the number of women aged 16-64 entering paid employment, reaching a high of 72.3% in the UK (Statista 2022b). The Office for National Statistics (2022) explored the rates of employment for caregivers of dependent children between January to March 2022 from the household labour force survey. There were 78.3% of mothers in a couple and 65.9% of lone mothers in paid employment, when children were 18 years and below. This thesis is focused on mothers of children aged 18 months and younger. The statistical data on

mothers with age of youngest child 0-2 years showed 75.3% of mothers in a couple and 40.5% of lone mothers were in paid employment (Office for National Statistics 2022).

Additionally, within the UK, women have the highest level of responsibility for domestic work and childcare, alongside paid employment, even if both parents are using flexible working hours (Payne 2017). Self-efficacy has also been found to have a significant influence on emotional health and career outcomes, with family commitments and role interference increasing the likelihood of resigning from employment (Houle et al. 2009).

Meeussen and Van Laar (2018) completed an online survey with 169 mothers in the UK and US, aged 19-58, with working hours ranging from 30-80 per week. Findings suggested that the intense societal perception of a 'perfect' mother can project into the workplace, with mothers accepting of lower career ambitions and prioritising the family over career progression. It was insinuated that societal pressures place emphasis on the mothering role over the working role and many mothers comply with this. This can negatively influence women's presence in varying levels of power, both within the workplace and in politics, allowing women to become economically dependent on partner and at higher risk of poverty (Meeussen and Van Laar 2018). Burnett et al. (2010) and Chung and Van der Lippe (2020) agree from their literature review findings that associated social assumptions of gender specific division of labour and cultures of work attitudes need adjusting. This is due to the impact of negative employment outcomes for women in parenthood, rather than shared costs of inequality. With Goffman (1963) inferring a close connection between stigmatised persons and mental health conditions, employment stigma could potentially have an influence on the development of depressive symptoms.

Expectations of understanding the mothering role and being immediately defined by this new identity can be challenging (Laney et al. 2015). Hanley and Long (2006) conducted semi-structured interviews with 10 mothers, aged 17-33, in Wales, to explore their experience of PND. Many women in their study resented losing their status, finance and independence when relinquishing the worker role. The exploration of loss of roles seems apt when mothers have notably described the process as grieving the loss of self-image, femininity, independence and career; leading to feelings of resentment and seclusion (Highet et al. 2014).

A mother's lifestyle can often transition from full-time worker to homemaker and mother quickly, with increasing numbers of women having multiple prior responsibilities external to motherhood (Dunbar and Roberts 2006). It is suggested there needs to be time to adjust to the necessary and unavoidable lifestyle changes that the role of motherhood brings (Hanley and Long 2006).

Additionally, Oakley (1979) uncovered the issues surrounding socially assigned gender norms when she explored the first-hand experiences of women in their transition to motherhood and the benefits and/or challenges faced along the journey. In 1975-1976, Oakley conducted four interviews with 66 women expecting their first child at a London hospital, aged between 19-32, with 64% being middle class and 36% working class. She suggests that society places a less important role on the father within the parenting hierarchy and thus, his position is outside of the home. The terminology used within society that the father 'helps' the mother with childcare or domestic tasks implies these tasks are the mother's responsibility foremost. The father merely assists when required and that is all that is expected from the relationship (Oakley 1979, p. 211). Choi et al. (2005) conducted semi-structured interviews with 24 women in the UK, aged 27-45, regarding their experience of motherhood with reference to societal ideology. Many women were seen to accept and independently manage the fatigue, pain and stress following the process of birth, whilst attempting to rapidly learn how to care for their new dependent. There was a strong sense of failure as a mother and as a female, with both identities under threat (Choi et al. 2005), which would negatively impact the ontological security of the woman. Staneva and Wittkowski (2013) explored the beliefs and expectations of motherhood with 10 Bulgarian mothers, aged 28-32 with children aged ≤ 18 months, through semi-structured interviews. They found these mothers' expectations were influenced by societal perceptions of motherhood, feeling the ability to carry out mothering tasks, domestic duties and deal with family emergencies would be effortlessly achievable during pregnancy.

A contributory factor to maternal mental health conditions are the societal expectations within the portrayal of the 'perfect mother' being perpetually content throughout pregnancy and parenthood (Esdaile and Olson 2004; Hanley and Long 2006; Medina and Magnuson 2009). The idealised image of the socially constructed 'mother' revolves around a

heterosexual dual-parent, middle-class family, where the mother holds the responsibilities, putting the child's needs before her own (Medina and Magnuson 2009). The parameters of 'good' and 'bad' mothering remain unperturbed (Choi et al. 2005), despite attempts by feminist authors to revise these out-of-date ideologies (Hockmeyer 1988; Appelrouth and Edles 2011). Women are often unable to attain this unachievable societal set standard within their mothering role (Medina and Magnuson 2009; Meeussen and Van Laar 2018) . The negative impact on a mother's self-efficacy, otherwise described as the belief in self-capabilities, can further reduce confidence and prevent continuation within the role (Edwards and Timmons 2005; Houle et al. 2009; Slootjes et al. 2016). Furthermore, women feel obliged to only portray the positive aspects of motherhood, for fear of judgment or guilt at their performance. This further promotes the image of the 'perfect mother' to the social world and increases feelings of isolation within the role and for future mothers (Choi et al. 2005; Laney et al. 2015; Lazarus and Rossouw 2015). Continuous attempts to attain these intense mothering norms can lead to mothers struggling to minimise parental errors, take complete control of childcare and eventually suffer parental burnout (Meeussen and Van Laar 2018) .

Odenweller et al. (2020) recruited 529 mothers, aged 20-50, in the US for an online survey to understand their perspective on stereotypes of stay-at-home and working mothers. The results uncovered seven stereotypes: (i) overworked, presents with multiple roles that causes observable conflict; (ii) family-orientated, prioritises family needs above her own; (iii) ideal, juggles her responsibilities with observed ease; (iv) hard-working, ambitious and dedicated and attempting to balance; (v) non-traditional, choices benefit herself and her family outside of societal standards; (vi) traditional, life purpose to raise children and keep a home; (vii) lazy, not nurturing or hardworking. Each of these stereotypes are challenged throughout the thesis and will be explored further in chapter eight.

Society implicates the mother as the main caregiver responsible for child growth and survival, with childcare her primary occupation and developmental outcomes a reflection of her parenting skills (Oakley 1979; Esdaile and Olson 2004). Oakley's research found the inability to predict the enormity of the mothering role, the monotony of mothering and the loss of a woman's identity once she becomes a mother was detrimental to a mother's satisfaction. Furthermore, it explored how a child can negatively impact on the dynamics of a relationship,

especially in relation to the socially assigned gender roles that are engrained within thought patterns (Oakley 1979).

The reliance on the mother as the main caregiver influenced Ruddick (1995) to describe the particular attributes involved in the mothering role as maternal workload, that fit in with the other working features of a woman's life. She describes how maternal work is formulated from three demands from both the child and social world: preservation; growth; and social acceptability. This bears a significant weight on maternal thinking and a need to continually reflect on the role. Mothers must make choices on their own responses to the biological child within a social world. For example, the responsibilities of the child around working life or the multiple demands from the varying roles, selecting the role that is in the best interests of the child. If a woman is not engaged in preservative love/protection, nurturance and training, she is not performing maternal work for her child (Ruddick 1995, p. 17). However, Khanna (2009) counter-argued that framing motherhood in this manner diminishes the value and diversity of motherhood into a repetitive social process. The process of child-rearing can be difficult for some mothers and can impact on the ability to provide the three demands that Ruddick describes, which needs consideration within this research.

Once the monotonies of routine set in, resentment can arise with the unequal division of care/chores (Oakley 1979; Gerson and Torres 2015). Delmore-Ko et al. (2000) claims most couples anticipate an equal division of responsibilities for childcare and domestic duties, however the reality is quite different. Expectations, and often realities, of the woman as main caregiver within the family remains salient, with women regularly taking responsibility for domestic and childcare obligations (Delmore-Ko et al. 2000; The Social Issues Research Centre 2011). Oakley (1979) found the division of labour is initiated when a woman terminates her employment prior to the birth and the household chores are naturally assigned to the woman at home as an additional role. Though Gerson and Torres (2015) and Nomaguchi and Milkie (2020) note that although partner contributions have increased, the issues surrounding division of labour in relation to caregiving are still prominent. Furthermore, the mother is expected to manage the underlying cognitive processes involved in rearing a child, such as emotional and time management, which is often overlooked by partners and increases levels of distress (Medina and Magnuson 2009; Nomaguchi and Milkie 2020).

The division of labour is also dependent on the expectations of the woman and for some women, a partner's willingness to complete tasks when requested is an acceptable form of assistance (Oakley 1979). This predisposition of society to associate women with the biological nurturing attributes to perform childcare does discriminate against the father's ability to be more involved in childcare (Oakley 1979; Esdaile and Olson 2004). It is now accepted that it is beneficial to both caregivers and to the child if role assignment and involvement with the infant is shared more equally (Esdaile and Olson 2004).

Realistic expectations and complex thinking about the transition of both parents were identified as a predicting factor in whether the relationship would flourish or dismantle following children (Pancer et al. 2000). As Oakley (1979, p. 232) encapsulates, "The more romantic the vision, the worse the prognosis", positing that an underestimation of the parenting roles will impact on the strength of the parent's relationship. Esdaile and Olson (2004) suggest that current gender ideologies will remain salient until belief systems shift to views of men being capable of nurturing and caring attributes.

Kohler (2013) findings of increased happiness following the birth of a first child led to exploration on why mothers predict additional children will further increase their subjective well-being. In reality, these expectations can fall short upon arrival of the second child and women's well-being is often reduced (Kohler 2013). Mothers of more than one child describe feeling additional pressure on their time, with the further responsibility of existing dependents alongside the care of the baby (Dunbar and Roberts 2006). Kohler (2013) suggests women and men may differ in their perception of parenthood, with women having lower levels of subjective well-being as the number of children increases, due to the majority of responsibilities of raising children resting on the mother. However, sense of agency was positively associated with parenting more than one child, with knowledge of the experience making adaptations to the second child more manageable (Choi et al. 2005).

Feminist theory surrounding motherhood is full of contentions and differing perspectives that make theories difficult to wholly substantiate, especially within an ever-changing society and social world (Appelrouth and Edles 2011). The debates outlined above explored the assumed gender roles that impact on mothers, the levels of expectation and responsibility on women

entering motherhood and the impact of societal structures. The relevance of these sentiments will be discussed throughout this thesis. Arguably, the experience of motherhood is a unique experience for every woman. Overall, happiness and well-being within motherhood is dependent on a combination of factors: marital status; age; personality; and attachment needs (Nelson-Coffey 2018). For the proportion of women that struggle within their new role, it is important to consider their mental health and well-being. As every child is a different experience for the mother and every child has differing behaviours and needs, the addition of each child brings with it a transition to a modified mothering role and needs consideration.

2.5 Societal and Media Stigma Experienced by Mothers

In keeping with critical realist ontology (explored in chapter four), stigma exists mainly through the social world and depends on the environmental and contextual situations the individual finds themselves (Goffman 1963). Social structures can exist on many levels, for example a mother and child; a nuclear family unit; mothers within a wider family unit; a local community of mothers; mothers within a nation; and mothers throughout the world. The level of power a mother has within her social context will impact on the social structures available to her. Mothers can experience multiple episodes in which they are expected to rationalise parenting decisions, which fall outside the boundaries set by society, for example around breastfeeding choices, weaning, sleep routines (Yim et al. 2015; Regan and Brown 2019; Grant et al. 2020).

Any form of unjustified judgement is described as 'stigma' towards an individual that does not conform to the same social expectations within a group. Goffman (1963) perceives this stigma as the undesired differences from anticipated expectations between social actors, with ignorance to similar attributes. This is often demonstrated through rationalised discrimination, attitudes towards inferiority and impertinent terminology use. The formulation of 'shame' is a common theme for individuals that are victim to stigma, succumbing to the failings that others see as evident (Goffman 1963). For example, mothers may self-stigmatise or face judgment from others for returning to work, resulting in feelings of guilt for leaving their child and are thus de-moralised to continue with employment and

surrender their own career aspirations (Edwards and Timmons 2005; Dunbar and Roberts 2006).

Media exerts power through the use of language to shape societal views on groups of people, making it a dangerous tool (McCarthy and McMahon 2008; Bilszta et al. 2011; Grant 2019). Giddens (1991b, p. 27) suggests “the media do not mirror realities but in some part form them”, implying there is a strength and power to media that requires caution. Liechty et al. (2018) conducted a United States (US) study of 50 pregnant and postpartum women, aged 20-40 years were interviewed on their perceptions of media, inclusive of magazines, television and online resources. The women described a lack of realism within depictions of motherhood, with emphasis on the physical appearance of pregnancy or mothers and lacking portrayals of the physical and mental health aspects of daily life. The Social Issues Research Centre (2011) reviewed media portrayals of motherhood from 1950s to 2010 and suggests it has always had the power to subtly infer the failings of a mother, playing on the guilt and societal pressure already felt. However, some positives have been highlighted with the use of online communities to provide advice, support and information, when correctly mediated. This increase in use of social media and accessibility of the internet mean there needs to be navigation from mothers to find online spaces that provide a sense of ‘belonging’ and enhance confidence in the role (Amaro et al. 2019; Moon et al. 2019). Forums, such as Mumsnet, have become increasingly popular and do provide an online platform to discuss some of the challenges of mothering and resist the idealised mothering perception (Pedersen 2016; Matley 2020).

The impact of societal and media stigma is likely contributing to the reduced presentation of women reporting mental health issues. Goffman (1963) proposes that attributes that are negatively perceived and can be maintained as indistinguishable, may be kept hidden to prevent consequential stigma and divide. Choi et al. (2005) found mothers would put on a façade when in public to hide their struggles, making it more difficult for family, friends and health professionals to identify. Stanescu et al. (2018) suggests that PND and other perinatal mental health conditions are commonly under-diagnosed. It is suggested that rather than the one in ten women reported suffering from PND, it is now more accurately estimated at three in ten women but their symptoms are not reported (National Health Service 2011,2018; Royal

College of Psychiatrists 2018). A study that explored the reasons for non-disclosure found mothers faced no continuity of care, were fearful of social services input, or were too fearful to seek assistance due to the stigma associated with mental health, whether from prior pre-conceived discrimination or from real life experiences of stigmatisation (Edwards and Timmons 2005; McCarthy and McMahon 2008; Bilszta et al. 2011; Nagle and Farrelly 2018) . These women fear failure and attempt to perform harder, which leads to burnout, more depressive symptomology and substantiates the 'perfect mother' ideology (Choi et al. 2005; Meeussen and Van Laar 2018; Witcombe-Hayes 2018) .

Stigma has been highlighted within this section as impacting on the mother's occupational choices to conform to the standards set in place by society. These maternal expectations are promoted within the media and these often unrealistic portrayals influence the mothering role and affect the confidence of a mother to care for her child. There is the potential for a reduced number of women seeking help due to the negative stigma associated with current perinatal care provision and appearing not to cope within the mothering role. Despite these negativities, there are positive aspects of online communities that provide education and support that can be beneficial to a mother settling into her new role.

2.6 Conclusion

This chapter has explored the setup of the social world and the development of ontological security and self-identity in relation to motherhood. Feminist theories posed questions surrounding the enormity of the mothering role, the unjustified assumptions of prior knowledge of the role and the expectations from society. The mothering role itself brings alterations to routines that can be unexpected and impact on pre-existent identities. Social support was discussed as assisting mothers with emotional and informational support, especially within peer groups. The family dynamics will understandably change following the birth of a child and there needs to be negotiation of roles and fair division of labour to ensure both caregivers retain pre-parental identities. Some mothers have been subjected to stigma from society but also self-stigmatisation was raised as an issue surrounding mental health conditions. All of these factors can have a positive or negative impact on maternal mental health. There remains a gap within the current research that explores the impact on a mothers' mental health from the varying composites of a mother's social world and

occupational engagement. The following chapter will examine the concepts of social capital and occupational balance, which are the focus of this thesis and the contribution of this research.

3 Chapter Three: Social Capital, Occupational Balance and the Relationship with Motherhood

3.1 Introduction

This chapter will examine the two key theoretical concepts under investigation within this thesis, social capital and occupational balance and will discuss how these are related to motherhood. The chapter will begin by considering the surrounding theory and research on the defining attributes and nature of the concept, how these influence self-identity and social integration. The chapter will then provide an insight into the profession of occupational therapy, inclusive of occupational science, which examines the theory behind the profession. An occupational therapy model of practice will be introduced to illustrate how practice is structured for assessment and intervention plans. The concept of occupational balance will then be described and how this can impact on well-being and quality of life. An understanding of the social and systematic obligations a mother feels will impact on the occupational choices made with regards to her and her child's daily routines and actions.

Epidemiological evidence of previously trialled interventions will be explored in relation to the associations between motherhood, depressive symptomology, and occupational therapy, occupational balance and social capital. The exploration of the current research and literature surrounding these concepts will provide an insight into areas in need of further investigation. The chapter will conclude with the identification of a research gap, to which this research study aims to provide new knowledge. The research questions will be briefly highlighted with an outline of where in the thesis the results are presented to answer these.

3.1.1 Database Searches and Included Articles

To explore the empirical evidence available, the databases searched included: OVID, inclusive of MEDLINE, PsycINFO, Embase and AMED; ProQuest, including ASSIA; EBSCO, inclusive of CINAHL and APA PsycInfo; and OT Seeker. Initial searches were conducted in October 2018 up until the final searches in October 2022. Key word searches included combinations of vocabulary for the topics of interest in an attempt to capture all relevant research. Additionally, Medical Subject Headings (MeSH) were utilised in databases that allowed for this, which increases the precision and efficiency of the search by looking at the content rather than text within the databases. For PND, the key terms within the search were

“postnatal depression OR postpartum depression OR maternal health OR PND OR PPD OR post-natal depression”. To capture occupational balance, the terms “occupa* OR active* OR balance*” were used and for social capital, “social support OR social capital OR support OR social networks OR relationships” were inputted. For relevance to motherhood, the search terms were “moth* OR primipara”. PND was searched and checked independently, whilst occupational balance and social capital were searched alongside both the mother and/or PND search to ensure relevance to the topic area. Further exploration of relevant articles was completed through backward chaining via citations and reference lists. Articles that were in the English language, from high-income countries and preferably related to mothers of young children were considered within the inclusion criteria for further exploration. Inclusion of articles was dependent upon relevance to the concepts under investigation within this thesis and a required relationship with motherhood. For example, interventions surrounding social capital of mothers were included, whilst postnatal medical interventions were excluded.

3.2 Theoretical Underpinnings of Social Capital and the Relevance to Motherhood

When consideration is given to the general concept of capital as being an investment with a return, social capital within its own right suggests a personal gain from social connections. The investment the individual makes from putting effort into forming social connections is associated with a personal gain, such as informal education, group belonging and identity (Lin 2001; Field 2003). Mothers’ social connections arise from group engagement, peer support (face-to-face and virtual) and family network.

The concept of capital as an entity was identified in Marx’s theory of capitalism, an interpretation of the inequalities of class formed around labour relations (Lin 2001). Subsequent deliberations have explored the concept within wider discussions on social structure and agency (Lin 2001; Tzanakis 2013). This initiated the development of social capital theory, originally between three authors: Bourdieu, Coleman, and Putnam (Adam and Rončević 2003; Field 2003; Tzanakis 2013). All three authors consider the benefits of social structure and networks on an individual’s position within society but have differing positions on the central meaning and therefore application of this terminology (Adam and Rončević 2003).

3.2.1 Bourdieu's Theories Surrounding Social Capital

Bourdieu (1986) shared Marx's concern around economic power dynamics, while deliberating on the necessity of social capital within society to form social connections and personal experiences. Bourdieu developed an understanding of social capital as group memberships, either through necessity (family) or voluntarily (peers), that will develop and characterise the personality of the mother. This defines social capital as the material and symbolic exchanges mothers may encounter. Relationships can be built from these exchanges, which expands social networks and create social capital for the mother (Bourdieu 1986). Bourdieu recognised the benefits of any group membership are dependent on unity and cohesion between members. As previously highlighted, stigma surrounding maternal mental health conditions can have an impact on feelings of membership with peers and/or society.

Bourdieu (1990) proposes that idealised social capital bases itself upon an equal and proportionate level of reciprocity between individuals but acknowledges that within society this is not often achieved. For mothers, idealised social capital would include advice, emotional support and physical support with childcare. However, an inability of group members to trust one another in fear of non-reciprocity restricts access to any acquired social capital benefits, leading to increased risk of social isolation increasing the burden of the mothering role (Bourdieu 1990). Trust is the most influential factor on the formation of social ties, a concept explored by Coleman.

3.2.2 Coleman's Theories Surrounding Social Capital

Coleman (1988) claims that individuals engage in social situations for their own benefit, describing social capital as the value assigned to resources available, concurring that accruing social capital requires reciprocal trust. He viewed the retention of social networks as dependent on the profits from the connection to the individual and will therefore adapt and develop over time. Mothers often find their friendship groups will alter and peer support becomes more important to manage the mothering role.

Coleman suggested there are both advantages and disadvantages to social capital. Benefits include social engagement and acceptance, both to the individual and society, as a result of successful interactions. Field (2003) supports the contemplation that socialisation may be

beneficial to the individual but detrimental to other members of society. For example, networking between individuals forming a group with bullying behaviour, seen with conflict arising around differing parenting styles.

Due to the nature of social capital as a resource, Coleman (1988) felt the fundamental aspects of accretion occurred throughout childhood. The education provided by the caregiver will teach the child to expand their social capital and overall development. Mothers who experience PND are seen to have a reduced emotional connection with their child, affecting child development and the child's interaction with others (Righetti-Veltema et al. 2003; Tsivos et al. 2015). Giddens (1991b) claims that socialisation is achieved via the use of universal language and social cues that are memorised over time. This is how meaning is created for humans and impacts on identity formation. This formulation of a child's personality and the development of social identity is also seen by Tzanakis (2013) in his review of social capital theories, viewing this to be imperative to the creation of healthy social relationships and networks. Putnam was keen to explore the concept of societal engagement as the basis of his theories.

3.2.3 Putnam's Theories Surrounding Social Capital

Putnam (1993) suggests the success of civic society is dependent on the societal norms of cooperation and engagement of citizens. He describes social capital as inherently different to other forms of capital, with an increase in use being good for the individual. Social capital is lost if not utilised, with the importance of this asset often undervalued and underutilised. Poor social capital can lead to social isolation, impacting on maternal mental health if there are limited opportunities to build support networks. Trust is again highlighted as required for the growth of social capital, stating 'Trust lubricates cooperation...Cooperation itself breeds trust' (Putnam 1993, p. 171). Dekker and Uslaner (2001) suggest that individuals tend to build relationships around shared interests, values and beliefs, struggling to negotiate trust with individuals outside of these boundaries. A fear of non-reciprocity may impact upon the types of social connections established. This can be a determining factor in mothers asking for support and relieving some of the burdens of the mothering role (Choi et al. 2005).

Similarly, civic engagement was seen as influential by Dekker and Uslaner (2001) when related to happiness with life. The wider social connections gained from community participation can expand the available resources and reduce the burden and stress of everyday life. Mothers can benefit from emotional and physical support with childcare from group engagement and peer support due to community engagement. It is suggested that a successful balance of social capital has the potential to positively influence educational attainment, health and well-being, economic growth and reductions in crime (Field 2003). Poortinga (2006) reported the results of the European Social Survey, which suggested there is a need to explore if social trust and civic participation could be adjusted through healthcare intervention. The suggestion that wider societal influence could improve health outcomes needs to be considered in relation to motherhood within this study. For example, knowledge of community resources and support.

3.2.4 Summary of Social Capital Theory

Social capital appears to be conceived as how the individual understands relationships, societal norms, expectations, and personal values influenced by prior experience and group involvement. The combination of these aspects becomes beneficial to both the individual and larger community through generalised reciprocity. Giddens (1991b) elucidates this will rely on previous experiences and feelings of security, which direct everyday choices. Trust is therefore fundamental in the development of personality and self-identity, a theme recurrent throughout this thesis. These aspects of social capital will be considered within this research project as the basic definition.

Social capital is considered to have an influence over the occupational choices and engagements of individuals. The second concept of exploration within this research is occupational balance, which is used by occupational therapists as a subjective measure to assess well-being and quality of life. The next section will explore the underpinning theories of occupational therapy as a profession. It will also consider how the practice of occupational therapy can assist individuals for improved mental and physical health. A model of practice will be introduced to provide insight into the holistic approach of occupational therapy before introducing the concept of occupational balance.

3.3 The Theory and Practice of Occupational Therapy in Relation to Motherhood

Occupational therapy is a client-centred health profession concerned with promoting health and well-being through occupations. Occupations refer to the everyday grouping of activities that people do as individuals, in families and with communities, to occupy time and bring meaning and purpose to life and support civic participation (Creek and Lougher 2008; World Federation of Occupational Therapists 2012; Wilcock and Hocking 2015). Occupations are the culmination of a series of activities that provide sociocultural and personal meaning. Activities are made up of a series of structured tasks that accomplish the completion of an activity (Creek and Lougher 2008). For example, the occupation of mothering is made up of activities, such as feeding the baby, which is made up of tasks, such as locating bottle, preparing formula, heating formula and so forth. Occupations are the underpinnings of an individual's self-identity, social identity and promotes social inclusion, which as discussed, creates life purpose (Creek and Lougher 2008). Creek and Lougher (2008) explore how these occupations have pre-determined social structures and can be organised into the categories of self-care, leisure or productivity (sense of achievement). Physical disabilities or mental health conditions can hinder occupational participation, performance and expectations, which can impact upon quality of life and life satisfaction (Creek and Lougher 2008; Wilcock and Hocking 2015).

The primary goal of occupational therapy is to enable every person to participate in his or her own activities of daily living as independently as possible by modifying the activities, process or environment (Creek and Lougher 2008; World Federation of Occupational Therapists 2012; Wilcock and Hocking 2015). This is accomplished by using everyday activities as part of rehabilitation, via active participation, occupational adaptations and coping strategies (Royal College of Occupational Therapists 2017). OTs use a variety of conceptual models of practice for assessing an individual's strengths, challenges and needs within their daily life. These models provide a structured framework to capture the intricacies of each individual's life composition (Turpin and Iwama 2010). OTs can thus focus holistic interventions around an individual, inclusive of role transitioning, time management and social engagement (Slootjes et al. 2016). Thus, OTs are equipped to provide effective interventions and support throughout the life-course, with motherhood a key transition that could benefit from OT involvement. Currently, postnatal specific mental health support from OTs is sparse but there

is increasing interest within the profession to develop OT services within specialist perinatal teams. The holistic view that OTs would use with each mother is demonstrated in Figure 1, illustrating the different aspects of occupational therapy consideration for assessment and intervention.

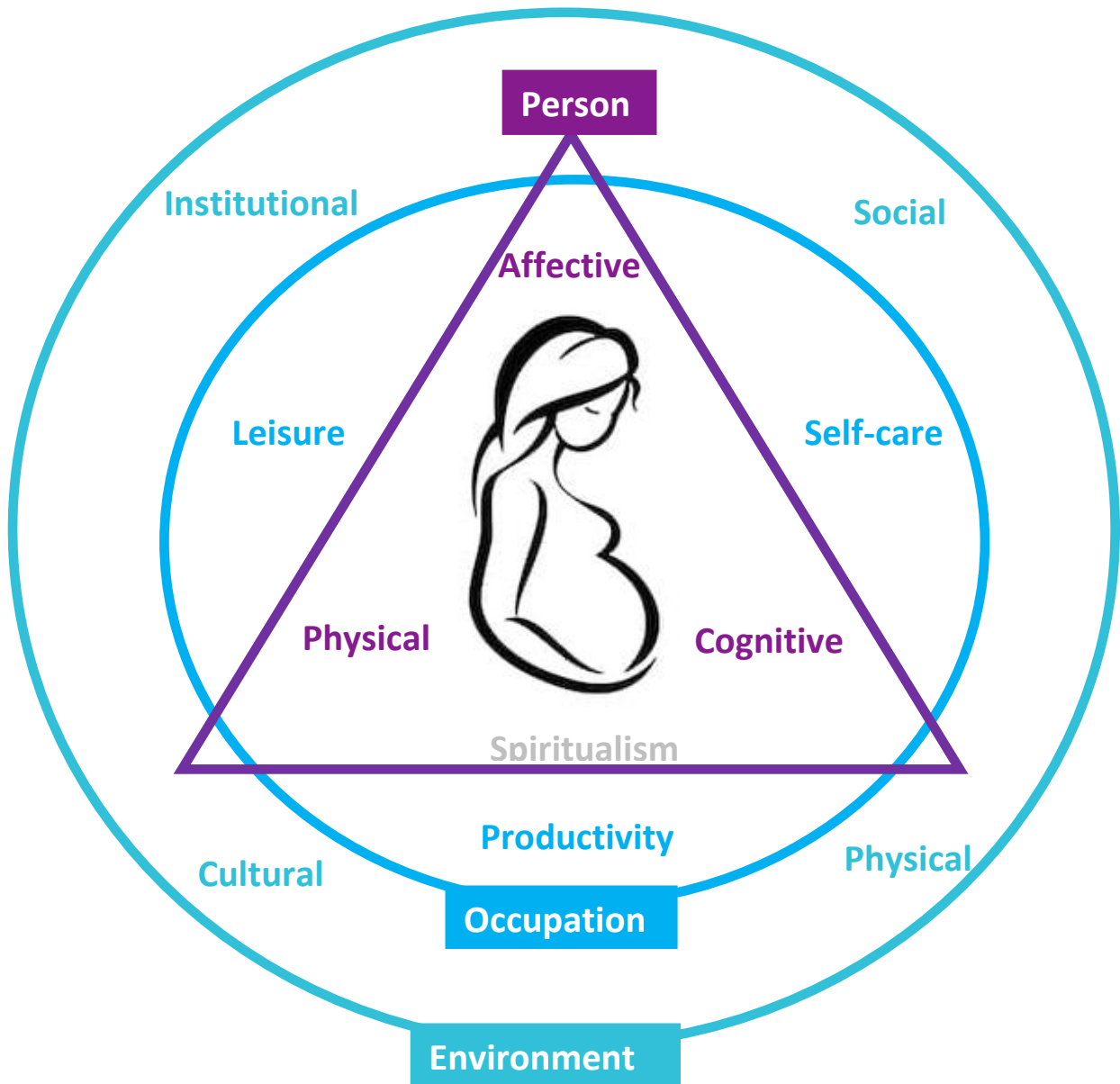


Figure 1: Adapted from the Canadian Model of Occupational Performance (Townsend and Polatajko 2007).

3.3.1 Occupational Science: The Theory Behind the Profession

Occupational science is the study of the human as an occupational being with the capacity and evolutionary need to engage in and coordinate occupations within differing environments, over the life course (Clark et al. 1991; Kristensen and Petersen 2016). Alongside the physical and cognitive abilities to perform occupations, the complex interactions of motivators, moral standpoints, psychosocial aspects and sociocultural influences require examination (Clark et al. 1991). One purpose of occupational science is to examine the connections between occupational engagement and well-being, physical and mental health and human development. The process of identity formulation is reliant on the occupational choices and participation of the individual, with success in a variety of occupations leading to increased self-esteem and self-worth (Crouch and Alers 2014). This can be used to provide clinical reasoning and promote occupationally focused interventions, with understanding surrounding the impact of individual and cultural contexts (Kristensen and Petersen 2016). One of the most influential dimensions of occupational science study was exploration of the complexity of occupation through doing, being, becoming and belonging (Gallagher et al. 2015).

3.3.2 Doing, Being, Becoming, Belonging

Due to the complexity of encapsulating the features of occupation, Wilcock and Hocking (2015) define occupation into four terms: 'doing'; 'being'; 'becoming'; and 'belonging'. 'Doing' refers to the active participation in any activity within the daily life of an individual, for example, the daily tasks of childcare for a mother. This participation is precluded by occupational choices, which are culminations of choices adapted over time to determine the occupations that are meaningful and achievable (Creek and Lougher 2008). These choices are influenced by preference, sense of accomplishment, collective agreement, personal values, prior experience, capabilities, environment and societal expectation/norms (Wilcock and Hocking 2015). This notion of 'doing' created the foundation for occupational science, providing the contextual background of occupational choices (Creek and Lougher 2008). The term 'being' is personal to the individual and requires self-contemplation and reflection, either individually or as part of a social group. For mothers, this may include self-care, peer support or meaningful group engagement. The time is used during 'being' to understand the motivations for 'doing' and plan to 'do', which is usually achieved in the absence of internal

conflict (Hitch et al. 2014; Wilcock and Hocking 2015). 'Belonging' is imperative to humans, who are social beings that form connections with others to feel an acceptance of self within the world, security and satisfaction. For mothers, this may take the form of peer acceptance and shared parental values. Finally, 'becoming' is the ability to change, adapt and develop towards self-actualisation. The transformation occurs across the lifespan and is dependent on the physical, mental and psychosocial factors that encourage aspirational goals, challenges and achievement (Hitch et al. 2014; Wilcock and Hocking 2015). The transition to motherhood itself can be a time for 'becoming', though as this thesis aims to attest, there can also be unforeseen challenges for some mothers.

Wilcock and Hocking (2015) describe how these four terms are interconnected with well-being and are underpinned by occupations. Physical health and well-being involve 'doing' and 'becoming', inclusive of: a balance of productivity and leisure occupations; enjoyable, regular physical activity; adequate rest and sleep; healthy food choices; and social motivation. Mental health and well-being incorporate 'being' and 'becoming', comprising of: healthy balance of time to self and being social; aspirational goals; appropriate cognitive stimulation; social acceptance; and meaningful activity. Lastly, social health and well-being includes 'belonging' and 'becoming' and encompasses: social support networks; social standing; relationships built on shared values and purpose; and acceptable living and working environments and economic conditions. One of the challenges of motherhood can be the time available to participate in activities that satisfy feelings of well-being and the four aspects of occupation are not always achieved, which can impact negatively on mental health. However, definitions of well-being are debateable within and external to occupational science, as discussed in this next section.

3.3.3 Well-being

The topic of 'well-being' is used regularly within health and social literature, and there is an interest in the relationship between well-being and health outcomes (Bryant et al. 2014). Multiple definitions exist for the term well-being, with a multitude of key words and phrases used by various authors to best describe the concept (Wilcock and Hocking 2015). For example, Yazdani et al. (2018, p. 293), defines well-being as "being in a positive state of mind with a positive outlook on life, appreciating life, social connection and happiness". Similarly, Creek and Lougher (2008) describe well-being as a subjective experience that is individualised

and results in feelings of contentment, health and comfort. Whilst Wilcock and Hocking (2015) further elaborate that well-being is a complex, individual experience that is made of physical, mental and social interlinked elements, that cannot subsist interdependently and are reliant on meaningful occupational choice. Anaby et al. (2010) suggests subjective well-being is associated with occupational balance and occupations should align with the values of the individual, be structured, supported by others and promote a sense of accomplishment.

A literature review of 14 papers found the well-being of mothers needs to consider the physical, psychological, social, spiritual, financial and environmental factors of her life (Allan et al. 2013). The ability to be self-reflective impacts on the well-being of the mother. The transition to motherhood can impact on well-being and the ability to adapt to the changes will be reliant on the socio-cultural life dimensions and self-evaluations. Feelings of empowerment and self-fulfilment can promote positive well-being (Allan et al. 2013). Additional impacts on well-being for mothers was seen with the specific pandemic-related factors of restrictive government imposed measures, highlighted by the responses of 575 Italian mothers from an online self-report questionnaire (Molgora and Accordini 2020). These findings suggested the pandemic was more challenging for mothers of more than one child, which may have been due to the closure of schools during this time.

3.3.4 Kielhofner's Model of Human Occupation

Occupational therapy has multiple models of practice that are used to guide practical assessment and intervention, seen in Figure 1 adapted from the Canadian Model of Occupational Performance. The Model of Human Occupation (MOHO) examines the motivational drivers behind occupational behaviour and the development of habits/routines influenced by skills and subjective prior experience (Kielhofner 2008). This model of practice is often used within OT practice with perinatal populations (Graham 2020). These aspects of the model echo the theories of Giddens and Goffman, whilst capturing the critical realism ontology and epistemology underpinning this research, explored further in chapter four. Therefore, the MOHO model will be used within this research study.

The model consists of three main concepts that make up human occupation: volition, habituation and performance capacity. These concepts cover the choice, organisation and

performance skills surrounding occupational engagement (Turpin and Iwama 2010). The environment will provide contextual background to the occupational performance choices and the ability to be reflexive and change future actions is considered a major underlying foundation for human occupational behaviour (Kielhofner 2008).

Firstly, volition refers to the human need to participate in occupations, the drive for action. This results from self-identity influencing occupational engagement. Volition is made up of three components: personal causation; values; and interests. Personal causation uncovers the sense of personal capacity of the individual to perform an occupation and the self-efficacy to exercise self-control and trust these capacities could successfully achieve the occupational performance. For mothers, this is the self-confidence that they can effectively complete the tasks required in childcare. Values comprise of the cultural and societal convictions and obligations that underpin occupational behaviour. As discussed, for mothers this is the influence of personal perceptions of societal expectation and norms. Interests are the unique collection of occupations that are enjoyable or satisfying for the individual, which may include co-occupations of mother and child activities within motherhood (Kielhofner 2008; Turpin and Iwama 2010).

Habituation consists of two concepts, habits and roles, that reflect consistent, repetitive patterns of occupational behaviour, influenced by roles and the subsequent temporal, physical and social environments. Habits are patterns of behaviour that are performed so consistently and regularly that they become almost unconsciously performed, reliant on familiar environments. The occupation of mothering will naturally formulate habits in relation to caring for the basic needs of the child. This routine behaviour is influenced by the roles being acted out within the social world. The roles which social actors assume combine to create a sense of self and identity, which is dynamic and adapts temporally throughout the life course. The role of mother is seen to often become the dominant role for women in this life stage (Kielhofner 2008; Turpin and Iwama 2010).

Finally, performance capacity is formulated from the physical and mental components required for engagement in occupations, alongside the prior experiences of the individual surrounding the proposed occupational behaviour. This is depicted as the objective

components of performance capacity alongside a subjective viewpoint. This will relate to the mother's physical capacity to successfully engage in the mothering role and the personal perceptions of that role engagement. This is often an area in which mothers with PND face challenges in their perception of their own daily life experiences (Kielhofner 2008; Turpin and Iwama 2010).

MOHO will provide the framework for this research study due to its comprehensive exploration of the motivational behaviours behind occupational choices, alongside the subjective experience of occupational engagement. MOHO will be re-examined and applied to the results of this research study within chapter nine, to provide a succinct, structured and informative illustration of the benefits of occupational therapy within perinatal mental health service provision.

As highlighted within the descriptors of occupational therapy theory and practice, in order to ensure interventions are beneficial, they need to be centred around the requirements and desires of the individual. This requires consideration and compliance with: unique interests; self-identity and roles; personal values and goals; choice and control; and sense of appropriate levels of ability (Kielhofner 2008). These aspects have been previously discussed within the exploration of ontological security, self-identity formulation and the concept of social capital. Occupational competence is the successful application of these concepts into an occupational performance that is maintained (Kielhofner 2008).

As occupational therapy revolves around the occupational engagements that form the roots of each individual, a key concept for consideration is the balance of these activities to promote mental health and well-being (Wilcock and Hocking 2015).

3.4 Theoretical Underpinnings of Occupational Balance and the Relevance to Motherhood

There is an underlying depth to activity engagement, consisting of the relationships between the person, their environment and their meaningful occupations (Royal College of Occupational Therapists 2017). Occupational choices are made by individuals to create daily routines and fulfil their time. These choices adapt over the lifespan, determined by personal

interest, skills, expectations, socioeconomic circumstance, life stage, and physical and social environment (Bryant et al. 2014). Mothers have been reported to minimise their own self-care and leisure needs and prioritise the child's needs (Wheatley 2017). Creek and Lougher (2008) suggests a healthy balance incorporates social, physical and mental occupations to develop and enhance competence within each area. There is an importance placed on activity participation, within which an individual can develop skills, social connections, competencies and find purpose and meaning to life. To achieve meaningful participation, the occupational engagement needs to encompass individual choice, an appropriate level of challenge, leading to a sense of mastery within a supportive environment. These concepts are dynamic throughout the life course, especially prevalent during times of life transition, such as pregnancy and motherhood (Law 2002; Bryant et al. 2014; Yazdani et al. 2018). Wilcock and Hocking (2015) further explore the need for satisfactory time allocation to occupations, with the opportunity for engagement to be consistent and sustainable.

A poor balance of occupations, or occupational imbalance can lead to stress-related symptoms and ill health (Borgh et al. 2018). Occupational imbalance can occur if an individual focuses too much on one occupational area, neglecting the others or have restricted access to occupations that fill time and fulfil role demands (Bryant et al. 2014). Mothers are at increasing risk of occupational imbalance due to the roles of childcare, division of labour and employment (Choi et al. 2005; Wheatley 2017; Dickson 2020). Additionally, there are aspects outside of the control of an individual that restrict access to occupations and can impact on mental health. Occupational disruption is the short-term restricted access to occupational engagement; occupational deprivation is the prolonged long-term equivalent (Townsend and Polatajko 2007; Bryant et al. 2014). Occupational alienation can occur if the occupational engagement is perceived as meaningless or unfulfilling and results in feelings of powerlessness and monotony, which can negatively impact self-identity (Townsend and Polatajko 2007; Bryant et al. 2014). Mothers are at risk of occupational imbalance, disruption, deprivation or alienation due to multiple factors, including geographical mobility, employment flexibility or financial constraints.

Wilcock and Hocking (2015) claim that changes to occupational engagement can be beneficial to health but are often overlooked. All physical and mental capacities need to be exercised

within everyday life to enable an individual to thrive. If these abilities are used exhaustively, the resultant fatigue/pressure can make an individual vulnerable to illness. Alternatively, if capabilities are disregarded and not challenged, for example, full-time mothering, this can cause physical weakness or mental under-stimulation, resulting in mental health conditions and declines in physical health, which ultimately impacts ontological security (Wilcock and Hocking 2015).

Additionally, it is advised that exploration and consideration of external impact should be included when assessing occupational balance (Wagman and Håkansson 2018; Yazdani et al. 2018). This is awareness of the surrounding individuals (for example, partners of mothers with PND) when occupational adjustments are made to promote a balance for the individual under investigation. This can have an impact on the occupational engagement and balance of the other individual, via their interpersonal connections and relationships. For example, if a mother with PND is unable to complete childcare tasks due to their illness, it is reasonable to assume that the partner will take on these duties. This will likely result in the partner experiencing occupational imbalance themselves (Wagman and Håkansson 2018; Yazdani et al. 2018).

Wagman et al. (2015) claim occupational balance is continuously being redefined and conceptualised within occupational therapy literature, creating ambiguity around the terminology and its measurement. This has caused uncertainty around the exploration of occupational balance as a concept, as it requires an assortment of individualised subjective descriptions influenced by culture, values and norms (Backman 2004; Borgh et al. 2018). Wagman and Håkansson (2018) observe the complexity of the phenomenon of occupational balance is inclusive of four aspects: individual needs are met; interaction and effect of occupations; time management of occupations; and the personal satisfaction with occupational engagement. All of these considerations should improve the life satisfaction and well-being of the individual. These four aspects, as described by Wagman and Håkansson (2018), were used within this research as a concise definition of occupational balance.

With the claims that subjective well-being is influenced by occupational engagement and balance, these aspects are not always fully within an individual's control. Opportunities to

develop; communication and interaction skills; social structure and attitudes; interpersonal relationships; and support networks will all impact on the ability to achieve such balance within daily life (Kielhofner 2008; Wilcock and Hocking 2015).

3.5 Epidemiological Evidence of the Involvement of Occupational Therapy Within the Perinatal Period in the United Kingdom and Worldwide

The Royal College of Psychiatrists (2015) recommend OTs are employed within all mother and baby units, as well as the community mental health teams in England. The role includes assessing and assisting with activities of daily living, by organising individual and group activities with the baby (Royal College of Psychiatrists 2015). However, there is limited empirical research to provide evidence of the impact of OTs on intervention outcomes within these settings in the UK and this guidance is restricted to England. Furthermore, there are no recommendations for occupational therapy involvement with mothers during the postnatal period, regardless of mental health status. This is despite research that suggests a screening process would be beneficial to include OTs within education during the perinatal period for all transitioning roles (Horne et al. 2005; George 2011; Acharya 2014; Slootjes et al. 2016). The Royal College of Occupational Therapists (2017) provide guidelines on occupational therapy services throughout the UK, within all neonatal care settings for both mother and child, but this is a very specialist area and the guidelines do not extend beyond this role. No further guidance is provided for OTs for working with perinatal women.

The requirement for occupational therapy involvement has been identified worldwide, with recommendations of intervention opportunities from varying researchers. Within the UK, Sepulveda (2019) suggest paediatric OTs are in a position to screen for maternal mental health disorders and should be equipped to provide support and care, liaising with community services. Canadian research suggests there is scope for occupational therapy interventions for treatment of PND, inclusive of group sessions, ergonomics, psychoeducation and activity scheduling (Barbic et al. 2021). Research from the US by George (2011) suggested the potential benefits of occupational therapy input with mothers can incorporate patient education, facilitation of social support through guided participation, identifying and utilising strengths and teaching coping mechanisms. Pizur-Barnekow and Erickson (2011), also presented research from the US and examined the need for occupational therapy for mothers

who have experienced a traumatic birth, experiencing a reduced bond with the child and difficulties within the mothering role. They promote the design of appropriate interventions that address the occupation of mothering and mother-child bonds. Co-occupation for managing routines and responsibilities was also suggested by Brittz (2019) as an occupational therapy specific intervention within her thesis, in the US. Barlow and Sepulveda (2020) concurs with the provision of a US case study of a mother giving birth during the global pandemic and how the paediatric OT was able to provide successful interventions for both mother and baby. Australian research by Sloodtjes et al. (2016) promoted occupational therapy to assist in the personal transition, teaching additional perinatal occupations, with consideration to the individual environments of each mother. This was further explored by an Indian paper (Acharya 2014) that presented the importance of occupational therapy within the mothering transition period, to develop mothering competencies and enhance mothering skills prior to the birth. This will support the mother to be prepared and able to remain safely within the home environment with the baby postnatally. A study in Israel (Bar and Jarus 2015) highlighted the importance of OTs to promote supportive social, physical and stimulating environments to positively affect mental health and well-being.

These studies promote OTs involvement in antenatal and postnatal education, the transition to motherhood and assisting mothers with mental health conditions. However, there remains limited research into the occupational therapy role within perinatal settings for maternal mental health. Current UK research explores the potential to expand paediatric roles to incorporate maternal mental health. There are training opportunities becoming available for UK based OTs working within perinatal mental health services (Royal College of Occupational Therapists 2020). However, there needs to be a better understanding of PND within the mothering population to identify the mother's needs and to inform successful intervention strategies for healthcare professionals.

3.6 Conclusion

It stands to reason there will continue to be debate amongst scholars on the ambiguity of terminology and definition of both social capital and occupational balance. It is therefore consequential to highlight these debates prior to exploring research within this area and apply caution and context during interpretation and application (Adam and Rončević 2003) . The

presentation of the occupational therapy profession and associated theory and model of practice has provided an insight into the type of assessment and intervention areas that may occur within practice.

With the understanding that motherhood is a time of transition and multiple roles/identities, some mothers may develop depressive symptoms and struggle to effectively continue within their obligated roles. Occupational engagement and the ability to balance these can influence health and well-being outcomes, which in turn is influenced by social capital in the forms of trust, identity formation and interpersonal relationships. Developing a better understanding of the issues surrounding social capital and occupational balance is key to ensuring the role of OT within perinatal services is better understood. This could inform the development of effective interventions for OTs to implement, ensuring they are targeted to the needs of mothers. To gather this information, a mixed methods approach was adopted and chapter four discusses reasons behind the methods chosen and the specific purpose of this research.

3.7 Research Gap Surrounding Social Capital and Occupational Balance Related to Maternal Mental Health Conditions

It has been highlighted that social capital and occupational balance are both impacted by motherhood, which may affect maternal mental health and well-being. This is further complicated by mothers who experience depressive symptoms postnatally, impacting on their performance in the role of mother and occupational engagements. Currently there is limited research surrounding the complex elements of social capital and occupational balance that may have an influence on PND symptoms. This can therefore limit the potential input from OTs to design interventions for both preventative and recovery models for mothers.

Thus, the purpose of this research was to identify the daily occupations that new mothers engage in, how these are balanced within daily routines, the social capital built up from life experience, personal values and societal norms and expectations and whether there was an association with postnatal depressive symptomology. Additionally, the influences of social capital on occupational engagement and attitudes were considered, alongside the social support networks in place.

This study was focused on the following research questions:

Research Question 1: How can social capital and differences in daily occupational engagement and balance help us to better understand postnatal depression?

Research Question 2: Which elements of social capital and occupational choice influence the sense of self and postnatal depressive symptoms?

Research Question 3: How can social capital, occupational choice and occupational balance influence occupational therapy interventions?

The first research question will examine personal social capital, the type of occupations completed and the balance of self-care, productivity, leisure and rest for these mothers. It then explores how these may influence postnatal depressive symptomology. The second research question considers how identity is altered during motherhood, in relation to these aspects of social capital and occupational choice and whether these influence PND symptoms. The final research question will assist in exploring how these concepts can assist in the development of occupational therapy service provision. The next chapter will discuss the methods that were used and ethical issues considered to examine these research questions.

4 Chapter Four: The Research Design Used to Explore the Relationship Between social Capital and Occupational Balance with EPDS Score

4.1 Introduction

This chapter will explore the philosophical underpinnings of the research study and justify why a critical realist lens has been adopted. Then the chapter will discuss the mixed methods design, with justifications around choices made for each method. Finally, there will be an exploration of the ethical implications of the research study and how mitigation strategies were sought to minimise potential impacts.

4.2 The Ontological and Epistemological Approach of Critical Realism

Within social science, there are two 'traditional' perspectives that underpin the conceptualisation of research. As critical realism pertains to aspects from both perspectives, a brief explanation will be provided as contextual background to the ontology that is pertinent to this research study and further justification for the approach applied.

The origins of the concept of 'positivism' is often attributed to Auguste Comte, who believed social research was only possible through empirical observation (Ryan 2018). Positivism encompasses repetition of observation that derives the same outcome consistently, to produce laws for phenomena existence. It suggests researchers' perceptions are redundant to the scientific outputs of objective exploration of relationships between events (Lewis-Beck et al. 2004; Ryan 2018). Criticism has been raised that research is inevitably influenced by researcher involvement itself and subjective experience is dismissed in outputs (Lewis-Beck et al. 2004; Pham 2018). Within this research study, an association between variables was explored, however, to explore the mechanisms behind a mothers personal and social experiences is challenging through objective examination alone.

Contrastingly, interpretivism mainly developed through the works of Max Weber and Alfred Shutz, to explore social interpretation as the basis for understanding phenomena. The notion was that rather than a singular shared reality, there are multiple realities influenced by social context and construction, thus research is reliant on research interpretation (Lewis-Beck et al. 2004; Ryan 2018). Critiques surround the disregard of societal power and agency that

impact social experience and the in-depth nature of the research can create bias and reduced generalisability to differing contexts (Lewis-Beck et al. 2004; Pham 2018). The ideals of interpretivism do not fully consider influences of societal expectations, socioeconomic status, and political decisions that could impact on motherhood and mental health care for mother and baby. These factors are paramount to answer the research questions within this study.

“Broadly speaking, critical realism enables us to bridge the objectivism–relativism chasm between classical positivism and liberal interpretivism”
(Bygstad et al. 2016, p. 83)

Critical realism incorporates both natural and human social sciences, with an interest in the mechanisms that create empirical outcomes (Lewis-Beck et al. 2004). There are three main principles; a realist ontology, an epistemic relativity and methodological pluralism (Bygstad et al. 2016). The foundations of the philosophical standpoint were developed by Bhaskar. Bhaskar’s Concept of Critical Realism lies within the ontological position of two realities side by side: man-made ‘observable’ reality; and the natural ‘unobservable’ reality that exists outside of the parameters of human interaction (Bhaskar 1975; Archer et al. 1998).

The importance of the critical realism dual realities and knowledge formation surrounds many aspects of motherhood. Motherhood is the natural ‘unobservable’ process of pregnancy, birth and child rearing, an accepted part of nature to reproduce and continue the species. The type of birth, decisions on breastfeeding, care of the baby and recovery time are examples of decisions that are all dependent on formed social ‘observable’ knowledge, whether culturally, socially, physically or institutionally. The natural world creates the ability to procreate, providing the man-made world with a baby to craft into an adult that can function within the boundaries of the society within their individual context (Chevalérias 2011).

The concept of an ‘unobservable’ world can be encapsulated by the psychological changes that a woman undergoes in pregnancy. Whilst observable factors, such as hormone changes being a contributor to the development of PND (Edwins 2008; Abdollahi et al. 2016), provide a partial insight into behaviours and mood, they are inherently accompanied by the unobservable internal cognition of the individual. The level of susceptibility to PND and

severity of symptoms within each individual experience of PND are considered 'unobservable'. As a society, we continue to investigate the phenomenon and attempt to understand the causal mechanisms for the changes that nature generates but are restricted by what can be measured, hormone levels rather than susceptibility to PND.

The critical realism form of inquiry combines explanation and interpretation to illustrate the multifaceted social world, with an understanding that unobservable structures influence observable events. These are the layers of complexities within causation that relate to the influences from social structures, cultural obligations, objects and underlying processes affecting human action and interaction (Cruickshank 2012; Ryan 2018). These overlapping intricacies and subsequent impacts move past the 'positivism' reality of cause and effect and the 'interpretivist' reality of existence only upon interpretation from the social world. Critical realism differs by holistically and critically exploring the additional aspects of causation, structures and processes from the 'unobserved' that result in the 'observed' social world (Cruickshank 2012; Ryan 2018).

This research study explored the individual choice, environmental influence and societal impacts, to determine if there is an association with depressive symptomology. For example, a contextual cultural expectation for mothers not to return to work alongside socioeconomic circumstances that require the mother to return to work, may be associated with lower mood and higher levels of depressive symptomology. Angus and Clark (2012) highlight the importance of considering how structure and agency can have an impact on health and well-being. The consideration of both the intrapersonal and interpersonal influences on phenomena, from an individual to societal level, within this research is the purpose of adopting the critical realism paradigm.

4.3 Research Setting

This research was based in Wales due to an identified lack of specialist perinatal mental health resources and services, inclusive of minimal specialist perinatal mental health OT employment. This was first highlighted in 2015, when the Welsh Government dedicated £1.5 million in funding for specialist community perinatal mental health services (Maternal Mental Health Alliance 2020). A report into perinatal mental health services raised concerns over the

lack of training for health professionals, a lack of a mother and baby unit and disparity in service standards between health boards (Witcombe-Hayes 2018). Though a mother and baby unit has been set up in South Wales and there are improvements in specialist perinatal services throughout the Welsh health boards, there are still vast improvements that can be made to perinatal care (Maternal Mental Health Alliance 2020; BBC 2021). Additionally, the research is funded by the Economic Social and Research Council, Wales Doctoral Training Partnership, which promotes research which could influence services in Wales. There were no limitations to location of participants within Wales, as it was desired to have participants from varying health boards and urban/rural locations, who may have had very different experiences of healthcare, providing a more generalisable sample.

4.4 Mixed Methods Design

This mixed methods research study used a combination of quantitative (phase one questionnaire) and qualitative (phase two interviews and activity diaries) data collection methods. Mixed methods research consists of the collection, analysis and interpretation of both qualitative and quantitative data, integrated within one study design, to answer research questions (Creswell and Creswell 2018). Methodological triangulation, where results obtained from using different methods are compared, can increase the reliability of the results if consistent patterns are found (Lewis-Beck et al. 2004; Timans et al. 2019). This provided enhanced robustness and persuasiveness in comparison to the use of one method (Lewis-Beck et al. 2004; Grant 2019). Care must be taken when comparing results to ensure the data sets are considered within the method undertaken and not blindly bunched together. The ontological and epistemological underpinnings can differ if a combination of qualitative and quantitative research are used (Lewis-Beck et al. 2004; Timans et al. 2019). Mixed methods can explore and interpret the mechanisms of action and the experiences of the phenomena, encompassing the fundamental core concepts of the critical realism position. Quantitative methods are a source of summaries and associations that can work well alongside the qualitative methods for gathering the descriptors and interactions between complex mechanisms (Zachariadis et al. 2013). A mixed methods approach was considered the most appropriate for this study due to the ability for multiple data collection methods to capture complex social phenomena. Motherhood is a multifaceted, evolving and individual experience. As such, it was necessary for a range of methods to be used for a holistic insight

into the experiences of different mothers. Similarly, the potential relationship between PND symptoms and the concepts under investigation may have been overlooked with purely qualitative research. The potential challenges within this study included decision-making during the design of phase two and the purposive sampling, to ensure the second phase explained or supported the first phase results (Creswell and Creswell 2018).

Mixed methods is recognised for dealing with the multifactorial considerations surrounding health conditions, when Duncan and Nicol (2004) explored how the complexities and levels of depth involved in healthcare interventions can make research complicated to conduct and interpret. They recommend the use of mixed method research so both qualitative and quantitative methodologies can address the multiple requirements of healthcare research questions. This includes the difficulties with introducing and understanding the effects of new interventions into a multi-dimensional healthcare system and societal structure, or that the interventions can be complex, which can have implications for their design and evaluation. Though this research explores experiences rather than interventions, the understanding of the mental health condition, access to healthcare system and societal structures require a similar level of in-depth exploration, which mixed methods provides.

4.4.1 Research Design

This research study used an integrative logic to mixed method design, where multiple components become integrated to explore the whole phenomena theoretically (Mason 2009). This was achieved via an explanatory sequential design, where the qualitative participants were selected as a subset from the quantitative population (See Figure 2) (Creswell and Creswell 2018). The aim of this study was to explore the potential relationship between the development of PND symptomology with social capital and occupational balance. The explanatory sequential approach attempts to examine the reasons for phenomena and thus aligned with the study objectives (Earl 2020). The quantitative data is used to influence the question design for the second phase and often the researcher is required to request volunteers for engagement in the second phase of data collection (Creswell and Creswell 2018). This dual method technique proposes to robustly answer the research questions about motherhood as a complex individualised experience.

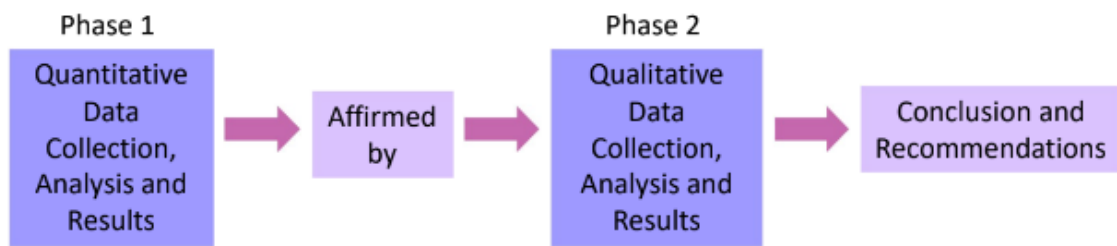


Figure 2: Adapted from Creswell and Creswell (2018) Explanatory Sequential Design

The method of data collection chosen for this study consisted of two phases. The first phase comprised of an online questionnaire, followed by the second phase that included two semi-structured interviews and an activity diary. The quantitative aspect of the questionnaire provided background information on what motherhood entails and PND symptomology. The qualitative interviews and activity diary provided insight into why these experiences occur. The research aimed to provide a seamless flow between the methods, which were considered the best options to answer the research questions.

Alternative methods of data collection were explored during the design process, for both quantitative and qualitative aspects of the design. The cross-sectional questionnaire used allowed for targeted exploration of the mother's experiences at one point in time. A longitudinal study would not have aligned with the time constraints of the mixed method data collection within the thesis period. The literature review highlighted discrepancy between OT need and OT involvement within a UK context (as discussed in chapter three under epidemiological evidence). It appeared OT interventions had not been developed within this area so experimental research, such as randomised controlled trials, were not feasible options (Earl 2020). Similarly, within qualitative data collection methods, an ethnography would not have been beneficial with a lack of interventions to observe. An ethnographical exploration of motherhood would have also not been feasible due to the COVID-19 pandemic restrictions. Additionally, the descriptive aspects of this method would not have answered the explanatory aspects of the research questions. Focus groups may have provided additional insights with the peer support aspects of engagement in research but the sensitivity of the topic area meant semi-structured interviews were the preferred choice (Earl 2020).

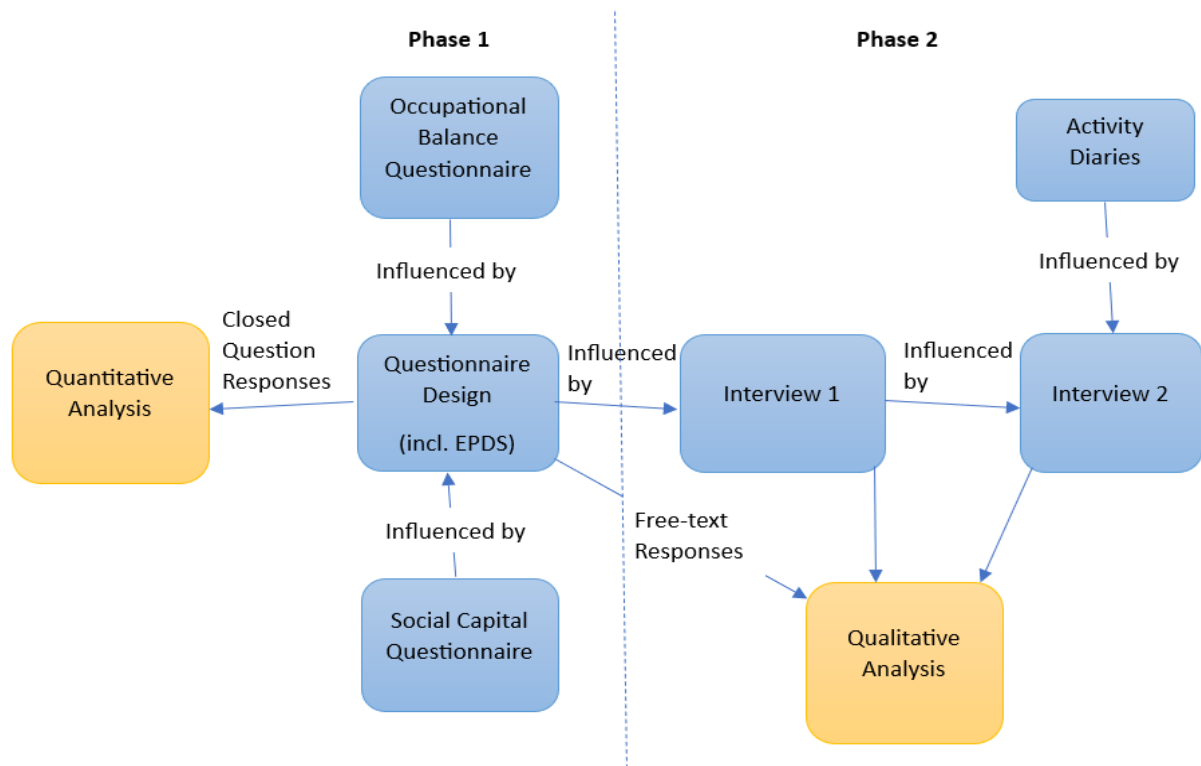


Figure 3: Visual Research Design for this Study

Figure 3 provides a visual representation of the research design and the flow from phase one to phase two. The questionnaire design was influenced by two external questionnaires and included the full Edinburgh Postnatal Depression Scale within it. The closed question responses from the questionnaire in phase one were used within the quantitative analysis. The questionnaire responses highlighted areas for further exploration within the interviews and influenced the design of the interview schedule for interview one. The results from the first interview and the activity diaries were the basis for the interview schedule in interview two. The free-text responses from the questionnaires and two interview transcripts from all interview participants were analysed alongside each other within the qualitative analysis.

Figure 4 illustrates the exploration of how each method answers the research questions and in what way. The cross-sectional questionnaire that was answered by mothers of young children and semi-structured interviews with nine mothers assisted to answer research question one. These methods with the addition of activity diaries assisted to answer research questions two and three.

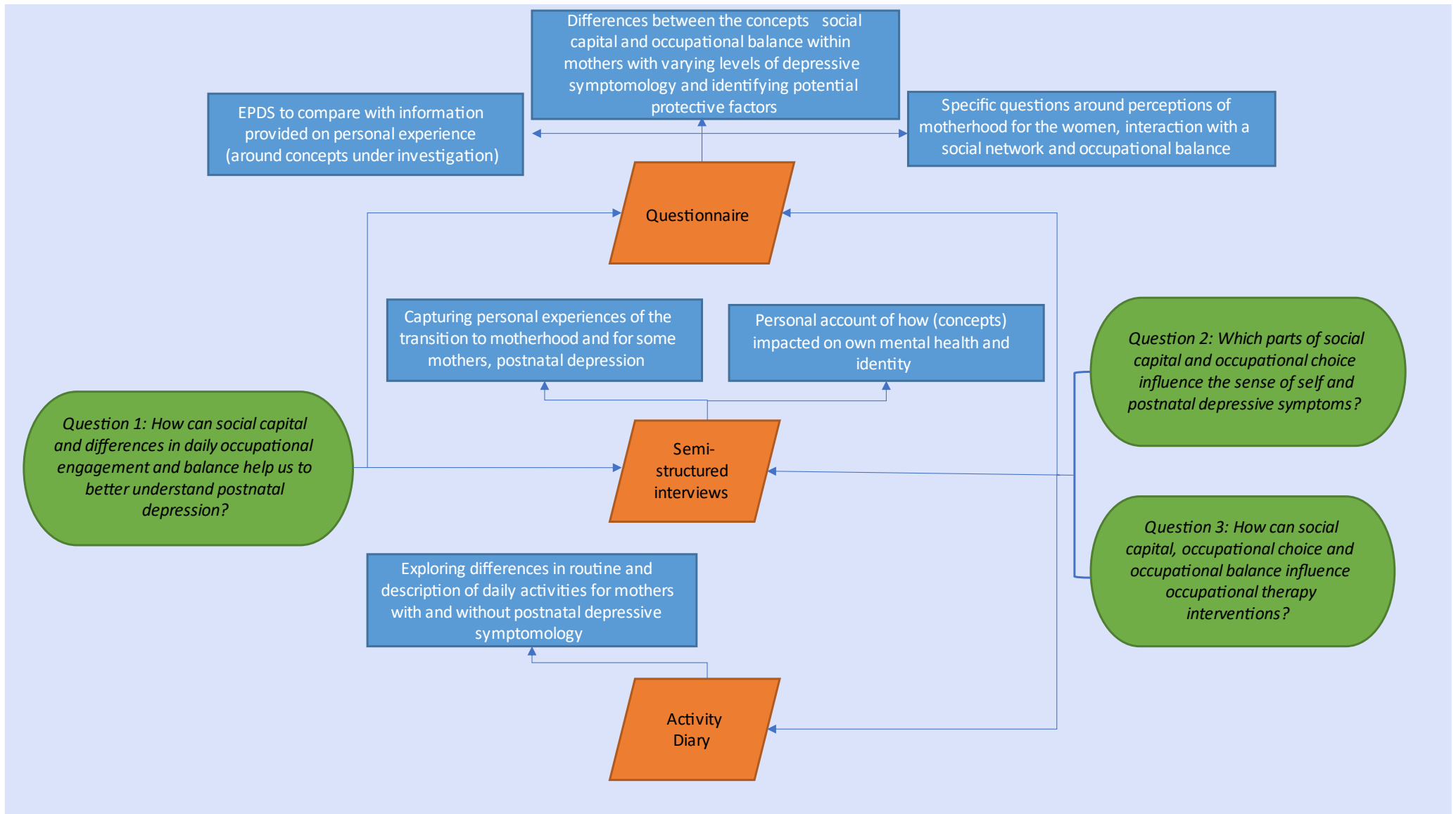


Figure 4: How methods answer the research questions

4.5 Phase One: Questionnaire

The information on the quantitative data collection was reported following the guidelines for strengthening the reporting of observational studies in epidemiology (STROBE), for cross-sectional studies.

4.5.1 Study Design

The first stage of data collection was a cross-sectional online questionnaire completed by new mothers. This study design was chosen to collect data from a population on their experience of motherhood during the postnatal period. A cross-sectional design was considered to be the most cost and time efficient for both researcher and participant, which could reach a wider audience and may encourage a higher completion rate (Rezigalla 2020). This questionnaire consisted of demographic information, the Edinburgh Postnatal Depression Scale (EPDS) to screen for depressive symptomology, and questions on social supports, lifestyle and routines.

4.5.2 Participants

The inclusion criteria for the questionnaire were women with a child under the age of eighteen months, living in Wales and literate in English. It was preferable to capture data from mothers that did not have access to additional services in the community, such as government schemes or specialist services, and may be more vulnerable to depressive symptomology. The inclusion criteria were set based on prior research and the research aims. Nyström and Öhrling (2004) and Munk-Olsen et al. (2006) found that the first twelve months of motherhood was when depressive symptoms were most commonly developed, whilst also being the key period for child development, and eighteen months is the key period in which mothers are adjusting to their new role. Additionally, the maximum statutory pay for any mother is for 52 weeks (GOV.UK 2022) and with consideration of employed mothers, the criteria was extended to mothers of children up to 18 months old to attempt to capture mothers that may have returned to employment. Recruitment was due to start in October 2019 and continue for a period of four to five months, dependent on data collection response rates.

4.5.3 Sample Size

The sample size was calculated based on the expected number of mothers with specific scores for the EPDS, required for phase two of this research project. This is the most widely used screening tool for perinatal mental health illnesses. This is used by perinatal health professionals during appointments and within large numbers of research studies (Gibson et al. 2009; Thombs et al. 2015; Shrestha et al. 2017; Levis et al. 2020). The EPDS is a ten-question screening tool to identify symptoms of depression, though importantly is not a diagnostic tool, designed to be completed in 5 minutes with a simple scoring system (Cox et al. 1987).

A formal sample size calculation was required to ensure an adequate sample of mothers with EPDS scores above and below 9 completed the questionnaires in phase one. This calculation was based on the prevalence rates from previous research studies examining mothers scores on the EPDS. The output of this was then checked to ensure that there was the potential for participants with varied EPDS scores above and below the threshold to participate in phase two.

Fellmeth et al. (2019) and Dennis (2004) identified there are different cut-off scores used within research studies, so examined the prevalence rates of postnatal depressive symptoms as self-reported on the EPDS by women eight to twelve weeks postpartum. The findings from Fellmeth et al. (2019) showed an 9% prevalence of EPDS scores above 13 and a 18% prevalence of EPDS scores above 10. Dennis (2004) found an 8% prevalence of EPDS scores above 12 and a 21% prevalence of EPDS scores above 9. This is supported by a number of research studies into prevalence rates from other middle- to high-income countries (Huang and Mathers 2001; Gavin et al. 2005; Munk-Olsen et al. 2006; Vigod et al. 2013; Falah-Hassani et al. 2016; Wallwiener et al. 2019; Levis et al. 2020).

The current research study aims to target women who are experiencing depressive symptoms but may not have input from any perinatal mental health support services. A lower cut-off score of nine on the screening tool may potentially highlight more of these women and was selected. This inferred any woman scoring nine or above was experiencing minor to major depressive symptomology and was at higher risk of developing a depressive condition (Dennis

2004). This was tested in a validation study with a sensitivity of 84-100% and a specificity of 82-88% during screening (Dennis 2004).

Using a cut-off score of nine, a sample size of 176 women would be needed to detect a two-fold increase in the risk of mild depressive symptoms, in a two-group exposure variable (for example, low social capital compared with high social capital), with 80% power and at a significance level of 0.05 in the quantitative analysis.

Dropout rates would also need consideration, so a higher number of women than the minimum requirement would be necessary to ensure there were enough participants to invite for engagement in the qualitative aspect of the research. If 200 women were recruited for the quantitative survey, given the prevalence noted above, it would be expected that 16 women would have EPDS scores of 12 and over, and 38 women would have EPDS scores of 9 or over within the sample. This was an adequate number of women (allowing for refusals) to invite to take part in the qualitative aspect of the study. Potential higher rates of respondents would allow for smaller effect sizes and subsequent lower risk ratios. Therefore, 200 women were set as the minimum requirement to complete the questionnaire within the data collection period. This would ensure an adequate sample of women with cut-off scores above and below the threshold to participate in phase two. Ethical approval for phase two was received for a minimum of 5 mothers with EPDS scores below 9 and 5 mothers with EPDS scores 9 and above, up to a maximum of 30 participants.

4.5.4 Questionnaire Design

The questionnaire was designed to collect information on sociodemographic information, self-rated EPDS score, group membership, aspects of social capital, support systems, occupational balance and sense of self. These desired outputs were the basis of question formation (See Appendix 1). The questionnaire was formatted and presented within Qualtrics, which is a University approved questionnaire online service. It was accessible from any computer/tablet/mobile phone so could be completed by the participant at a location of their own choice.

Participants were first provided with information on the research and asked to confirm if they consented to take part in the study, as described in the ethics section below. The first section was the collection of demographical information about children ages, marital status, employment status, financial situation, any history of mental health issues and postcode. This was followed by the full EPDS questionnaire, with scores based on the original scoring system for the tool (Cox et al. 1987). The main content of the questionnaire explored the experience of motherhood and associated activities, the support received and the importance of this, and the influences on the mothering role and experiences. These areas of exploration were used to capture the social capital and occupational balance of the mothers and is discussed in further detail below. The final question asked participants if they consented to be contacted for a follow-up activity diary and interviews as required (See Appendix 2 for full layout of questionnaire).

Validated questionnaires do exist to measure occupational balance and social capital. The Occupational Balance Questionnaire (Wagman and Håkansson 2014) and the Social Capital Questionnaire (Grootaert et al. 2004) were considered for use within the questionnaire, however, the use of these specific questionnaires in young mothers has not been validated and the content was not specific to the population under investigation.

Social Capital Instrument and Changes Made

The Social Capital Questionnaire is arranged under six headings: groups and networks; trust and solidarity; collective action and cooperation; information and communication; social cohesion and inclusion; and empowerment and political action (Grootaert et al. 2004). Not all of the questions within the Social Capital Questionnaire were relevant to motherhood specifically. Thus, potentially relevant questions were selected and adapted for the context of this research (See Appendix 2 for full questionnaire for this study). For example, within the Social Capital Questionnaire, it enquired on the groups or organisations the household were members of and stated options, such as farmer/ fisherman/ neighbourhood/ religious/ political. Within the questionnaire in this study, the mothers were asked if just themselves were members of groups, such as mother and toddler/ sensory/ exercise/ support groups. The final set of questions for social capital within the questionnaire in this thesis was comprised of 7 questions.

Occupational Balance Instrument and Changes Made

The Occupational Balance Questionnaire was devised by Wagman and Håkansson, and a summary of the 13 questions was accessed from an article to introduce the Occupational Balance Questionnaire (Wagman and Håkansson 2014). These questions are aimed to explore the occupational balance of all individuals. The questions that could be adapted for relevance to a mother's activities of daily living were included within the questionnaire for this study. For example, within the Occupational Balance Questionnaire, it explores having sufficient time for obligatory occupations. Within the questionnaire in this study, it explored having the time to complete necessary activities, for example, caring for child, housework, employment etc.

The scoring system for the adapted questionnaires is described within chapter five (overview of variables included in analysis section). Despite the validated questionnaires having scoring systems, these are standardised measures, which are directly affected if the wording of the questions are altered or questions removed/replaced, so the scoring criterion would not be appropriate for the amended questions used in this research questionnaire.

4.5.5 Validity and Reliability of the Questionnaire

A full validation study of the new questions was beyond the scope of this PhD research study. Though there was no formal validity testing used for the questionnaire in this study, several validity measures are discussed for their relevance to this thesis. Face validity, the overall appearance and accessibility of the questionnaire, was assessed with the completion of a pilot study. The feedback from the pilot study ensured content validity as the instrument was evaluated for its topic coverage and sensitivity due to the nature of the study (Taherdoost 2016).

Criterion validity was also present within this study when association analysis was examined (Taherdoost 2016). The hypothesis priori was that a low level of occupational balance would have an association with higher levels of PND symptomology. This hypothesis was proven correct within the results from this questionnaire, which gave a level of criterion validity. The lack of an association seen with social capital and EPDS score may have been due to the

measure of social capital not being accurate or the relationship between variables not being strong.

Reliability measures the stability and consistency of results from a measure (Taherdoost 2016). Due to the everchanging nature of both occupational balance and depressive symptomology within a mother's daily life, it would not be possible to assess the reliability of the measure. The scores for each variable would not be the same over time and may change daily. The use of a cross-sectional design was chosen to consider the occupational balance and EPDS score at one point in time with the knowledge of these variables as changeable. The implications of adapting the questionnaires for the interpretation of the results in this study is considered further in chapter five, within the strengths and weaknesses section.

Edwards et al. (2009) conducted research into improving the success of online research. The results of this study were considered during the design of the questionnaire and prior to dissemination. It was found responses were increased when the length of the questionnaire was shorter and textual representation of response categories provided. The questionnaire was shortened multiple times during the design phase and the duration for completion measured during the piloting stage, to ensure estimated completion times could be provided in the participant information sheet. The questions contained a range of open question types, for example multiple choice, text entry and matrix tables.

The initial questions formulated were uploaded to Qualtrics prior to the pilot study, to check readability, context and interpretation of question. Ten mothers consented to participate in the pilot study and were sent a link to the Qualtrics questionnaire. Within the one-week deadline, there was successful completion rate of six out of ten with reports of an average 20-minute completion time. The feedback received prompted alterations to be made to the question wording and the layout of the questionnaire design, for example, an inability to select multiple answers on some questions and the need for a 'back' button on each page. With the aid of supervisors, additional amendments were made and edits to ensure the questionnaire aligned with the sensitive nature of the research topic and was easily administered before going live. The questionnaire was designed, piloted and edited over a period of four months.

4.5.6 Recruitment of Participants to Phase One

Data collection began on 11th November 2019 and closed on 1st March 2020. A combination of recruitment methods was chosen in an attempt to advertise the study as widely as possible and ensure that the recruited population was representative of the target population. Researcher contact details were included at all times, to allow participants contact opportunities for more detail prior to participation, if required.

Topolovec-Vranic and Natarajan (2016) and Ryan (2013) found social media was a population and cost-effective accessible tool for recruitment into research. Social media has the potential to reach participants that may otherwise be difficult to recruit or at-risk, for example, those with specific conditions. Gelinis et al. (2017) concur that social media recruitment is far-reaching, with the interconnectivity of 'friends' or 'followers' potentially encouraging snowball sampling. Recruitment of participants began through social media posts, with the use of a standalone twitter page dedicated to the research. Organisations and individuals began to retweet a post created about the research, with information on the inclusion criteria and a click-link to the questionnaire, allowing participants immediate access. This enabled numbers to slowly rise, however this was a slow process and only gathered less than 30 completed questionnaires in a three-week period.

The second recruitment method used was Health Wise Wales (HWW), a national, online, population survey funded by Health and Care Research Wales. It is a register of adults living in Wales who have consented to be contacted about research projects that may be of relevance to them. The process to access the HWW population required an application to be submitted to HWW for approval. The application was assessed by the management team to ensure the project fitted with the ethos of the HWW project, though this was not an ethical review. One of the services that HWW provides to researchers is to send an email to all registered participants, to inform them of opportunities to take part in research. HWW had roughly 25,000 active participants at the time of this study and had been recruiting pregnant women in antenatal clinics for a while. The thesis target population of mothers to children less than eighteen months was likely to be captured.

Though some of the HWW advertisements were bilingual (in the English and Welsh language), it was clearly stated in the email that research participation was limited to the English language. HWW sent out an email advertisement on 5th December 2019, when the survey had been live for one month. This email to potential participants included a link to the participant information, consent form and the secure online questionnaire set up by the researcher. HWW additionally disseminated the research details, with attached link, through newsletters and social media posts. The adverts for the study also informed HWW participants that they could inform friends and relatives about the study. This further expanded the outreach span and attempted to snowball the sample by outreaching through an associated participant group (Bryman 2016). This increased the number of completed questionnaires to 130. However, as over two hundred responses were required, the response rate was still too low. A second social media account on Facebook was created in December 2019. This page was shared by individuals in mothering groups and on private pages, such as baby blog pages, local community pages and toddler groups. Permission was also granted by the National Childbirth Trust (NCT) for their subsidiary pages, to share within Wales.

The social media sites took continuous engagement, posting and responses, with questionnaire completion numbers rising very slowly. The use of standalone social media pages dedicated to the research, that were not associated with personal researcher accounts, may have been impacting on: perceived reliability of the site as genuine; generation of trust; and encouragement of participants to engage in the survey with no prior face-to-face contact with the researcher. There were women who provided feedback to a gatekeeper that there were trust issues regarding the site and associated link. These potential participants had decided therefore not to take part. One of the solutions trialled was to add links to the researcher's professional ESRC advertisement page advertising the research study. This is publicly accessible to any individual seeking the research on internet search engines. Additionally, there were some difficulties with gaining contact with organisations to request to post on private social media group pages. Large numbers of organisations did not respond to contact made about sharing posts on the research, such as Doula networks and mothering group pages.

The social media accounts and HWW advertisements were successful in reaching a completion rate of 240 by February 2020. A close date of March 1st was selected, with information of this close date available on both Twitter and Facebook research pages and posts.

4.6 Phase Two: Interviews and Activity Diary

Phase two of data collection consisted of semi-structured interviews and an activity diary. This was required to provide additional depth to the information gathered from the questionnaires. As the questionnaires were virtual and consisted of a large amount of multiple-choice questions, the personal experiences and purposes behind decisions made were not captured in detail. The use of interviews allowed in-depth perspectives and experiences to be shared around family dynamics, support networks and social capital. The activity diaries were designed to provide more intricate details around daily routines and occupational balance to guide the discussion of the final interview. The diaries provided detailed insight into the daily roles, responsibilities and supports for each mother, which allowed a discussion on occupational choice and reflection in the final interview. This technique made use of the diary-interview method, where the final interview acts as a source of additional data gathering based on the activity diary outputs (Spowart and Nairn 2013).

4.6.1 Amended Plans Due to the COVID-19 Pandemic

The initial plan that gained ethical approval was face-to-face interviewing of up to thirty women that had EPDS scores of both over and under the cut-off score of nine. This ensured analysis of mothers both with and without PND symptomology. Face-to-face interviews were chosen to build rapport with participants, eliciting emotion and trust to provide rich descriptions of experiences (Mirick and Wladkowski 2019). Participants with good rapport with the interviewer are often motivated to further engage in the research (Sun et al. 2020). Thus, face-to-face initial interviews could provide encouragement for further participation in the activity diary and final interview. The activity diary was originally set to take a record of all daily activities for a period of two-weeks; the optimum diary length for research is between one week and two weeks, with less than one week not providing sufficient depth to the data and an excess of two weeks causing participant fatigue with the method (Jacelon and Imperio 2005).

However, this second phase of data collection coincided with the COVID-19 pandemic and the introduction of lockdown restrictions. A back-up plan design was created (Table 1), with different plans for each potential restriction scenario and timeframes.

Plan A	If the mothers are agreeable and lockdown lifted before July 2020, the original plan would take place: interviews and activity diaries of normal day-to-day routines roughly one month after lockdown is lifted.
Plan B	If the lockdown extended beyond early July 2020, virtual interviews and activity diaries would be the alternative phase two data collection. These would be completed throughout July to September 2020.
Plan C	If Plan B is completed and subsequently within two months (latest during November 2020) restrictions are lifted, those mothers will be asked if they would like to complete a second round of interviews and activity diary. Again, this would be roughly one month after lockdown finishes, but would be completely optional.
Plan D	If the above mothers (Plan C) were not agreeable to complete the second round of interviews, but there is still time to complete interviews and activity diaries as per the original plan (outside of lockdown restrictions), these would be offered to mothers from the survey that did not partake in Plan B but consented to be contacted.

Table 1: Back-up Plan Adjustments

If the lockdown/restrictions continued past November 2020, the data collected from Plan B would be the sole phase two data collection. If Plan C went ahead, all the participant numbers would have been kept within the thirty maximum participants for phase two data collection, as per the original ethics submission. The reason for multiple plans and the push to get mothers to complete outside of the lockdown restrictions was due to the main focus of this research being on social capital, social support and community engagement, and their

activities during the lockdowns would be less representative of a mother's normal day-to-day routines.

The restrictions were maintained throughout the year, so it was not feasible to conduct any face-to-face interviews. Plan B was decided upon as the only achievable replacement. Due to the impact of this change on the time frame of data collection, it was decided that a reduction to ten participants would be sought for interviews, with five scoring below nine on the EPDS and five scoring above nine on the EPDS. The activity diary timeframe would also be reduced to one week to remain within the optimum suggested timeframe (Jacelon and Imperio 2005) but reduce the burden of the research on the participants. It was a consideration due to the significant increases in symptoms of depression and anxiety which have been reported as a direct impact from the COVID-19 pandemic on mothers (Cameron et al. 2020; Matvienko-Sikar et al. 2020).

4.6.2 Sampling and Recruitment From Phase One Participants

It was anticipated that the response rate for the second phase of data collection would be less for mothers that had scored above nine on the EPDS. Mothers with more depressive symptoms were considered to be less likely to engage with further research demands, especially during a pandemic, when additional stress triggers can impact on those mothers with chronic susceptibility to mental health illness (Cameron et al. 2020).

Due to the change of method from face-to-face interviews to virtual interviews, the purposive sampling criteria for participant engagement in the second phase of data collection did alter to become more inclusive and less restrictive. Mothers with children older than eighteen months were accepted for participation, due to the time delays encountered. Initial inclusion criteria restricted phase two inclusion to South Wales for face-to-face interviews, due to travel times and costs. However, when using virtual interviews, mothers could participate from any location in Wales. This ensured there was contributions from mothers living in a range of different areas throughout Wales, especially significant as Mid and West Wales have more rural areas. Access to facilities may be increasingly restricted, causing lockdown measures to have a greater impact, especially within situations where support could be accessible to mothers. Additionally, health boards across Wales differ in service provision and

lockdown restrictions were lifted at different paces throughout Wales, making each individual experience unique. This aided the representativeness of the research to mothers throughout Wales.

The survey responses were reviewed with only mothers who consented to further contact at the end of the phase one questionnaire considered. All participants who did not consent to the additional data collection remained anonymous on the questionnaire with no contact information provided and therefore were at no risk of being contacted for further participation unintentionally. A purposive sampling list was compiled of twenty-one participants that would fit the requirements of the second phase. This larger number allowed for participants that may not be contactable or may decline to engage in the second phase of research (Bryman 2016). The twenty-one consisted of eleven mothers with scores over nine on the EPDS and ten mothers with scores below nine. Eleven mothers were selected for scores above nine as the expected response rate was lower for mothers with more depressive symptomology.

A variety of criteria were used to purposively select women to invite for interview, for example, the youngest and oldest mothers within the sample, the mothers with the least amount of social support, the mothers with lowest and highest EPDS scores. Within the phase two list, initial contact was made with five mothers over and five under the EPDS threshold, via an email with a reminder of the questionnaire previously completed and information on what the second phase would entail. These participants would need to respond with interest before the participant information sheet, consent form and support information sheet were emailed to them. It was clearly stated that electronic signatures were accepted for consent, as long as received from their personal email accounts.

The remaining mothers were only contacted if the initial contacted participants were marked as 'no response' or decline. A maximum of two prompt emails was sent to each participant, at any stage of contact. If no response was received within one week, the participant was marked as a 'no response' and the next participant contacted. This was to ensure the participants did not feel pressured to engage in the research, but were given a fair length of time for responding, with the understanding they may not regularly check their emails.

Of the initial ten mothers contacted, five mothers with scores below nine responded and two mothers with scores above nine responded. All five mothers with low scores were contacted and replied with completed consent forms and participated in phase two data collection. Of the five mothers with high scores, only two responded with completed consent forms, so email contact was made with the next three mothers with high scores on the list. Two responses were received, one participant felt she was not able to dedicate the required time for the research so declined and one participant did not return the consent form. Therefore, email contact was made with the final three participants on the phase two list. Two of these participants responded with completed consent forms and one participant did not want to have a virtual interview and declined. At this stage, the phase two list of participants had been exhausted for mothers above EPDS score nine, phase two data collection commenced, despite not reaching the target of five participants. This was to ensure there was a clear end point for phase two to fit within the overall time frame of the project.

Therefore, a total of nine of the sixteen mothers that were contacted for phase two participation engaged in data collection, five mothers with scores below nine and four mothers with scores above nine on the EPDS.

Upon receipt of a completed consent form, a date was organised for the first interview to take place at a time of convenience for each mother, inclusive of evenings or weekends. At the start of the first interview, further consent was required to collect contact details of family members as a precaution in the event of safeguarding for the children. All mothers consented to this and were able to continue in the second phase of data collection.

4.6.3 Practical Considerations of Amended Plans

Interviews that used video-mediated interaction were preferable to telephone interviews, due to the visual cues of facial expressions and access to non-verbal communication promoting a sense of intimacy and trust, to provide more in-depth responses (Mirick and Wladkowski 2019). Challenges were considered around the use of online interviews. There were two potential participants within this study that refused to engage with the online platform. Gray et al. (2020) highlighted this could be an issue for researchers using online interviewing. For the participants that did engage, technical issues were identified as a cause

for concern, with access to the platform for both researcher and participant, and potential breaks in communication due to internet difficulties (Gray et al. 2020). This had the potential to affect the flow of conversation, rapport building or missed data (Mirick and Wladkowski 2019). There were some issues that arose with participants living in rural parts of Wales and having poor internet connections, which affected the quality of feedback during the recordings. This did not affect the flow of conversation or rapport between researcher and participant, supported by Sun et al. (2020), who found no significant differences in rapport using online platforms for interviews. This was a disadvantage of using online interviewing but did not occur enough to affect the interview outcomes. Furthermore, the interviewer is not able to choose the location of the interview and the participant may not have a suitable space that allows for privacy and a removal of distractions, which may impact on the quality of the interview content. Mirick and Wladkowski (2019) and Gray et al. (2020) suggest that prior to the interview, the participant is encouraged to choose a private location and use a headset if able. This was utilised within the study but due to the study being conducted with mothers, there were often children present for the interview. However, the presence of children during the interview was always a consideration, whether in person or via online platforms due to the population under investigation. Semi-structured interviews at a time of the mother's choosing and a more informal approach to the interviews allowed for the mothers to feel comfortable, even if they had additional responsibilities to watch over their children during the interviews. Most of the women interviewed chose to complete the interviews in the evening after the children's bedtimes.

There were benefits to the use of online interviewing platforms. Accessibility to participants without the issues of geographical mobility allowed for mothers to be involved within the interview process from any location in Wales, rather than the original inclusion criteria of South Wales postcodes (Mirick and Wladkowski 2019). Gray et al. (2020) acknowledges that online platforms also provide flexibility of time and the length of interview for both interviewer and participant. This was apparent with the women being able to choose times that were convenient for themselves, even if this was late at night. The method was more desirable and practical than initially considered. Mirick and Wladkowski (2019) found some participants were not comfortable with the researcher entering their home in person but were open to online interviewing within their personal environment. The participants were

also able to share more openly about sensitive topic areas when in a comfortable space of their own choosing (Mirick and Wladkowski 2019; Gray et al. 2020; Sun et al. 2020). These online interviews had the additional advantage of reduced costs and time associated with travel for the participants, researcher and funder (Mirick and Wladkowski 2019; Gray et al. 2020).

4.6.4 Initial Interviews

Despite the change of collection method from face-to-face interviewing to virtual interviewing, good rapport was built with the participants during the online interviews. Semi-structured interviews were used to provide flexibility around the unique participant responses. The loose structure of a semi-structured interview schedule fits alongside the conversational tone of interview that was created to allow for better rapport building and trustworthiness with the participants (Sun et al. 2020). The content of the first interview explored expectations of motherhood versus the realities, changes in support networks, group engagement, financial implications of activities, the impact of the pandemic and family dynamics (See Appendix 3 for interview outline).

4.6.5 Activity Diaries

The multidimensionality of social capital makes it difficult to measure and define (Diez 2013). Social capital broadly consists of human activity that contributes to the individual and/or society in some way. Similarly, due to the complexity of definition and subjective nature of the term occupational balance, difficulties are encountered when attempting to measure quantitatively for each individual (Backman 2004; Yazdani et al. 2018). It is therefore important to remember that “while time alone does not fully capture the concept of occupational balance, it is nevertheless a place to start” (Backman 2004, p. 207).

Time-use surveys are increasingly being utilised to measure social capital to develop government initiatives and indicators, with well-being considered increasingly important within economy (Diez 2013). Time-use of individuals differs over time dependent on social norms, societal expectations, personal priorities and hierarchical processes (Field 2003). Law (2002) and Behnia et al. (2017) claim occupational routine and time management requires further focus from OTs and researchers alike. Capturing time-use and activity engagement

through diaries or logs and completing an occupational questionnaire can be the best initial form of data collection (Backman 2004). Wilcock and Hocking (2015) describe how time-use surveys capture in-depth data around daily routines and activity engagement to study occupational balance, which will influence mental health and well-being. Further exploration of particular reasoning behind occupational engagement, whether through necessity, obligation or choice, can assist in examining the influential relationship between occupations and health (Wilcock and Hocking 2015). The idea that a diary can capture the information for in-depth exploration at a later date was the purpose of using of the diary: diary-interview method, as discussed below.

The activity diaries were designed to capture intricate details about the day-to-day activities, interactions and satisfaction levels of each mother, to inform the question design for the final interview and reflect on the diary content. All nine mothers interviewed consented to complete an activity diary for one week on Qualtrics as part of their research participation. Direct participant observation of mothers within their own daily environment was considered but would likely be impractical, with inconsistencies in daily behaviours due to the flexibility of tasks within the home environment and presence of outsider adult company (Zimmerman and Wieder 1977). Zimmerman et al. (2005, p. 481) suggests the “diary: diary-interview” method can gather similar levels of knowledge compared with direct observation, as the participant is aware that the diary content will be explored in the follow-up interview. This allows a heightened level of reflexivity to ensue in the interview discussion and highlights the purpose of the diary, to evoke in-depth reflections of behaviour and occupational engagement (Jacelon and Imperio 2005; Spowart and Nairn 2013). This triangulation of methods can reveal additional information regarding relationships and understanding of decision-making that is not reliant on recall, reducing the likelihood of recall bias (Moffat et al. 2007; Spowart and Nairn 2013).

A pilot study of the activity diary was completed with two mothers for one day. Suggested amendments included: question redesign; additional options for questions; adding a back space; and additional input of support page. The diary was updated and to ensure understanding, brief verbal instructions were given to each participant at the end of the initial

interviews on diary completion. An email link to complete an online activity diary for one week, a total of seven days, was sent to each participant.

The diary was split into time sections of four hours for the whole 24 hours, for example, 00:00-04:00; 04:00-08:00. There was an option to submit up to four activities for each time section. There was a text box following the fourth activity to submit additional activities that may have been completed during the time section. Four pieces of information were required for each activity: (i) what activity was it?; (ii) who was present when completing this activity?; (iii) how would they categorize the activity? (self-care, leisure, productivity, rest/sleep); and (iv) how did they feel when completing the activity? The use of multiple-choice options and Likert scales were used to attempt to decrease the time expended on completing the diary (See Appendix 4 for activity diary layout).

The diary link opened a web page on any device; a phone, computer, laptop or tablet. The first page had instructions for the participants to follow, including the page structures and how to navigate around these. Participants were informed that reminder emails would be sent daily to complete the diary, suggested to be beneficial to the volume of data collected in diary studies (Jacelon and Imperio 2005). Participants were encouraged to make contact should they have any problems with the diary. One participant did struggle to understand the four-hour time sections within the diary but after further explanation, she was able to fully complete the diary. Most of the participants felt it was fairly easy to complete, though one participant fed back there were items missing from the categories, for example work, and the limit of four activities was too restrictive, which led to frustrations whilst completing the diary. Despite these issues, all nine diaries were completed for the full seven-day timeframe requested.

4.6.6 Final Interviews

The final part of data collection phase two was the closing interview with each participant. This allowed reflection and exploration of the activity diary results (See Appendix 5 for interview schedule). It was highlighted in each interview that there were differences in the diary representations due to the pandemic restrictions, and it was discussed how this may differ. Reflections explored the balance of activities, including happiness level trends during

activities and the quality of rest and sleep during the week. The social supports involved in daily routines were also identified with each participant, exploring each individual preference around socialisation and occupational engagement. The interview concluded with a reflection of the whole research process. This final interview allowed clarification of the diary content to reduce potential bias of interpretation, improving the credibility of the research and to further explore any areas of interest during reflective discussion (Bryman 2016).

4.7 Ethical Consideration

Ethical review for the study was sought and a favourable review was granted from Cardiff University's School of Social Sciences Research Ethics Committee (SREC/3336) (See Appendix 6). No amendments were required at the time of this submission. A second ethics submission was required due to the impact from the pandemic restrictions on the face-to-face design of phase two, changing to virtual interviews. Phase one had already been completed so did not require any amendments. No amendments were necessary for the back-up plans recommended during this second ethics submission (See Appendix 7). Ethical approval was not required from an NHS Research Ethical Committee, as no access for recruitment was sourced using NHS resources. The subsequent discussions explore the ethical issues associated with this study, including issues of situated ethics.

4.7.1 Recruitment Routes

The recruitment methods used allowed the participants to read the purpose and intended use of data within the project before making a decision on whether to take part. This ensured there was no coercion of potential participants. Participants recruited through the HWW process had already given consent to be contacted for research purposes, which was considered an additional form of consent.

One recruitment route that had the potential for controversy was the use of social media. There could be issues related to user privacy in research around: personal health; researcher transparency when gaining access through private groups; and maintenance of professional researcher accountability/boundaries on a platform that can be classified as informal (Ryan 2013; Gelinis et al. 2017). Standalone social media accounts that were not connected to any personal researcher social media pages were created, to maintain a researcher persona.

Background information around the research was uploaded onto the pages, along with signposting to the research and questionnaire link. These could be shared by the public or copied into private mothering group sites. Any questions posed on these posts were responded to via private messaging and deleted to maintain user privacy.

4.7.2 Data Collection

The use of questionnaires had the benefit of the potential participant being able to decide whether to complete the questionnaire in a location of their choice. This allows them the ability to withdraw participation at any point, without any feeling of being pressured to continue, which has the potential to occur in the face to face presence of a researcher. The virtual interviews also afforded the participants the opportunity to choose a comfortable and safe location for completion.

The change in data collection method to virtual did raise ethical concerns, as the platform for hosting the interviews required university approval, and storage of the interview recordings needed to be organised. The use of Zoom was approved after examining the privacy statements and the security for a password protected private student account. The main benefit of using Zoom for this research was the participant access to the interview without having to download a program or sign up to an account, as the direct link to the meeting opens using a search engine (Gray et al. 2020). The recording of the interview was completed separately through QuickTime Player, which appeared to have the most secure privacy guidelines. All devices that may contain data were securely encrypted and password controlled as per university regulations.

The Zoom video default setting would show inside the researcher's and participants' homes, in comparison to meeting at a neutral location, for example a café. Though research suggests environments can further encourage rapport if there is common ground, for example a researcher having pictures of children to represent solidarity as a parent (Mirick and Wladkowski 2019), this was not used within this study. To attempt to maintain researcher boundaries, the interviews were completed with a neutral visual background alongside no potential interruptions on the researcher's part. It was expected there would be interruptions on the side of the participants due to their caregiving roles (Gray et al. 2020).

4.7.3 Informed Consent

Sin (2005) explores how the concept of 'informed consent' presents many challenges that need to be considered. To seek consent from participants, there should be transparency in the information provided to the participant about the research study, any limitations to their participation and acknowledgement of any potential risks (Lewis-Beck et al. 2004; Sin 2005; Jain et al. 2017). The participant should be clearly informed of their right to refuse to engage, that confidentiality and anonymity will be maintained throughout and all the available options to renegotiate consent throughout the study (Sin 2005; Nijhawan et al. 2013; Jain et al. 2017).

On the questionnaire in phase one, the participant information sheet and consent form (See Appendix 8) had detailed content on the purpose of the research, the topics under investigation and the dissemination plans for the project. It was made clear that the questionnaire was voluntary and the participants could stop the questionnaire at any time. Electronic consent was required for each of the three separate consent questions. If any of the 'no consent' boxes were selected, the participant was not able to progress to the questionnaire and was led to the closing page to thank them for their time and provide information on associated support networks.

Consent was taken prior to the start of the first interview, with all participants informed that printing of their names was considered consent if sent from their personal email accounts (See Appendix 9 for participant information sheet and consent form). An optional consent question was included that allowed for the research data to be used in future research projects outside of this thesis, to which all participants consented.

4.7.4 Topic Sensitivity

Maternal mental health is a sensitive topic area, with high rates of diagnosed depression and higher numbers of mothers with symptoms who do not seek assistance or receive a diagnosis (Stanescu et al. 2018; Witcombe-Hayes 2018). When conducting sensitive research, there is the risk of impacting on the feelings, values, attitudes or views of the persons involved (McCosker et al. 2001). The process of interviewing on sensitive topics can be seen as a cathartic experience, providing a sense of relief to discuss topics that may not otherwise be reflected upon, as discussed by the participants in this research (Elmir et al. 2011). Serious

consideration was given to the vulnerability of the intended participant group and the sensitivity of the mental health subject matter. The methods chosen respected the limited time availability of mothers with multiple potential roles. Deliberation was given to the ease of accessibility and estimated completion time for the questionnaire. The interviews were designed with open ended questions, so the mothers could provide the amount of response that was comfortable for themselves in both content and length. The activity diaries were designed for ease of completion, to reduce the duration of engagement required each day. The pandemic led to further reductions in interview and diary length.

Multiple revisions of the questionnaire content were made to ensure careful placement of language within each question. For example, additional consideration was given to how to sensitively manage data capture around issues such as mothers who have had children removed or children that were deceased. Several edits to tailor the question responses to reflect this sensitivity were required. Additionally, two sections of the questionnaire contained advice on seeking help from healthcare professionals, with useful resource links for all women partaking in the study. This was to enable participants to seek appropriate support, if required. One was strategically situated at the bottom of the EPDS screening tool page and the other on the closing page (See Appendix 10).

The pandemic had a negative impact on the mental health of many new mothers (Barlow and Sepulveda 2020; Molgora and Accordini 2020). In this study, there may have been impacts on each mother's mental health and coping abilities due to restrictions on outings, support networks and peer support groups, adding complexity to an already sensitive subject area. Engaging in interviews and partaking in diaries could cause additional stress and anxiety, especially if there was limited access to support with childcare to have the time to engage in the interviews (Mirick and Wladkowski 2019). To attempt to mitigate these issues, mothers were offered interviews at a time most convenient for themselves and their routines, for example evenings, weekends or during nap times. The interviews were structured to last roughly 30 minutes and the mothers were informed they could terminate the interview at any time. The interview schedule was designed with sensitivity surrounding support and routines. The activity diaries were accessible on mobile phones and were quick to administer. Each mother agreeable to participate also received a list of resources to access via email. This

included mental health services and coping strategies for the pandemic (See Appendix 11). This ensured every participant had access to information which could be retained for potential future usage.

4.7.5 Safeguarding for the Researcher

Initial consideration was given to the lone worker safety requirements as the plan was to complete face-to-face interviews, and this was included on the initial ethical approval application. However, there were no further safety risks for the researcher with use of virtual platforms.

Supervisors offered debriefing sessions for any potential distress caused to the researcher, which is required for potential emotional exhaustion or feeling overwhelmed by the personal experiences explored (McCosker et al. 2001). No safety or welfare concerns were raised during any of the interviews with any participants.

4.7.6 Anonymity of Participants

Sin (2005) and Jain et al. (2017) argue that ethical considerations should be integral within the research process and considered throughout a study, not just at the timing of seeking ethical approval or when participants are signing consent to participate. This is deemed important, especially when studying sensitive topics such as mental health. The questionnaire was an open link that could be completed anonymously, with the opportunity to input identifiable information if consenting to be contacted to participate in phase two of the project. The participant information clearly stated that once the questionnaire had been submitted as complete, it could not be withdrawn due to anonymity. With no participant information collected, it would therefore not be identifiable. However, if the participant had consented to the second stage of data collection and inputted their contact details for the researcher, it was clearly stated this questionnaire was no longer anonymous and if requested, these questionnaires were able to be withdrawn. However, there were no requests to the researcher to remove any questionnaires from the study.

Strong guarantees of anonymity, ensuring data is not traceable to the participant, were assured via the use of pseudonyms, separating identifiable demographics into different

storage files to the research data, and safe and secure password protected data storage (Crow and Wiles 2008; Wiles et al. 2008; Jain et al. 2017). The participant information sheets given for both phase one and phase two clearly explained these concepts prior to consent to engage in the research. This may have aided with rapport, encouraging participant trust in the researcher (Lewis-Beck et al. 2004; Jain et al. 2017).

However, Crow and Wiles (2008) question how far anonymity needs to be taken when some participants desire the recognition from the research or the location of the research is important to the context and understanding of the results. This arose within the research when a participant that engaged in phase two data collection posted on social media her participation in the research, tagging this to a personal researcher social media account. The participant was active in advocating for mental health and was proud of her engagement in this research but this raised concerns regarding the level of discretion held by the researcher. As aforementioned, dedicated research social media pages without affiliation to personal accounts had been intentionally created and utilised. To remain neutral, the researcher discussed the situations with supervisors and it was decided to remove the tag from the personal account. There is a level of unpredictability and inability to control actions surrounding research participants, but the researcher must attempt to maintain confidentiality and anonymity within the thesis and storage (Crow and Wiles 2008). Additional care was taken during the write-up of the thesis to ensure complete anonymity, with regular checks from supervisors.

It was also considered that during an interview, a participant could disclose information that raised concern for the safety and welfare of the child, themselves or another person. Participants were made aware prior to the interview that confidentiality was contingent, any concern for the welfare of a child or an adult may need to be shared with safeguarding services. All contact information for children, inclusive of full name and address were taken at the start of the first interview. For circumstances of concern, a plan was put in place for any escalation procedure required, which was approved by supervisors. A list of relevant authority referral criteria and contact details for each relevant agency was prepared prior to each interview and readily accessible should there be any concerns raised.

4.7.7 Data Storage and Confidentiality

To maintain confidentiality throughout the study, all data was stored on a password protected university account. All data was password protected on any storage device and any hard copies were kept in a locked filing cabinet. Each computer used was encrypted in accordance with university requirements. Data was backed up with use of the researcher's university password protected OneDrive account. All data remained confidential in accordance with Cardiff University regulations.

4.7.8 Reflexivity

Reflexivity has been described as the continual reflection of the researcher within the research process and wider contextual influences, to monitor reactivity and any potential bias within the research findings (Lewis-Beck et al. 2004). Dodgson (2019) suggests reflexivity is desired to promote trustworthiness in a research study and illustrate robustness. Though reflexivity is complex and comprises of multiple facets including insider or outsider positionality as researcher, role conflict and positions of power (Colbourne and Sque 2004; Breen 2007; Dodgson 2019).

The location of myself as researcher and practitioner is based within South Wales, which is where the interest in location for this thesis originated. The interest in this research topic arose from personal experiences of the ramifications of PND with several close family members experiencing PND, inclusive of my mother after giving birth to myself. The resultant life-long depression relapses have had a direct impact on my mother's life, having to take ill-health related early retirement and regular monitoring by healthcare professionals. After qualifying as an occupational therapist, I developed an interest around how our profession could assist with both prevention, management and recovery of PND. The positionality of myself as researcher within the project did require careful consideration as an outsider to the population under study. Insider research studies a group to which the researcher belongs, whereas outsider research relates to a group to which the researcher does not belong (Breen 2007; Dodgson 2019). I am not a mother myself and have not suffered a mental health condition so cannot consider myself an insider with the participants but there are elements of empathy and understanding, with the interest for the research resulting from hereditary PND occurring in my family. I am a mental health occupational therapy practitioner, with an

understanding of the illness and the subsequent treatments and interventions. Breen (2007) suggests the ability for the researcher to be both insider and outsider is better portrayed as a continuum role that adapts with the research. Though I consider myself an outsider, as a researcher I have: a pre-existent understanding of the participant culture; a natural ability to interact due to my professional background; and a relational intimacy of knowledge surrounding the research area, in this case, PND. However, the lack of personal researcher experience meant there was a level of objectivity maintained, portraying an image of being more unbiased around the research outcomes (Breen 2007).

My healthcare professional identity did contribute to feelings of role conflict due to this dual researcher/professional role. I recognised that the role of practitioner was not required within this researcher role but allowed me to feel equipped to understand any issues participants may be facing. The researcher lens is committed to developing new knowledge around a particular topic, whereas the occupational therapy principles of holistic assessment and intervention are conflicting when not able to be utilised. Similar feelings are expressed by Colbourne and Sque (2004, p. 301), stating “Not being able to help participants to resolve their problems, merely suggesting other avenues for intervention, made me feel callous, uncaring and awkward”. It is recommended that self-disclosure and honesty can dissipate the feelings of conflict and promote participant rapport (Colbourne and Sque 2004). Introductions within the initial interviews attempted to provide transparency by explaining my occupational therapy background and the purpose of the research to promote the profession within motherhood.

This preceding professional role gave some insight into understanding how to navigate the ethical complexities around issues, such as concerns for the immediate welfare of the individual and their child. Colbourne and Sque (2004) suggest this promotes the role of professional friend that allows there to be a level of rapport alongside the need to remain in the researcher role and initiate emergency responses if necessary. This is a term that healthcare professionals adopt in their day-to-day interaction with service users and ensures ethical considerations remain a priority.

This professional role, additional to the researcher role, may have impacted on the already contested subject of positions of power. The researcher is seen to be in a position of power due to the researcher viewed as the expert interpreting the findings of the research (Mitchell et al. 2018). This can be particularly apparent in researchers from the outsider perspective, who are not direct members of the group to which the participants are, thus at more risk of misrepresentation (Dodgson 2019). The purpose of reflexivity is to consider the beliefs, social position, traditions, and responses to the topic of study prior to engagement in the research, providing transparency of these concepts for the audience to consider. Throughout the interviews and any email communication, I attempted to encourage a conversational tone to the interviews to promote rapport building and provide a platform to create back-and-forth responses with the participants, to demonstrate familiarity and trust. I ensured I held off discussions of personal opinions to remain unbiased but did discuss similar experiences where appropriate.

4.8 Conclusion

This chapter has explored the ontology and epistemology adopted for this research project, alongside the methods chosen and how these methods were carried out. A justification has been provided for the mixed methods design of this research and the setting and inclusion criteria for recruitment were described. There has been an exploration of the related ethical considerations that have been central to the design and data collection of this study.

The next chapters will explore the findings and associated discussions for this research. The description of the analyses for both quantitative and qualitative results is found at the start of each respective chapter for ease of readability. Chapter five will explore an overview of the variables for analysis, the statistical methods, results and discussion of the quantitative data from the phase one questionnaire. Chapter six will introduce the qualitative analysis and plan for the themes discussions, followed by exploration of theme one. Chapter seven and eight explore themes two and three, respectively. An overall discussion and conclusion with recommendations will follow to close the thesis.

5 Chapter Five: The Association Between Social Capital and Occupational Balance with Postnatal Depressive Symptomology: An Analysis of Cross-sectional Data in Wales

5.1 Introduction

The aim of this study is to understand how the concepts of social capital, occupational choice and occupational balance manifest within motherhood and impact on PND symptomology. In this chapter, the results presented will endeavour to answer the first research question.

Research Question 1: How can social capital and differences in daily occupational engagement and balance help us to better understand postnatal depression?

The data within this quantitative chapter comes from the closed question responses of the questionnaire (phase one). The chapter will begin with an exploration of the variables and how they were categorised for analysis. The statistical methods section that follows will explore the choice of statistical methods employed, the exploration of potential confounders and how missing data was managed. Descriptive, univariate and multivariate results are presented, as well as a secondary analysis using a different cut-off for the EPDS scores. The discussion section will summarise how the key findings assist in answering the research question of interest, the strengths and limitations of the methods employed and how representative the results are.

5.2 Inclusion/Exclusion Criteria Regarding Participation

As discussed in chapter four, the inclusion criteria for participation in the questionnaire were mothers of children aged less than eighteen months, with a home address in Wales and literate in English. There were additional exclusion criteria applied to the data for inclusion in analysis. The first exclusion were postcodes that were incomplete. The postcode was used to identify the wealth of the small area in which the mother lived in accordance with the Welsh Government's Welsh Index of Multiple Deprivation (WIMD). There are different ways of classifying the asset scores generated by this index, and the wealth quintiles were selected for use, where quintile 1 is classified as most deprived and quintile 5 is least deprived, identified using the Welsh Government postcode to rank lookup (Welsh Government 2022b). If the WIMD deprivation quintile could not be assigned to each participant, this would impact

on the variable being used as a potential confounder during analysis. Secondly, a completion rate of less than 88% was excluded as the questions surrounding the exposures of interest would not be covered prior to this point of the questionnaire. A completion rate of 88% ensured the questionnaire had gathered sufficient information on support systems, group involvement and socialisation, which covered social capital and aspects of occupational choice and engagement. Participants with missing data surrounding the key exposure variables were excluded.

5.3 Overview of Variables Included in Analysis

The concepts under investigation were social capital and occupational balance to explore their association with EPDS scores, the measure of depressive symptomology used in this study. This section will describe the coding process for each variable in preparation for statistical analysis.

The closed questions or Likert scale questions formed the quantitative data, with the responses assigned a numerical value and label for each variable response. This numerical data set was exported from Excel to IBM SPSS Statistics 25 for analysis.

5.3.1 Exposure/Independent Variables: Social Capital and Occupational Balance

To capture the culturally sensitive and complex contexts related to social capital and occupational balance, multiple variables relating to the key concepts involved were used to devise a scoring system, similar to those used by previous authors but adapted to be of relevance to the population under study (postnatal mothers) (Grootaert et al. 2004; Wagman and Håkansson 2014). This section will provide a breakdown of how each of the two exposure variables were scored from a combination of questionnaire responses.

5.3.1.1 Social Capital Scoring System

Social capital encompasses individual understanding of relationships, societal norms and expectations, alongside personal values (Dekker and Uslaner 2001; Field 2003). The seven variables considered most appropriate to capture these aspects and included in the scoring criteria were: levels of confidence in mothering role; number of roles; support systems (emotional, physical, monetary and additional); and socialisation. The frequency tables and

cross-tabulation tables for the individual variables are given in Appendix 12. Each variable was split into three categories, given a score of 0, 1 or 2. The score for each of the variables was added for each participant, giving an overall social capital score. Each of these seven variables are explored below in further detail.

Levels of Confidence in Mothering Role

Confidence within a role is built from multiple components, inclusive of previous experience, levels of guidance, reassurance from others, advice to follow, societal norms, personal values, personal and societal expectations and practice (Slootjes et al. 2016).

The original question within the questionnaire from this study asked if mothers felt confident within their role as mother. There were four possible responses ranging from very unconfident to very confident (Appendix 2, Question 44).

Due to small sample sizes for the ‘unconfident’ and ‘very unconfident’, these categories were combined. Three categories were used for the scoring system:

Unconfident/Very Unconfident	0 (Low)
Confident	1 (Medium)
Very Confident	2 (High)

Table 2: Confidence Scoring Table

Number of Roles

There is research to suggest that roles can have a positive and negative effect, with some roles being supportive and adding to the formation of identity, but too many roles can cause overload and stress (Glynn et al. 2009). Established roles, especially those that were in place prior to motherhood, can have an impact on the amount of support available, the knowledge existing and the levels of confidence in this new role.

The original question from this study’s questionnaire explored the different roles the woman had in her life, with 17 possible responses covering family and vocational roles with the final response ‘other’ giving a text option to specify (Appendix 2, Question 37).

All roles identified by each participant were summed to give a total role score. Three categories were used in the scoring system:

1-5	0 (Low)
6-9	1 (Medium)
10-14	2 (High)

Table 3: Roles Scoring Table

Support Systems

Support systems were split into four categories: emotional; physical; monetary; and additional. There is a large amount of research to suggest that social support is linked with health outcomes and that the more support received, the lower the depressive symptoms (Law 2002; Bar and Jarus 2015; Yazdani et al. 2018). However, research which separates the types of support is less available. These support systems were considered important as emotional support has been seen to be integral to the success of mothers in their role (Razurel and Kaiser 2015). Physical support is directly relational to the roles a woman engages in and how well she can complete them. Monetary support is a stressor during motherhood. Additional support is the knowledge that there is support during emergency situations which reduces the stressors for mothers, particularly with the issues around geographical mobility highlighted during this research.

The number of different sources of support in each individual category were summed from the responses to the overall support matrix question, as seen in Figure 5.

The original question within the questionnaire of this study, with the possible responses were:

Please can you identify the type of support you receive from the following persons:

Please select all that apply

	Father(s) of your child/ children	Your parents	Your in-laws	Other family members	Your friends/colleagues	Healthcare professional	No support received
Financial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emotional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Childcare (for work)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Childcare (for social)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Domestic Chores	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shopping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Call on in an emergency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can ask for additional help if needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 5: Question 38, Questionnaire

(Appendix 2, Question 38)

Four overall support variables were created by combining the sums for individual, related variables:

Emotional Support	Emotional
	Advice
Physical Support	Domestic Chores
	Childcare (work and social)
Monetary Supports	Finance
	Transport
	Shopping
Additional Support	Additional Help
	Call in Emergency

Table 4: Support Systems

For these four variables, three categories were assigned for scoring, the same for each support variable, decided upon due to the range and means of the data form each of the combined variables.

<4	0 (Low)
4-7	1 (Medium)
8+	2 (High)

Table 5: Support Scoring Table

Basic sense-checks of the data were completed using cross-tabulations but all four variables were retained as each were considered to measure a unique element of social capital (Appendix 13). A 'total combined support' variable was contemplated, but the overall spread of data did not illustrate the levels of change within the support category that occurred, such as emotional differing from financial.

Socialisation

The opportunities to engage in activities with others and have opportunities to talk with other adults has frequently been identified in research as important for new mothers (Giddens 1991a; Field 2003; Kielhofner 2008). Social activities have been shown to have a positive impact on peer support, advice, reassurance and reductions in stress (Leahy-Warren et al. 2011; Razurel et al. 2013; Razurel and Kaiser 2015).

The original question within the questionnaire of this study, with the possible responses were:

Please can you provide information on how you socialise, i.e. spend time:

Please select all that apply

	How often do you socialise?	Where do you socialise?			Type of Activity					
		At home	Outside of the home	At group	Family gatherings	Informal catch-up	Physical activity, e.g. gym, sports	Social activity, e.g. shopping	Other activity	Not Applicable
Partner (Current)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partner (Former)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mother	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Father	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mother-in-law	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Father-in-law	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family member (no young children)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family member (with young children)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends (no young children)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends (with young children)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Figure 6: Question 42, Questionnaire

5 responses were available in the dropdown menu covering different timeframes (Appendix 2, Question 42).

Scores were allocated to frequency of socialisation for each associated individual within the question:

Individual in question e.g. Partner (Current), Partner (Former) etc.	I don't feel I can socialise	0
	Weekly/Monthly	1
	Daily/2-3 days	2
	Not Applicable	888

Table 6: Scores for Frequency of Socialisation

The total score consisted of the sum of the number of socialisation points for all associated person within the question.

Three categories were used for scoring:

1-5	0 (Low)
6-9	1 (Medium)
10-14	2 (High)

Table 7: Socialisation Scoring Table

Final Scoring System for Measuring Social Capital

The scores for each of these seven variables were summed for each participant to create an overall social capital score, with a minimum of 0 and a maximum of 14. The higher the score for each participant, the more social capital present. The overall score was split into 'low', 'medium' and 'high', with each score category covering 5 score numbers.

Low	0-4
Medium	5-9
High	10-14

Table 8: Final Social Capital Scoring

5.3.1.2 Occupational Balance Scoring System

Occupational Balance relates to a subjective view of the balance of activities and time use within daily life (Wagman et al. 2012). The questions representing these concepts in the questionnaire were the personal views of their daily time use, social impacts on activities and actual activity engagement.

The original question within the questionnaire of this study, with the possible responses were:

Please answer with how you feel at this point in time.				
	Strongly Agree	Agree	Disagree	Strongly Disagree
There is a balance between activities for myself and completing activities for others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a balance between doing activities by myself and with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My activities are meaningful to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the time to do the activities I enjoy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My activities sufficiently fill my time during a regular week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am content with the number of activities completed during the week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the time to complete my necessary activities, for example caring for my child, housework, employment etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a healthy balance between my necessary and chosen activities in my everyday life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am content with how my time is allocated within my daily routines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a balance between employment, family, relaxation, sleep, leisure and home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can control the choices around important decisions for myself and my family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Figure 7: Question 45, Questionnaire

(Appendix 2, Question 45)

A summing for the responses was calculated with the following scoring system:

Strongly Disagree	0 (Lowest)
Disagree	1 (Low)
Agree	2 (High)
Strongly Agree	3 (Highest)

Table 9: Occupational Balance Scoring Table

The more balanced a participant perceives their life to be, the higher the score and the more occupational balance is achieved (Table 10).

Final Scoring System for Measuring Occupational Balance

The score cut-off points were created related to the scoring system. It was considered that any woman choosing 'strongly disagree' or 'disagree' for all eleven statements would be categorised as 'low' occupational balance, choosing 'agree' for all questions as 'medium' occupational balance and choosing 'strongly agree' for all questions as 'high' occupational balance. These cut-off points reflected this and was considered to be the most equal division of the eleven statements.

Low	0-10
Medium	11-21
High	22-33

Table 10: Final Occupational Balance Scoring

5.3.2 Outcome/Dependent Variables: EPDS Score

The EPDS is a validated measure, with each of the 10 EPDS questions using a Likert scale response, with corresponding scores of 0-4. These EPDS scores were summed together to create a new variable 'Total EPDS Score' for each participant. This total score was split into a binary value of <9 or ≥ 9 , with 9+ commonly used as a cut-off to indicate minor to major depressive symptomology (Vigod et al. 2013; Falah-Hassani et al. 2016; Wallwiener et al. 2019). This cut-off score was selected a priori as the primary outcome.

There were more women that scored ≥ 9 on the EPDS within this study (40% of the sample scored <9 and 60% ≥ 9). Therefore, a secondary analysis was conducted using a cut-off score of 13, which is suggested to signify major depression within the literature (Fellmeth et al. 2019; Levis et al. 2020).

5.3.3 Potential Confounders

The sociodemographic variables that were considered potential confounders within this research consisted of: participant age; number of children; relationship status; employment status; financial situation; location of residence; and previous mental health diagnosis.

The variables current age of mother (<30; 30-34; 35+), total number of children (1; 2; 3+) and finance (comfortable; manageable; difficult) were grouped into three categories. Relationship status categories were combined due to small sample numbers. 'Married' and 'Civil partnership' were combined into one category. 'Lone mothers' was a group of interest but the small sample (10 mothers) all with EPDS scores ≥ 9 meant the variable could not be analysed independently and was combined to make 'Other Relationship/Lone'. Employment had two categories, with the employment category including maternity leave and sick leave. There were small percentages in quintile categories due to a small sample size split into 5 postcode quintiles, which meant combination of quintiles was necessary for analysis. Therefore, the three least deprived areas (quintiles 3-5) were combined to compare with the two most deprived areas (quintiles 1 and 2). Previous mental health diagnosis and perinatal mental health diagnosis retained their original two responses, with an additional 'not required' for the perinatal diagnosis.

5.4 Statistical Methods for Analysis

The questionnaire responses were transferred to the program SPSS for data cleaning and data checking. The data was additionally checked for accuracy of transfer into SPSS from Excel, ensuring data was numerical and assigned the correct code names for each variable and value (if assigned value names required). Data cleaning was completed on all the valid responses to filter out any errors. The process of data cleaning involves screening, diagnosing, and revising any data that was evidently inconsistent or contained clear errors. By identifying data anomalies to either edit or remove, improves the quality assurance of the data analysis (Van den Broeck et al. 2005). Each variable response was placed into a frequency table to check validity of the data and perform data cleaning as necessary. This process included: removing blank spaces before numbers, which impacted numerical value; assigning the correct names to values; and checking missing data labels were correctly assigned to values. When a skip logic was assigned to a question, there was expected missing data for responses. These

responses were assigned a different label to the data clearly identifying 'no response required'.

The conceptual framework of how the potential confounders have an independent association with the outcome and exposure is shown in Figure 8, alongside the causal pathway of the exposures under investigation with the outcome.

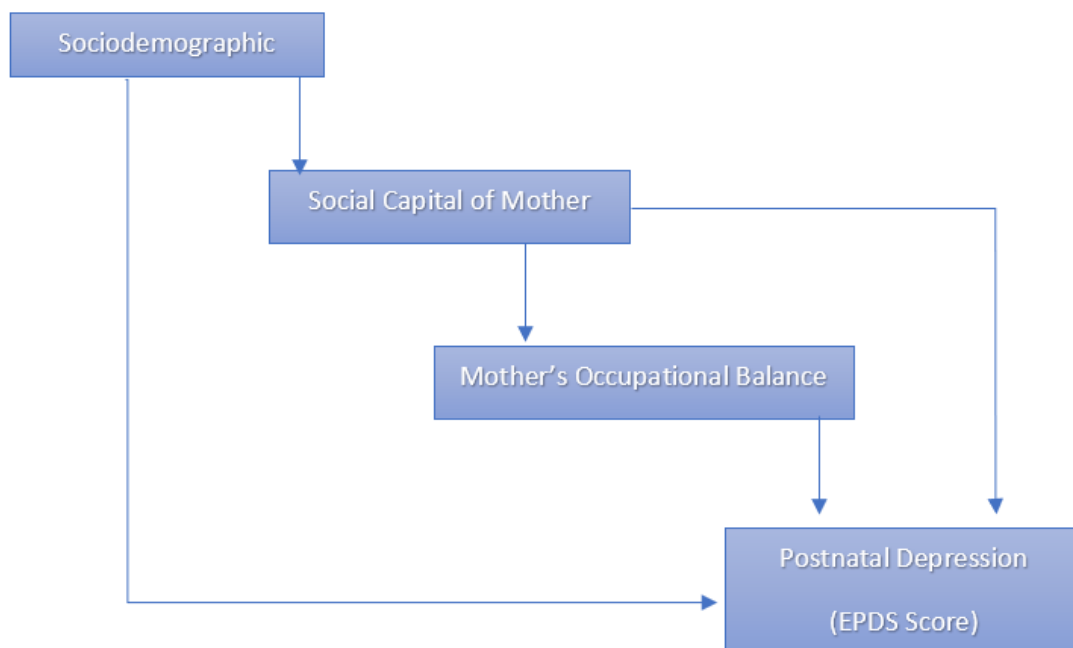


Figure 8: Conceptual Framework

The sociodemographic factors may have an impact on the EPDS scores directly in relation to lower economic status, potentially impacting on levels of depressive symptomology. Different sociodemographic backgrounds have a significant influence on social capital, as social capital directly relates to personal experiences, values, societal expectations and knowledge acquisition. Social capital can have a direct impact on depressive symptomology. Social capital will have an influence on occupational balance as personal daily routines are formulated around personal needs and situation. Occupational balance can also have an impact on depressive symptomology if there are limitations to or deprivation of any occupational category (self-care, leisure, productivity or rest). It was clear that occupational balance was

on the causal pathway between social capital and depressive symptoms and separate models were required to explore the effects of the two variables.

5.4.1 Descriptive analyses

The sociodemographic variables were cross-tabulated with the outcome. This was to examine the distribution and understand whether there were associations between the variables that would help to guide further analyses. Associations between categorical variables were assessed using Chi-Squared tests, with the Pearson-Chi Squared tests used for tables with cell counts ≥ 5 and Fisher's Exact Test used with cell counts < 5 .

5.4.2 Multivariable analyses

As the research question explored a relationship between the exposure variables and a binary outcome variable, a logistic regression model adjusting for potential confounders was an appropriate model (Hosmer et al. 2013; Field 2018).

Univariate logistic regression models were run to explore the association between independent variables (sociodemographic variables, social capital and occupational balance) with the outcome variable. A total of 9 univariate logistic regression models were examined.

My modelling strategy for the multivariate logistic regression consisted of three models. The first model includes all sociodemographic variables, adjusting for each other. Social capital and occupational balance were examined in separate models as described using the conceptual framework above (Figure 8). The next model examined the association between social capital and EPDS score, adjusting for the sociodemographic variables. A decision was made a priori to retain all sociodemographic variables in the multivariate models, as all variables had the potential to confound the association between social capital and occupational balance with EPDS score, rather than base the modelling strategy on the results of statistical tests of association. The final model looked for an association between occupational balance and EPDS score, adjusting for the sociodemographic variables and social capital. The potential confounders were added into the model one by one, to understand which produced the most pronounced changes between the unadjusted and adjusted odds ratio for both the social capital and occupational balance models.

5.5 Results

5.5.1 Flow Diagram

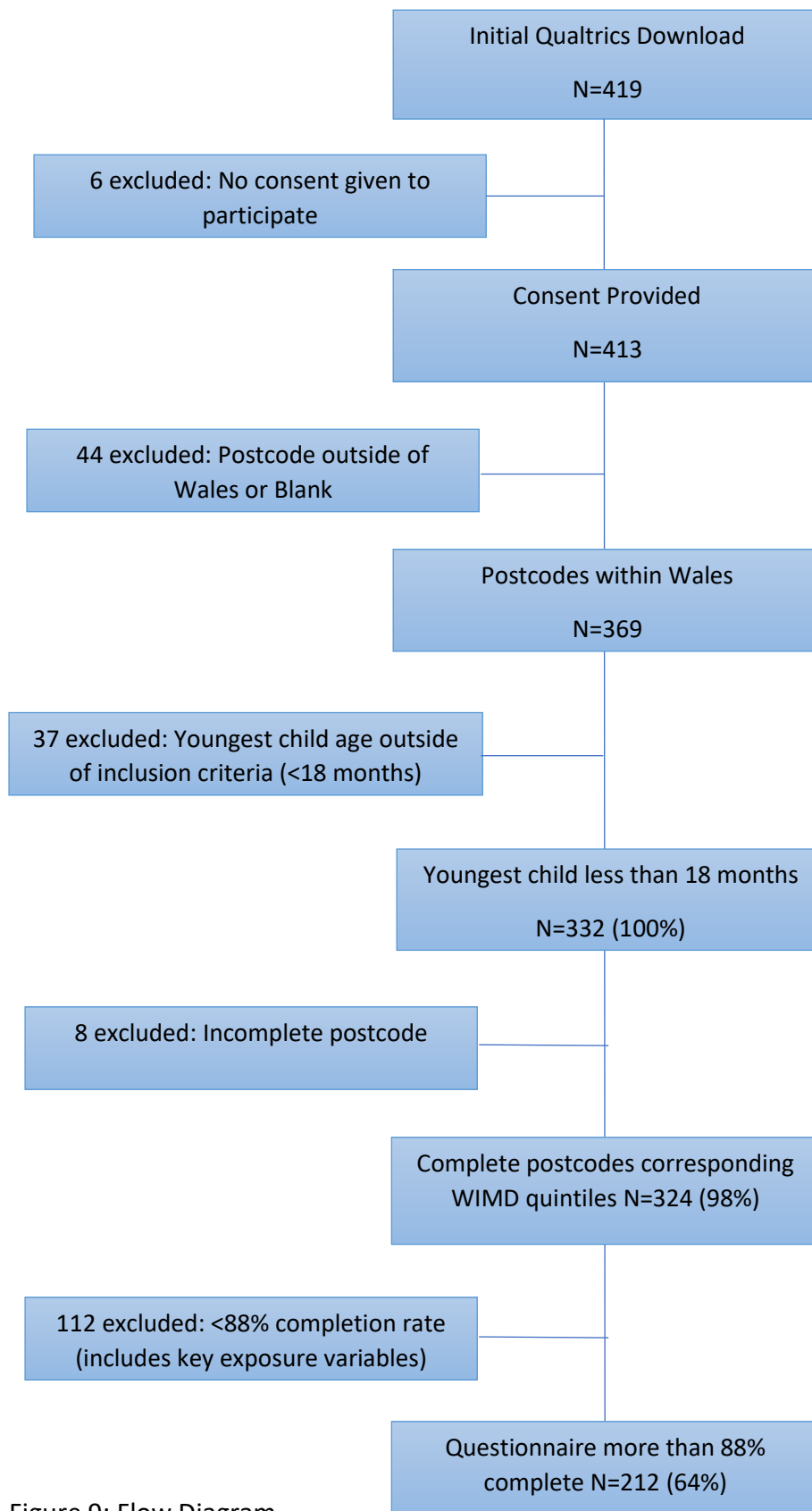


Figure 9: Flow Diagram

Figure 9 shows the flow diagram for the study. There were 419 people that had accessed the live link, logging as questionnaires being initiated. Qualtrics processed any level of data entry as a valid data extract. Of these, 6 participants did not complete all three consent questions and provided no further data, so were removed from the sample. 81 participants were

removed as they did not fit the inclusion criteria for the study: 44 because they reported postcodes outside of Wales or left postcodes blank; and 37 because their youngest child was older than 18 months. As these responses were outside of the inclusion criteria, they would not be included within the analysis and were thus not incorporated into the missing data percentage calculations.

Figure 9 then highlights 120 participants who were excluded from the final sample for analysis, as they were missing key data that were considered essential for the analysis. This consisted of 8 without the full postcode, meaning the WIMD deprivation quintile could not be assessed and thus, would not fit within groupings for data analysis; and 112 removed due to a completion rate of <88%, which meant they did not provide responses to the questions on the key exposure variables of social capital and occupational balance. The presence of missing data could cause bias within the sample for analysis and a table of comparative key sociodemographic information was completed to check for inconsistencies between the two populations (120 missing data with 212 final sample; See Appendix 14). The women within the missing data sample did have a higher percentage of mothers within the below 30 age category (34.2% within the missing data and 21.7% within the included sample). Additionally, there was a higher proportion in the missing data of women with EPDS scores ≥ 9 when compared with the women scoring < 9 (61.7% ≥ 9 and 31.7% < 9 within the missing data and 59.9% ≥ 9 and 40.1% < 9 within the included sample). This wider difference in the missing data percentages of EPDS scores was affected by the non-completion of the EPDS by some of the missing data sample (6.7%, n=8).

The final sample included to explore the association between social capital and EPDS scores was based on 212 participants. There were three participants who did not complete all required questions regarding occupational balance. The analyses examining the effect of occupational balance on EPDS scores was therefore based on 209 participants.

5.5.2 Distribution of socio-demographic variables and univariate association with EPDS scores

Table 11 presents the sociodemographic information of the women included in the analysis. It also shows the cross-tabulation of the sociodemographic variables with EPDS scores of < 9 or ≥ 9 .

5.5.2.1 Background Statistics

Of all the women in the study, 59.9% (n=127) scored ≥ 9 and 40.1% (n=85) < 9 on the EPDS. For the secondary analysis, 37.3% (n=79) of the women scored ≥ 13 and 62.7% (n=133) scored < 13

on the EPDS. 92 participants (43.4%) were aged 30-34. Fewer were aged 35+ (34.9%, n=74) and the smallest group were aged <30 (21.7%, n=46). Most respondents (61.3%, n=130) were first time mothers. 61 women (28.8%) had two children and the smallest group had 3+ children (0.9%, n=21). There was no evidence of an association between age or number of children and EPDS score categorised as a binary variable (p-value for the chi-squared test with age = 0.111, and number of children = 0.755). 62.7% (n=133) of the women were married or in a civil partnership and 32.5% (n=69) of the women classified themselves as being in any other type of relationship. There was evidence of an association between relationship status and the EPDS score (p-value=0.011). Of note, the smallest group was lone mothers (4.7%, n=10) and all mothers within this group scored ≥ 9 on the EPDS scoring system. 88.2% (n=187) of the women were employed, with 11.8% (n=25) unemployed. A higher percentage of women in unemployment (17.3%, n=22) scored ≥ 9 , when compared with the same population scoring < 9 (3.5%, n=3) (p-value=0.002). 46.2% of women (n=98) described their financial circumstances as manageable, fewer described comfortable finances (38.2%, n=81), while 15.6% (n=33) described their finances as difficult. A higher percentage of women who described their financial situation as difficult had an EPDS score ≥ 9 (23.6%, n=30), when compared to an EPDS score < 9 in the same population (3.5%, n=3). The percentages of mothers scoring ≥ 9 on the EPDS decreased as the financial status increased, with comfortable financial status (54.1%, n=46) higher than manageable financial status (42.4%, n=36), and both higher than difficult financial status (3.5%, n=3).

The largest number of women lived in the least deprived area (Quintile 5, 32.1%, n=68). Fewer lived in Quintiles 4 (20.8%, n=44), Quintile 3 (18.9%, n=40) and Quintile 2 (17.9%, n=38). The smallest group of women lived in the most deprived area (Quintile 1, 10.4%, n=22). There is some suggestion that a higher percentage of women in the deprived Quintiles (1 and 2) had EPDS scores of ≥ 9 , although patterns are not consistent due to small numbers. 36.3% (n=77) of the women in the sample had received a mental health diagnosis at some point prior to the time of the questionnaire. Women with a previous mental health diagnosis had a higher percentage of EPDS scores ≥ 9 (48.8%, n=62), in comparison to the same population with EPDS scores < 9 (17.6%, n=15), with strong evidence of an association between mental health diagnosis and EPDS scores (p-value=0.000). Additionally, 40 (51.9%) of these women's

diagnosis were related to perinatal mental health. It was not distinguishable if this was a current diagnosis or from a previous postnatal period, if the mother had more than one child.

There were 3 (1.4%) mothers who stated they had no access to emotional support in their daily life and all three of these mothers scored 19 or more on the EPDS. Of the 21 (9.9%) mothers who categorised themselves as 'unhappy' or 'very unhappy' on the questionnaire, each mother scored ≥ 14 on their EPDS. Additionally, 36 (17.0%) of the mothers stated they were 'unconfident' or 'very unconfident' in their mothering role and 34 (94.4%) of these scored ≥ 9 on the EPDS. Overall, 134 (63.2%) of mothers felt they needed additional support within their mothering role.

<i>CATEGORIES prior to merging for logistic regression</i>		Total (n=212)	Percentage	Total with EPDS <9	%	Total with EPDS =>9	%	P-value
Total EPDS	<9	85	40.1%					
	≥9	127	59.9%					
Mother's Age	<30	46	21.7%	13	15.3%	33	26.0%	0.111 ¹
	30-34	92	43.4%	43	50.6%	49	38.6%	
	35+	74	34.9%	29	34.1%	45	35.4%	
Number of Children	1	130	61.3%	52	61.2%	78	61.4%	0.755 ¹
	2	61	28.8%	26	30.6%	35	27.6%	
	3+	21	9.9%	7	8.2%	14	11.0%	
Relationship Status	Married/Civil Partnership	133	62.7%	59	69.4%	74	58.3%	0.011 ²
	Other Relationship	69	32.5%	26	30.6%	43	33.9%	
	Lone	10	4.7%	0	0%	10	78.7%	
Employment Status	Employed	187	88.2%	82	96.5%	105	82.7%	0.002 ²
	Not Employed	25	11.8%	3	3.5%	22	17.3%	
Finance	Comfortable	81	38.2%	46	54.1%	35	27.6%	0.000 ²
	Manageable	98	46.2%	36	42.4%	62	48.8%	
	Difficult	33	15.6%	3	3.5%	30	23.6%	
Postcode Quintiles (1= most deprived; 5= least deprived)	1	22	10.4%	8	9.4%	14	11.0%	0.042 ¹
	2	38	17.9%	10	11.8%	28	22.0%	
	3	40	18.9%	23	27.1%	17	13.4%	
	4	44	20.8%	14	16.5%	30	23.6%	
	5	68	32.1%	30	35.3%	38	29.9%	
Mental Health	Yes	77	36.3%	15	17.6%	62	48.8%	0.000 ¹
Diagnosis	No	135	63.7%	70	82.4%	65	51.2%	
Perinatal Diagnosis	Yes	40	18.9%	(51.9%) 4	4.7%	36	28.3%	0.000 ²
	No	37	17.5%	(48.1%) 11	12.9%	26	20.5%	
	Not Applicable	135	63.7%	(0%) 70	82.4%	65	51.2%	

Table 11: Descriptive Statistics and Cross-tabulation of Sociodemographic Information with EPDS Score (Cut-off Score Nine).

¹ Pearson-Chi Square Test. ² Fisher's Exact Test.

5.5.3 Multivariate association between sociodemographic variables and EPDS scores

Table 12 presents results of the logistic regression model for the association between sociodemographic variables and EPDS scores, showing unadjusted estimates and estimates adjusting for the other variables within the table. There was no evidence of collinearity between the variables in the model (See Appendix 15).

In the adjusted model, there was no evidence of an association between age of mother, number of children, relationship status, employment status or wealth quintile and EPDS score.

The women who classified their financial status as 'difficult' were almost seven times more likely to have EPDS scores of 9 or above than those women who classified their financial status as 'comfortable' (adjusted odds ratio [OR] 6.85; 95% confidence interval [CI] 1.70-27.60; $p=0.007$). Women with a previous mental health diagnosis were three times more likely to have EPDS scores of 9 or above than those women without a previous diagnosis (adjusted OR 3.18; 95% CI 1.55-6.51; $p=0.002$).

Table 12: Sociodemographic Information Logistic Regression (EPDS Cut-off Score 9)

	Unadjusted OR	95% CI	P-value	Adjusted OR*	95% CI	P-value
Age of Mother						
<30	2.228	1.040-4.770	0.039	1.744	0.733-4.149	0.209
30-34	1.00 (Reference)	-		1.00	-	
35+	1.362	0.732-2.534	0.330	1.502	0.754-2.995	0.247
Number of Children	0.972	0.686-1.377	0.873	0.880	0.577-1.342	0.553
Relationship Status						
Married/Civil Partnership	1.00 (Reference)	-		1.00	-	
Other Relationship/Lone	1.625	0.909-2.905	0.101	1.056	0.531-2.102	0.876
Employment						
Employed	1.00 (Reference)	-		1.00	-	
Not Employed	5.727	1.657-19.798	0.006	3.144	0.810-12.206	0.098
Finance						
Comfortable	1.00 (Reference)	-		1.00	-	
Manageable	2.263	1.240-4.131	0.008	1.902	0.988-3.662	0.054
Difficult	13.143	3.707-46.595	0.000	6.848	1.699-27.599	0.007
Postcode Quintiles						
3, 4 & 5 (Least deprived)	1.00 (Reference)	-		1.00	-	
1 & 2 (Most deprived)	1.839	0.971-3.482	0.061	1.102	0.521-2.331	0.800
Previous Mental Health Diagnosis						
No	1.00 (Reference)	-		1.00	-	
Yes	4.451	2.307-8.589	0.000	3.180	1.553-6.512	0.002

All reference categories were chosen due to highest frequency and least risk of depressive symptomology. *Each estimate is adjusted for all other sociodemographic variables.

5.5.4 Primary Analysis: The Association between Social Capital and EPDS score

Table 13 presents a cross-tabulation of social capital with EPDS scores. Overall, most women reported a medium level of social capital (63.2%, n=134), with a quarter reporting low social capital (24.5%, n=52) and 12.3% reporting high social capital (n=26). 29.9% of the women in the EPDS ≥ 9 group have low social capital compared to 16.5% of women in the EPDS < 9 group. Conversely, only 7.9% of the women in the EPDS ≥ 9 group have high social capital, compared to 18.8% of women in the EPDS < 9 group.

Table 13: Cross-tabulation of Social Capital with EPDS Scores (Cut-off Score 9)

Social Capital Score	Frequency (N=212)	Percentage	EPDS < 9	% Social Capital	EPDS ≥ 9	% Social Capital	P-value
High	26	12.3%	16	18.8%	10	7.9%	0.012*
Medium	134	63.2%	55	64.7%	79	62.2%	
Low	52	24.5%	14	16.5%	38	29.9%	

*Pearson Chi-Square Test.

Table 14 presents the results of the logistic regression examining the association between social capital and EPDS scores. The unadjusted odds ratios suggested that women with low or medium social capital are more likely to have EPDS scores ≥ 9 than women with high social capital scores. Women with low social capital scores were four times more likely to have EPDS scores ≥ 9 (unadjusted OR 4.343; 95% CI 1.598-11.803; $p=0.004$) and women with medium social capital scores were twice as likely to have EPDS scores ≥ 9 (unadjusted OR 2.298; 95% CI 0.971-5.441; $p=0.058$).

However, after adjusting for potential confounders, there was no apparent association between social capital and EPDS score. The variable that was the strongest confounder of the association was the financial circumstances of the mother, making the most difference to the size and significance of the estimates (See Appendix 16 for logistic regression model for each sociodemographic variable).

Table 14: Social Capital Logistic Regression (EPDS Cut-off Score 9)

	OR* Not adjusted	95% CI	p-value	OR* Adjusted	95% CI	P-value
High	Reference					
Medium	2.298	0.971-5.441	0.058	1.856	0.718-4.798	0.202
Low	4.343	1.598-11.803	0.004	2.263	0.734-6.981	0.155

*The estimates are adjusted for all sociodemographic variables.

5.5.5 Primary Analysis: The Association between Occupational Balance and EPDS score

209 of the 212 participants were included in the occupational balance logistic regression model. Table 15 illustrates a cross-tabulation of occupational balance with EPDS scores. Overall, most women reported a medium level of occupational balance (66.0%, n=138), with over a quarter reporting low occupational balance (26.3%, n=55) and 7.7% (n=16) reporting high occupational balance. 38.7% of the women in the EPDS score ≥ 9 group have reported low occupational balance compared with 8.2% in the EPDS < 9 group. On the contrary, only 3.2% of the women in the EPDS ≥ 9 group have high occupational balance compared to 14.1% of women in the EPDS < 9 group.

Table 15: Cross-tabulation of Occupational Balance with EPDS Scores (Cut-off Score 9)

Occupational Balance Scores	Frequency (N=209)	Percentage	EPDS <9	% Occupational Balance	EPDS ≥ 9	% Occupational Balance	P-value
High	16	7.7%	12	14.1%	4	3.2%	0.000*
Medium	138	66.0%	66	77.6%	72	58.1%	
Low	55	26.3%	7	8.2%	48	38.7%	

*Fisher's Exact Test.

Table 16 presents the results of the logistic regression examining the association between occupational balance and EPDS scores. The unadjusted odds ratios suggest that women with low or medium occupational balance are more likely to have EPDS scores ≥ 9 than women with high occupational balance scores. There is a bigger effect on EPDS scores ≥ 9 in the group of women with low occupational balance scores (unadjusted OR 20.571; 95% CI 5.166-81.915; $p=0.000$) than women with medium occupational balance scores (unadjusted OR 3.273; 95% CI 1.006-40.649; $p=0.049$).

After adjusting for confounders, the odds ratio for medium occupational balance was not statistically significant, but the adjusted odds ratios for low occupational balance suggested that these women were almost 17 times more likely to have higher EPDS scores than women with high occupational balance scores (adjusted OR 16.807; 95% CI 3.540-79.797; $p=0.000$). There was no single variable that led to the major changes in the odds ratios in the adjusted model but instead a combination of confounding variables: number of children; financial situation of the mother; postcode quintile; and previous mental health diagnosis (See Appendix 17 for logistic regression model for each sociodemographic variable).

Table 16: Occupational Balance Logistic Regression (EPDS Cut-off Score 9)

	OR Not adjusted	95% CI	P-value	OR* Adjusted	95% CI	P-value
High	Reference					
Medium	3.273	1.006- 10.649	0.049	3.222	0.838-12.398	0.089
Low	20.571	5.166- 81.915	0.000	16.807	3.540-79.797	0.000

*The estimates are adjusted for all sociodemographic variables and social capital variable.

5.5.6 Secondary Analysis: Associations Between Exposure Variables and EPDS Score with a Cut-off Score of 13

A secondary analysis was completed using a cut-off of 13 for the EPDS scores. This secondary analysis was used to examine whether associations were seen when a cut-off score for higher levels of depressive symptomology was used.

Appendix 18 and 19 (respectively) contain the cross-tabulation and logistic regression examining the association between social capital and occupational balance EPDS scores with a cut-off score of 13. 37.3% (n=79) of women scored ≥ 13 on the EPDS score. There was a higher percentage of women with EPDS scores of ≥ 13 in the women with low social capital (n=28, 54.9%) and low occupational balance (n=42, 76.4%), compared with women within the medium or high categories.

The unadjusted odds ratio for medium social capital were not significant. There did appear to be an association between low social capital and EPDS score, with the adjusted odds ratio for comparison with women in the high social capital group suggestive of a three-fold increased risk of scoring ≥ 13 (adjusted OR 3.904; 95% CI 1.001-15.218; p=0.050).

It was not possible to run a logistic regression model on the association between occupational balance and EPDS scores with a cut-off score of 13, as there were no women with an EPDS score ≥ 13 and high occupational balance.

5.6 Discussion

In this analysis, it was examined whether there was an association between social capital and occupational balance with EPDS scores. There was no association between social capital and EPDS score with a cut-off score of 9, after adjusting for sociodemographic variables. The results did suggest a strong relationship between lower occupational balance scores and increased postnatal depressive symptoms. Women with low occupational balance were nearly 17 times more likely to have EPDS scores ≥ 9 than mothers with high occupational balance, when adjusted for sociodemographic variables and social capital. As the large effect remained despite adjusting for social capital, the adjusted odds ratio is the effect of occupational balance, independent of social capital.

Within the secondary analysis, low social capital was associated with a higher likelihood of scoring ≥ 13 on the EPDS, when compared with high social capital and adjusted for sociodemographic variables. It was not possible to complete the occupational balance logistic regression for the higher EPDS score as there was a zero count for women that scored ≥ 13 on the EPDS and had a score of high occupational balance.

5.6.1 Potential Strengths and Weaknesses of Quantitative Analysis

With observational epidemiological data, it is always important to examine whether any associations seen might be true associations or whether there might be alternative explanations. These potential alternative explanations will be considered within this section.

Chance

Random error occurs by chance as the observed values within research differ from the true values, being either higher or lower. Within this research, there may have been issues with the differences between participants or natural variations in the context of data collection. These potential variations were considered within the sample, with the need for a significant proportion of women with EPDS scores above and below the cut-off score of 9, to be able to explore relationships between variables more precisely and be more representative of a true association.

A priori sample calculations suggested that approximately 200 women were required to complete the questionnaire. This response rate was achieved within this study. Given this sample size, there were enough women to detect a two-fold increase in the risk of mild depressive symptoms, in a two-group exposure variable, with 80% power and at a significance level of 0.05 in the quantitative analysis. The sample size was adequate to detect the large effect size seen when comparing women with low occupational balance to women with high occupational balance (OR=16.807) on depressive symptomology, which means an association was clearly demonstrated within the study.

Given the level of detail included in the questionnaires and the variability in scores across the sample, social capital and occupational balance were examined as a three-level exposure (high, medium, low) at the analysis stage. This may mean that the sample size achieved was

not adequate to detect a small effect size for all levels of social capital or occupational balance. This may explain why no effect of social capital on association with EPDS scores was seen after adjusting for confounders.

A larger sample size may have allowed for detection of an association in social capital scores with EPDS scores because the true effect size in the population is smaller than the one that was seen in the sample. However, the large effect size detected for occupational balance is not explained by chance. There does remain some uncertainty in the size of this effect, with the large confidence interval in the association between occupational balance and EPDS score (3.540-79.797). However, the lower boundary of the confidence interval means there is a 95% confidence that the women with low occupational balance were at least 3.5 times more likely to have EPDS scores ≥ 9 .

Selection Bias

Selection bias can affect a study if the sample of participants is not representative of the overall population under investigation. The target population within this study were Welsh mothers with pre-school children. There was a particular interest in mothers without access to additional resources or services and with a mix of EPDS scores above and below the cut-off score of 9. Selection bias could have occurred during recruitment or during analysis and both will be explored in more detail.

Non-random selection was used to ensure representation from all groups and locations across Wales, to recruit participants that met the inclusion criteria. Recruitment for the study was initially through advertisements on online social media platforms by academics, mothers or support group pages. This was followed by HWW emails and newsletters. Snowball sampling and gatekeepers were used to outreach to additional mothers, attempting to reach different types of women, to mitigate any sampling bias. However, the mothers that would have seen the advertisements were already associated with online support groups or had consented to be contacted for research purposes. There may have been mothers in more rural, isolated areas who did not have online access or local peer services and were not included within the sample. Overall, the mothers included in this study from all regions of Wales are likely to have a higher occupational balance than the women that did not participate as they were able to

commit to the time required to complete phase one of this research. Without these scores within the current sample, the results are diluted and the true associations may not have been captured. As there is a strong occupational balance association, this would suggest the association would have been even stronger, had these mothers been included.

There were 212 participants included in the final analysis sample, meaning there were 120 participants excluded as missing data, which can lead to a biased sample. The comparative table (Appendix 14) was able to verify the women in the excluded sample did have a higher proportion of women <30 years old and higher EPDS scores. Thus, there may have been an association between these women and lower social capital and occupational balance scores. If a group of women with lower social capital and higher EPDS scores was excluded, this may account for the lack of effect seen from social capital in the results. However, as the results would have been diluted, the effect of occupational balance would be even larger than shown in the results and is existent. The missing data may be impacting on seeing the full effects of occupational balance in the sample. The effect of not including this missing data sample is likely to be small but the exploration of association between younger mothers and higher EPDS scores is potentially an area for further exploration in future research.

The aim of the study was not to estimate the prevalence of PND in Wales but examine associations, so the recruited sample did not necessarily need to represent the population of postnatal women in Wales (Richiardi et al. 2013). However, given the objectives of this study, the sample did need to include populations of mothers that were not covered by government services, such as Flying Start. Flying Start provides access to free groups, childcare and additional health professional support to parents living in low deprivation postcode areas (Welsh Government 2017b,2022a). There were more mothers from quintiles 3-5 than quintiles 1-2, which did illustrate successful recruitment when considering the purpose of this study. The results of this study are less applicable to mothers within quintiles 1-2 but service provision is already established for these mothers. The sample was appropriate for the research questions being answered. Being able to draw inferences for the less deprived population is useful to inform the next steps for healthcare professional involvement and service development.

Information Bias

Information bias includes any issues with the handling of data that can cause errors in the information collected on exposures or outcomes, and therefore an over or underestimation of the associations seen. Within this research, there was use of unvalidated questionnaire and measurement tools that may have impacted on the associations seen. Additionally, the grouping of variables may have diluted some of the effects seen.

As mentioned, the main content of the questionnaire was adapted to make relevant to motherhood from two validated tools (the Occupational Balance Questionnaire and the Social Capital Questionnaire) and thus required new scoring systems. This did mean the questionnaire used an unvalidated tool to capture data on social capital and occupational balance, which included the use of unvalidated scoring systems. However, the results of the qualitative analysis (discussed in chapters six to eight) were consistent with the quantitative results, so the questions appeared to be measuring the phenomena of interest. Nevertheless, the use of unvalidated tools for the exposure may have led to some misclassification of social capital and occupational balance. This misclassification is likely to be random as it is unlikely that the adaptations changed the questionnaires in ways which would lead to different responses from women with and without PND. This would result in an underestimation of the associations examined. Additionally, the tool used to gather data on the outcome (EPDS) was validated, which ensures the measurement of depressive symptoms that are specific to the postnatal period (Thombs et al. 2015; Levis et al. 2020).

Due to the sample size, there were small numbers in some of the sociodemographic variable cells and variables needed to be combined for analysis. The data could not have been input into the model without adequate numbers within each cell and each variable combination was considered for the least restrictive pairings. This may have grouped together women that did not have similarities and diluted the accuracy of the analysis.

The factors discussed above may have diluted the results for the social capital model with the lack of an association seen with EPDS score. However, this would not explain the significant effect seen within the occupational balance model, which would have been even larger if the results captured were underestimated.

Recall bias was also considered, where the outcome of interest itself may affect the recollections of events. The women within the study were reporting subjectively on their questionnaires for aspects of social capital and occupational balance, for example, levels of support, socialisation and time use. There may have been more negative reports from the mothers with depressive symptomology as they may not perceive there to be the same levels of positive influence within their lives. Alternatively, the women's perspectives on their life could be detached at the time of questionnaire completion. As this was a study of the mother's lived experience, this was not problematic for the interpretation of the data. Though these potential areas of bias were considered, the results were representative of the women's experience at the time of completion and are unlikely to impact on interpretation.

Confounding

Confounders are variables that are associated with the exposure and the outcome, seen as the sociodemographic categories, such as finance. Multiple potential confounders were adjusted for in the analysis and this made a difference to the estimates, including nullifying the associations for social capital and reducing the size of the association for occupational balance. It is therefore concluded that within this sample, there is no association seen between social capital and EPDS score once confounders were adjusted for, whereas the effect seen on EPDS score from occupational balance remained.

Some confounders may not have been measured well, for example, employment, or weren't measured at all, for example, education. There may therefore be some residual confounding within the estimates in this study. This is unlikely to explain the large association between low occupational balance and EPDS score because the confounders included within the study were extensive and had low multicollinearity.

Reverse Causality

There is the possibility of reverse causality within this study, where a high EPDS score may affect the exposures under investigation, rather than the exposures affecting the outcome. Within cross-sectional data, this is a common issue as information about the exposure and the outcome is collected at the same point in time. It is therefore likely these associations are

cyclical in nature and influence each other. For example, higher levels of sleep deprivation and social isolation could lead to a decrease in occupational engagement, social interaction and negatively impact on self-identity. Further exploration of this possible reverse causality will be explored in the final discussion. The awareness of this potential cyclical relationship is essential when considering healthcare interventions that can address the influence the exposures and outcome have on each other.

5.6.2 Comparison of Quantitative Results with Existing Research

Though there was no association seen between social capital and EPDS score with a cut-off ≥ 9 , there was an association in the secondary analysis with cut-off score of 13, which supports the research to suggest social capital is associated with depressive symptomology. Previous research does suggest an association between social capital and postnatal depressive symptomology (Kritsotakis et al. 2013; Zhou et al. 2018; Nagy et al. 2020). Additional research has explored how low social capital has an association with postnatal health and well-being (Winkworth et al. 2010; Lamarca et al. 2013; La Placa and Knight 2014; Strange et al. 2016; McArthur and Winkworth 2017). The results from this study and previous research suggest there is a need to develop a fuller understanding of how the different elements of social capital may impact on a postnatal mother's life. This can assist in understanding how potential interventions could be developed to better support these mothers.

The association between low occupational balance and EPDS score, and the fact that no woman scoring ≥ 13 claimed to have high occupational balance, highlights the occupational imbalance felt by women who have self-rated higher levels of depressive symptomology. Both the score of occupational balance and the EPDS score are self-rated so both scores are subjective but this further reflects the perception of the woman and directly impacts on her mental health. These results support existing literature that indicate there is an association between occupational balance and health and well-being (Backman 2004; Anaby et al. 2010; Wagman et al. 2015; Eklund and Argentzell 2016; Wagman and Håkansson 2019), especially for mothers (Horne et al. 2005; Hodgetts et al. 2014; Borgh et al. 2018; Uthede et al. 2022).

Financial considerations were identified as confounders in both the social capital and occupational balance logistic regression models and should be considered an important

influential factor on postnatal depressive symptomology. This is consistent with previous research studies finding financial deprivation is closely linked with low socioeconomic status, which is highly correlated with higher rates of mental health issues (Gunnell et al. 1995; Martin et al. 2014). With the costs of living rising, a survey of 983 women by Maternity Action (2022) has called for statutory maternity pay to reflect the living wage. Overall, 96% of the women in their survey were worried about money during their maternity leave with 56% of these women stating it had a negative impact on their health and wellbeing (Maternity Action 2022).

Additional data exploration highlighted that lone mothers, mothers with reduced emotional support or mothers feeling unconfident within their role were mostly associated with higher EPDS scores. This is supported by previous research on the importance of support and confidence within the mothering role (Choi et al. 2005; Laney et al. 2015).

5.6.3 Implications of Quantitative Results for Future Research

The results within this study have suggested there is an association between occupational balance and EPDS scores. There is a need for further research on this association. This research could include longitudinal assessment of occupational balance, to understand how this changes over time as the child develops and mothering roles and expectations change, and how this affects the association with EPDS scores temporally.

Additionally, exploration of any interventions implemented within healthcare settings to attempt to increase social support and provide psychoeducation for women to understand and influence their own occupational balance would be advantageous. The purpose of the research would be to investigate how increased social supports impact on perceptions of occupational balance and self-rated EPDS score.

5.6.4 Implications of Quantitative Results for Future Practice and Policy

Current services available to mothers do aim to promote a sense of community and group-based activity to promote peer support. The current results have highlighted the importance of support systems, socialisation, roles and confidence within the role. Therefore, healthcare professionals should be identifying when women are not participating in these community

activities, to examine any challenges and attempt to mitigate these or source alternative support routes.

These results imply that the addition of occupational therapy to the perinatal team would be beneficial for mothers with indicators of poor mental health. Assessments to identify occupational imbalance and interventions that promote healthy occupational engagement may have a positive impact on mothers with postnatal depressive symptomology. Current assessment tools and intervention strategies that focus on identifying occupational imbalance for improvements in mental health have been designed and implemented, but these are not specific to a postpartum population (Dür et al. 2014; Wagman and Håkansson 2014; Hultqvist et al. 2019). The complexities of the mothering transition and role would require a specific focus from assessments and interventions within this population, which OTs could lead on to promote occupational balance in this population.

5.7 Conclusion

This quantitative cross-sectional study aimed to answer the following question,

Research Question 1: How can social capital and differences in daily occupational engagement and balance help us to better understand postnatal depression?

The information gathered within this quantitative analysis has provided preliminary data to improve our understanding of the association of social capital and occupational balance with depressive symptomology in the form of an EPDS score. The results are suggestive of a strong association between occupational balance and EPDS score. This supports existing literature that suggests occupational balance has an association with health and well-being. The lack of association between social capital and EPDS score within the quantitative analysis was unexpected and may have been due to the small sample size or measurement difficulties without the use of a validated measure. Attempting to capture multifaceted concepts such as social capital and occupational balance within one quantitative variable is challenging and may not be fully representative of the complexity. Further exploration of an association between social capital and EPDS score is required through qualitative means for understanding the underlying components of each concept, to better understand what

influences the depressive symptomology. Further breakdown of the concept of occupational balance could also assist in providing more insight into how the concepts of social capital and occupational balance are linked and why they may have an impact on depressive symptomology. The following qualitative results chapters will provide an in-depth exploration into the personal experiences of a sample of mothers and provide further insight into the positive and negative social capital and occupational influences within daily life.

6 Chapter Six: An Overview of the Qualitative Analysis and Exploration of The Identity Transformation of Motherhood and the Associated Internal and External Stigma

6.1 Introduction

The quantitative findings presented in the previous chapter indicated there was a significant association between occupational balance and EPDS scores. The association between social capital and EPDS scores was not significant. The qualitative data collected was analysed to provide context to the occupational balance association with EPDS scores, exploring what is understood by occupational balance and why the effects of imbalance can impact on the mental health of mothers. Despite the lack of association between social capital and EPDS scores, the qualitative data was also used to identify if there were potential links between social capital and depressive symptomology that could be explained through subjective means.

Within the three qualitative chapters, the findings will be explored to answer the research questions.

Research Question 1: How can social capital and differences in daily occupational engagement and balance help us to better understand postnatal depression?

Research Question 2: Which elements of social capital and occupational choice influence the sense of self and postnatal depressive symptoms?

Research Question 3: How can social capital, occupational choice and occupational balance influence occupational therapy interventions?

This chapter will firstly introduce the analysis of the qualitative data, describing the analysis methods adopted and the triangulation of data from the different data collection methods. This is followed by an overview of how the data is referred to within each chapter, to understand which research methods each discussion relates to. Chapters six to eight will explore the three qualitative themes to consider how they relate to relevant theory and research. Theme one explores the issues surrounding identity formulation and

transformation when entering into motherhood and its continual development. The discussion then moves to how stigma can impact on the mothering role and what protective factors may assist in preventing negative reactions to unrealistic societal expectations. Theme two will examine the role transition to motherhood and how this will impact on the types and variety of occupations engaged in each day. It will also examine how occupational balance is understood and reflected upon by the mothers. Finally, theme three will consider the gender negotiations that take place when entering parenthood for both themselves and within any relationships, exploring how these may be managed within each individual role. A combined discussion of the quantitative and qualitative findings will be presented alongside thesis conclusions in chapter nine with recommendations for practice, policy and further research.

6.2 The Qualitative Data Sources and Process of Thematic Analysis

6.2.1 Methods

There were two sources of qualitative data considered within analysis. The questionnaire from phase one contained open-ended questions that required qualitative responses (see Table 17). These qualitative questionnaire responses were initially analysed as a separate data extract. However, the results from the phase one thematic analysis were combined with the phase two interview thematic analysis, as similar themes were extrapolated from both datasets. The data could be analysed as one dataset as participants in both phases were from the same population. Further detail on this process is provided below.

6.2.2 Analysis of Phase One Questionnaire Responses

Thematic analysis was the preferred method to analyse the questions in Table 17. This is a method of familiarising the self with the data to be able to identify patterns in excerpts of qualitative data that develop into themes (Braun and Clarke 2006). The aim of these themes is to obtain important meaning and topics of interest from the data in relation to the research question. The purpose of thematic analysis is to explore the underlying concepts that may not be directly communicated but provide meaning to the data content, achieved by continual reviewing and defining of the themes until clear titles and definitions of themes are established (Braun and Clarke 2006).

Question 24	Looking back to before the birth of your first child, what were your feelings about becoming a mother?
Question 25	Following the birth of your child/children, how do you feel about being a mother?
Question 26	Please can you indicate which activities you complete in a typical week day:
Question 30	How do you understand the term 'balance' in relation to your daily activities and routines?
Question 40	How do you feel about accepting support from others?
Question 41	Is there additional support you feel you need? (please specify)
Question 47	Are there any activities you would like to make time for?
Question 48	Finally, please can you tell me a bit more about the things that you really think have influenced you within your mothering role?

Table 17: Qualitative Questions from Questionnaire

The responses to the questions in Table 17 were exported to NVivo 12 for analysis, and individual cases were created for each participant response. This ensured identification of quotes linked with participant number.

Each of the 212 responses were examined in detail, with the process repeated to become familiar with the data. A mixture of theoretical and inductive analysis allowed initial structural coding to code the data into set topics. From here sub-codes were created from the content of the response, to guide the theme development (Braun and Clarke 2006; Saldaña 2021). This was achieved with initial codes related to each topic of questions (theoretical) but then the sub-codes and subsequent framework matrices were led by the response content to develop underlying themes (inductive) (Braun and Clarke 2006).

There were seven initial codes: emotional responses antenatal; emotional responses postnatal; occupational balance; social support; limitations of motherhood; influences on motherhood; and group engagement. Each code consisted of a number of sub-codes more intricately linked to the participant quotes.

Framework matrices were created within NVivo for each of these seven codes. Each matrix was examined and new codes assigned into groupings that highlighted the initial themes. This included the assurance that every new code accurately represented the experiences, values, attitudes or beliefs of the participant. The coding methods employed to achieve this were: causation coding, to explore the complexity of influences both internal and external that affect social actions and phenomena; emotion coding, which deciphers the emotions of the participant to examine unique perspectives and understanding of the world; and values coding, to illustrate values, attitudes and beliefs of the self and society (Saldaña 2021). During this new coding process, notes were made regarding interesting findings or similarities/differences within responses, which were given consideration at the grouping stages. A further re-examination of the new coding categories was completed to further develop the codes and sub-codes into themes that capture the essence of the participants meanings (Saldaña 2021). These new themes were developed with consideration of the underlying contextualisation and meaning of the quotes, to ensure the capture of the intricate underlying topics emerging from the data.

6.2.3 Analysis of Phase Two Semi-Structured Interviews and Activity Diary

The purposive sampling of 9 participants for phase two ensured a mixture of socio-demographic backgrounds and EPDS scores. The interviews were conducted during the global pandemic and completed virtually via video link. The process was initiated with familiarisation of the data with each interview transcribed manually. Once the interview transcripts were uploaded to NVivo, they were read and re-read for further familiarisation with the data and to take note of aspects of the interview that were repetitive or thought-provoking. The process of immersion in the data entails the continual exploration of the transcripts to identify patterns within the content (Braun and Clarke 2006). Initial codes were noted throughout the transcripts and collated together with similar codes across cases until themes appeared. The codes were developed from the data excerpts, producing initial themes that were descriptive. An initial thematic map (Appendix 20) was generated to explore the specifics of each theme and how they could be further established. Further analysis was required, to explore the overall conceptualisations and meanings to develop the underlying interpretation and theorisation (Braun and Clarke 2006). The first interviews were coded individually, whereas the second interviews were coded alongside the activity diaries, as the diaries were the basis

for the interview questions. The activity diaries were explored for interesting data with regards to satisfaction levels, categorisation of activities and company kept for activities.

6.2.4 Triangulation of Findings from Phase One and Phase Two

Upon comparison of the themes that emerged from analysis of both the open questions from the phase one questionnaire and phase two interviews, it became apparent the themes were similar and interlinked to the values, experiences and descriptors of motherhood and retained contextual meaning for the participants, encouraging fairness in authenticity (Clark et al. 2021). The phase two findings corroborated and supported the phase one results, which is described as triangulation of the data (Tariq and Woodman 2013). The topics were examined together to create three overarching themes that closely related to formulated concepts and theories that were already established in the surrounding literature and research. The potential complexities of separation of the two phases were reduced by considering all aspects of the qualitative data together, within both the findings and discussion chapters. These three themes and related theories/literature are explored in-depth later in the thesis.

6.2.5 Classification of Sample Data for Phase Two: Interviews and Activity Diary

Table 18 provides a summary of the background information on the participants that will be discussed in the finding's chapters. Pseudonyms have been used for each phase two participant to ensure confidentiality and anonymity within the presented results (Clark et al. 2021). It is important to note that the 212 questionnaires were completed prior to the COVID-19 pandemic (October 2019-March 2020), but the 9 interviews and activity diaries were completed in months 5-7 of the pandemic (July-September 2020), following a national lockdown and closure of community services. For the participants that completed the interviews and activity diaries, there will be reference to which interview the quote is retrieved from, either Interview 1 (initial) or Interview 2 (final, based upon activity diary results).

Questionnaire	Pseudonym	Social History
Participants 1-212	Participant	All mothers of at least one child under 18 months old, range of EPDS scores <9 & ≥9
Interviews 1&2 and Activity Diaries (listed in order of consent form received)		
Participant 1	Anna	EPDS score ≥9
Participant 2	Bethan	EPDS score <9
Participant 3	Chloe	EPDS score <9
Participant 4	Daphne	EPDS score <9
Participant 5	Ella	EPDS score <9
Participant 6	Fiona	EPDS score <9
Participant 7	Gemma	EPDS score ≥9
Participant 8	Holly	EPDS score ≥9
Participant 9	Imogen	EPDS score ≥9

Table 18: Participant Social Demographics

A summary (from chapter five) of the socioeconomic demographics of the 212 participants from phase one has been provided for contextual purposes for these qualitative chapters. The women who completed the questionnaire had a mean age of 33 (Standard Deviation=4.488). The median number of children was one (61.3%, n=130). The highest percentage (61.7%, n=134) of women's relationship status was married. 88.5% (n=192) women were in some form of employment. The mean EPDS score was 10.82 and the median was 10, with 59.9% (n=127) of the women scoring nine or above on the EPDS (cut-off score 9; score range=0-27). The women who completed phase two of the data collection ranged in age from 31-41. Six of the participants had one child and three participants had two children living at home. There was one lone parent, five married and three cohabiting with a partner. The EPDS scores ranged from 0-26. The interviews varied in duration, with the mean time of interview 1 at 47 minutes (range: 33–66 minutes) and the mean time of interview 2 at 29 minutes (range: 20-44 minutes).

Overall, though sensitive topics were discussed, all mothers were very willing to open up about their experiences and be honest about motherhood as a personal process. The practice of discussing the role, their daily occupations and mental well-being was described as *“nice to look back on”* (Anna, Interview 2, EPDS ≥ 9).

Every mother reported positive reflections of their participation within the research, as it was a tool for reflecting on how much they do, their relationships and the enjoyable aspects of motherhood. For some mothers, it assisted in making changes to their lifestyle, *“helped me to put some changes in”* (Bethan, Interview 2, EPDS < 9), develop their mother identity *“attuned me more to my mother identity... recognise how much I do actually enjoy spending time with him... made me feel more of a mum rather than, you know, someone that has a child, a working parent”* (Chloe, Interview 2, EPDS < 9), and increase their emotional expressions, *“I think it’s given me time to self-reflect and that has kind of like aided my self-awareness... opened up my willingness to talk a bit more to anyone and be a bit more honest”* (Ella, Interview 2, EPDS < 9).

6.3 Theme 1: The Identity Transformation of Motherhood and the Associated Internal and External Stigma

6.3.1 Introduction

All women go through a transitional change in identity when introduced to motherhood. The autonomous identities that were previously held are amended to include the new role of mother, with a dependent child reliant on the woman for care needs. This chapter will consider the identity transformation associated with motherhood and how there is a fracturing and redefinition of identity to include this new role. It also explores the differing perspectives from women when considering the mothering aspects of their lives, for example, providing purpose through to resentment and regret. The influences on identity are discussed, considering stigma from society, media and self-stigmatisation. The subsequent impacts on mental health stigma is considered, exploring the different experiences of mental health support seeking and support received.

An introduction to social interaction, ontological security, identity formation and stigma was presented within chapter two. This findings chapter will summarise and explore these themes

in relation to motherhood and the participant responses. There will be reference to relevant existent theory and research, which corroborates the assertions of this research project.

6.3.2 Identity Transformation Related to Motherhood and the Importance of Preparation

Identity is formulated from individual choice of presentation to the social world, that fits with the character attributes of the social actor (Goffman 1959). Identity formation develops and adapts over the lifespan, sustained through reflexive activities of the individual (Giddens 1991a,b). Thus, the women in this study all had a pre-defined established identity that was presented to the social world, developed from varying life experience, influences, occupational choice and engagement. The continual expansion of identities for an individual aids psychosocial development to increase their ability to adapt to varying phenomena (Mercer 2004).

An unanticipated shift in self-identity can threaten the ontological security of a woman transitioning into a mother, when her sense of stability and order is under threat (Laing 1965). Ontological security is achieved through a security of being, in which autonomy and identity are present and stable and not under question (Giddens 1991b; Kinnvall and Mitzen 2018). A woman's ontological security is threatened if her sense of 'being' is disturbed by feelings of losing her identity. This disconnectedness from herself and the world around her can dehumanise others and affect her awareness of reality, negatively influencing her mental health and ability to effectively engage in her roles (Laing 1965). This chapter will explore the origins of identity formulation and the transitioning effects during motherhood.

Due to the 'frontstage' performance required of individuals when in an environment with other social actors, it is only in the 'backstage' area without others that social actors can stop performing (Goffman 1959), that is, when alone. It must be considered that the engagement within the research itself, whether via questionnaire or interview, is a 'frontstage' area for these mothers and the responses provided may be exaggerated or underestimated in the context of the mother's own reality. The 'frontstage' and 'backstage' concepts will be considered when exploring identity transformations.

Laney et al. (2015) claims the life transition into motherhood will bring with it a significant modification of identity as the woman takes on another prominent role within her life, characterised by dependency of the child. This is a life-long commitment as the transformation cannot be reversed, the woman will always be considered a mother and that is intertwined within her personality and sense of being (Mercer 2004; Laney et al. 2015). Laney et al. (2015) suggest the children are incorporated within the mother's identity through a process of self-loss, identity fracturing and redefinition. Mercer (2004) explains how this identity transformation begins antenatally with psychosocial preparation for this next stage of life. A formal stage occurs after the birth, with the mother replicating the role from her past observations and experiences until she grows to informally care for her child, guided by her own instincts and judgment. The final stage of accepting this maternal identity is a confidence in her own role and attachment with her child (Mercer 2004). There are changes to a woman's autonomy, physical appearance, sexuality and occupations, all of which influence personality and identity (Laney et al. 2015).

Some respondents within this study felt motherhood was the beginning of a new journey, helping to sculpt a vision of themselves into a role they felt instinctively prepared for, a sense of occupational 'belonging' and 'becoming'. There was a perception that their previous self was not wholly fulfilled until motherhood became a part of their core identity. There was an expectancy that motherhood could provide these women with self-worth and purpose, *"I felt as though becoming a mama would give me a purpose in life and was all I had wanted for years"* (Participant 185, EPDS ≥ 9). Similarly, Participant 104 (EPDS ≥ 9) felt there was an emptiness within her life, which led to *"desperation for a child, empty"*. This sense of desire for the mother identity was also felt by Participant 8 (EPDS ≥ 9), *"I was desperate to be a mother, I felt ready"*. For Participant 201 (EPDS < 9), the negativities she encountered within her own childhood gave her an opportunity to provide a different experience for her own child, offering a sense of 'belonging'.

For the first time in my life I felt important. I felt needed. I had purpose, a duty and responsibility to be unapologetically strong and determined to do everything in my power to make sure my child was always safe, loved and cared for

For these mothers, the addition of the mother identity was seen as an opportunity to 'become', to establish themselves within a new role, performing desired occupations. The expectations of the mother identity were developed from their own childhood memories and perceptions of other mothers within society. Mercer (2004) distinguishes maternal identity as a sense of being within the role and acceptance of her past and future. For Participant 201 (EPDS <9), the birth of her child was integral to her new identity and connection with the social world. An acceptance of her past may have been achieved with the sense of ontological security in her own mothering identity.

Motherhood is magical. The most wonderful experience of my life and I'm certain nothing else will ever compare to it. My life truly began when my child was born. It's a love I never knew existed and it saved me. Becoming a mother has made me even stronger than I was, more determined than ever and fiercely protective. I live more in the present moment now than before to soak up every joyous minute with my baby. It can be tough at times, exhausting and stressful but I've learned to use those times positively to make myself a stronger person for my child. Motherhood is without a doubt the best thing that's ever happened to me.

The closeness between mother and child appears to increase the intensity felt by mothers on both their own performance and their emotions (Laney et al. 2015). This can have positive effects of self-efficacy to successfully complete child associated occupations and a positive outlook on the role. However, there can also be negative effects with women perceiving themselves as incompetent and negatively viewing motherhood, impacting on self-esteem and self-worth. As Goffman (1959) describes, social actors are performing within a public environment and the expectations of soon-to-be mothers can be idealistic or there may be a lack of awareness of how their identity alters. The disparities between the reality of motherhood and the ideals of motherhood can cause feelings of guilt at not attaining the idealised perception of a mother and missing their pre-motherhood identity (Laney et al. 2015). The women previously desperate to become mothers described a more ambivalent notion after the birth of their children. Participant 104 (EPDS ≥9) found she was "missing myself... all about the children" and that loss of identity was having an impact, with her self-rated depressive scores ≥9. Participant 185 & 8 also scored ≥9 on their EPDS, stating that

though having their children was *“incredible and such an honour”* (Participant 185), it was exhausting and *“sometimes I wish I could just leave the “mother” thing at the door every now and then!”* (Participant 191). It appears that even if there is an antenatal overwhelming desire to be a mother, the reality may be different to the expectations and this could impact on a mother’s mental health (Choi et al. 2005; Staneva and Wittkowski 2013; Laney et al. 2015). Lazarus and Rossouw (2015) found a decrease in self-esteem and increase in levels of depression, anxiety and stress in women whose prenatal expectations were altered.

The mothers that appeared fearful of how motherhood may change their personal life did find these identity changes difficult but maintained EPDS scores <9. Participant 1 (EPDS <9) was worried about the intensity of the role and losing herself *“I didn’t want to lose my identity and all of a sudden just be seen as a ‘mother’. I still wanted to be me but somehow struggled thinking that others wouldn’t see that anymore”*. However, she found some solace in the role and merely reflected back on the choice made to enter motherhood due to its chaotic nature; *“Sometimes I do think what life would be like without children. I wouldn’t change my circumstances, but I definitely reflect how things are very different right now compared to how they were before children”* (Participant 1, EPDS <9). Similarly, Participant 130 (EPDS <9) was worried about her interpersonal relationship *“worried about how my relationship with my partner would change”*. Whilst she was enjoying motherhood, she felt that her sense of self had diminished, *“I often feel most of my own identity, personality and interests have gone”* (Participant 130, EPDS <9). The awareness of more realistic expectations of motherhood creating self-loss and identity-fracturing can assist in the transition and incorporation of the child within the identity boundaries (Laney et al. 2015). This may have been a protective factor against self-stigmatisation and thus depressive symptoms. Pancer et al. (2000) explored how prenatal complexity of thinking regarding the impact of parenting can assist in less negative impacts following the transition.

Negative feelings towards the loss of identity could in turn fester into resentment towards their partner, who retained a part of their pre-parental identity by engaging in employment, *“[I] feel isolated and like I’m missing out on things. [My] Partner gets to go to work and still be himself, I feel like I only get to be mummy”* (Participant 197, EPDS <9). Though her identity was significantly altered, her baby was social and that kept her *“More busy, baby likes being*

out, pretty much every day we go out somewhere to keep her entertained". Perhaps the increased activity engagement was an unconscious source of well-being that assisted in keeping her EPDS score <9, despite the identity loss.

However, for some mothers, there was a disconnect with this new identity and the drastic alteration was too much. This led Participant 82 (EPDS ≥9) to a lack of desire to proceed within the mothering role, also leading to resentment, which she felt needed to be hidden;

I hate it, I try to put on a brave face and act like I love it but truthfully, I miss my old life and I resent my partner for asking to try for a baby... Everything is centred on baby and I have no time to myself... I feel like once I made the decision to have a baby my needs became secondary and I'm not allowed to moan or ask for help I just need to get on with it

As Goffman (1963) theorised, Participant 82 is feeling as though she is acting in the frontstage when other social actors are around, hiding her true feelings about the mothering role. Donath (2015) suggests the ideology of motherhood is promoted with an expression that women will regret not having children. This leads to the societal expectation that every mother should love their child unconditionally, which has prevented mothers expressing any feelings of regret at entering motherhood (Donath 2015; Matley 2020). It appears there is a lack of support to enable Participant 82 to express her true feelings with reciprocation of support or engage in any occupations associated with her pre-parenthood identity, which is impacting on her mental health. This was also evident for Anna (Interview 1, EPDS ≥9), who is a lone mother and geographically isolated from family and missing that support network. She saw the role of mother commandeering the personality that existed prior to having her child, *"it's almost as if that is all I am now, you kind of take on that role as mother and that's kind of your personality... my whole life revolves around my daughter"*. It may be more difficult for mothers that feel they do not have a good social support network to maintain any resemblance of their pre-motherhood identity. Support systems will be further explored in chapter seven.

Participant 21 (EPDS <9) took a different approach and ensured she felt ready at the stage in her life for the inevitable identity transformation, so spent some time prior on herself. Ensuring the timing was right for herself and having an awareness of the changes to come may have helped with her depressive symptomology scores remaining <9,

So, things like lots of holidays, meals out and trips back home. I also read loads of novels! Before becoming pregnant, I'd recently moved jobs closer to home, so that helped on a practical sense, as my commute was much more manageable. I knew that my life was going to be completely different, but I felt on a personal level that I needed to have some time for myself before I became a mother... I just felt that it was the right time when I became a mother and that I was ready for it then.... I was glad that I didn't rush into motherhood when I was younger, I know that I would have struggled

The level of preparedness was seen by Participant 21 herself as a conscious decision to protect her own mental health with a knowledge of the identity changes that would occur during motherhood. Participant 155 (EPDS ≥9) found her first pregnancy was unplanned and thus a negative experience. It was likely that she suffered PND, which put her off having further children until she had taken some time for herself, and this assisted with the identity changes following the subsequent children.

Going back to work helped the healing process. I left it several years before feeling ready to have another child and since having my second and third, who were both planned, I am happy and more comfortable. I am also more experienced and I have a social network around me. I am more settled in my work and my relationship. I have tried to do as much as I wanted to in life before having the next two but I still feel like I missed out on certain aspects, though I don't feel bitter or sad as I used to. Life is better now.

There appears to be a link between the planning of pregnancy and the right time for the woman, with the expectation that planning will allow for preparation and assumptions made this is the correct time in the life cycle for motherhood. Other mothers within the study that

experienced unplanned pregnancy had similar negative experiences, with Participant 189 (EPDS ≥ 9) stating, *“Immediately afterwards for about 6 weeks I hated it. My life had changed so much just didn’t feel happy at all”*. Similarly, Participant 210 (EPDS ≥ 9) claimed, *“Parenthood wasn’t planned. I basically took it 1 day at a time... I find it hard to relax”* and Participant 122 described finding out she was pregnant as *“It was a complete shock and I remember being terrified and overwhelmed”*. The unpreparedness for the new role may have been a contributory factor in these mothers having higher EPDS scores. It is evident these internal expectations of the change in identity, routine and socialisation were often conflicting, with opposing emotions felt pre and post motherhood. These experiences and perceptions were not always negative and Participant 121 (EPDS < 9) is an example of a positive change in perspective. She projected judgment onto other parents prior to entering motherhood but instead changed her own behaviours when she experienced the phenomena herself.

Thought people who let their lives change after a baby (is not seeing friends as much, not willing to leave their kids overnight etc) had an issue with being too protective of their kids and fussing... I have never left them overnight... I love being a mum and I have reduced my work hours and taken the maximum maternity leave I could

This moulding of herself into the mother identity and embracing the role was unanticipated but may be helping to sustain her mental health, with her EPDS score < 9 . The ability of Participant 121 to reflect on her previous observations and relate them to her existent values can assist with further acceptance of her role (Laney et al. 2015).

It is also important to consider the pre-existent personalities of the women and how these influence their mothering identity. Some women will not be reliant on other social actors to contribute to their performance, preferring to encompass the mothering occupations independently and do not seek support, *“Don’t ask for it unless it’s essential, like to do things myself, I’m quite stubborn”* (Participant 119, EPDS < 9), or are reluctant to accept it, *“Reluctant as I like to feel independent”* (Participant 98, EPDS < 9). Participant 42 (EPDS < 9) was actively attempting to alter her own previous personality to strengthen her ability to accept support,

further enhancing her mother identity, *“I feel a little embarrassed if I have to ask but I'm happy to accept a little support if offered by others. It's my nature to try and get on with things on my own so this has been something I've had to learn to accept”*. The ability to recognise unnecessary or unhelpful social support networks for personal satisfaction or manage self-awareness to change their own perceptions, may have influenced these mothers in maintaining an EPDS score <9. Participant 185 (EPDS ≥9) felt her personality traits and high levels of independence caused her to feel she does not want to accept any support outside of her immediate family dynamics,

I am a private person and if something needs doing, I will do it and do not like accepting help. My baby is my responsibility and anything he needs will come from me, or his daddy. Emotionally I will lean on my partner but often deal with it myself.

However, there was evidence of an EPDS score ≥9, which may have suggested that this stance was not so successful for her situation, especially when the reasoning for the forced social isolation was due to feeling the child was not the responsibility of others. This may be related to the stigmas associated with sourcing social support and will be explored further in chapter six, exploring the impact of societal expectations on mothers accepting external support.

Mercer (2004) suggests the strategies required for maintaining personal integrity whilst transitioning to motherhood requires exploring the new construction of identity, accepting the permanency of the change and achieving a sense of self-efficacy within the role. The mothers with low EPDS scores have illustrated the importance of preparing for the self-loss, identity alterations and the acceptance of changes to having improved mental health. However, this acceptance can also be seen in some mothers with higher EPDS scores, as presented by Participant 112 (EPDS ≥9), who has accepted the alteration to her identity,

It's an emotional rollercoaster with the best and worst times of my life. It was a massive internal shift and now being a mother is a core part of me

Though the explanation of the extreme highs and lows experienced may be a contributory factor to the higher levels of depressive symptomology for Participant 112.

Each social setting holds normative expectations that are therefore associated with the social beings found within them (Goffman 1963; O'Mahoney and Marks 2014; Sims-Schouten and Riley 2014). The women in this study had all felt the expectations of certain environments or social situations. For example, this may have been in a baby group, where the group leader played the role of a facilitator and teacher, whilst the mothers played the role of student. This may also have been in the workplace, in which the woman takes on an employee identity and navigates the dynamics of organisational obligations and constraints (Swann et al. 2009). Thus, each environment will generate certain behaviours and influence the interactional encounters experienced.

Swann et al. (2009) described the flexibility of identity required to achieve this process of changing performance, which is dependent on social and contextual environment. There is an element of identity negotiation that must take place to enable agreed positional stances between individuals with mutual expectations and commitments (Giddens 1991b; Swann Jr. and Bosson 2008). As there needs to be a dynamic process to navigate the different social actors and environments, the multiple roles held will impact on the overall self-identity and self-image of the individual (Giddens 1991a).

Some mothers within the research wanted to make their mothering role and identity the priority within their occupational lives. However, for Participant 17 (EPDS ≥ 9), this was not possible and she was required to go to work for financial security for her family, *"I wish I could be a full-time mother and not have to go to work"*. Similarly, Participant 209 (EPDS ≥ 9) struggled with the readjustment to returning to employment and if she were financially secure, would remain at home full-time, *"Difficult being a working mother - things would be better if I could afford to stay at home with them. Returning to work after maternity leave was the worst feeling ever"*.

However, employment could be recognised as an environment in which a mother could return to her pre-parenting identity within this study. Although Imogen (Interview 1, EPDS ≥ 9)

would prefer to stay at home full-time to complete her mothering occupations, she can see how returning to employment had its own benefits in relation to her previous identity.

I would love to be off full time if I could and carry on with the baby classes and I'm a homebird so I love being at home, financially that's not an option... It's nice to work... nice for me to go away and be a bit of the old me... work getting my brain thinking about something else

Participant 17, 209 and Imogen had EPDS scores ≥ 9 , this may be reflective of their feelings of disconnect from the mothering identity as they felt pressured to return to employment when there is a desire to remain full-time at home.

The workplace is demanding of a different identity within organisational structures that require negotiation of the interpersonal relationships. Managing these expectations within the workplace can have positive or negative implications for women (Swann et al. 2009). Daphne was successful in setting up her own business prior to the pandemic but unfortunately had to close it during lockdown as it became a financial burden. After Daphne became a full-time mother, she struggled with conflicted feelings of enjoying the time with her child as a mother but missing her employment. Though she felt *"a lot calmer...much happier actually"*, there were still feelings of loss surrounding her professional identity, *"I want to do something with my brain... I really need a challenge; I feel really frustrated"* (Interview 1, EPDS < 9). Daphne had introduced herself during the interview by discussing her professional identity before discussing her mother status and it was apparent how much that had meant to her. The grief surrounding this loss of identity was evident but the relief following the release of the financial burden of the business may have been a protective factor against depressive symptomology, with her EPDS score remaining < 9 . Daphne was also an older mother but had wanted children for a long time. This long-term desire for children may have also prepared her for the identity-fractures and transformations that she experienced.

Chodorow (1989) details how the development of the child is associated with the performance of the mother, which can trigger feelings of guilt associated with working, in fear

there will be developmental delays caused by the separation. The Social Issues Research Centre (2011) found 88% of mothers felt some form of guilt in relation to their work-life balance, with mothers aged 35-44 feeling the most guilt. Some women discussed feelings of guilt associated with employment in relation to their mothering role, but Participant 74 (EPDS <9, age <35) argues that there will be opinions on mothers regardless, *“Mum guilt is real, especially returning to work full time, people will always have comments on the choices you are making”*. Participant 49 (EPDS ≥9, age ≥35) struggled with comparing her own mothering style to her childhood experiences with her own mother not employed, *“I do struggle with guilt as my mum didn't work whilst I was small, yet I have to work full time”*. The feelings of guilt appeared to be manageable if considered from an outsider perspective, achieved by Participant 74. However, the comparisons Participant 49 made to her own mother caused feelings of guilt, which may have impacted on her depressive symptomology. Age of the mother may have also been a factor on the levels of guilt experienced, in line with the presented findings by The Social Issues Research Centre (2011).

Ella (Interview 1, EPDS <9) delayed motherhood to ensure her professional identity was established and secure before taking maternity leave. There was no ambiguity in her intentions to return to her career after her maternity leave. *“I deliberately waited because I wanted to get my career to where I wanted it... I'm actually looking forward to going back to work”*. Ella was aware her identity also encompassed being the family breadwinner and this choice to wait to have children was a deliberate decision to ensure financial security. Ella did enjoy the identity transformation more than she thought she would *“he was born and then it was like this overwhelming like emotional feeling and I even extended my maternity leave... I am very much emersed into motherhood and um I'm like really enjoying it, like I absolutely love it”*. The planning for career security and financial stability may have been protective factors for Ella's mental health, with her EPDS score remaining <9, despite having little support from her partner and living away from family.

Participant 14 (EPDS ≥9) felt society now pressurised women to return to work, rather than stay at home, but the price of childcare had removed the element of choice on whether to work for herself,

Social pressure is huge in terms of the expectations that mothers should go back to work and tends to ignore what is best for the child. However, I tried this and it was not good for anyone in the family, even before child 2 arrived. With child 2 it has been economic pressures given the cost of childcare that have forced me to remain at home.

The societal pressures that were underlying the choices of Participant 14 highlight how influenced she was by the opinions of other social actors and the importance of her portrayal of a socially acceptable mother figure. This impacted on how she viewed her identity and the roles that she undertook within her routines. The financial implications on occupational performance will be explored in the finance section of chapter seven.

This section has explored how motherhood can have an impact on the identity of the women transitioning into new mothers and how there needs to be redefinition of their position within the social world. The unrealistic expectations of the identity changes can have negative implications for the mother's mental health, even if the woman is feeling optimistic about parenting. Some women can find the return to employment an important step in returning to their pre-motherhood roles and associated identities. The following section will explore further the stigma that is associated with acquiring support from professional services and the difficulties with accessing the appropriate services, causing a reluctance to seek the support required.

6.3.3 Stigma Associated with Motherhood: From External Sources or Internalised Feelings
As Goffman (1963) and Giddens (1984) argue, all individuals are social actors performing and attempting to fit within the environmental constraints of societal social interaction. When social actors stray from the expected performance or present differently, other social actors become aware of this variation from the 'norm'. Stigma is notably described as an 'undesired' distinction from others or the anticipated virtual/actual identity (Goffman 1963). There exists the notion that once this distinction from the 'norm' is acknowledged within society, the individual is discounted or tainted with a spoiled identity, which will continue to allow social actors within the environment to judge their identities (Goffman 1963).

Bethan (EPDS <9) dealt with loss and fracturing of her identity when she became a mother at a young age but her children were removed from her and placed in care. Morriss (2018) describes how the process of child removal can leave the mother feeling shame and a sense of failure as a mother. Bethan may have been more self-stigmatising about her own role as mother due to the experience of losing custody of her first three children, making her more susceptible to comparison with other mothers through social media, *“I feel sometimes like I’m a failure because of social media”* (Interview 1). Though Bethan is aware that she was let down by a lack of education regarding motherhood in consideration of her young age and lack of support, *“When I was 17, I was put into a mother and baby group with a baby placement, so technically yeah they should have educated me on being a mother but it wasn’t like a positive experience”*. The suggestion of flawed morals stemming from class, gender and sexuality reflects a societal dissatisfaction and antipathy towards the mother. The trauma of experiencing loss of a child that is living elsewhere is exacerbated by the knowledge that future children will be subject to child protection processes, further extending the stigmatization experienced (Morriss 2018). Bethan explains how she appreciates time more with her children now because of her experience of loss previously, *“I understand the sense of like when this all gets taken away like I’ve been there and I’ve lost it so I know you know that’s the stuff you miss then”* (Interview 2). The distress of losing her children made her desire for a nuclear family stronger as time passed, *“all I’ve ever wanted to be is to be a mother... just being able to be a normal family is so important to me”* (Interview 2).

She reflected that once she was married and settled, she was able to prepare herself and she felt *“more settled as a mother like from the age of [fourth child]”* (Interview 1). The stability of her home environment provided Bethan with the confidence to manage the anticipated social services input with her subsequent children. Bethan had previously experienced the identity transformation to mother and as Mercer (2004) and Laney et al. (2015) assert, motherhood is a lifelong identity change. As her sense of self-efficacy in her ability to mother grew and she retained healthier personal relationships, the fear of having her children removed lessened. This self-assurance in her mothering occupations may have been an influential factor for her EPDS score <9.

However, as Goffman (1963) described, once there is a public awareness of a discriminated aspect of the self within the cultural environment, the identity of the social actor is spoiled. For some, this is a self-stigmatisation and fear that others are discriminating against them in the 'backstage' area. For others, there is an active experience of the discrimination against them. For Bethan, her self-stigmatisation maintained a fear that any type of support, whether physical or emotional would be conceived as negative due to her history of social services input. Bethan (Interview 1, EPDS <9) still felt the stigma of her past within her current mothering role, even though her circumstances had changed, she felt constrained to be honest regarding the difficulties of being a mother.

Some days you just need to be able to voice and say I am having a bad day but then again, in my situation, you have to be really careful who you say that to because sometimes it can be taken in the wrong way

The perception of a spoiled identity attributed to her previous childcare situation was continuing to impact on her ability to outsource support for herself in fear of being judged and attempting to stay away from further social service involvement. The stigma associated with child removal and awareness of future stigmatisation with subsequent children, despite changes to environment, relationship and age, maintained a level of fear (Morriss 2018). Fonseca et al. (2018) explored the role of stigma in seeking professional help via a cross-sectional survey of 226 Portuguese women (mean age 30 years) in the perinatal period. They found mothers with clinically significant psychopathological symptoms were less likely to seek professional help and stigma was an influential factor. The concept of spoiled identities festering self-stigmatisation could influence the decisions for mothers to seek professional help when it is needed.

Corrigan and Watson (2002) raise concern that society misinterprets mental illness symptoms and impact, which in turn leads to high levels of unnecessary discrimination. This discrimination from society results in the internalisation of stigma, affecting the individual's self-esteem and self-efficacy. Societal stereotypes suggest persons with a severe mental health illness should be feared and excluded from communities, have decisions made by third parties, and need to be cared for (Brockington et al. 1993). The suggestions of social

ostracization, no autonomy and reduced independence may lead to people with a mental health illness feeling dehumanised and bottom of the social order. Self-stigmatisation and fear are inevitable within a society that projects such stigma (Corrigan and Watson 2002). Within motherhood, multiple studies have highlighted a relationship between self-stigmatisation and fear associated with help-seeking behaviours. The inability to cope is associated with being a 'bad mother' and results in a reluctance to outsource help (Edwards and Timmons 2005; McCarthy and McMahon 2008; Fonseca et al. 2018) .

Studies have found that women are only likely to seek professional help when they feel they have no other choice and rarely make the decision to seek this assistance independently (McCarthy and McMahon 2008; Fonseca et al. 2018) . Within this study, mothers' mental health experiences seemed to group into three types: (i) the mothers that were aware of their own difficulties and sought professional assistance; (ii) mothers who had an awareness of their mental health condition but made active attempts to hide it in fear of the potential repercussions; and (iii) mothers who did not realise the extent or were oblivious to their mental health issues and were reliant on others to identify this and seek professional help on their behalf. Each of these mothers will be explored in further detail to determine how the awareness of their mental health issues impacted on their depressive symptomology and if stigma had an impact on their mothering role.

Fiona (Interview 1, EPDS <9) was diagnosed with PND shortly after the birth of her child. Both herself and her husband had identified the symptoms quickly and there was no delay in going to the GP. Fiona was also very aware of the cause of her depression,

it was quite obvious I was very unwell... the two main things that brought on the postnatal depression were the, well they are quite closely linked, was the massive amount of trouble I had breastfeeding, which then led me to not sleeping at all... my baby wanted just to be held and eat all the time so I lost all autonomy over my life

The clear progression of events after the birth, the rapid response to the symptoms and an assumed pre-existent knowledge of potential symptoms did assist in Fiona getting the

professional support she required. The immediate and clear-cut association between the difficulties breastfeeding and subsequent impact on sleep and independence may have reduced the self-stigmatisation Fiona felt towards her own diagnosis. Sleep deprivation at a time when hormonal fluctuations occur following the birth of a child can increase the risk of depressive symptomology (Leistikow et al. 2022). Further exploration on sleep requirements will be discussed in the occupational balance section of chapter seven.

Gemma (Interview 1, EPDS ≥ 9) sought support antenatally during a routine check-up and found she could open up about her fears with her midwife and subsequently with the mental health nurse. Though her symptoms were not identified as depression, she was able to seek support from the healthcare professionals when it was needed.

I just remember bursting out in tears with this midwife... I said I honestly think I'm going to die when he's born...I was sleeping with a teddy um so that he had something that smelled like me... I was in a little bit of denial first of all about how I was feeling um and it was only when she made an appointment for me to see a psychiatrist [that] I was really honest

The social 'performance' is more complex when there are mental health symptoms that a mother may want to disguise. The performance becomes a façade for the other social actors and the 'backstage' area becomes more important as a source of relief, which can lead to withdrawal from society (Goffman 1959; Choi et al. 2005). This may be more evident when attempting to portray a sense of coping in front of healthcare professionals or family members, to avoid any potential consequences.

Participant 22 (EPDS ≥ 9) felt a fear of exposing her mental health issues and would attempt to conceal her issues when monitored by the outside world,

I hated being a mother, tiredness factored in as well as dealing with a relationship break down. I was horrifically depressed, suicidal. I started harming myself for the first time in 5 years. I never sought out true help for myself. I believed that my son would be taken away from me if anyone knew how terribly I was struggling, so I

put on a front whenever I spoke to anyone... I wish I admitted I needed help and how badly I was coping as even my ex thought I was fine

With the ability to put on a 'frontstage' performance for her ex-partner and mother, Participant 22 was able to conceal her mental health issues until she got 'backstage'. There is a vulnerability to being discredited and stigmatised if the mental health issues were to come to light (Goffman 1963). The ability to perform to others was perceived by Participant 22 as protecting her child, though her poor coping strategies were actually putting her child at risk. Edwards and Timmons (2005) reported similar responses from the mothers within their study, feeling fearful of the repercussions of their mental health illness, with self-stigmatisation evident in their reflections of poor parenting and lack of attachment.

As discussed, Fonseca et al. (2018) found women with higher levels of anxiety and avoidance were less likely to seek professional help. The negative representation of others either translated into: a reluctance to seek support, declining to be emotionally reliant on others or promote intimacy; or a reflection of their fear of rejection/abandonment, negatively viewing the availability of support and the fear of non-acceptance by healthcare professionals (Fonseca et al. 2018).

Daphne (Interview 1, EPDS <9) was unaware of her own difficulties until they were highlighted by a healthcare professional and she was referred for support. Though Daphne felt the support was provided at a late stage, she was able to reflect on her own symptoms,

It didn't kind of dawn on me that anything was kind of not right until kind of the health visitor said that I needed help and I was like 'mmm' (nervous noise) no I don't... I don't know if I had postnatal depression but well I was referred for help... the health visitor put a referral in when I was about 3 weeks postpartum and then they got back to me um about 8 months afterwards (laughs) and by that time I had kind of got over the worst bit of it... just these awful things going through in my head like and they were really really scary... it was just constant...crying all the time... it was really horrible actually the first year

Daphne appeared to be initially unaware of her symptoms and how they were impacting on her, becoming overly protective of her child. Daphne did attempt to conceal her difficulties to the outside social world, only choosing to open up to her husband 'backstage' for reassurance and comfort,

I can always put on a cheery face on and like yeah everything is fine and only my husband really gets to know how upset I am really... when the girls are in bed I desperately need like a sit down and a cuddle and a cup of tea with my husband just to kind of de-stress um id be lost without that

Similarly, Participant 212 (EPDS ≥ 9) was unaware of her own symptoms and relied on her support system to identify when she required support, "My husband and my mum and dad are good at keeping an eye on me and letting each other know when I'm struggling or need a bit of extra help". These differences in how the mothers present with their mental health difficulties will have an impact on the types of healthcare services available to them, though as noted by Daphne, the waiting list had an impact on the timing of the input, which became redundant for her situation as she had dealt with her symptoms independently. This builds a stigma towards the services being provided and women become less encouraged to seek help when it is required and will be explored in this next section.

Lazarus and Rossouw (2015) found the self-rated reports within their study of depressive symptomology were double those of a PND diagnosis. This suggests the women in need of healthcare professional input were not receiving any services or the symptoms had not been recognised and diagnosed. This was considered in the quantitative results of this study (chapter five), in which 59% (n=127) women scored ≥ 9 and 37.3% (n=79) women scored ≥ 13 on the EPDS, with 36.3% (n=77) that had an official mental health diagnosis, but only 51.9% of these a perinatal mental health diagnosis. However, previous diagnosis and current mental health condition may not always be correlated.

There were women within the study who had received input from mental health services, with both positive and negative experiences. Participant 69 (EPDS ≥ 9) had very positive

experiences of the services within her area and was able to access the services with positive outcomes,

I feel lucky to live within a flying start area as I have had invaluable support and access to groups and courses that many miss out on due to a postcode lottery. I'm also lucky that I live within a health board that has a perinatal mental health team.

However, the awareness of the difficulties experienced with the Flying Start referral process and lack of perinatal mental health teams in areas of Wales, highlights the existent negative stigma surrounding services for mothers. Fiona (Interview 1, EPDS <9) lives in a more rural area and struggled with the lack of specialist service availability within her area, *"there's one person up here in the perinatal mental health team and she was off sick so I didn't actually see anyone from that team until like three months after I initially went to my GP"*. Gemma (Interview 1, EPDS ≥9) also experienced issues with accessing services for her mental health after expressing significant fear to the midwife on the pregnancy of her second child. *"I'm going to die when he's born... She put the referral in for me um but it just turned out that I didn't see them physically didn't see them until after he was born because the lady who covered my area was on holiday"*. Gemma had mixed reviews of the healthcare professionals service, *"my GPs have been nigh on useless... the service I have had from them [perinatal mental health team] has been really really good"*. Despite the delay in access, the mental health services were received well but she felt let down by the GP services.

Participant 78 (EPDS <9) described feelings of being ignored by healthcare professionals, with the care focused on the baby and not the mother,

Abandoned. I struggled with being sick all through pregnancy and during labour, following birth I was unable to eat for around 5 days and even sipping water was painful, yet no healthcare providers seemed interested in me, it was all about my baby. I struggled to breastfeed to start and perhaps my dehydration didn't help this

Whereas Holly (Interview 1, EPDS ≥ 9) had received input from the services but struggled with a partial diagnosis, as the cause of the symptoms was trauma-based rather than anxiety-based. She had to live with the symptoms for two years before being referred to the appropriate service,

I'd seen the perinatal mental health team and they were fabulous but they were trying to treat me just for anxiety... I'm only actually doing the trauma therapy now and she's two.... So much easier had it happened like eighteen months ago... any kind of help on that front with new mums would just be a massive benefit

Participant 63 (EPDS < 9) had a poor experience of identity loss, fracturing and redefining after her first child. Her mental health was not explored by her healthcare professionals and her symptoms went unnoticed. She was undiagnosed but assumed she suffered with PND. Her identity was redefined when she returned to work and she spent time managing her life expectations before deciding to have further children.

I went from a fun loving and social person, who enjoyed outdoor sports, to a recluse and I hated the baby... I put on a façade for the world but inside me I was breaking apart, I was in autopilot to keep the child alive but I hated every minute of it.... My midwives and health visitors never asked about my mental health or how I felt.... I lost weight and became anorexic, its all I felt I had control over... The world loved the baby and forgot about me... Those were dark days and I'm pretty sure I had postnatal depression. I shudder just thinking how I got through them. Going back to work helped the healing process... I have tried to do as much as I wanted in life before having the next two but I still feel like I missed out on certain aspects, though I don't feel bitter or sad as I used to. Life is better now.

This one example encapsulates the themes of identity and stigma discussed within this section. There were issues with identity transformations impacting on mental health, concealment of symptoms and the stigma of professional services in exploring the mental health of mothers.

Edwards and Timmons (2005) found the women in their study reluctant to seek support due to the societal stigma associated with mental health, compounded by the health professionals not recognising the symptoms and delaying the appropriate referrals. Similarly, McCarthy and McMahon (2008) found the stigma associated with mothers not being able to cope was a barrier to seeking help, alongside a poor knowledge of distinguishing what the depressive symptoms were.

Brandstetter et al. (2020) conducted a study of 2,455 mothers in Germany around their knowledge of support services available to them. Good knowledge was associated with higher education, no migration background and better health literacy. Mothers who were single/living alone, or first-time mothers were less likely to have a good knowledge. This supports the findings from this study, with lone parents and first-time mothers generally having higher EPDS scores and describing more feelings of isolation and a lack of support.

This stigma section has uncovered the impact of spoiled identity and the subsequent societal judgements on mothers with a history of social service input. It also explored the stigma associated with poor mental health, which impacts on identification and diagnosis for support provision. Finally, it examined the issues surrounding mental health service provision.

6.3.4 Conclusion

The theme of identity and stigma has highlighted some of the issues associated with the transformation to motherhood and the support seeking behaviours of mothers that experience mental health difficulties. Some women felt motherhood was a welcome identity change that encapsulated their vision of their own identity and position within the social world. Other women felt that this change had dissolved their previous identity and the world had forgotten their pre-child self. If the ontological security of the mother is threatened, her sense of self-identity is impacted upon and mental health conditions can develop. The awareness of identity loss and redefinition can assist in the mother coping with the transition to motherhood. The difference between expectation and reality of mothers' identity fracturing may have had an impact on their satisfaction within the new role and increased depressive symptomology. There appeared to be a link arising between support and maintenance of pre-mothering identities, with mothers lacking support scoring higher on the

EPDS and describing higher levels of identity loss. Some women prepared for the transition and ensured the engagement in meaningful occupations prior to motherhood, which appeared to assist with managing the transformed identity. The values of the mother were altered for some mothers and this was evident within the reflections of their journey into motherhood and the differences described. The pre-defined personalities of the mother can have an influence on the acceptance of support and ability to cope within the mothering role.

Clarity was restored for some when returning to the workplace, which served as an opportunity to separate themselves from the mothering role. These women felt able to use their knowledge and skills in a working environment, with different expectations and diverse social settings. However, outside of the workplace, the struggle to differentiate that individual identity away from the children remained. This struggle for independent identity was impeded by the self-stigmatisation to conform to the societal expectations placed upon mothers. The stigma felt by these women was apparent within their identity, whether opposing the societal perception of the 'perfect' mother or impacting on the confidence and security of their own mother identity. Professional identity was controversial in some regards, with mothers wanting to stay at home but being required to return to work for financial necessity; mothers wanting to return to work for mental stimulation but unable to due to childcare or no job; and the elements of no choice in the decision because of financial or childcare issues. Again, preparation for the employment status with regard to planning finances and managing expectations can assist in an easier transition.

The concept of stigma arose consistently throughout the responses, whether from society, communities or themselves. The stigma was felt from social encounters and through media, but also the self-stigmatisation a mother pressed upon herself. Aspects of a contemporary mother's life can impact on her abilities to manage the mothering role, inclusive of engagement in employment, geographical mobility away from support networks and more closed communities. These occupational and environmental changes can increase the burden of motherhood, by reducing the time to engage in the role or rejecting support and increasing feelings of isolation and fatigue with decreased support networks. The consequences of these changes were an impact on confidence in the mothering role, which ultimately led to further self-stigmatisation and guilt.

Spoiled identities became an issue of stigmatisation that affected the ability of mothers to seek support from others in fear of judgement. Mental health was presented in three different ways: (i) the mothers that identified their own symptoms and sought the appropriate support from healthcare professionals; (ii) the mothers that were oblivious to their own mental health issues and were therefore informed by others of their needs for additional support; (iii) and the mothers that were fearful of repercussions so hid their symptoms. This was however met with issues surrounding: mental health service provision with reports of a lack of specialist teams; postcode lottery for additional services; long waiting lists; misdiagnosis; inconsistencies between the attitudes of service providers; and the focus on the baby rather than the health (physical and mental) of the mother. This meant mothers were less motivated to seek the support that they required or if they did, did not receive it within an adequate timeframe. Results from phase one of this research showed that a high percentage of women with a previous mental health diagnosis (n=77) also scored nine or over on their current EPDS (80.5%, n=62). These women would have some experience of mental health stigma prior to the mothering role, so may be aware of how this stigma could be exacerbated when considering the care of a child.

Mental health service provision within the UK is under resourced in comparison to other NHS services. This may be associated with negative societal perceptions of mental health conditions or the reduced uptake of services by individuals due to fear of mental health stigmatisation and mental health policies (Cummins 2018). This has created an additional stigma of services being inefficient and unreliable, with some mothers in this study having direct experience of these issues. There were experiences of insufficient service provisions, missed referral opportunities and fear of service engagement. This meant women were missing out on services for long periods of time, inclusive of supportive healthcare interventions. Mental health problems were consequently managed without the appropriate professional input. Women were left with intensified existent feelings of isolation and disconnection with the social world, which further promoted distrust in healthcare services.

Role transition and balance are important factors for mothers dealing with identity transformation and stigma. The next chapter will consider these aspects in detail.

7 Chapter Seven: The Role Transition to Incorporate Motherhood and the Influence of this Additional Role on the Occupational Balance of Daily Activities

7.1 Introduction

This introduction provides a summary surrounding the theme of role transition and balance. Alongside the change in identity when entering motherhood, the transition into the new role is complex and an individualised experience for each woman. This chapter will examine the transitions associated with motherhood and how these can impact on a mother's mental health. The occupational balance of mothers will be explored, alongside some examples of how this was overcome by involvement in group activities and sharing of responsibilities within the family unit. There will be a discussion to highlight the supporting theories and research throughout the section where appropriate.

7.2 The Transition of Lifestyle to Include Motherhood

The transition period to motherhood is a radical change in lifestyle and the awareness of societal expectations can impact on the mother, so issues are likely to arise (Chodorow 1989). Transitions within the life course have been described as a 'discontinuity' of routine, habit and the pattern of everyday life (Blair 2000, p. 232). Giddens (1991b) suggests transitions involve loss and a mourning process must proceed if self-actualisation is to continue to develop. Changes to behavioural patterns, skills, sense of self, roles and interpersonal relationships will occur within a transition (Willson 2019). There is a need for acceptance of the event and the subsequent changes to successfully manage this alteration. The change in circumstance can foster feelings of denial and often this is counteracted with engagement in the familiar to postpone the associated changes to occupations that the transition brings. This is closely linked with self-esteem, sense of agency and identity redefinition (Blair 2000; Moore 2016; Willson 2019). The process of practice can build confidence within the mothering role, which builds a relationship between mother and child and takes time (Miller 2007).

The identity loss, fracturing and redefinition surrounding motherhood was explored in chapter six. The transitional changes experienced by mothers remain linked to these concepts and will be briefly mentioned. However, the focus of this section is to explore how the

transitional changes affect the occupational engagement, performance and balance of mothers.

7.2.1 Additional Responsibilities of Motherhood and Disrupted Sense of Agency

The additional role of being a mother on top of the existent responsibilities within the home, and often the workplace too, can cause women to feel overwhelmed and at times, frustrated. Moore (2016) explains that responsibility is a socially constructed concept that ensures the social actor is held accountable for their actions. The behavioural management system of punishment or reward is thought to assist social groups in increased social cohesion. Responsibility is guided by a sense of agency, which is a control over our own actions (Moore 2016). There is the additional responsibility when becoming a mother to protect the child, alongside the occupational dependence of the child diminishing the mother's sense of control. The increased pressure can make the new role intensive and consuming.

The additional responsibilities can impact on the time a mother has for occupational engagement and social interaction. Participant 10 (EPDS ≥ 9) finds the additional tasks associated with mothering impact on her ability to manage the other tasks required of her within her daily life, *"Don't have time to do other things such as clean, socialise easily, get out of the house easily, perform daily tasks"*. The inability to manage her perceived occupational requirements has had an impact on her sense of agency, potentially impacting on her depressive symptomology, with her EPDS score ≥ 9 .

The impact on the mother's sense of agency can exhibit into behavioural symptoms that are reflective of poor mental health. Participant 109 (EPDS ≥ 9) was able to reflect on her own behaviours and understand these were related to her sense of control being challenged but unable to manage these issues, leading to self-stigmatisation.

Continuous focus to be quick and efficient when doing something, with hindsight that is partly fuelled by not wanting to let go of control about baby or anything else, has led to a continuous feeling of being on edge, making me snappy and unpleasant to others and feeling unhappy, failed and incapable a lot of the time

Participant 108 (EPDS ≥ 9) was attempting to adjust her thoughts on control and her sense of agency was adapting to the new unstructured routine of childcare, *“Activities and routines now led by baby rather than myself. Less easy to have control over the day, having to learn to go with the flow more than previous”*. Both mothers had EPDS scores ≥ 9 , which may have been attuned with their loss of sense of agency after having a child. However, Participant 108 was attempting to alter her ideals to situate herself comfortably within the new paradigm of control, which may be a protective factor against depressive symptomology in the future.

Ella (EPDS < 9) was also aware of her need to relinquish her locus of control over managing her new responsibilities and tasks, *“I’m forcing myself to not get too hung up on stuff like nap times and feeding times and schedules and I’ve been very much led by him”* (Ella, Interview 1, < 9). This tactic appeared to have a positive effect, with her EPDS score < 9 . The additional responsibilities of the role and the sense of agency regarding occupations can be explored further through examining the mother’s routines.

7.2.2 Necessary Changes to Routine with the Additional New Role

Routine is defined by the predictability of established daily occupations that within healthy individuals will meet their needs, within the confines of societal boundaries (Creek and Lougher 2008). Giddens (1984) associates routine with lower levels of anxiety as a form of day-to-day social activity. The continuity of social life is dependent on the participation of social actors to perform their daily routines. Routines do in fact create a sense of ontological security for the individual (Giddens 1984). With a knowledge of themselves within the social world, the relationships between the individual and the surroundings is established on a basic form of trust. As anxiety, routine and trust are so closely linked, the rituals of day-to-day life that create routines can represent coping mechanisms (Giddens 1991b). As routine is built around habits and performance, a lifestyle is created by the individual, influenced by group pressures, role models and socioeconomic circumstance (Giddens 1991b).

For participants, daily routines were drastically changed from pre-parenting lifestyles. The routine of daily life was set around the child’s needs, which were often unpredictable, especially for babies. Additionally, the routines were significantly changed during the pandemic, which is reflected by the interview participant responses highlighted in this

section. Participant 135 (EPDS ≥ 9) reflected on the lack of spontaneity available within her routine and the complexity of small tasks when caring for a child.

My whole daily routine has understandably changed, I am no longer able to do as I please when I please, leaving the house is now a massive task, nothing is simple.... if I manage a cup of tea in peace then it's a win.

Similarly, Participant 80 (EPDS ≥ 9) discusses a negative cycle of routine, which impacts her mental and physical health, resulting in multiple trips to healthcare professionals.

Do not have time for my morning routine, so everything has to be rushed or postponed until my husband can hold the baby. I do not have time for any enjoyable activities for myself, just playing with the baby. I feel more stressed and have constantly many things in my mind, do not manage to finish everything I start, my memory is very bad and my physical health suffers too. Very often visits to the GPs/hospital appointments for me and the baby. Sleep much less and always interrupted.

The effort and time required to organise occupations outside of the home may be off-putting for some mothers, which could lead to issues with social isolation and a reliance on visitors or media sources instead. The exploration of social support is available under support networks in this section.

7.2.3 The Importance of Access to and Use of Support Networks

The literature explores the need for support in everyday life, defining four categories of support. There is a need for: (i) instrumental support, a physical assistance with tasks; (ii) emotional support, receiving empathy, love and trust from another individual; (iii) informational support, given advice and useful information; and (iv) appraisal support, to achieve self-awareness of own performance (Leahy Warren 2005; Glanz et al. 2008). This builds on the concepts of reciprocal trust, community engagement and acceptance from peers that formulates a mother's social capital (Coleman 1988; Bourdieu 1990; Putnam 1993;

Dekker and Uslaner 2001). Though the research highlights this support as a necessity, some mothers within this study struggled to even accept the support on offer to them.

The role transition can be more difficult with mothers fearful of accepting support due to the perceived societal stigma attached to this. The societal expectation and portrayal of women appearing to cope within their multiple roles independently and successfully has had an impact on the perception of accepting support during the role transition. Some mothers could appreciate the importance of accepting support from others as essential to coping within the mothering role. Participant 191 (EPDS ≥ 9) was active in sourcing support for herself, *“I love having support from others I seek advice a lot from the people I trust. I’m new at this, sometimes I just need reassurance but also just need someone to talk to sometimes”*. The ideology of this as a new role that she is not yet experienced in and therefore support is a necessity may have been a supportive factor for reducing the depressive symptoms experienced, despite an EPDS ≥ 9 . Participant 131 (EPDS ≥ 9) felt that without the support to be able to look after herself, she would then not be able to provide the best care for her children, *“It’s necessary to keep everyone happy, allow self-care for myself”*. The support was therefore accepted willingly, as it was seen as a necessity for maintenance of the mothering role. For a lot of the mothers, the main source of support was from close relationships, *“I feel the support that I receive from others is invaluable. In particular that received from my husband and others”* (Participant 38, <9).

Participant 137 (EPDS ≥ 9) concurred that support was necessary for all individuals but also highlighted the lack of discomfort with this decision, *“I’m not ashamed to accept support from others as everyone needs some sort of support”*. There was an underlying awareness that there may appear to be some judgment on a parent if assistance is required. Similarly, Participant 194 (EPDS <9) made reference to this shame response when arguing that parents need to be healthy to adequately care for a baby.

We have never felt ashamed of accepting support. We want a healthy happy baby and in order to do that we need to look after ourselves too so we can provide a safe and happy environment

Though accepting available help, the need to specify their lack of shame in their responses highlights the existent societal stigmas surrounding the acceptance of support. The knowledge of these stigmas is a clear illustration of a different prioritisation within their social capital accrument. These mothers have actively decided to put their personal values ahead of their perception of societal standards. The expectant role transition and the reality of the transition can cause mothers to self-stigmatise if their own performance differs from their perceived norm (Choi et al. 2005; Lazarus and Rossouw 2015). The need for clarification of not feeling ashamed within the statements further emphasises the impact of societal expectations onto mothers. Participants 191, 131 and 137 scored ≥ 9 despite their willingness to accept support, whilst Participant 38 and 194 scored < 9 . The differences seen between the responses may be due to the plural vocabulary indicating a joint decision between caregivers, within the response from Participant 194, and the mention of husband and mother for Participant 38. This suggests there may be some factors associated with parents feeling supported by each other within decision making and having a good support network.

Being a mother to more than one child was also a potential factor in the acceptance of support for some mothers, even if previously reluctant to do this. *"I struggled with this initially but since having two children have come to accept this more easily"* (Participant 102, EPDS < 9). The hesitance of relying on others became redundant and as support was offered, it was accepted openly. *"I know it's good to take it when it's offered, I've expected it more with my second than first child"* (Participant 104, EPDS ≥ 9). Schaffnit and Sear (2017) found receiving emotional support correlated with a higher likelihood of having subsequent children for mothers. Surprisingly, they found practical support was negatively associated with going on to have subsequent children. Women with lower socioeconomic positions received less overall support (Schaffnit and Sear 2017). Similar results were found within Redshaw and Henderson (2016) study of 4571 UK women, who completed a questionnaire on whether they were asked about their mental health during their perinatal experience. Findings suggested non-white women, those women in deprived areas and women with lower educational levels were less likely to be asked about their mental health status or offered treatment and support. This proposed the inverse care law on mental health, where those most in need of healthcare are least likely to receive it, existed within perinatal care (Redshaw and Henderson 2016). These research studies highlight the importance of social capital accrument over time

to compensate for the lack of resources that are often associated with mothers in deprived areas or with lower levels of education.

Due to this perceived stigma associated with accepting support as a mother, the support may be offered but feelings of guilt would stop the support being taken, negatively impacting the transition to this new role. Participant 88 (EPDS ≥ 9) was unaware that her own mental health could have an impact on the role she was undertaking. She felt there was an additional stigma to receiving support for reasons outside of the home or caring for the child, *"I always feel guilty about asking for help with childcare for social reasons"* (Participant 88, EPDS ≥ 9). Giddens (1991b, p. 67) explains how guilt is associated with anxiety, generated when a boundary is touched upon, which may be a feeling of wrongdoing towards her child alongside a concern about violating codes of 'proper behaviour'.

A lot of the mothers were willing to accept support but only if it was offered to them, rather than having to ask for the support. Again, the concept of asking for assistance was seen as less socially acceptable than agreeing to assistance when it is offered *"I am learning I need to accept support as it is offered"* (Participant 108, EPDS ≥ 9). This may be due to the fear of putting pressure onto others that have not got the time to provide the required support, *"I welcome support if it's offered but feel hesitant in asking because I know others have busy lives too"* (Participant 19, EPDS ≥ 9). Both Participant 108 and 19 scored ≥ 9 on their EPDS scores, which may suggest the resistance to accept support is having a negative effect on their mental health. Additionally, a mutual understanding of the role could be important, as Participant 123 (EPDS ≥ 9) was not keen on accepting support from individuals without children, *"From family and friends with children I am happy to accept support as they understand what I am going through. I find it difficult to take support from people who might not understand"*.

Fonseca et al. (2018) found a barrier to women seeking help was the fear of portraying personal failure and receiving disapproval from their social network. The mothers wanted to project themselves as invulnerable and self-sufficient or feared the potential rejection from others (Fonseca et al. 2018). There was a considerable number of responses from the women in this study suggesting the main factor inhibiting acceptance of support from outside the

parental partnership was a fear of societal judgment. *“I’d rather not [accept support], I feel judged if people think I need support”* (Participant 211, EPDS ≥ 9). There was an expectation that mothers would be able to manage the responsibilities of the role without additional support, *“I find it difficult, like admitting defeat”* (Participant 69, EPDS ≥ 9). Despite the need for support, Participant 68 (EPDS ≥ 9) felt guilt towards her inability to manage the mothering role herself. She did not reach out for support due to the negative connotations, *“I felt like asking for support or for a break made me a bad mother and that I should be able to do this on my own because I’m a mum and I should know how or should be able to do this on my own”*. This can lead to mothers feeling despondent and untrusting when considering support from others, *“I find it difficult to acknowledge that I need help from others. It makes me feel that I have failed in my role as a mother”* (Participant 128, EPDS ≥ 9). Each of these participants appear to have decreased confidence in their own abilities as mothers that allow them to feel like they are failing within their role if they are not completely independent. This self-stigmatisation is detrimental to the mental health of these women as they struggle to find a sense of ‘belonging’ within society in this new role. These perceptions have been influenced by personal experiences and values, alongside their understanding of the societal norms and expectations. All EPDS scores were ≥ 9 , illustrating the detrimental effects of low social capital on mothers when exploring acceptance of support.

The stigma attached to mothers that are perceived as requiring help to continue within their role is negative and detrimental to the mental health of many women. There appears to be increasing numbers of women refusing support for this reason (Fonseca et al. 2018). The impact on the mental health of the mothers and the overwhelming nature of motherhood can negatively impact the role transition.

7.2.4 The Impact of Supportive Social Environments

The social environment can have a significant impact on the amount of support available to a mother. Potential familial influences include the loss of a parent/parents, family conflict, family members who have a disability, or family members in a caring role themselves.

Participant 144 (EPDS < 9) had a positive experience of social support from her in-laws and friends, despite having no immediate family of her own. This may influence the mother to

explore other avenues for support, inclusive of in-laws and friends, *“I am happy to, and keen to, accept support, especially as I don’t have immediate family of my own. I feel it’s important for me and my baby that I have support from people around us”*. The open acceptance of support may be a shielding factor against depressive symptomology.

However, this is not always accessible, with Participant 63 (EPDS <9) struggling with the loss of a parent impacting on the levels of support available, *“We don’t have family close by and my mum is dead. I do feel like other people are more fortunate than us in the help they are able to access”*. Daphne (Interview 1, EPDS <9) explores how after her mother had an accident, suffering with a lifelong health condition, that maternal support was no longer available to her.

I haven’t got that support network and I really ache for that... you kind of have that expectation that mum will kind of be at the other end of the phone if you’ve got problems and its kind of, I miss that kind of somebody... traditionally as mothers you would have had that kind of that network of support from aunties and sisters and friends and stuff like that... wish that somebody was there to kind of to help you a little bit

For Participant 80 (EPDS ≥9), the previous experiences of poor social support and conflict surrounding familial relationships were influencing her decision to no longer request support unless absolutely necessary, *“I never usually ask for support, I’d rather do everything myself and then I know I won’t be let down”*. This may lead to feelings of social isolation within poor social environments and with informational poverty, impacting negatively on her mental health (Ruthven et al. 2018). Similarly, Participant 135 (EPDS ≥9) found a reliance on others difficult and had some regrets at the choice to enter parenthood, *“I find it hard to ask for help as I find it difficult trusting that people will be there for me... In all honesty, if I had the time over, I wouldn’t do it. I certainly won’t be having any more children”*. The mental health impacts of poor family support was described by Participant 173 (EPDS ≥9) who felt she was being shut down when requesting support from her family,

I sometimes feel like I am screaming out for help from my family but they do not notice or listen, even to the point where my partner and I cannot celebrate my birthday together as my family refused to babysit for 1 evening. I have a medical problem, I need my gallbladder removed and when I have an attack it is very very painful. I had an attack recently and asked my mum if she would babysit the kids so I could go to A&E and I was told to wait 2 days until her day off work as she wouldn't be able to help until then. My other choice was to go on my own and leave my partner to watch the kids but as it's painful to drive, I decided against this and ended up suffering at home for a week until it passed. I need help. I need support. I am dying a bit inside everyday and I feel like no one notices. I won't ask anymore as I have been shut down so many times but I would be more than happy if someone offered... just help me

This lack of a secure support network to provide the care required when needed may have been negatively impacting on Participant 173's mental health with her EPDS ≥ 9 . Participant 103 (EPDS < 9) had a similar issue with family conflict and refused support on the basis of a poor relationship, *"I am reluctant to accept support from my parents-in-law as we have a difficult relationship"* (Participant 103, EPDS < 9). Despite this conflict, Participant 103 did have support from her own family and this may have been a protective factor, keeping her EPDS score < 9 , unlike Participants 80, 135 and 173 who lacked a secure social network.

Fears surrounding generalised reciprocity were more evident for the mothers whose support network did not include immediate family members. Participant 1 (EPDS < 9) explains how they are reliant on their neighbours for any emergency childcare needs, which was reciprocated. She worried about using up the support, *"It's difficult, you'll never know when you'll have an emergency and need help, so you don't want to use it too much just in case there is only a finite amount of help anyone can give you... They have helped us numerous times with childcare when we've had an emergency and vice versa, it makes it difficult to think how else we would cope"*.

It is also important to consider the impact of geographical mobility on mothers who move away from the family and settle down in new locations. Previously, women would often

remain close to their families to have children, but in our modern society, many individuals move away for university or work and settle in this new location, away from their families and often away from their partner's families (The Social Issues Research Centre 2011). These issues surrounding social mobility are tied with the concepts of social capital, inclusive of community engagement and support networks. This separation from family members can hinder the levels of support they have available to them, generally less easily accessible. Participant 113 (EPDS ≥ 9) finds the practicalities of living away from family means she does not receive regular practical support.

I find this hard. Practical support isn't offered to us very often. My mum and my dad live 5 hours away and have a young teenager in school, so it is difficult for them to get to us to help out, so I tend not to ask very often. My in-laws live a little closer but are often too busy to help and rarely offer. Living far away also means that the baby isn't very familiar with lots of extended family members, so I worry about leaving him with people in case he doesn't settle. The people the baby feels most comfortable with are friends but they have children so often are too busy to offer practical help.

Participant 9 (EPDS ≥ 9) describes the aspects of feeling isolated by the distance, without access to the relief practical support can offer, "Living away from family can feel isolating and means that we don't always have support at hand when needed" (Participant 9, EPDS ≥ 9). This can lead to mother's reflecting on their own circumstances in relation to other mothers, with Participant 130 (EPDS < 9) explaining the issues with her support network due to distance.

I would love to have my mum closer to take care of the children now and then so I could have some free time. I really envy friends who get nights off when the grandparents have their children for sleepovers etc. Practical support e.g. when one of the children are ill etc. would be very helpful too. My parents and my partners parents are not local so my main practical support network is friends and neighbours and school mothers of my older children.

Both Participant 113 and 9 have EDPS ≥ 9 , suggesting the lack of practical support can have an impact on mental health. Participant 30 has an EPDS < 9 but this may be due to the experience gained from her previous children, *“I’ve become more relaxed since my older children started schooling and seeing a variety of parenting styles”*. The ability to compare her own parenting style to other mothers and reflect on her own abilities may have been a supportive factor.

7.2.5 Change in Dynamics of Relationships

The introduction of children can impact on the dynamics of close relationships, with additional roles and expectations (The Social Issues Research Centre 2011; Laney et al. 2015). Overall, within the findings of this study, the increased time spent in the caring role reduced the time available to maintain important relationships for a lot of the women. For the women in intimate relationships, there was a reported change in the dynamics with their partner and a loss of intimacy, whether due to fatigue, environment or time.

Intimate Partner Relationships

Participant 46 (EPDS ≥ 9) found the fatigue of the caring role was impacting on her relationship, being unable to make the most of the weekends together as a family. There was a change in routine noted with evenings spent within the home due to the sleep times of the child, *“My husband and I no longer go anywhere in the evenings, and don’t get to do much at weekends as we’re so tired!”*. Whilst Participant 122 (EPDS \geq) found the lack of time together as an issue to the relationship, *“My partner and I struggle to find time to ourselves now as a couple”*.

Participant 155 (EPDS ≥ 9) found the environmental circumstances, change in routine and levels of fatigue all contributed to an overall sense of loss in her relationship. The opportunities to spend time as a couple was restricted and fatigue was impacting on their ability to connect as a couple.

He now has to sleep separately. We now barely have a chance for intimacy and barely breakfast together. It’s lonelier and I’m usually sleep deprived from the night so in no mood for being lovey dovey... Now we barely watch movies together, are too tired to talk about much and the conversation mostly revolves around the

children. We barely go out any more and no dates. When we do on the rare occasion have a date, it's always rushed so as to get back to the kids who are looked after by the in-laws

These three women (Participants 46, 122 and 155) all reported a negative impact on their relationship and had an EPDS score ≥ 9 . The reduced intimacy and connection felt with their partners may have been a contributing factor to their reduced mental health.

It was highlighted how becoming a parent can have negative impacts on the father as well as the mother, with Participant 17 (EPDS ≥ 9) feeling that her partner had also struggled with the transition, which affected their relationship. *"I feel we as a family (my partner and I) need support to reconnect as adults and I feel that he needs support for his mental health and becoming a father and the responsibilities that entails"*. There is research to suggest that paternal mental health is under researched and underdeveloped and needs consideration when considering the mental health of the mother (Schuppan et al. 2019). Philpott et al. (2020) review of 101 studies of paternal perinatal depression suggested prevalence estimates of nearly twice the rate of depressive symptomology during the perinatal period when compared with the adult male population. Additionally, maternal depression was a common predictor for paternal depression and fathers felt they were often left out of discussions with healthcare professionals, leading to increased stress and anxiety.

Unsurprisingly, a lot of women highlighted spending time with their partner as an activity they would like to make time for, *"Spending more time alone with my partner"* (Participant 1, EPDS < 9). There were requests for a more *"intimate relationship"* (Participant 115, EPDS ≥ 9) and *"date night"* (Participant 116, EPDS ≥ 9), but most women wanted in particular *"my partner and me spending time together without children"* (Participant 196, EPDS ≥ 9).

Child/Children

The main issue raised that impacted on the relationship with the child was employment, with some mothers feeling they were restricted in the time they were able to spend with their children. The opportunity to spend more quality time with their children was important to them and desired, *"Would like to spend more time with my baby"* (Participant 48, EPDS < 9).

Similarly, Participant 70 (EPDS ≥ 9) found work was taking too much of her time, that she would rather be spending with her children, *“More time with my children in the week... work has meant that it takes up more of my time than I would like”*. This reduced time during the week could affect the activities engaged in with the children, with this mother missing, *“Taking my children out to the park”* (Participant 173, EPDS ≥ 9). These challenges were due to role conflict, in which the mothers were dissatisfied with the division of time within their roles.

There were also positives identified with the dual roles of employee and mother. Gemma (Interview 2, EPDS ≥ 9) found that though working meant time away from her children, this made the time they did spend together more enjoyable, as it was more valuable and rewarding.

Because you’re working, because you know schools are back on... the actual time that you’ve got to spend with [baby] is sort of it, you can spend that time playing... it’s an activity that you’re enjoying and you can sort of make that time for it

Friendships/Peer Support

The awareness of group dynamics can positively develop into the formation of friendships, providing relief for some mothers. The support of a close social circle can assist in the performance of normalcy in public and reduce the stigma felt by an individual through acceptance and similar peer experiences (Goffman 1963). This was attributed to the friendship groups mothers maintained during parenthood, choosing friendships and engaging with social groups.

Participant 2 (EPDS ≥ 9) found socialising a positive experience for her own mental health, *“My new mum friends and groups are really important to me, it’s made such a difference getting out every day and socialising with people going through the exact same things as me”*. Similarly, Participant 6 (EPDS < 9) found solace in her friendship groups, *“Other parents/friends have massively influenced me and helped me so much along with my own family”*.

Peer support can contribute to increased feelings of self-esteem, self-efficacy and parenting competence, whilst reducing feelings of isolation, stress and disempowerment (McLeish and Redshaw 2017). Peer support was raised by a number of mothers as an important supportive feature of friendships during motherhood, providing advice or normalising experiences. Gemma (Interview 1, EPDS ≥ 9) describes the importance of friendship groups for peer support and advice within the role of motherhood, *“Definitely with my friends, I think its positively influenced because I think you share things with one another... you can articulate your problem and your friend can help”*. Gemma described herself as unconfident within the mothering role and the reliance on a peer support may have assisted in providing guidance within her new role. Similarly Participant 99 (EPDS < 9) found the stigma associated with expressing issues within the mothering role was not apparent within her friendship groups, *“My friends with children have really supported me through motherhood and allowed me to share worries with them without being judgemental”*. Peer support allowed mothers to feel a sense of community and belonging to have other individuals experiencing the same phenomena, *“Making mum friends has been the best thing, you realise that you’re not alone and everyone has their challenges”* (Participant 183, EPDS ≥ 9).

Participant 45 (EPDs ≥ 9) found the ability to get advice on issues invaluable, *“I am also influenced by my friends who are also mothers - they can be a bit of a yardstick around day-to-day issues such as weaning queries etc”*. Whilst Participant 142 (EPDS < 9) found sharing the experience at the same time as others was valuable, *“Meeting other first-time mums in the area with babies all due around the same time, they have been an invaluable support”*. As did Participant 76 (EPDS ≥ 9). *“Friends who have recently had babies have been a big help to me”*.

Research suggests that friendships, particularly with peer support have a positive impact on mental health (Leahy-Warren et al. 2012; O'Neill et al. 2019) and the mothers within this study identified the positive influence of friendships and peer support. However, the EPDS of the mothers were inconsistent with a mixture of scores ≥ 9 and < 9 and conclusions cannot be drawn on the impact of this type of support from the EPDS scores.

Some women felt the relationships with their social groups had been altered by motherhood, as the opportunities to socialise had decreased and the desire to spend *“more socialising without the children”* (Participant 155, EPDS ≥ 9) was a common thread. Some mothers needed any type of time *“Meeting up with friends without the baby”* (Participant 153, EPDS ≥ 9). Whilst others wanted to go for *“Lunch without children with partner, family or friends”* (Participant 18, EPDS ≥ 9). Participants 155, 153 and 18 all scored ≥ 9 , suggesting a lack of engagement with friendship groups can lead to feelings of isolation and impact on the mother’s mental health.

There could be negative influences from friendships, with dispute over the different parenting styles. Participant 194 (EPDS < 9) had witnessed parenting styles that were both positive and negative and this had influenced her own parenting style,

Over the years we have seen our nieces, nephews and friends’ children grow up and seeing how they react to praise/discipline/rewards etc has given me ideas on how I wish to raise my child. It has helped us see what does and doesn’t work and what has been positive and negative

Participant 2 (EPDS ≥ 9) took the negative parenting styles as an example of how she did not want to parent herself, *“I’ve also known a lot of ‘bad’ parents which have influenced me in how to not be”*. Similarly, Participant 8 (EPDS ≥ 9) opposed the parenting style of her friend, *“I have one friend who has two children and is the same age as me and I find I disagree with the way she parents a lot and I think it made me determined what “not” to do! (Not that I tell her that of course!!)”*.

Family

Ella lives away from her parents and had to contend with a national lockdown, so visits back home were unachievable during her maternity leave. At home, her partner is not involved in the daily chores or childcare, so the lack of family support is more noticeable to her. *“Not having my family close to me in the while since I’ve had him, I’ve really noticed that, so it can be quite isolating”* (Ellie, Interview 1, EPDS < 9). She reflects that if she had suffered from mental health issues following the birth of her child, she would likely have returned to live

closer to her parents due to the lack of support in her relationship. This also had an influence on the decision to have more than one child, as there is an awareness that living with a mental health condition alongside the mothering role requires a much higher level of support.

If I needed help because I wasn't as mentally strong as I have been this time, I don't know how I would have coped with that. I suspect I would have moved back up to my mums and maybe even ending the relationship, so I think that is like quite a serious consideration for me if I was ever going to do it again

Ellie (Interview 1, EPDS <9) reflects how her personal journey of motherhood, with a significant lack of support system, has influenced her confidence as a mother to look after her child. Ellie dealt with the loss of a close friendship, a partner that was choosing to avoid involvement in daily tasks and a global pandemic that restricted access to visiting family members who live away. *"I think they've [relationships] made me quite independent... I am able to care for [baby] even without a support system, even though caring for him with a support system is nicer and easier"* (Ellie, Interview 1, EPDS <9).

The importance of social support systems from an early stage of motherhood is supported within this study. There is evidence to suggest that a higher level of and satisfaction with social support, especially from the baby's father, is necessary for a woman during pregnancy, to experience fewer difficulties during labour and birth healthier babies (Collins et al. 1993; Jonsdottir et al. 2020). Having minimal social networks prenatally has been associated with depressive symptomology after the birth (Collins et al. 1993).

The development of support systems is increasingly important for mothers with mental health conditions. An avoidance of personal relationships can be seen as a coping mechanism to conceal discreditable features, such as a mental health illness (Goffman 1963). This can lead to social isolation and further deterioration of the mental health of the mother. Voluntary disclosure of the discredited features is described as the well-adjusted phase, in which the individual is accepting and not fearful of judgment (Goffman 1963). This has been described as available through peer support within this study and through previous research (Leahy-Warren et al. 2012; O'Neill et al. 2019).

Hultqvist et al. (2019) conducted a study of the Balancing Everyday Life intervention amongst individuals with mental health issues. The strongest predictor for clinical improvements was having a close friend, with accountability of others to assist in reaching goals another positive finding. The importance of social support has been highlighted by numerous research studies (Eastwood et al. 2012; Feeney and Collins 2015; Cornish and Dobie 2018; Lefkovic et al. 2018). Yim et al. (2015) found the strongest predictor for PND risk amongst psychosocial factors were high stress levels, poor quality and resource of relationships and reduced support from partner and mother.

7.2.6 Groups Accessed that are Specific to Motherhood

There were some positive and negative experiences of the group sessions that mothers attended. For the mothers that specified in the questionnaire they attended groups, emotional support was regarded as the most reported benefit of attendance. Some mothers were able to make lifelong friends from the groups and used this as a specific friendship group of fellow mothers at the same life stage, which aided their ability to cope within the new role. *“From going to groups and things I have made a nice uh network of mum friends... I don’t think I would have survived without the groups, the friendships I have made... I would have been so isolated and so on my own I think it would have been so awful”* (Anna, Interview 1, EPDS ≥ 9). For Anna, who is a lone parent and geographically isolated from family, the groups provided her a lifeline to have social support. *“Pre-COVID yes, I um, nearly every weekday um I try to go out at least every day for my mental health as well as my child... wear out some energy... there’ll always be a mum I know there at least so there is that social aspect for me as well so it’s kind of a win win situation”* (Anna, Interview 1, EPDS ≥ 9).

However, not all mothers were successful at making friendships and shared mixed experiences of the classes. Daphne (Interview 1, EPDS < 9) enjoyed the groups with her first child, making lasting friendships, but stopped attending after her second child as she felt the mothers were too young for her. *“I liked groups with [eldest]... I got to know a really good friend... I went to the groups to begin with [youngest] and they were all really really young... I felt old (laughs) felt a bit past it and I just I just didn’t feel comfortable... I felt like the old granny in the corner”*. Chloe (Interview 1, EPDS < 9) encountered difficulties attempting to fit

into a group of mothers, that had already formulated friendship groups prior to her attendance,

Already a cohort of mums that had being doing the group... so hard to break into... so hard when there's people that already know each other... I didn't actually enjoy it I felt like because I had paid for a certain block of sessions, I had to go back but I was dreading because it is even lonelier being a mum amongst people where you are not um there's nothing there and you are feeling left out

Though there were some women that Chloe felt could have become good friends, the opportunity for these friendships to develop did not happen and she did not feel that the groups had allowed her to gain any like-minded friends. *"Never sort of transitioned into a like a real-life friendship beyond the group... I was a little bit disappointed... there were some really nice mothers there with very similar interests"* (Chloe, Interview 1, EPDS <9).

Ellie (Interview 1, EPDS <9) found the dynamics of the group itself to be a problem in preventing friendships from being formed, *"at the groups... no one really introduced themselves then you do everything but all your focus is on your baby... I certainly didn't meet anyone that I would... I have met more people through church... socialisation time after the service on a Sunday"*. Ellie found she was able to join a group at the church and was a lot more successful in gaining new friendships and being involved in mothering activities. *"A better circle of people and more like-minded people and more people that have got my nature I think whereas baby groups you never know who you're going to get it could be anyone (laughs)"* (Ellie, Interview 1, EPDS <9).

Due to the interviews being conducted during the global pandemic, the national restrictions had affected groups being carried out, which impacted on a lot of mothers. Whether the children were too young to engage with on-screen groups or the children were not getting the same amount of energy expenditure at home, many mothers described a sense of loss when the groups were temporarily terminated. The dynamics of the mothering role needed to be adapted to meet the change in environments and reduced external support. Mothering became more intensive and with less resources to entertain the child/children.

Lone parent Anna (Interview 1, EPDS ≥ 9) explained that her daughter was not engaging in any virtual classes and missed the interaction with other children that she would get from the group environments, *“I’ve been doing a couple of zoom toddler and parent classes but my daughter is not quite old enough to engage with that... she really misses that social interaction desperately”*. This then impacted on Anna having to try and create activities to do within the house and manage the excess energy that her daughter was not able to work off in a group environment. *“Constantly trying to catch up, I’ve been really struggling um because she is not burning off the energy she would of, the house is always trashed... I’m struggling to keep on top of things and keep her entertained... there’s not been any balance”* (Anna, Interview 1, EPDS ≥ 9). This has led to Anna (Interview 1, EPDS ≥ 9) reflecting on her previous daily routine and how she took this for granted, when she is now not able to attend any groups.

Things I desperately miss are things I kind of took for granted, you know, like just popping over to the community centre and kind of going to all of these groups and doing all of these things and definitely going to do as much as I possibly can when it all reopens

Holly (Interview 2, EPDS ≥ 9) found solace in the in-person group dynamics and the ability to take some time for herself when other parents were present and able to watch the children. This aspect of the groups was missing and caused feelings of exhaustion at not being able to switch off.

If we went to play group, you’d have like ten minutes just quiet time in your own head where someone else’s eyes, not specifically watching her but you know you know that there is a group of women’s eyes or men looking at the children so if something were to go wrong you have that like safety um and maybe it wouldn’t feel quite so exhausting

This was reiterated by Anna, finding the solidarity of being in a room of responsible adults gave her a rest from her parenting role for just a short while, *“another pair of hands...another pair of eyes so you can switch off for just a second is really nice”* (Anna, Interview 1, EPDS ≥ 9).

When transitioning to the role of mother, groups were often mentioned as an activity to complete with the child/children. Groups could be a source of support for mothers, with peers forming friendships and becoming a source of informal advice and reassurance. However, groups had mixed reviews and some mothers found it difficult to make friends within the environment. Some mothers found the added routine of attending groups was helpful for their socialisation, mental health and ability to switch off from the mothering role for a short while. This was an aspect of daily routine that was missed by the mothers that attended groups regularly, when the national lockdown was imposed.

7.3 The Occupational Balance of Daily Life When Carrying out the Mothering Role

Occupations have been introduced within chapter three and have been described as ‘a group of activities that has personal and sociocultural meaning, is named within a culture and supports participation in society’ (Creek and Lougher 2008, p. 39). Chapter three discussed how occupation is defined as encapsulating four key concepts: doing, being, belonging and becoming (Wilcock and Hocking 2015). These concepts have been referred to throughout the theme discussions as these are the drivers that motivate occupational choice around occupational engagement.

7.3.1 Understanding of Occupational Balance and Time Use

Occupational balance as a concept was well understood by the majority of mothers within the study. The importance of the individual’s sense of self and self-actualisation to maintain an independent identity was highlighted by the women when describing occupational balance as a concept. Participant 127 (EPDS <9) relates her identity as having time to be an adult, *“It’s finding a balance between keeping yourself and baby entertained, stimulated and happy. Also taking time for yourself without baby so you can be an adult for a little while”*. Similarly, Participant 144 (EPDS <9) referred to her own sense of self as important, *“Having the chance to pursue my own goals, relationships and activities whilst making sure the baby is taken care of”*. This pertained to each aspect of the women’s emotional and physical well-being within the expected roles and responsibilities attached to their identity, *“To balance my own individual physical, emotional and social needs with my role and responsibilities as a mother and a partner”* (Participant 144, EPDS <9).

Participant 96 (EPDS <9) felt the parameters of her pre-child lifestyle had just expanded to include the children, *“Sort of an extension of work/life balance, now it’s work/life/children balance!”*. Participant 117 (EPDS <9) felt the importance lay in having the opportunity to switch off and not always be thinking about the needs of others, *“Making sure I get time to have a break while the baby naps and have time to stop and not always be ‘on’”*. This ability to relax away from the mental load of mothering was discussed previously by the mothers’ attending groups. The environment of the groups or the time when the baby is napping allowed the mother time away from her mental load, encouraging a sense of occupational ‘being’ and self-care (Townsend and Polatajko 2007). The mental load of the mothering role will be further discussed in chapter eight.

Whereas the attempt to consider balance within the mother’s life was sometimes a difficult task and Participant 8 (EPDS ≥9) described the chaos she felt in her daily routine, *“It feels like it’s less “balance” and more trying to work out what is screaming loudest and dealing with that”*. This may be due to the number of tasks that need to be fitted into each daily routine, *“Hard to have a balance as so much to fit in”* (Participant 7, EPDS ≥9). The number of roles was seen as difficult to juggle by Participant 129 (EPDS ≥9), *“Balancing all the different aspects of my life and doing them well (mum, wife, professional, friend, sister, daughter) is nigh on impossible”*. Similarly, Imogen (Interview 1, EPDS ≥9) found the varying roles impacted on her occupational balance, *“Getting the balance right between motherhood being a wife, being a cleaner at home, looking after yourself, it’s really really hard”* (Imogen, Interview 1, EPDS ≥9). The occupational imbalance is clearly seen with these mothers feeling over-occupied from their multiple roles.

Participant 142 (EPDS <9) included the sharing of responsibilities related to childcare in the explanation of balance, highlighting the required division of tasks to achieve a healthy balance.

Making sure the childcare duties are shared as equally as possible e.g. alternating who gets up in the night to allow the other person to sleep. Also not completely giving up your social life you had pre baby and making sure you have time to yourself when needed

Similarly, Participant 62 (EPDS <9) promoted the sense of support that is achieved through shared responsibilities, *“Both partners support each other. My partner is great and does a lot”*. The occupational balance was encouraged by the sharing of caring occupations with a significant other.

Participant 46 (EPDS ≥9) found she was actively promoting her own needs as necessary and important to her partner to ensure they were considered, *“My needs can often get pushed aside, and I have to keep reminding my partner that my needs and our baby's are not mutually exclusive”*. The division of labour within a relationship can cause additional stress for the mother and impact on her mental health. This will be explored within theme three in chapter eight.

Participant 68 (EPDS ≥9) highlights how environmental, social and structural aspects of daily life impact on the type of day that is experienced, *“I understand the term balance however some days it's easier than others due to things like teething or the days I work & the weather too”*. In this regard, balance is described as changeable daily and is only relevant to the phenomena of that particular arrangement of occupations. As described by Townsend and Polatajko (2007), occupational deprivation is environmentally dependent and an inability to perform activities due to the external factors can be defined within this deprivation and indeed changeable daily.

Participant 1 (EPDS <9) was aware of the short-term impact of young children and was able to rationalise that the occupational balance would get better temporally, as the children got older.

It's probably the thing we compare most about. The balance changes from time to time, and I think it's accepting that some things won't go on forever so it's just putting up with it while you have to until the circumstances change

Participant 14 (EPDS ≥9) was also aware of the dependency of the child waning over time but the experience of small children overwhelming, *“There is no balance with small children other*

than the fine line between coping and total miserable chaos". There are similarities in the understanding of an occupational disruption as the impact is temporal and will alter again when the child is older.

Participant 64 (EPDS <9) touches upon the requirement of personal well-being to manage the well-being of others within a caring role, *"The balance is tipped away from self-care at a time when it is essential to be able to maintain your caring role"*. This was discussed in the accepting support section of this chapter, where the maintenance of good mental health was used as an explanation for accepting support from others. It appears there is a sense of understanding surrounding the importance of self-care for well-being, but this does not appear to be implemented within day-to-day life by a lot of the mothers within the study.

From this brief excerpt of quotations, it is clear the concept of occupational balance is complex and subjective to the experiences of the individual. When attempting to explain the concept, a lot of the mothers related balance to their own lifestyle. The women that described occupational balance with elements of self-preservation or self-care scored <9 on the EPDS, whereas the women that described occupational imbalance or deprivation appeared to have EPDS scores ≥ 9 . There may be a causal relationship present, with the negative descriptions representative of the depressive symptomology impacting on the women's perceptions of their everyday life. Overall, out of the 212 women that completed the questionnaires, 169 (79.7%) felt they needed more time overall, inclusive of time to themselves and time with partner.

7.3.2 The Domains of Occupational Balance: Productivity, Self-Care, Leisure and Rest

When the women from the phase two interviews reflected on their own activity diary following completion, each of the nine participants commented on most of their time being categorised as productivity or rest. There was an imbalance between the categories, with self-care and leisure missing or minimal for the mothers, as seen in previous research (Briltz 2019; Hesse Tyson et al. 2021).

Occupations can be categorised into three parts: self-care, activities for self-preservation and maintenance, inclusive of rest/sleep; leisure, for personal satisfaction; and productivity,

which promotes a sense of achievement, which gives purpose and value to life and a position within society (Creek and Lougher 2008). The activity diaries were used to contemplate their overall occupational balance and for Gemma (Interview 2, EPDS ≥ 9), the minimal time spent for self-care or leisure was a revelation, *"It was a bit worrying how little I did (laughs) for myself"*. Whilst Fiona (Interview 1, EPDS < 9) found the dependence of the child impacting on her daily performance of occupations the most difficult to manage, *"the stuff that has been a shock has been the, you know, the minutia of the practicalities, like you can't wee when you want, you can't drink when you want, you can't sleep when you want"*. Giddens (1991b) discussed how reflexivity is encountered when an active reflection of experience occurs. The activity diaries were a source of reflection for these mothers, influencing their self-perceptions, and an unintended impact of the research process.

Fiona was in paid employment at the time of the interview and did feel this may have influenced the amount of time in productive occupations, *"Productivity would be very high for me but that's because I would class childcare and paid work as productivity"* (Fiona, Interview 2, EPDS < 9). However, Daphne and Ella, both not in employment at the time of the interviews, also felt their time was split mainly into two categories, *"everything is either productivity or just rest when I'm sleeping"* (Daphne, Interview 2, EPDS < 9); *"I felt it was predominantly productivity and sleep"* (Ella, Interview 2, EPDS < 9). The overall focus on productivity led to some of the women feeling that their time had become very repetitive due to the daily childcare tasks that were required to be undertaken, *"I think my routine in the week is quite repetitive"* (Chloe, Interview 2, < 9).

Sleep was a common issue raised by these participants, with a lack of sleep impacting on their mental and physical health throughout the day. Leistikow et al. (2022) suggests the impact of impaired sleeping patterns affects executive cognitive function and chronic disruption can increase the risk of developing serious health conditions. Unsurprisingly, the women in this study felt the effects of sleep deprivation on their mood and abilities the following day, *"If I've got enough energy then I'm, you know, there's nothing that I really hate... if I haven't slept very well or I haven't gone to bed early enough then I'm just oooooof [gesture down slope with hands]"* (Daphne, Interview 2, EPDS < 9). Ella concurred, exploring how the day was dependent on the sleep achieved during the night, *"if I ever had a bad night then I can be like in a bit of*

a mood the next day” (Ella, Interview 2, EPDS <9). The occupation of rest was increasingly important to manage the other aspects of the caring role. This was also highlighted in the stigma section in chapter six, where Fiona discussed how the lack of sleep due to breastfeeding was one of the main contributory factors to the development of her PND. Breastfeeding was highlighted by Regan and Brown (2019) qualitative study of 14 mothers in South Wales, as an area in need of further supportive services. The study reported a lack of practical breastfeeding support from professionals and lack of peer support services.

Some of the verbal advice that was given to these mothers with sleep deprivation was not seen as helpful. Participant 158 (EPDS <9) found the lack of time when the child was awake to complete non-childcare associated tasks meant nap times were the optimal time to catch up. However, advice given to her was for the mother to nap as well.

They say sleep when the baby sleeps but that is utter nonsense - the only time you can actually get anything done is when the baby sleeps, so as soon as baby is asleep you spend a mad half hour running around trying to get as much done as possible before he wakes up!

The emotional repercussions of sleep deprivation were clearly identified, with Bethan (Interview 2, EPDS <9) reflecting on a week period in which her sleep was disrupted and how this affected her mood.

Also realised how you sleep in the night depends on how you feel then for the rest of the day... last week then we had a fortnight where we had no sleep at all... I was very weepy, very emotional, couldn't concentrate on anything

This meant women may choose to sleep rather than engage in self-care or leisure activities, as they prioritised sleep over other activities for the self. *“I do make the choice between leisure and sleep but I tend to choose sleep (laughs)”* (Ella, Interview 2, EPDS <9). Participant 18 (EPDS ≥9) described the time constraints to manage the multiple roles that she held and how the self-care or leisure for herself was sacrificed. She also reflects that if there was additional time, this would likely be spent catching up on her rest category. *“I do not have a balance*

between what I do for the family and time for myself because there is no time leftover for me to do something I enjoy (other than caring for the family). If there was, I would probably choose sleep!”.

The long-term effects of sleep deprivation can be seen by Participant 14, who felt she was just making it through the day, *“My inability to cope without sleep that has kept us muddling through day by day with no long-term plans and no energy to make one”* (Participant 14, EPDS ≥ 9). The impact of occupational deprivation meant the prioritisation of the occupation of sleep was chosen over all others where possible. This promoted occupational imbalance and could lead to occupational alienation, as seen in the response of Participant 14, who appears disempowered and demoralised, scoring ≥ 9 on her EPDS. Sleep deprivation is a continual concerning issue for new mothers, with DeLeón (2012) pilot study of 40 mothers in the US suggesting an association between sleep deprivation and reduced child interaction and more negative perceptions of the child. Whilst Dennis and Ross (2005) longitudinal study of 505 women in Canada found an association with poor sleeping patterns of the child alongside maternal fatigue with higher EPDS scores. Leistikow et al. (2022) recommends four strategies to improve the sleeping habits of new mothers. These include: adapting the societal expectations on mothers needs being sacrificed to a mothers needs being met; educating on the need for longer periods of sleep; extending the night feeding role to others, for example partners, family members or night doulas; and accepting flexibility over breastfeeding needs, for example pre-emptive pumping or formula (Leistikow et al. 2022).

7.3.3 Financial Impact of Parenthood on Occupational Engagement

It must be considered how present day mental health conditions are affected by present day living. Contemporary society is fast paced with technology, social media and immediate access to desirable goods, with an increasing trend towards a “throwaway culture”. This encourages humans to be seen as consumers and suggests money equates to happiness (Clark and Alford 2019). Finance is seen as having a heavy influence on mothering and the ability to engage in activities or whether to return to employment. Each mother needs to make daily decisions regarding finance in relation to her family. Having the financial capacity to engage in activities or return to employment had an impact on the daily occupations performed and how time was spent for the women in this study. For mothers like Chloe who do not have

financial concerns, the access to services made engagement in daily occupations less stressful, *“I think we are fortunate we’ve both got decent salaries... it’s not a consideration for us, the financial aspect”* (Chloe, Interview 1, EPDS <9). Ella planned financially for her child and had budgeted for all of the childcare requirements before getting pregnant, aware that her partner was not able to contribute financially, *“I am basically responsible for all of the finances and for our house and our living expenses... I could cover the mortgage, I knew how much nursery was going to cost um before we even thought about having a child... so I researched it from a practical side”* (Ella, Interview 1, EPDS <9). The level of preparation and planning assisted in Ella feeling in control of her financial responsibilities of childcare and reduced feelings of financial burden and even meant she could extend her maternity leave.

Participant 113 (EPDS ≥9) was very aware that financial security had given her stability within her role, as she had more time to immerse herself in the parts of the role she was passionate about,

Being comfortable financially makes a huge difference to stress levels I think – because we can do things like get a cleaner, pay for baby groups, buy plenty of food, do fun things etc., it gives me the headspace to devote time and energy to things that are part of my role as a mother like breastfeeding for example and baby led weaning

All three mothers found the lack of financial stress was a positive influence on their mental health and allowed them to maintain the lifestyle they wanted to best care for their child.

There were quite a few mothers that were impacted by the cost of childcare, affecting the type of employment sought or whether to remain in employment. Participant 188 (EPDS ≥9) was unable to enter into employment due to the logistics of childcare and a lack of flexible hours, *“I don’t work because nursery fees are too high/I can’t find a job that I can work around the baby”*. Participant 169 (EPDS ≥9) was not able to remain in the industry she was trained for due to the need for part-time and flexible hours, *“[I’m] relying on paid help to be able to work, not being able to apply for a ‘good’ job in the sector I trained for at Uni because childcare is crippling (£1000 if working 37 hours a week)”*. Whilst Participant 95 (EPDS ≥9) was required

to give up her career altogether and feels this has impacted on how she participates in activities with her children,

Financial predicament and my lack of employment. Can't afford childcare for youngest on my last wage so had to quit and now I'm not working money is tight. Can't afford baby groups, coffee trips out, days out with the kids or drinks/meal out with husband which makes me feel trapped indoors with the kids.

Similarly, Participant 19 (EPDS ≥ 9) found activities were restricted due to the financial burdens of childcare, *"childcare is expensive, so money is restricted and I can't afford to go out with friends for a while"*. Mothers were feeling pressured into performing the role as stay-at-home mother, *"with child two, it has been the economic pressures given the cost of childcare that have forced me to remain at home"* (Participant 14, EPDS ≥ 9). There were continual quotes about the issues with childcare restricting employment options, *"no money, no help to babysit so I can go out to earn more money! Extortionate nursery fees"* (Participant 173, EPDS ≥ 9). Some mothers were *"constantly worried about money"* (Participant 122, EPDS ≥ 9) and making suggestions for *"more opportunities for free activities for children run by the council as these are the things that costs parents the most"* (Participant 84, EPDS ≥ 9). Further financial assistance was required to be able to manage with the childcare requirements against working commitments when they did not meet the set criteria in place. *"More financial support from the government for parents who are unable to afford to pay for childcare but also aren't entitled to any benefits due to their salary"* (Participant 84, EPDS ≥ 9).

Anna (Interview 1, EPDS ≥ 9) found that even with the benefits available to support her as a single mother, the financial burden of childcare or the restricted spaces available meant the search for employment was even more hassle, *"I think the problem with going to work is childcare is so expensive, even with the help offered and then there isn't places, so it's so hard when you find a job to find the childcare for it"*.

Occupational deprivation and alienation is seen with these mothers, with the employment options dependent on environmental situations that lead to occupational engagement in meaningless routines, negatively affecting mental health. The depressive symptomology did

seem to have some association with the satisfaction of occupational identities within their lives. The mothers that would prefer to stay at home but were required to work, had employment options on the wrong career path or were required to terminate employment, all seemed to have depressive symptomology scores ≥ 9 . Financial difficulties were the underlying cause of these occupational disruptions and alienation, which was highlighted as a confounder in the quantitative results in chapter five.

When managing reduced finances long-term, the mothers adapted their lifestyles to accommodate more cost-effective solutions to engagement in occupations for the children. Bethan (Interview 1, EPDS < 9) discussed the pressures of being restricted financially and found that it could become almost competitive against other families, *“Not all children are the same, not all budgets are the same and I think there is too much competition in parents”*. She had developed some coping strategies to use with her children to avoid the triggers of activities or items that required money, *“if we’ve got the money then we walk past the shops to go to the park and if we haven’t, we walk a different way and my son doesn’t really notice”* (Bethan, Interview 1, EPDS < 9). Holly used the free local amenities to reduce costs, *“we did a lot with the libraries and they’re all free so that was a big part of our social interactions”* (Holly, Interview 1, EPDS ≥ 9). Gemma discussed how the use of cheaper holidays within Britain allowed the family to go on holiday for a cheaper price, *“quite savvy in how we go away, we then got the money to be able to go out and be able to do things with them I suppose”* (Gemma, Interview 1, EPDS ≥ 9). Imogen was a fan of activities that did not require money as felt they were more meaningful for the child, *“I think sometimes the nicer experiences are the ones you don’t pay for”* (Imogen, interview 1, EPDS ≥ 9).

The closure of facilities during the global pandemic had provided some solace for the women working with low incomes as the pressure of activities requiring financial backing was diminished. *“It’s been nice this summer to not have that pressure of like all the parents doing things like money wise and everyone having to do things that don’t cost anything”* (Bethan, Interview 1, EPDS < 9). Though as lockdown restrictions were lifted, Daphne was starting to foresee the financial issues resurfacing. *“Lockdown is opening now, it’s becoming a bit more stressful financially”* (Daphne, Interview 1, EPDS < 9).

Occupational engagement did require financial backing a lot of the time, with costs of activities, groups and products all adding up. This caused occupational disruption for the mothers, leading to occupational imbalance if alternatives were not sought or comparisons were made. The additional stressor of finance did appear to have a negative impact on the mental health of the mothers, though coping strategies and control over the occupations performed did ameliorate some of these.

7.4 Conclusion

The pregnancy and birth of the child is a new journey for all women, with subsequent pregnancies and births all differing also. This can be a positive or negative event for the woman, though the additional responsibilities and change in routine can impact on the sense of agency, causing mothers to feel out of control and decrease mental health and well-being. All tasks become centred around the new child, whether the first child or subsequent children. The intensity of the transition can be unexpected and cause feelings of being overwhelmed. The transition will also impact on relationships and the current support networks will need to adapt to the changing dynamics of the family unit. There is an importance of having social support for emotional and informational support, especially from peer groups that are experiencing phenomena at the same time. There may be a separation from friends without children and a new reliance on family members or friends who are mothers themselves. There is also an impact on the relationships with any partners that are involved, as the time to spend together lessens and the types of occupations engaged in significantly alter.

The issues highlighted by mothers around accepting or requesting support equated to a negative outlook on mothers not being able to cope within their role. The insinuation that a woman is not a good mother if she requests assistance is felt from their own historical social capital. The environmental considerations of support are important as there may not be access to the support required or the dynamics may be difficult to navigate for some mothers. The relationships the mother holds will be increasingly important to maintain a healthy well-being. This is the reason behind a lot of mothers turning to group involvement, to meet peers and feel a sense of relief at having other responsible adults within their presence, to have a break from the hypervigilance felt when alone with the child.

The occupational balance concept was well understood by the mothers but for a lot of them, this was not achievable and out of reach. The drastic change in daily occupations can have a detrimental effect on the occupational balance of mothers. The balance is tipped to predominant productivity tasks, with self-care and leisure often decreased or forgotten completely, the first to be sacrificed by mothers. This has an impact on the mental health and well-being of the mother, which in turn can affect mother-baby bonding. The monotony of everyday life and the missing activities for the self can lead to some resentment in the new role and increase depressive symptomology. Indeed, the results from phase one of this research suggested that mothers with low occupational balance were seventeen times more likely to have depressive symptomology. As discussed in phase one, finance was a confounding factor within the logistic regression model for the association between social capital and EPDS scores. Finance was identified as a contributory factor to the inability to engage in certain occupations within the social environment. The lack of financial security had an impact on accessing childcare, seeking employment and attending child-friendly activities. This assisted in making the mother feel excluded from society, both with her child and without. This had an impact on occupational identity and mental health.

The findings from this research study suggest support received is dependent on the social environment of the mother and this differs, dependent on the social capital accrued over time and the occupations engaged in. Support that is offered from close relationships is more agreeable to be accepted and is generally more expected. The next chapter will further explore the challenges within intimate relationships with the division of labour and examine how mothers need to renegotiate their own roles to potentially provide some resemblance of balance.

8 Chapter Eight: Negotiating the Stereotypes Associated with Parenting and Managing Expectations of the Self as a Mother

8.1 Introduction

The following chapter provides a summary of the theme negotiating stereotypes. The seven stereotypes highlighted by Odenweller et al. (2020) in chapter two ((i)overworked; (ii) family-orientated; (iii) ideal; (iv) hard-working; (v)non-traditional; (vi) traditional; (vii) lazy) have been challenged in part throughout the findings of this thesis. This section will further explore how these stereotypes are detrimental to the mental health of mothers. It will then delve into the traditional division of labour within society and how these need to be challenged. The need for negotiation in gender roles will be discussed, with relevant theory and research to support the issues raised.

8.2 The Division of Labour Between Parents

Chodorow (1989) discusses how the woman carries the child and is thus expected to be the main caregiver within the social and cultural context of society. Women are increasingly juggling the responsibilities of paid employment, childcare and domestic chores. Though the gender gap is shrinking in paternal participation, there does continue a disparity in the levels of participation in comparison to women (Gerson and Torres 2015).

In this study, an equal level of responsibility and support provided by each parent towards the other was seen to create a more manageable mothering role for Participant 66 (EPDS <9),

Being able to do shared parental leave with my partner has helped me get back to feeling like me, whilst also being a new mum. It has also helped me to let go of some baby related activities to free up some mental space

By sharing the parenting role, they were both able to retain a sense of their former identity, alongside the parenting role. However, it is noted this is dependent on the availability and taking of shared parental leave, with a reliance on the partner sharing the parental duties during their leave. This is reliant on the types of employment that will provide these options, which may only be in higher status positions or from 'family friendly' employers (Government Equalities Office 2019). Participant 207 (EPDS <9) describes how her days can be balanced

when she has some time to herself, can socialise, there is a division of labour and this assists in being able to relax,

Balance is those days where everything works out, I'm able to spend time getting ready myself, my other half helps out, adult conversation is had, naps are on time, housework gets done easily and time to relax is available

The sharing of roles and responsibilities promotes the occupational balance for the mother, with time away from the child to engage in self-care or leisure occupations. Peltz et al. (2018) longitudinal survey research of 249 families in the US, found co-parental cooperation mediated a dual directional association between parent-child relationship satisfaction and marital satisfaction. Dickson (2020) concurs that a supportive partner relieved pressure from the woman and promoted connectedness with the child. The support networks section (chapter seven) illustrated that mothers with better support from partners appeared to have lower EPDS scores. Similarly, Participant 66 scored <9 on her EPDS.

However, when the division of labour within the household was not equal, this could give rise to feelings of resentment and occupational alienation, with the mother feeling disempowered. Ruddick (1995) and more recently Gerson and Torres (2015) and Nomaguchi and Milkie (2020) claim there is a need for more equal roles between the mother and father, with fathers taking on some of the parental responsibilities, that have been traditionally assigned to mothers. However, The Social Issues Research Centre (2011) and Wheatley (2017) found the division of labour remains unequal, with women spending greater amounts of time on household chores and childcare than men. Moreover, maintaining a career is dominated by male choice and women are required to organise flexible working hours, even if this impacts on their career prospects. The time burden from childcare can limit career progression, temporal and spatial occupational engagement and leisure occupations, associated with decreased subjective well-being (Wheatley 2017). Kruse et al. (2013) highlights the importance of checking the quality of the support provided from a partner, rather than their presence.

Within this research study, when there were expectations for the mother to perform full-time childcare duties, this could often include the household chores. Participant 14 (EPDS ≥ 9) describes feeling the dynamic has altered since having children, *“The balance of domestic chores has shifted so that I now do them all (or 95%)”* with this impacting on leisure and rest time, contributing to poor mental health and well-being. Participant 103 (EPDS < 9) felt her husband did not contribute fairly to the distribution of household chores, which she identified as a separate role in her life,

I am happy with my role as a mother, but unhappy to have taken on role as a housewife too... I don't feel that my husband contributes fairly to household chores... I would like more support from my husband

Similarly, Participant 19 (EPDS ≥ 9) felt there was a disparity in the division of labour between her and her partner, with the additional need of emotional support required, that was not being satisfied from her relationship, *“I need help from partner in domestic chores and childcare. I need emotional support from somewhere”*. Chodorow (1989) argues that due to the increase in mobile families, working mothers and a reduction of nuclear families, there is a decrease in the emotional support available from external sources. This highlights the importance of partner awareness of emotional support needs and external peer support, especially with the mothers feeling overworked (Tanner Stapleton et al. 2012; McLeish and Redshaw 2017). Participant 9 (EPDS ≥ 9) also expressed difficulties associated with working mothers being on different work schedules so unable to get the support they require from their friendship groups, *“I think a challenge associated with parenting now is that so many parents work and therefore, although I have friends who have young children, we don't have the same time off which I have found isolating”*. There is a level of isolation from friends and reliance on the partner for this lack of emotional support, putting additional pressure on the relationship. The occupational imbalance and alienation can be seen in the response of Participant 57 (EPDS ≥ 9) when discussing her lifestyle, *“No balance at the moment. I feel I'm doing all the jobs and partner does none”*. The lack of support may be having a negative impact on Participants 19 and 57 with EPDS scores ≥ 9 , with both mothers describing feelings of unhappiness due to struggling with loss of identity, financial burdens and social isolation.

Participant 103 may have scored <9 on the EPDS due to strong support from her mother and feeling happy within her role.

Participant 128 (EPDS ≥9) found the social capital related to her past experiences and values of how her own mother was stigmatised had impacted on her own self-stigmatisation. *“Being brought up by a stay-at-home mum, where comments were made about what did she do all day, I feel that it is my job to make sure the house and all the jobs are completed myself, rather than accepting help from my partner. I see it as my “job” now I’m on maternity. I feel that I should be doing more for my daughter, although I don’t know what that is.”*. This has increased the internal expectations she has of what needs to be accomplished within her daily role, causing uncertainty and reduced confidence in her mothering role and a higher EPDS score. This has impacted on her overall occupational balance and her social capital has influenced the parental roles set for both herself and her husband. Oakley (1979) suggested the association of childrearing with the mother, also places the expectations of the father’s role on the mother.

Social capital is unique to each individual and can significantly differ between mother and father of the child, which may have an impact on the way the parenting is undertaken. Issues may arise from differing external influences on how parenting is performed. Participant 103 (EPDS <9) found her confidence from personal experience and research, which may assist her in attaining a sense of efficacy, whereas her husband was influenced on a more social level from advice.

My own attitudes are influenced by friends, my upbringing, watching how close family look after their own children, reading (online forums, facebook groups, blogs and parenting books). I also attended incredible babies course with flying start, which I think reinforced some of my beliefs. My partners attitudes are influenced by his family and colleagues, and society locally.

Participant 103 observed the values and beliefs of her husband, influenced by his family, colleagues and society, were not in sync with her own and there was a different outlook on

the roles within the household. She found there was a lack of divide in the household chores, causing her to feel unhappy with the dual identity of mother and housewife.

The impact of long working hours for the father could also have an impact on the division of labour, with the mothers feeling isolated within their relationship. Participant 90 (EPDS <9) found her husband was at work every day and she did not get the benefit of being a nuclear family unit, *“I wish my husband didn’t work 7 days a week so I might as well be single, we don’t spend time as a family of 3”*. Participant 30 (EPDS ≥9) found it was the emotional support that she required from her husband, but this was not available due to his fatigue following work, *“I need my husband more. Emotionally and to be more present. However, his work life balance is abysmal and by the time he’s finished work there is nothing left of him for me”*. Though the situation was not within the control of mother or father, there was an evident divide between the lifestyles and the desire to change the situation from the mother’s perspective.

The levels of productivity appeared to be even more prominent for lone mothers, with the mother completing all parenting tasks without the support of a partner. Participant 22 (EPDS ≥9) is a lone mother and only has support from the baby’s father for childcare to socialise. Any other forms of support are received from her mother and all childcare and domestic chores are her responsibility alone, *“More support from the child’s father would be nice”*. As Chodorow (1989) suggests, the pre-existent gendered roles put a societal expectation on the mother to care for the child. Lone mothers are often left solely in charge of the caring, social and financial burdens of the child. Anna (Interview 2, EPDS ≥9) also does not receive any support from the father of her child and lives away from family support. She reflected on her activity diary, *“[The] vast majority of it was definitely productivity... being a single parent as well and not having that kind of support, there’s not really an option or much room for much else to be honest”*. There is occupational deprivation apparent for lone mothers, with low levels of support creating occupational imbalance. As presented in chapter five, of the ten lone mothers within this study, all of them scored ≥10 on their EPDS, suggesting the lack of labour division and financial impacts of single parent-families can have a negative impact on mental health.

Ellie (Interview 1, EPDS <9) is in a relationship with the father of her child but feels very unsupported, which has impacted on the stability of their relationship. She receives minimal support from her partner, often finding the caring role exhausting and overwhelming, *“Everything falls on me which is a big responsibility but it can be quite claustrophobic when you’re like, I just want a break”*. Ellie has been reflecting on her relationship and come to the realisation that this has influenced her emotional attachment to her partner, *“Since [child] has been around... I care less about [partner]... I don’t feel like he [partner] has made any attempts to support me really emotionally, financially, practically”*. This escalated during the pandemic when he was home full-time, not working, but still not participating in the upkeep of the home or performing childcare duties, with Ellie (Interview 1, EPDS <9) stating,

I still felt I did everything for [child] and everything in the home as well um and I like I was getting really frustrated because he was literally just, apart from going out for a walk with us for an hour and a half a day, just sitting and watching TV, like he’s a builder and like our house is a mess and I’m like could you not just like spend a day painting the dining room, we’ve got all the paint, we’ve got all the stuff, its free, it doesn’t cost any money but I felt, I felt, I feel he’s really he’s lazy so and he was lazy during lockdown

The division of labour can have a positive or negative influence on the relationship of the mother and father, with single-parent families without choice. The unequal division of labour can lead to mothers feeling overwhelmed and burnt out, impacting on the caring tasks performed and overall mental health. The promotion of a more balanced lifestyle requires social support, which has been impacted by the pandemic restrictions, with a decrease in support networks and uncertain financial security impacting on mental health (Cameron et al. 2020; Jackson et al. 2021; Suwalska et al. 2021).

When considering the external supports available to the mother, it is also important to consider if they contribute to the division of labour that is of use to the mother. Participant 195 (EPDS ≥9) found the support she required was assistance with domestic chores due to her fatigue, but was only offered childcare, *“I accept support but find no one helps out with the stuff I actually need support with. Sometimes I just need help with cleaning the house but*

everyone always wants to spend time with my daughter". The quality of support a mother requires can be more important than the quantity and the mother needs to be able to communicate her needs.

8.3 Negotiation of Self Expectations as a Mother

There are persistent issues surrounding gender in social situations in the modern world. These relate to the social capital of each woman, the societal expectations of her within her roles and how she perceives the expectations on herself (Chodorow 1989). Oakley (1979) warns of the social expectation that women will be prepared for the role of mother without the appropriate training or experience. The woman is provided with a dependent and expected to care for them twenty-four-hours per day in an environment that is socially restricted and unpaid. The protectiveness over the child may be instinctive but the confidence in self-efficacy that can follow is attained through being assertive to the child's needs and self-belief (Oakley 1979; Esdaile and Olson 2004).

Weistein and Deutschberger (1963) assert that exchanges may require elements of bargaining to reach the desired goal of the interaction. A woman that is able to approach interactions driven by outcomes may be more successful in attaining successful support networks and professional assistance, if required. For mothers, this could be the difference between coping within the new role and facing a struggle, which impacts on mental health. The likelihood of attaining goal-orientated interactions may be influenced by the levels of self-efficacy and confidence experienced by the mother. Giddens (1991b) advocates for the importance of creativity, to act or think innovatively, in the promotion of self-worth and mental health.

Daphne (Interview 1, EPDS <9) illustrates an awareness of the concept of external effects on your identity and role, *"I think that we are insular but you have to be you're influenced by everything that you see and you either want to be like them or you don't want to be like them and everything has an effect doesn't it"* (Daphne, Interview 1, EPDS <9). Participant 143 (EPDS <9) had a positive experience during childhood, which has influenced her performance within the mothering role. However, there was a concern that she was setting the expectations too high for herself and could potentially self-stigmatise herself for not attaining the same performance as her mother, *"My mum is a lovely role model but it is a double-edged sword*

trying to become your idol" (Participant 143, <9). Both Daphne and Participant 143 stated they felt 'confident' as a mother and maintained an EPDS score <9 and demonstrated that a good role model and an awareness of external influences may be a protective factor for depressive symptomology. In contrast, Participant 122 (EPDS ≥9) and her partner both had negative experiences within their childhood and were making an active decision to distinguish their own parenting style from their own parents, *"Growing up in dysfunctional families, both myself and my partner are adamant that our daughter will not"*. The absence of a positive role model and a reduced support system may have impacted on Participant 122, describing herself as unconfident and scoring ≥9 on the EPDS.

The importance of self-belief in competency of skills and abilities determines the choices made around occupational engagement and behaviour. The self-belief in one's efficacy to perform that skill can increase confidence within an environment to make positive choices surrounding growth and development in occupations (Kielhofner 2008). Mastering of these tasks is associated with self-satisfaction ('becoming') and societal acceptance ('belonging'), promoting future engagement in comparable occupations (Crouch and Alers 2014). The confidence a woman has in her capacity as a mother is based on a number of different factors. These include the ideal image of the attributes desirable for motherhood to herself, self-reflection of her performance in the role, often compared with others and attachment/adaptive response to her child (Mercer 2004; Chevalérias 2011). Mothers will be influenced in their role by their own personal experiences, whether positive or negative, and how they will adapt their own style accordingly (Mercer 2004). Confidence in self-efficacy is formulated from previous experience, so it is influenced by the environments, contexts and social surroundings of each individual.

At times, the confidence in self-efficacy was demonstrated in the parenting technique adopted and how the children developed. Bethan discussed the importance of non-judgmental responses and autonomy in child development, *"I think there is an importance for children to have choice and sometimes we forget then as parents like or as adults like that they are allowed to make choices or have days that where they don't feel great or extra loud days and stuff and it's just like helping to encourage them things"* (Bethan, Interview 1, EPDS <9). Roth et al. (2019) suggests environments that harbour non-judgmental attitudes and

encourage autonomy promotes improvements in emotional processing and development for children, which decreased the burden for the mother within the parenting role. The children themselves then become a source of motivation, *“I feel more confident than like when I go out and I got the children like they are what make me get up in the morning”* (Bethan, Interview 2, EPDS <9). Seeing confidence and happiness in her child gave solace to Chloe (Interview 1, EPDS <9), who perceived the successful development and attachment of her child as a reflection of her own mothering performance, *“I’m very confident that I am doing something right... my little shadow... I think maybe just the fact that he is alive (laughs) that I’ve kept him alive literally”*. Chloe considered herself confident in her role and Bethan classified herself as very confident. The ability to be reflexive about their own competence emerging from their child’s development may influence depressive symptomology, with both EPDS scores <9.

Anna (Interview 1, EPDS ≥9) expresses how she initially had issues with comparison of both herself as a parent and her child’s development against other families. This may have been further compounded by the single parent make-up of her own family, assessing if her child was developing at the same rate as children from nuclear families. *“It’s really hard not to compare yourself to other mothers... its worse when babies are smaller... they go through different developmental stages and you’re constantly comparing, constantly being worried about your child and if they are not reaching certain milestones”*. However, Anna has taught herself to be more realistic about her own abilities and the abilities of others. She appears aware that there is a lot of media that portrays a ‘perfect mother’ but this does not exist in reality. *“I don’t think I would ever call myself a perfect parent because I don’t think anyone is”* (Anna, Interview 1, EPDS ≥9). This may have been a supporting factor for the confidence that Anna has in her own efficacy in the mothering role. Though Anna has an EPDS score ≥9, this may be due to the stressors of being a single mother alongside a chronic health condition and the confidence she has within her role may still be a supportive factor for reducing the depressive symptomology.

Imogen (Interview 1, EPDS ≥9) concurred, indicating how she had decided to exclude the opinions of the outside world and concentrate on her family and what the needs of her family were. *“Whatever I do for [baby] is the right thing for me and my family and I can be judged*

and I don't care... I've just kind of thrown myself into it really and just kind of go with it". Imogen had confidence in her role and though her EPDS score ≥ 9 , she was indicated as a mother that appeared to have decreased depressive symptomology by the timeline of the interviews.

8.4 The Influences of Societal Expectations

The expectations from society were raised as a big issue by a number of women within the study, which led to self-stigmatisation surrounding managing the role and a negotiation of self-expectations is required. There was resistance to accept the mothering portrayal from the media, which had adapted and developed alongside the considerably evolving society but still placed unrealistic pressures onto mothers (The Social Issues Research Centre 2011). This was accurately summarised by Holly (Interview 2, EPDS ≥ 9) reflecting on her fathers' opinions relating to the change in family structures and communities since his childhood, which impacts on the knowledge and understanding of mothers in modern society.

My dad is always like I feel really sorry for mothers nowadays because they just don't always have the training you know, you don't have like seven brothers uh younger brothers to look after and they don't have their families to help you look after them and you know, you don't have that support network

The increase in working mothers, change in family dynamics, reduction in neighbourhood community support and an increase in geographical mobility from family can make the role of mothering more isolating and challenging (The Social Issues Research Centre 2011; Office for National Statistics 2019). Participant 9 (EPDS score ≥ 9) does not feel a comparison can be made as the circumstances and contexts differ so dramatically, *"I think the experience of being a parent is very different to my mum's, as she didn't work when me and my brother were young and none of her friends did, and she lived near her mother"* (Participant 9, EPDS ≥ 9). The knowledge of her mother's experience and how the close community set-up was assistive for her mother's role has made her reflect on her own circumstances and highlighted the differences in social capital between the two generations.

Daphne feels the concepts that were positive from previous generations of care have been forgotten. Modern mothers are expected to be recovering quicker with a lack of support provided immediately after giving birth. *“It’s everywhere on social media... mothers should have like a week and support the mother... nobody actually gives that time to mother whereas my mum’s generation would have been in hospital for a week just to kind of just to sleep”* (Daphne, Interview 1, EPDS <9).

This has led to women feeling there is no control over the modern perception of mother and Participant 19 (EPDS ≥9) felt that balancing occupations was *“A mythical state that everyone promotes but is unachievable in the current social structure and with the current social expectations”*. A number of women felt the number of responsibilities were overwhelming within the current societal structure and the expectations on mothers made the role either unattainable or unsustainable long-term.

It is accurate that with more women in paid employment (Office for National Statistics 2019), maintaining the role of housewife and main caregiver has become increasingly difficult (The Social Issues Research Centre 2011). *“There is that expectation that you should be everything to all people at all times and its completely unrealistic”* (Holly, Interview 2, EPDS ≥9). In modern society, there has been a change in family structures and dynamics alongside an increased pace of life to manage a career and children, with an increased reliance on childcare (The Social Issues Research Centre 2011). However, the increase in access to social media and online community has also caused mothers to compare themselves to projected stereotypes that are advertised online, as noted by a number of mothers within the study. Participant 46 (EPDS ≥9) reflects on the external expectations for mothers,

The social aspects of motherhood are not so great. I often feel as though mothers are expected to sail through and manage in a way that fathers or those without children are not, working twice as hard with little recognition. There is very little support out there and a lot of judgement. I feel as though there is a lot to improve on in terms of how mothers, or indeed all parents are supported. I feel as though we’re expected to just “suck it up” and compete on the same terms when we’re averaging three hours a night

Women that are feeling this pressure within their role may be more likely to have EPDS scores ≥ 9 like Participant 46 and Holly, as they feel they are competing against unrealistic societal expectations (Choi et al. 2005; Odenweller et al. 2020). Participant 207 (EPDS < 9) was actively rejecting these stereotypes and encouraging more equality within society's perceptions and access to care. *"The pressure on women to be all things is immense and I have become very passionate in encouraging women to fight for their rights, ensure they have equality in relationships and to ensure they are well looked after in getting the treatment they deserve through pregnancy and new motherhood"*. This ability to challenge stereotypes, reach out as peer support and become an advocate to campaign for mother's rights may be a protective factor for Participant 207, with an EPDS score < 9 .

8.5 Social Media as a Tool for Both Suffering and Support

Social media has been an issue for a lot of mothers in this research, with it affecting confidence levels, increasing guilt and providing unrealistic expectations of motherhood. The Social Issues Research Centre (2011, p. 16) found media generated the same responses in modern society as it did in the 1920s, *"the woman continues to internalise the main responsibility for bringing up the child(ren) and experiences guilt for not being 'good enough'"*, resulting in self-stigmatisation of the mother. *"Social media is a big influence. I've come to realise that the worst of it for a parent is 'toxic positivity'"* (Participant 143, < 9). The inability to share the trials and tribulations of motherhood is being raised as an issue, where mothers only portray the positive aspects of the role (Lazarus and Rossouw 2015). Participant 143 is aware of these issues and can look out for them to protect her own mental health, which may contribute to her lower EPDS scores. However, for mothers that are not looking for this 'toxic positivity', feelings of situational isolation may occur with mothers not wanting to share the more realistic negative aspects of motherhood (Lazarus and Rossouw 2015). As Participant 159 (EPDS < 9) is aware, *"Social media making you feel everything has to be perfect"*, which can increase the pressure mothers feel.

Some mothers feel they are aware of the issues with social media portrayals and can overlook the posts and understand the idealistic representations are fake, *"I did look at Instagram and you can see people with their sort of perfect lives but I'm old enough to know that that is just*

what they are presenting” (Chloe, Interview 1, EPDS <9). Gemma (Interview 1, EPDS ≥9) agrees age can be an influencing factor but also explains that social media is an outlet that can be accessed silently so is useful when attempting to get the baby to sleep and therefore the access to it becomes automatic.

We can get a bit sort of um hung up on what we see, like particularly social media and Instagram and stuff like that... particularly when you're a bit younger you can get sucked into that... it's like a little rabbit hole that you end up going down... it's the one thing you can access which is quiet and doesn't wake the baby

Both Chloe and Gemma were aged over 35 and did recognise that age can be a determining factor in the ability to deter yourself from being negatively influenced by social media. They both suggest that a younger mother is more susceptible to the impact of the posts and will compare themselves to idealised perceptions of motherhood. The mothers with this awareness of social media all had EPDS scores <9, except Gemma, who appeared to still use social media as a silent activity to engage in with the baby.

Imogen, understood that there would be a differing opinion and parenting position when interacting online, so tried not to get drawn into the debates. *“You put something on social media and everyone has got an opinion and you have to kind of listen to your gut really”* (Imogen, Interview 1, EPDS ≥9). This is reiterated with an awareness of how parent portrayals need to be taken lightly. *“I think society now puts so much pressure on being the perfect parent, with unrealistic posts on social media, media outlets body shaming etc. I take it all with a pinch of salt and try and remember how lucky I am to be a mum, to be healthy and be a family”* (Participant 20, EPDS <9). Though Imogen, aged over 35, scored ≥9, she illustrated a good awareness of listening to your own intuition alongside Participant 20, aged over 30, who scored <9. This ability to decompartmentalise their own situation to those presented online may have been a protective factor against developing depression symptomology.

However, some mothers found social media too intensive and made an active decision to get rid of it and stop accessing it altogether. Social media can portray unrealistic mothering ideals that can impact on a mother's self-image (Choi et al. 2005; Archer and Kao 2018). Archer and

Kao (2018) explored the use of Facebook amongst mothers of young children and concluded the positives included: connectivity to family and friends; the ability to switch off; keeping up to date; access to news and information; stalking; and following organisations/influencers. Whilst the negative attributes were explained as: social media as addictive; superficial posts; and inappropriate content (Archer and Kao 2018). Regan and Brown (2019) concur that online media can provide misinformation, which could lead to inappropriate support being sourced.

Daphne, aged over 35, decided to remove social media altogether, *“I’ve kind of come off Facebook... it was increasing my mental, it was just making me really stressed and just kind of doubting everything and making me feel horrible and vulnerable”* (Daphne, Interview 1, EPDS <9). This decision to remove social media may have been a positive influence on her mental health, with an EPDS score <9.

For Bethan (Interview 1, EPDS <9), aged over 30, who may have had self-doubt over her mothering abilities due to her history of social services involvement, had mixed reviews of the internet. She would source information to educate herself on the mothering role but struggled with social media impacting on her confidence.

I’ve learnt more of my stuff from YouTube...from social media then definitely like you think it’s all going to be bubbles and no tantrums no nothing... I feel sometimes like I’m a failure because of social media... pros and its cons so yes I learn a lot from YouTube but then Facebook... sets you up to fail

Bethan was able to make the active decision to have phone free days with her family and this increased her mental health overall, *“I’ve banned phones like at all on the weekends, it’s just to give... that time so he gets that nice quality fun time on the weekend”* (Interview 2).

There were some mothers that used social media and other internet sources for information gathering and peer support. Participant 113 (EPDS ≥9) states *“The book... has also been a major influencer. We heard about the book in the Guardian and I follow the author on Instagram, so I guess the media, social media as well plays a role”*. Social media can also be used for connectivity with peer support and education, as Participant 174 (EPDS ≥9) claims

“Social media has helped me discover people with the same morals and values as me, giving me some confidence”. Additionally, social media reinforced positive self-efficacy received from interpersonal relationships, as seen with Participant 108 stating *“The friends that I have met from accessing a breastfeeding group early on have given me confidence in decisions I am making in raising my son, also joining groups on Facebook/social media helped to reinforce this”*. The use of online sources as resources for young first-time mothers was explored by Ruthven et al. (2018), who found most of the mothers were seeking information or support in regard to negative feelings towards cognitive load and uncertainty within the role. There was a reliance to seek informational or emotional responses from peers with shared experiences. The mothers that sought emotional support often reported feeling isolated, reflecting poor social environments and informational poverty within their lives (Ruthven et al. 2018).

There was an element of mental health strain associated with the use of social media, which for Holly, already suffering from mental health issues, was increasingly negative. She also made the choice to distance herself, *“I’ve just deleted the last of the social media... I just found it too overwhelming”* (Holly, Interview 1, EPDS ≥ 9). Holly is also aged over 35 and does not have access to any media now, with a separation from television and social media. However, she is still very aware of the societal expectations that exist and ponders how this is the case.

My friend said to me the other day ‘oh do you ever just get really tired of her being there and just like you just not want to be with her?’ and I was like ‘yeah, sometimes’, she’s just like ‘oh my god, I feel like terrible for feeling like this’ but I’m like ‘well you can’t be in love with someone all of the time’ and I think there is pressure and I don’t really know where this pressure comes from because I’m not on social media, I don’t have a TV

The societal expectations of a mother are imbedded within the society that we live in and are exchanged through the interactions with other social actors and not only through media sources (The Social Issues Research Centre 2011; Lazarus and Rossouw 2015). It appears the mothers over the age of 30 were more aware of the impacts of social media and made active steps to minimise the impact on their mental health, whether by scrolling past unrealistic

representations of motherhood or removing social media altogether. This appeared to have positive implications for their mental health. However, as highlighted within this section, there are positives to online resources and social media platforms as a source of information and support. The positive and negative influence on mothers from online resources and social media has been highlighted in previous research (McCarthy and McMahon 2008; The Social Issues Research Centre 2011; Matley 2020).

It must be considered that the current behaviours from most mothers to conceal their own struggles within the parenting role may be supporting the unrealistic expectations of motherhood, which could be detrimental to women considering motherhood themselves (Lazarus and Rossouw 2015). It has been highlighted from this research study that an awareness of the identity transformations, realistic expectations and normalisation of difficulties within the parenting role can be supportive factors against depressive symptomology.

8.6 The Mental Load of Mothering, Additional to the Physical Demands

Mothers have to make choices about their own responses to their child within a social world, for example, balancing home and work life (Ruddick 1995). There are multiple demands from the varying roles a woman undertakes and she needs to choose which to prioritise in the best interests of the child. The mother can encounter internal conflict if there is an expectation for her to make the big decisions regarding the child's life (Ruddick 1995). The woman is often required to take on the additional cognitive responsibilities of parenthood, such as, managing time, emotions, retention and child development (Medina and Magnuson 2009). This intensifies the complexity of the mothering role and can increase the impacts on mental health of the mother (Oakley 1979; Ruddick 1995).

The mother is often in charge of organisation and ensuring the smooth flowing of family life. Participant 132 (EPDS ≥ 9) describes the mental load of just leaving the house with a baby, *"Having to remember all of the little things... having to remember to pack a bag every time I leave the house"*. The concentration of the mother needs to be on the child, which is a shift from her pre-mothering routine, *"My focus is now entirely on caring for small people and not myself"* (Participant 196, EPDS ≥ 9). Fiona (Interview 1, EPDS < 9) explains how the additional

mental load impacted on her ability to manage the transition back to work as well as the day-to-day management of mothering,

You have to make space in your brain for managing whole person's life, you've got to know everything about them... the time, the brain space, like I've returned to work recently so I'm very much struggling with the brain space

Ellie discussed how reduced partner support affects the additional obligations of keeping a home, with any housework that is outside of the day-to-day chores not getting completed. This can add to the mental load of the mother, especially when the main location of childcare is carried out within the home. Ella explained how she needed to put together some garden furniture but was not able to do this easily, *"still engage [baby] and get a job done [odd jobs] and so I find that like, that's massively inefficient, cause I know that if I could just focus on one thing, then I could get it done a lot quicker... still on my mental to do list"* (Ella, Interview 2, EPDS <9).

The physical attributes of the role were seen to be easier to manage than the internal conflicts that were endured by Anna (Interview 1, EPDS ≥9),

The guilt is the worst thing in the world, like the guilt as a mum of things that is the worst bit and actually the screaming children, although it's hard, it's kind of not as bad as the internal bits of it

Fiona (Interview 1, EPDS <9) was aware of her feelings of guilt, that she felt were irrational, *"it really doesn't matter but you can feel guilty for those tiny tiny things, they build up don't they"*. These feelings of guilt within the mothering role add to the mental load that is carried by the mother and can impact on mental health. Bethan (interview 2, EPDS <9) felt the same, *"I've constantly got this feeling of like feeling guilty all the time, especially now because I'm not going anywhere, before I was doing stuff all the time, now I feel like I've slipped and have been lazy... I feel guilty then for like having something to do fun"*. The pandemic had further impeded her self-reflection and she was not able to view the activities that she did within the

day as 'enough' because she was not performing occupations outside of the home environment.

Additionally, Gemma (Interview 1, EPDS ≥ 9) felt sustained guilt about her own mental health struggles when her child was young. She is able to rationalise that it will not be remembered by her child and she is there for him now but this did not prevent the added guilt to the mental load of her role and her desire to return to counselling, *"Just to start coping with I think it's the guilt I suppose of how detached I was from him in his early stages and I know he's not going to remember and its obviously not affected his bond with me because he's all all mummy but it it would help me to sort of process it"*.

8.7 Desired Activities for the Self: A Dream or a Reality

When a woman decides to have a baby, there are sacrifices made on her part. One of these sacrifices is that of her body which can impact on body image and is further impacted upon by sacrificing her own self-care for the needs of the baby/family (Ruddick 1995). This became evident within the responses with mothers wanting to be able to engage in exercise, eat healthier meals or perform self-care occupations.

A lot of the mothers craved some time to themselves, time to be alone with their thoughts and have no dependents to worry about. Imogen (Interview 2, EPDS ≥ 9) found solace in self-care activities, such as showering, *"just having those five minutes in the shower, just on my own, just to collect my own thoughts is really, you kind of, it's your recharging time"*. Whilst Gemma (Interview 2, EPDS ≥ 9) used chores as a means of escapism, *"it's almost like quiet time [hoovering], where I can do it, I can get on with it, like cleaning the bathroom or whatever, and it's like I don't have to talk to anybody and I can just, you know, have a bit of peace and quiet"*. The attempts to acquire some autonomous occupations supports the occupational imbalance that is felt by these mothers of young children.

The most common requirement these women needed was support to have some time for themselves. This time was desired for a number of activities but most activities identified were related to self-care or leisure. For Anna, it was the simplicities of daily life that she craved, *"having a nice shower to yourself and having a really good sleep... it has a knock-on*

effect for the rest of the day” (Anna, Interview 1, EPDS ≥ 9). Other examples included having a bath, beauty treatments or previously enjoyed hobbies. A lot of mothers felt the type of activity that had been missing during motherhood was exercise and a substantial number of women wanted time to get their fitness back. Daphne was into fitness and completed multiple triathlons, so was missing her fitness training but would appreciate any time to herself within her current routine, *“go for a walk, go for a run, um just anything on my own (laughs) um toilet on my own (laughs)”* (Daphne, Interview 2, EPDS < 9). These women were unable to alter their support networks or role demands to partake in these desired occupations and the need for additional support was clearly identified. There was a negotiation to their identity and occupational choices when they transitioned into the mothering role, which were impacting on their mental health.

Bethan (Interview 2, EPDS < 9) felt she had learnt from the research experience of reflecting on her role and was starting to feel more confident about taking breaks for a mental rest or for self-care, which she had previously struggled with.

You don't have to be on the go all the time, like not feel guilty then for having five minutes...balancing my time then, I've started to manage a lot better recently and I think that's like one positive that's come out of the research project and it's made me realise I need to take some more time for myself to actually like be myself and have time just for me as a person not just for me as a mother and stop saying I don't do enough for the kids because I realise I'm actually with my children a lot more than I am ever on my own and I think it pushed us to spend some time more time as a couple

Bethan was reflecting on her role as mother and how this is not a healthy balance of occupations and could be altered to improve her mental health. This included Bethan becoming aware of how her own self-stigmatisation was influencing her occupational choices and causing her to feel overwhelmed and removed from aspects of her self-identity.

8.8 Conclusion

Aspects of role transitions and occupational balance are reliant on the type of relationship the mother has with her social support network. For a mother in a relationship, there are apparent role negotiations occurring between the mother and her partner. The issues surrounding gender stereotypes associated with parenting can cause rifts within relationships. The external societal perceptions of the traditional mother and father role can have an influence on how the roles are played out in everyday life. This can also occur in same-sex relationships, with the birthing parent taking on the traditional mother role. An unequal division of labour with household chores, parenting duties and employment commitments can be damaging to a woman's mental health. The woman can be expected to take on multiple roles, inclusive of the mental load of parenting, which can be damaging to both the relationship and mother's well-being. The traditional views surrounding gendered roles needs some negotiation and compromise to manage the physical demands and mental health needs of both parents in contemporary society.

Furthermore, there are some negotiations that need to be considered within the woman's own gender perception. The social capital of the woman will have an impact on how the mother idealises the role, occupational choice and attachment with her child, which will affect self-satisfaction. As discussed, the extensive roles expected of women can be overwhelming and impossible to uphold. The emotional labour of the women's roles needs revision to a sustainable and achievable level. There can be negative influences from social media and societal expectations on mothers, which can lead to high levels of self-criticism, self-stigmatisation and low self-efficacy.

Holly (Interview 2, EPDS ≥ 9) powerfully summarises the issues of raising a child in the current climate and how the role has changed over the years.

They used to be housewives, they didn't use to work, it used to be a safer environment, children were allowed to just go out and play in the street. There wasn't social media you know and the television had three channels, if that, you know, there was a lot, it was a very different time. The internet didn't exist, people kept themselves busy by reading encyclopaedias and researching things rather

than typing something into google and having the answers immediately, I think we are a very instant society where we want things so quickly and I think that is what assists in burnout, is that there's no time for breaks, if you sit down and have time for yourself, you are made to feel guilty

The confidence a mother has in her efficacy has an impact on the development of her new identity. Each woman needs to negotiate their own gender requirements and what that means to their identity, to have any opportunity of finding a sense of fulfilment and balance. This modified perception of the woman's role could then allow women to accept support, extend social networks and enjoy desired occupations without the guilt.

The next and final chapter will highlight the strengths and weaknesses of this research study, summarise the quantitative and qualitative findings and explore the recommendations for future occupational therapy involvement, policies, and practice.

9 Chapter Nine: Discussing and Concluding on the Relationship Between Social Capital and Occupational Balance with Depressive Symptomology in Mothers of Young Children

9.1 Introduction

This thesis set out to examine whether there were associations between social capital or occupational balance and depressive symptomology in the postnatal period and the mechanisms of these associations. This research has given a voice to these participants, to highlight what is important to them and how others can best provide the support that they need. This includes exploration of the association between variables, identification of potential influential factors on the association and highlights where the occupational therapy process could be beneficial for this population.

This research study has highlighted the significant psychosocial impacts on depressive symptomology in new mothers, both first-time and mothers of more than one child. The research questions have been explored by this research study as highlighted below. A final summary of the findings will be explored in detail in this chapter, within the context of the concepts under investigation social capital and occupational balance.

Research Question 1: How can social capital and differences in daily occupational engagement and balance help us to better understand postnatal depression?

Social capital, differences in daily occupational engagement and occupational balance impact on PND symptomology in varying ways, inclusive of: support networks; personal values and ideologies of the role; inclusion of self-care and leisure within routines; and division of labour. The association between occupational balance and PND was discussed in chapters five and seven. Social capital and the association with depressive symptomology was explored in detail in chapters six and eight.

Research Question 2: Which elements of social capital and occupational choice influence the sense of self and postnatal depressive symptoms?

The sense of self was negatively impacted on when the sense of efficacy of the mother was altered, which occurred when the mother was not prepared mentally for the transition. Unrealistic expectations, sleep deprivation, refusal to accept support and the choices made

on daily routines all impacted on self-efficacy and confidence in the role, often leading to increased depressive symptomology. Identity was discussed within chapter six, occupational choice was considered in chapter seven and unrealistic expectations were explored in chapter eight.

Research Question 3: How can social capital, occupational choice and occupational balance influence occupational therapy interventions?

The opportunities for OT interventions have been highlighted within this study when discussing antenatal groups, psychoeducation, activity scheduling, implementation of co-occupations and graded exposure or signposting to appropriate services. These would be holistic and tailored to each mother at-risk, with the potential for screening tools to assist with referrals from other healthcare professionals to the OT service. The exploration of these potential interventions are discussed further within this chapter.

The mixed methods approach meant these questions were answered using multiple data collection methods, with the intention of using triangulation for in-depth analysis. As the quantitative results from phase one provided the background information to formulate questions for the qualitative aspects of the study, it stands to reason that the themes developed from the qualitative analysis incorporate the quantitative results within them. The three themes that were explored in-depth within chapters six, seven and eight will be summarised within this chapter and combined with the quantitative results to illustrate how the results are interconnected and combine to answer the research questions. Additionally, the three themes themselves were interwoven together, with influences from each theme onto another. For example, the transformation of the identity was impacted on by the additional responsibilities and time constraints of the role transition, which was affected by the societal expectations on the mothering role and the associated stigma. This interconnectivity has highlighted the complexity of the mothering experience and the challenges encountered when attempting to separate themes.

This chapter will examine the strengths and limitations of the study, to consider the robustness of the findings. This leads into a short discussion of the impacts of the global pandemic on this research study and how this influenced the analysis and findings. A summary

of the main concepts under investigation provides an overview of how the research questions were answered. There are implications and recommendations for policy, current practice and future research within this chapter following on from the findings of this study. The model of human occupation is used to demonstrate the areas in which occupational therapy support could be applied and how it is in keeping with professional foundations. The key findings of this study are then clearly highlighted with an overview of how each research question was answered.

9.2 Strengths and Limitations of this Study

The mixed method design of this research was a strength, to assist in improving the robustness of the findings, through the use of triangulation. The sample size of 200 was achieved that included mothers with EPDS scores above and below nine, so phase two of the research could be completed. The interviews and activity diaries provided the level of detail required to get an in-depth viewpoint of the mother's daily lives and experiences.

Furthermore, the use of an internet questionnaire did provide the opportunity to recruit to mothers throughout all parts of Wales in a cost-effective and time efficient manner. There is evidence to suggest that the use of online surveys/questionnaires is well received by participants and has a good response rate (Edwards et al. 2009). Recruitment through social media is thought to be cost-effective, efficient due to interconnectivity, reduces the impact of geographical mobility, and provides access for hard-to-reach populations, including new mothers (Ryan 2013; Topolovec-Vranic and Natarajan 2016; Gelinis et al. 2017). However, these recruitment and data collection methods did have some limitations. Every participant was required to have access to the internet to be able to complete the questionnaire, which may have affected access for mothers living in more rural areas with restricted access or poor-quality internet. Also, the inclusion criteria specified that only women who could respond to the survey in English could participate. This may have deterred mothers whose first language is not the English language, as the questionnaire included complex question structures. This may have impacted on mothers living in areas of Wales with populations who identify as Welsh speakers. Mothers living in more rural areas were a population of interest due to the restricted access to facilities, services and social support, which may lead to higher levels of depressive symptomology. However, upon review of the included postcodes, there were

mothers included from each health board throughout Wales, suggesting there was representation from mothers living in all parts of Wales. Additionally, during the interviews, the 9 mothers were spread through North and South Wales regions, living in both densely populated and rural areas.

The measure for depressive symptomology within this research was the EPDS, which is a standardised measure and used frequently in research studies (Thombs et al. 2015; Levis et al. 2020). Due to this existent research, the prevalence of depressive symptomology could be calculated to define the minimum sample size to sufficiently cover the first and second phase of the research study. However, as the inclusion criteria stated mothers could participate until their child was eighteen months old, reflective narrative was required for the majority of the women. The EPDS is a measure for how the woman feels at a specific temporal point and would not be indicative of the feelings that had occurred at differing stages of motherhood. Therefore, it was noted that women who had experienced PND symptomology previously, were no longer feeling those symptoms and scoring below the cut-off score on the EPDS and vice versa. This had the potential to skew the results, especially within the quantitative study, when exploring potential associations between variables and EPDS scores. Nevertheless, there were questionnaire responses required that were temporally accurate to the time of EPDS completion so would not have affected all of the answers provided. A longitudinal design may have been beneficial to measure levels of social capital, occupational balance and EPDS at defined points in time during the postnatal period. However, due to the time and resource constraints of this thesis, this was not a feasible option.

As required within this study, the EPDS cut-off score of 9 was used to capture the mothers that were experiencing depressive symptomology that may not have been severe enough for hospital admission or community healthcare interventions. This lower cut-off score allowed for the capture of responses from these mothers, that may not meet the criteria for current specialist perinatal mental health services but could benefit from healthcare interventions. There were mothers that had high scores on the EPDS included, although this was a smaller number of women. This was the desired spread of EPDS scores for the sample under investigation.

As discussed within chapter three, the measurement of social capital and occupational balance has been highlighted as problematic due to the subjective nature of the concepts within the social world. The scoring system was created for the purpose of this research and is not a validated scoring method. The lack of an association between social capital and EPDS score, when adjusted for confounders, suggests the measure did not fully capture the complexity of the phenomena. However, the occupational balance scoring system was successful in clearly identifying an association with depressive symptomology. The responses from the questionnaire were also beneficial to support the question formation for the initial interview, with question responses of interest highlighted for further exploration, for example, socialisation and types of support.

The initial proposed plan set out to recruit up to 30 participants for phase two of the study. However, due to the pandemic creating additional time constraints, limitations to external supports, such as nurseries/schools, and mental health implications, this was reduced to 10 participants. Only 9 participants engaged in the second phase, with participants not responding, not providing consent or refusing engagement. There was one less mother with a score ≥ 9 on the EPDS, it had been predicted mothers with higher EPDS scores would have more difficulty engaging in further research and a greater number of mothers with higher EPDS scores considered for the second phase. However, the mothers that did have higher scores were very open and reflexive about their difficulties and how their individual routines and depressive symptoms had impacted on their mothering experience. The interviews could not be conducted face-to-face, which had the potential to impact on building rapport with the participants and increase the risk of drop-out rates. However, all participants recruited to phase two completed the two interviews and one week of activity diary. There did not appear to be any difficulties with rapport, with sensitive topics covered during each interview.

The activity diaries that were completed were used to inform the question content of the final interview, which provided an in-depth exploration of each mother's daily life. The diaries could have been further analysed and included in the results but due to time constraints, this was not possible. These diary entries can be analysed further and used within publications following this thesis as separate data extracts.

Data collection occurred just prior to and during a global pandemic, which has been discussed contextually within the thesis but must also be considered a potential limitation. The interviews were completed when there were restrictions on accessing community services, and mothers with more than one child having to perform home schooling. There were long periods of fear for the safety of children and uncertainty about how the pandemic would play out. For Holly (Interview 1, EPDS ≥ 9), the pandemic had raised anxieties about the future that would be available for her child in light of all the environmental and social changes, *“just worrying generally about her future... every mum worries about the future of children”*. These additional concerns and anxieties may have further impacted the mother’s mental health.

It is possible that women’s EPDS scores changed during the course of this study, due to the time lapse and pandemic restrictions. The second phase of the research was conducted during a period of national restrictions, which saw the closure of support services, prolonged periods of isolation and restricted access to outdoor environments. This period of time had a significant impact on mothers’ mental health (Barlow and Sepulveda 2020; Molgora and Accordini 2020). Phase two had the potential to not be representative of the EPDS scores completed during phase one. The repetition of the EPDS self-rated score was considered during the second phase of data collection to make a comparison and relate specifically to the interview responses. However, this was not pursued due to the virtual nature of the interviews and an awareness of the need to be sensitive to the potential impact of the pandemic on the way the mothers’ felt. The women were instead encouraged to express the symptoms they had felt after building rapport during the virtual interview, using prompting from the semi-structured interview questions. Additionally, when examining the verbal responses provided during the interviews, there was an indication that the participants with EPDS scores < 9 all appeared to be coping within the constraints of their environment. There was use of more positive terminology, whilst still acknowledging the difficulties associated with the pandemic and its restrictions. The participants who scored ≥ 9 on the EPDS appeared to use more negative terminology in their descriptions of their experiences and the descriptions of their experience highlighted more difficulties adjusting to the pandemic restrictions. There was one exception noted in Participant 9, Imogen (EPDS ≥ 9), who had a positive outlook on her mothering role and had found the pandemic a positive experience for her family, highlighted during the interviews and activity diary.

9.3 Exploration of the Concept of Social Capital in Relation to Motherhood

Social capital was defined in chapter three for the purpose of this research as individual understanding of relationships, societal norms, expectations, and personal values, based upon prior experience and group involvement.

The formulation of identity is dependent upon a number of factors. These are inclusive of: the prior experiences of the woman; the awareness of identity transformation; the temporal, physical and social environment; and the occupational behaviours and engagement of the woman (Goffman 1959; Giddens 1984; Kielhofner 2008; Tzanakis 2013). The transition to motherhood was associated with a loss of identity for some mothers and feeling overwhelmed at the responsibilities of the mothering role. Also identified was the reduced awareness of the stark changes to lifestyle and identity, alongside an idealised view of the expected personal performance, which negatively impacted on mental health and increased the risk of PND symptoms. For many in this study, this was exacerbated if the support available did not allow for aspects of the pre-parent identity to remain, especially evident in lone mothers or mothers with a reduced social support network. The impact of reduced support was seen with all 10 of the lone mothers within the study scoring ≥ 10 on the EPDS. Additionally, the two mothers that stated they received no emotional support from any individual within their life, scored ≥ 19 on the EPDS. Overall, 63% (n=134) of mothers felt they needed additional support, illustrating that even the mothers who are receiving support are not satisfied with the levels of provision and do not feel succoured within their role.

The mothers in positions of reduced support were often aware of how unbalanced their lives had become, but were not able to make changes due to external factors. Women in Prabhakar et al. (2017) study relied on close interpersonal relationships for emotional and physical support. First-time mothers required time for managing the physical recovery, hormonal changes and learning of the new role. Mothers of more than one child required assistance with physical time-consuming tasks. Issues arose when expected support did not equate to support received (Prabhakar et al. 2017). Without support, the woman can lose her occupational choice, sense of self and pre-parental identity. Laing (1965) and Giddens (1991b) assert there is an importance to the maintenance of ontological security (autonomy and identity) for the woman/mother. When threatened, her ability to experience the world in the

same way as other social actors is affected. Here, she may lose her sense of reality, resulting in a serious mental health illness (Laing 1965; Giddens 1991b).

Stigma was a significant factor in the occupational choices of mothers within the study, influencing activity engagement and situating the woman within the social world. Social ideologies that have been continually promoted within society, can foster unrealistic expectations for mothers and continue to associate child development delays with a mother's parenting skills. These issues were raised within the research of Oakley (1979); Esdaile and Olson (2004); Choi et al. (2005); Laney et al. (2015). This research has highlighted increasing numbers of women in employment, mothers with access to reduced community support and increased geographical mobility from immediate family. Therefore, mothering has become a more isolating and self-reliant role for some (The Social Issues Research Centre 2011; Statista 2022b). Within this study, there were some negative connotations associated with accepting support for some mothers. Others felt they were impeding into the busy lives of others or failing in their role if they requested assistance. This self-stigmatisation was exacerbating the increased mental load and societal pressure felt by the mothers, which could have subsequent mental health implications. This study suggests stigma continues to dominate perspectives on mental health conditions and services, discouraging women from discussing their symptoms or accessing the required services.

The mothers in this study appeared to have an increased reliance on increasing their social networks with peer support, especially first-time mothers. Additional access to social media has become an issue for some of the mothers, with portrayals of 'perfect mothers', which coincides with Choi et al. (2005) and Liechty et al. (2018). However, the reality equated to the mothers within this study self-stigmatising against their own abilities because the portrayals were unachievable and staged. Lazarus and Rossouw (2015) claimed these portrayal issues continue over time and mothers struggle to convey the realities of mothering due to situational isolation, thus maintaining the promotion of positive aspects of motherhood and negating realistic portrayal of the negatives. In this study, age appeared to be a protective feature, with mothers 30 years and over acknowledging the dangers of social media.

9.4 Exploration of the Concept of Occupational Balance in Relation to Motherhood

The responses from the women within this study have highlighted the importance of the underlying inter and intrapersonal aspects of the self, that have an influence on the development of occupational routine.

A confidence within the mothering role assisted with identity negotiations in differing environments and improved the outcomes of social interaction (Swann Jr. and Bosson 2008). In this research, self-efficacy was a positive influence on occupational choice and engagement for some mothers. This appeared to have a positive impact on role transition and acceptance of the new identity, as found by Slootjes et al. (2016). Reflexivity was used as a tool to adapt individual behaviours for improved child behavioural outcomes, which promoted the self-efficacy of some mothers within this study, through their own desired mothering ideals being achieved. This led to more positive comparisons to other mother and child behaviours. The influence from personal childhood experiences or observation of other parents did impact on the performance of some mothers in this research. This assisted to increase maternal confidence when observing appropriate development in their own child. As Esdaile and Olson (2004) and Netsi et al. (2018) suggest, PND can impact on self-efficacy, perceptions of the child by the mother and ultimately, the development of the child.

The majority of mothers within the study did have a clear understanding of occupational balance and could describe how that applied to themselves and their individual needs. However, the reality was a lack of self-care and leisure time for the mother, with the needs of the family prioritised ahead of her own. The quantitative results of this study illustrated a significant association between occupational balance and PND symptomology, which may be suggestive of a predictive feature of maternal mental health in the perinatal period. Most women in this research found their self-care, rest and leisure occupations were heavily impacted by motherhood and this disruption was creating imbalance in their equilibrium of daily life, affecting mental health. This supports previous research that found an association between occupational balance and depressive symptomology in mothers (Horne et al. 2005; Barbic et al. 2021). The additional responsibilities of mothering can increase the pressure felt and impact on the time available for occupational engagement and interaction with other social actors. This loss of control over occupational engagement and balance can affect the

overall sense of agency, impacting on mental health (Bilszta et al. 2011; Staneva and Wittkowski 2013). Similarly, mothers require a routine with their children but the unpredictability of children's behaviour can impact on the daily structure, so a level of flexibility is required when considering day-to-day activities (Francis-Connolly 2002). Some mothers were aware that the all-encompassing demands of mothering a young child were short-term and the dependence would get less as the child increases in independence. However, some mothers were not able to see past the current day-to-day demands and how these would alter at each stage of the child's development.

9.5 Interconnectivity of the Concepts of Social Capital and Occupational Balance within the Results of this Mixed Methods Study

The overarching concepts of occupational balance and social capital were observed and debated as separate entities for clarity of meaning within the literature review. However, the potential prospect of an overlapping relationship between the two concepts was considered, with the qualitative findings in this study illustrating how these concepts are unquestionably interlinked and merged within each mother's lifestyle. It became apparent that these concepts would be difficult to isolate within the findings and emergent themes, due to the complexities of each concept and how these qualitative results dissolved any clear boundaries or clear causal pathways between the two. Thus, the themes in this research were not formulated as describing either occupational balance or social capital but a combination of the two concepts. The difficulty when attempting to formulate distinct discussions of the two concepts does in fact reform the knowledge of these concepts, usually researched separately. Despite the lack of an association seen with social capital in the quantitative results in this research, there is interconnectivity between the concepts within the qualitative findings. This suggests that both social capital and occupational balance are equally important within the mothering role, and have a potential impact on depressive symptomology.

The amalgamation of the unique aspects of a mother's social capital will influence and inspire occupational choices. These choices present as the engagement in meaningful occupations within the life course. Social capital and meaningful occupational engagement establish a personal identity, which was highlighted as a prominent feature impacting on a mother's well-being within this research. Mothers who retained part of their pre-parental self-identity due

to supportive environments, whether social or financial, often reported lower levels of depressive symptomology. Therefore, it is proposed that social capital and occupational engagement are entrenched within the creation of each individual's identity (Laney et al. 2015; Hansson et al. 2021).

The importance of relationships became apparent within this research study, with the majority of support reported from partners or maternal figures, for example, mothers, foster mothers and mothers-in-law. However, the introduction of children did take its toll on many relationships, with reduced time as a couple and reductions in intimacy. Resentment was also seen to arise from an unequal division of labour within the relationship, identified by many mothers, who were expected to take on the housework as well as the mothering duties. This is supported by Gerson and Torres (2015) and Nomaguchi and Milkie (2020), who suggest the unequal division of labour remains pertinent. Within this research, the shared experience with peers of the phenomena of motherhood became a supportive feature that influenced the occupational choices and engagement of the mother. Many of these mothers used groups to fulfil this need, with some mothers gaining friendships through attendance. However, the desire to socialise without the presence of children was prominent for the majority of women in this study, highlighting these women attempting to retain some of their pre-motherhood identities.

The main influential factor for occupational engagement described within the study was time, or the lack thereof, within the mothering role. Similarly, the financial constraints of mothering was a major contributing factor for occupational choice, with employment opportunities influenced by the ability to afford childcare. Employment became a compromising factor for a lot of the women in this study, with the majority choosing to return to employment on a part-time basis to increase the time spent with children and reduce those childcare costs. This was highlighted by Meeussen and Van Laar (2018) as an issue, with the women prioritising the family and adjusting their career ambitions, which left them at risk when more dependent on their partner's economic status. Additionally, the engagement in community occupations was influenced by financial restrictions, which impacted on the mother's ability to explore new social and physical environments, further encouraging social isolation. Finance was highlighted as the main confounding factor on the association between social capital and PND

from the quantitative results. It was also one of the confounders for the occupational balance association with PND.

The qualitative results suggested social capital, occupational choice and occupational balance all had an impact on PND. High levels of social capital appeared to be a protective factor against PND for the mothers that described: positive prior experience of interactions with children; social experiences with others that have similar values; and a good support network built on trust and generalised reciprocity. Additionally, a fair division of labour and a social network that supported occupational engagement in self-care or leisure activities did appear to have a positive influence on mental health. There is thus a suggested association between high social capital, high occupational balance and well-being in the mothers within this study.

9.6 Recommendations: Potential Occupational Therapy Involvement to Promote Social Capital and Occupational Balance within Perinatal Care

The results from this research clearly illustrated the individualised nature of each experience of motherhood. Interventions should be holistic to reflect this unique journey and to guide the expansion of identities to include this new role. Occupational therapy practice uses a holistic approach to each individual and includes the person, occupations, environment and spirituality (Townsend and Polatajko 2007). The occupational identity of mothers at higher risk of depressive symptomology should be considered within occupational therapy assessment, with social actions ('doing' and 'becoming') and ontological security ('being' and 'belonging') considered comprehensively. The deprivation of these occupational concepts can impact on identity formation and in turn, mental health, as illustrated within this research. An association was noted with depressive symptomology and certain internal or external pressures with some mothers in the study. These included: lower levels of self-efficacy; unpreparedness for the identity changes; lacked confidence in their mothering role; lacked a sufficient support network; had occupational imbalance; or had financial concerns that impacted on occupational choice. Recent research has supported the inclusion of occupational therapy in perinatal mental health that would address these highlighted issues (Briltz 2019; Barlow and Sepulveda 2020; Barbic et al. 2021). There does remain to be limited research within the UK that has explored occupational therapy specific interventions currently used with mothers with a diagnosis of PND, research would be beneficial within this

area. Additionally, perinatal mental health should be included within the OT curriculum during training at universities, educating on the psychosocial needs and issues encountered during the transition to motherhood.

The occupational therapy model of practice, the Model of Human Occupation (MOHO), was explored in detail within chapter three. As each component is introduced in the model, there is a brief description of its meaning, with the main aspects being volition (motivation), habituation (roles and routines), and performance capacity (personal capabilities). To illustrate how the findings from this study could influence occupational therapy intervention, potential strategies of involvement have been framed within the MOHO model. This model will provide a brief explanation of underpinning theory, highlight the problem areas resultant from this study and how occupational therapy could provide interventions to assist in this area of practice. Figure 10 is a visual representation of the MOHO model that will be explored within this section.

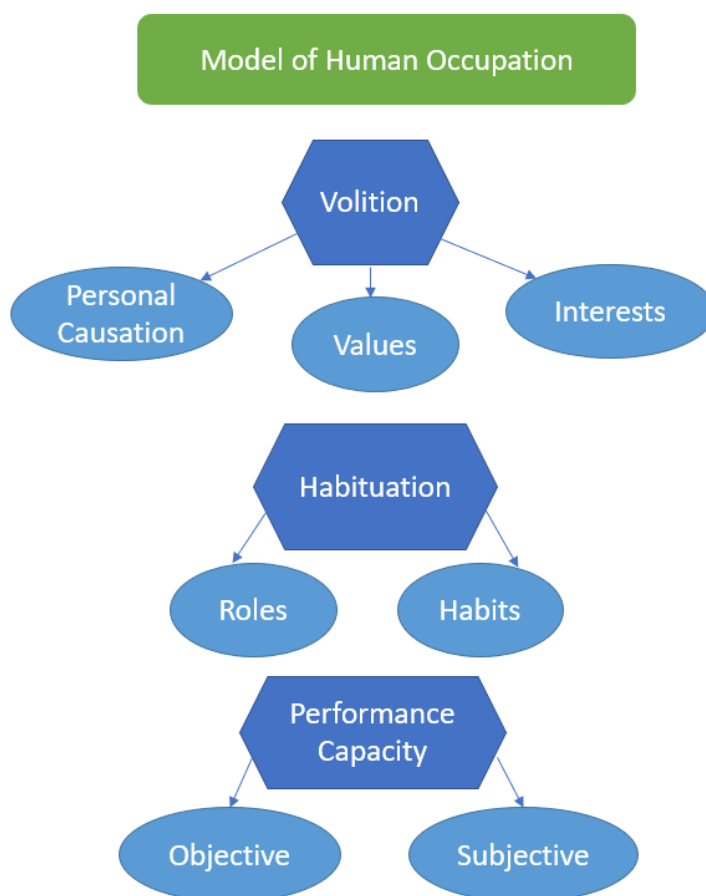


Figure 10: Model of Human Occupation (Adapted from Kielhofner (2008))

Volition refers to the motivation behind occupational choice from competence (*personal causation*), perceived *values* and satisfaction (*interests*) associated with occupational engagement (Kielhofner 2008). Personal causation is divided into the sense of personal capacity to perform an occupation and the self-efficacy required to perform self-control and believe these performance areas could be achieved (Kielhofner 2008). From this research, the sense of personal capacity to perform the role of mother often wavered when the woman first transitioned into motherhood. When a woman has unrealistic idealised perceptions of motherhood or lacks the ability to adapt routines to incorporate the additional responsibilities, this can cause a loss of self-efficacy and an increase in self-stigmatisation. This can lead to depressive symptomology and issues with bonding between mother and child (Righetti-Veltema et al. 2003; Choi et al. 2005; Laney et al. 2015). Interventions that centre around co-occupation (activities including mother and baby) between mother and baby could assist in the promotion of self-efficacy and confidence within the role (Esdaile and Olson 2004; Sloopjes et al. 2016). Within occupational therapy practice, activity analysis is used to break down an activity into structured tasks to explore any potential difficulties and address them in manageable parts. The breakdown of occupations between mother and baby can assist in highlighting positive responses from baby to increase confidence in the task, teach alternative techniques and encourage bonding behaviours. The promotion of self-efficacy within the daily tasks will encourage a more stable routine and consequently strengthen the ontological security of the mother, reducing fears of ineptitude and associated consequences.

Support systems have been highlighted as important for improving self-efficacy and sense of performance capacity, both in this research study and previous studies exploring PND (Pancer et al. 2000; The Social Issues Research Centre 2011). OTs encourage social network building through identification of appropriate environments for engagement, grading the exposure to varying social situations and organizing targeted peer support groups. The ability to share experiences, advice and information with peers can provide a sense of 'belonging', reducing feelings of loneliness and powerlessness and encouraging 'becoming' as the mother learns from a new social environment. OTs can also signpost to external agencies, such as charities, that can provide further support for the mother.

Realistic expectations are important for mothers to acquire a sense of achievement. There is an importance in setting an attainable idealised mothering perception with associated values to be able to set and reach goals created for the self. If the goals are set too high, the mother will feel a sense of failure and lose confidence in her abilities. Individualised antenatal and postnatal sessions with mothers at higher risk of PND symptomology could explore personal values and assist in setting targeted goals that are achievable, in the short-term, to increase her sense of performance capacity. The values of the woman would be considered throughout the recovery journey to ensure the goals are meaningful and tailored to the developing needs of both mother and baby.

The self-care and leisure activities of the mothers in the study were the least prioritised, and self-identity needed to be re-defined when this affected the mother's well-being. This can occur through occupational choice of co-occupations that are meaningful to the mother. OTs could assist with exploring interests and meaningful activities with the mother to develop an timetable (activity schedule) that aligns with the mother's leisure activities, for example, swimming, singing, dancing or walking. There are also groups available that support mothers in these co-occupation activities and provide guidance on managing safety of the child to build the mother's confidence. OTs can signpost to the relevant group activities and support mothers by attending with them until they have the confidence to attend independently. This may promote social inclusion and expansion of the mother's social network when entering differing environments and social settings.

Habituation is the patterns of behaviour guided by habits and roles that fit within the environmental constraints of temporal, physical and social routines (Kielhofner 2008). As Prabhakar et al. (2017) discuss, support needs to adapt alongside the mothering transition to remain consistent with the needs of the woman and remains equally important antenatally as well as postnatally. The preparation of the woman for the mothering role during pregnancy is an important phase of the transition. The awareness of the changes to identity and routine are key aspects of managing the transition more positively. Research has highlighted the need for more targeted antenatal education on the psychosocial adjustments and parenting roles (Delmore-Ko et al. 2000; Choi et al. 2005). Currently, the antenatal education provided is centred around the birthing process due to resistance from the high anxiety of the women

antenatally. This results in the parents making the transition without adequate education from healthcare professionals (Delmore-Ko et al. 2000; Choi et al. 2005). Prior knowledge of problem-solving, coping strategies and education is recommended for all new parents (Delmore-Ko et al. 2000; Matthey et al. 2004). These should include financial resources, health information and varying topics of concern to provide prospective parents with a sense of agency and optimism (Delmore-Ko et al. 2000).

The introduction of OT led antenatal classes to provide education on the transition, managing time, the use of co-occupations and basic psychoeducation could assist as a preventative measure for expectant mothers. Additional screening tools could be utilised, such as the EPDS, to identify mothers at higher risk of PND symptoms to have more individualised support from the OT team. A screening tool could be designed that is based on the results of this research and similar studies aimed at identifying potentially challenging areas for mothers that may impact on well-being and mood postnatally.

The mothers at higher risk of developing PND symptoms or with antenatal anxiety could be provided with additional support from OTs to meet with both parents and discuss parental expectations and responsibilities antenatally. Exploring the roles of both parents prior to the baby's arrival could assist in the development of a more successful partnership, which has been highlighted within the current study as a potential factor in reducing postnatal depressive symptomology. The father needs to be involved and educated on how to best assist the mother, whilst simultaneously teaching the mother to accept his help. Education on the intensity of the mothering role can assist in initiating discussions on the division of labour. The improved communication and clear supportive strategies allow parents to assist each other in childrearing duties (Delmore-Ko et al. 2000; Matthey et al. 2004). This opportunity to discuss shared expectations encourages fair division of labour and understanding of mother's feelings, which was seen to reduce postnatal distress and depression of mothers with low self-esteem in a study by Matthey et al. (2004).

An exploration by OTs on the mother's roles, once the mothering role has been taken on, can be crucial to prioritise and manage. The ability to reflect on each role and identify the time requirements attached to each can assist in prioritisation of activities and identifying where

additional support is required. This can assist in reducing the everyday stressors of role overload and decrease the mental load of the mother. The promotion of practical support and additional emotional support is essential for the mother, as highlighted within this research. OTs can assist with redefining mothering ideals to reduce any guilt felt towards accepting support.

Habits are formulated from repetition of tasks, especially within a daily routine. The introduction of habits within the mothering role will assist in confidence in routine and self-agency. The mother can feel a sense of control over the chaotic aspects of mothering when there is a set routine to abide by. Activity scheduling is a tool used by OTs to create a time-orientated schedule of events that over time transforms into a routine (Bryant et al. 2014). The repetition of the activities will become unconscious repetitive tasks over time and allow the mother an achievable mothering timetable to follow. This is inclusive of daily tasks, such as, independent living skills, child care, feeding and weaning, money management and taking care of the home.

Time management strategies can be implemented to explore prioritisation and assist in identifying essential and non-essential tasks for practice until habits are built. This could assist with illustrating a justification for prioritising self-care or leisure over productivity activities at times for mental wellbeing, for example, showering may be more important than housework. Activity scheduling could explore the potential for additional interests that fit within the mother's daily routines. The structuring and prioritisation of activities can assist with clarity of routine, for example, multi-tasking or arranging activities with social support to reduce time burdens. The education and encouragement of shared partner support is important to maintain aspects of both mother and father's self-identity and leisure activities. This promotes a healthier, more balanced lifestyle for both mother and father and reduces the stress as effective dual parenting provides time to perform leisure/self-care occupations. Over time, both parents will be accustomed to the new activities within the routine and have time to both explore self-care and/or leisure activities.

Performance capacity relates to the mental and physical capabilities to perform an occupation alongside the influence of subjective experience (Kielhofner 2008). The women

that are handling this new mothering role alongside a mental or physical health condition to themselves or their child, may require additional assistance to adapt or make changes to their environment. Problem-solving to manage the requirements of both mother and baby within their home environment would be crucial to any OT intervention. This ensures the environment is conducive and supportive of both mother and child's emotional, physical and social needs.

The PND symptoms will need addressing by the OT, which would include psychoeducation provided in an appropriate learning style, emotional regulation and resilience, sleep hygiene strategies and relaxation strategies, inclusive of mindfulness and breathing techniques. Education can be provided by OTs on potential support from charities, support groups, mother and baby groups and financial assistance. These coping strategies would be essential in the treatment of PND in perinatal teams alongside the tailored mother and child interventions. As mental health conditions in the mother can have adverse effects on the child, inclusive of isolation, lack of stimulation and neglect, which can result in developmental delays (Esdaile and Olson 2004). Effective OT interventions can assist the mother with identifying personal strengths, stress management, bonding between mother and child and the engagement of mothers in social settings with their child (Esdaile and Olson 2004, p. 239).

When considering PND, the focus of intervention will be on the person needing improved health and well-being. However, the impacts on the associated informal caregivers must also be explored, such as partners or family members (Wagman and Håkansson 2018). The reliance on these caregivers to take on additional responsibilities during recovery can cause burnout. Though some research has been carried out that explores the effects of PND on the father, little is known of the subsequent interventions that may be available for the fathers to access (Witcombe-Hayes 2018). OTs are in a good position to provide interventions for fathers, when the depression is related to the new child. Though not the focus of this study, it is important to consider the potential impact on family members when exploring modifications to maternal lifestyle to assist with role overload, activity burdens and balancing occupations. For example, PND interventions of occupational engagement for the mother could put additional childcare responsibilities on the partner. It is important to consider the whole family unit:

“Strategies to help mothers and their families balance their time and derive satisfaction from daily activities would likely help decrease maternal burnout, improve self-identity and self-esteem, and increase satisfaction of daily activities and time use”.

(Hodgetts et al. 2014, p. 91)

When mothers experience self-stigmatisation, this is perpetuated by the media portrayal of a ‘perfect mother’, not promoting the reality of motherhood, inclusive of the negative aspects (Choi et al. 2005). One of the roles of OTs is to normalize experiences and minimise the impacts of stigma. The education provided by OTs should additionally cover expectations of the self to reduce self-stigmatisation, inclusive of recovery time after the birth, setting achievable goals for each day, and allowing the self to have rest days where the basic childcare is all that is achieved. Additionally, OTs can explore self-image and the changes that have occurred to the body during the pregnancy and birth, to increase self-confidence and overall well-being.

The mothers within this study all indicated they had a positive experience when completing the activity diary to self-reflect on their role and the level of care they are providing to reduce self-stigmatisation. The activity diary allowed them to explore what aspects of their routine were their favourite or least favourite to attempt to incorporate more or less of these activities, respectively. It was also important in highlighting the occupational imbalance they were experiencing to explore how potential self-care or leisure activities could be incorporated into their routine. Activity diaries and subsequent reflective sessions would be an effective feature to include within occupational therapy interventions with this population. This could be expanded to group situations, in which women use the diary recording tool together and use the group interactions as a means of sharing advice and knowledge in improving occupational balance.

9.7 Recommendations for Change to Perinatal Healthcare Practice

Service provision has been highlighted within this research as an area for improvement within perinatal mental health, which aligns with the guidance previously discussed by the Royal

College of Psychiatrists (2015). Issues surrounding long waiting lists, minimal specialist teams and incorrect diagnosis affected the care these women received. There is a need for financial investment to promote service evaluation and improvement within the perinatal mental health sector, to improve the outcomes of women's mental health and subsequent child development. The recent improvements that have been made within Wales have made a significant difference to the service availability for women but more improvements can be made (Maternal Mental Health Alliance 2018,2020; Cantwell 2022). Currently not every health board has a specialised perinatal OT within Wales (Witcombe-Hayes 2018). Given the current issue of high workloads for midwives and health visitors, adding to their responsibilities would not be feasible for the caseload or within their professional remits and prioritisations (Higgins et al. 2018). OT involvement could be introduced alongside existent healthcare professionals to prevent or minimize the impact of mental health conditions. There have been investments by the Welsh Government to improve specialist perinatal mental health services, with funding of £1.5 million in 2015 and the inclusion of perinatal mental health in the Mental Health Delivery Plan 2016-19 (Children Young People and Education Committee 2017). There is a need to explore the involvement of OTs in these care strategies to identify service outcomes and the potential benefits to mother and child, for example, less involvement of professionals in follow-up care following early occupational therapy intervention.

This study illustrated that realistic preparation for motherhood and awareness of the intensity of identity changes was an important consideration for expectant mothers, as reflected on by the mothers. OT led antenatal education could be used to prepare mothers for the transition as a preventative measure, as suggested by Barbic et al. (2021) and Choi et al. (2005). Additionally, training of health visitors to emphasise the importance of mother's mental health alongside the care of the baby should be considered vital to identify mothers requiring additional mental health support (Choi et al. 2005). The consideration of idealised mothering beliefs and values antenatally should be introduced in antenatal education, alongside normalisation of parenting difficulties and the temporal parts of mothering. Acknowledging the challenges of motherhood alongside the developmental changes for the child and different needs of the mother at each phase can assist in mentally preparing for the

mothering journey. More education is needed for both parents on identifying the symptoms of PND and the importance of seeking immediate professional help.

The accumulation of ideal social capital can be a part of prenatal education and explored in preventative interventions for mothers at high risk of depressive symptomology, for example, personal history of mental health conditions or poor social support. Additionally, supportive material could be produced that highlights the key findings of relevant research, such as this study, as preventative tools against depressive symptomology. Additionally, information could be provided on supportive services available, for example, charities and doulas. These supportive materials must be realistic and not portraying romanticised mothering overviews, which is crucial to promote the reality of motherhood, reducing potential disparity of ideals for new mothers.

This research highlighted the emotional support needs for the majority of mothers, indicating services that offer this support would be invaluable. Consideration of piloting various expansions to the supportive services may be beneficial, for example, 24-hour phone support or counselling for new parents. This would require additional resources, but could be beneficial as preventative measures against PND and the associated costs for the whole family.

This section has highlighted a number of ways in which the NHS can improve perinatal mental health services in the short and long-term. As the focus of this research is on the inclusion of more OTs within perinatal services, the following OT specific recommendations are suggested to improve perinatal care. Evaluation of the effect of these services on maternal and child outcomes may assist in highlighting potential cost-saving from these interventions.

Short-term goals would include employing specialised perinatal OTs to each health board in Wales; introduce antenatal classes run by specialist perinatal OTs within mental health services that support development of social capital and education on occupational balance; specialist perinatal OTs to signpost mothers to appropriate services. Long-term goals would include employment of additional specialist perinatal OTs, especially in more densely populated areas; both antenatal and postnatal educational classes for all mothers, regardless

of mental health status that are run by specialist perinatal OTs; and the specialist perinatal OTs to develop supportive materials to be provided to women during the perinatal period. There is the potential for the results from this study to influence future OT specific interventions and outcome measures specific to the mothering population.

9.8 Implications for Evidence-Based Policy Making

There is a focus on well-being as an outcome for policy, as seen within the Social Services and Well-being Act (Wales) 2014. This aims to measure the success of services via well-being. There is an emphasis on prevention and early intervention to reduce the number of critical cases being seen within social care (Social Care Wales 2017). This is further supported by the Well-being of Future Generations (Wales) Act 2015, which aims to ensure public bodies within Wales are considering the long-term impacts on well-being prior to making policies (Social Care Wales 2017). This research has provided insights into the influential factors that impact on a mother's well-being and mental health, that may require the mother to access healthcare services and require consideration in public health promotion and policy.

Additionally, the consideration of the multi-disciplinary team and how the additional inclusion of OTs within the perinatal teams could have a positive impact. NICE guidelines could be developed with recommendations of the necessity of inclusion of OTs within perinatal mental health teams.

Within Wales, there remains discrimination and stigmatisation within the workplace. This was highlighted by the National Assembly for Wales (2018) during their EHRC survey, which found 71% of mothers reported experiencing discrimination as a result of having children. The mothers within the survey reported reduced career opportunities, job insecurity, harassment or negative comments, with 10% feeling forced to resign and 15% accepting reduced wages (National Assembly for Wales 2018). Wales is also struggling to offer flexible working hours to mothers attempting to return to work, despite the National Assembly for Wales (2018) making suggestions that flexible working can enhance better work-life balance and family functioning. Within this research, mothers highlighted difficulties with returning to the workplace due to financial difficulties or inflexibility of working hours. Policies that encourage the Family Friendly Schemes could promote more mothers to return to their original

employment, which could assist the mother financially and the industry would not lose the talent of the woman.

The important population to capture within this research were the mothers that did not have access to additional services. This included mothers with PND symptoms that did not require healthcare professional support and with no access to the additional services of Flying Start. Flying Start is a government led programme for parents living in low-income areas of Wales, and thus inclusion in the programme is dependent on geographical location of a mother's home address. The core principles of the programme is to: enhance parenting skills to benefit the child; improve parent-child relationships; develop positivity and resilience; promote understanding of child development; increase parental confidence; and promote learning within the home environment (Welsh Government 2017a). Flying start will assist families with children under 4 years old with: part-time childcare; additional one-to-one support for parents; access to structured parenting programmes; and communication support (Welsh Government 2017b).

To check the proportion of mothers that were receiving these additional services, each participant postcode was manually inputted into the associated Flying Start webpage for the relevant county. This process highlighted significant inconsistencies between county webpages. Some counties had specific 'postcode' finders that were easily accessible and provided accurate and informative statements about service provision in a timely manner. However, some counties had varied approaches, for example, providing a contact email address to request information, full lists of postcodes to manually scan through or no information/tools available to identify if a postcode was listed for inclusion. These accessibility issues could be detrimental to a family overlooked by healthcare professionals, potentially missing out on services that are available to them for additional support. This is an area of concern that requires remedial action to ensure families have clear guidance around eligibility for the Flying Start programme and its benefits. Furthermore, this research has highlighted there are women that may benefit from inclusion from these services that live in postcode areas outside of the inclusion criteria. Consideration of changing these inclusion criteria to include specific mothers that are assessed by healthcare professionals as requiring

these additional services could provide additional support for these women and potentially prevent mental health conditions developing further.

9.9 Suggestions for Future Research that could Positively Impact the Mothering Population

Qualitative and quantitative research is required that explores the impact of OTs involvement in perinatal mental health, through the experience of the mothers and levels of depressive symptomology. As the occupational therapy profession is developing within the perinatal mental health specialist teams, the piloting and evaluation of occupational therapy involvement would be beneficial to provide evidence of the changes in the perinatal care provided. For services with established OTs in the specialist perinatal mental health teams, a randomised controlled trial of specific occupational therapy interventions, such as antenatal classes, could be used to evaluate the success of interventions. This would provide the evidence for the development of future NICE guidelines, which may illustrate a need for OTs within perinatal specialist teams. Further research should also explore the use of preventative and recovery measures in reducing the symptomology of PND. Research that evaluates occupational therapy involvement in perinatal mental health would be valuable to support the current study and recommendations. It is estimated that the economic and social costs of PND are 5 times more to the public sector than the costs of improving services, when based on both mother and child, with lifetime costs estimated at over £75,000 per mother (Bauer et al. 2016; Maternal Mental Health Alliance 2018). Randomised controlled trials with long-term follow-up that explore associations between perinatal mental health interventions and their associated costs and cost savings would be beneficial for further funding opportunities and service expansions.

Lone mothers have been highlighted within this study as having an increased risk of developing postnatal depressive symptomology. Further research utilising interviews and focus groups for in-depth data on the demands of the role, may provide evidence to support these mothers having access to additional services, for example, Flying Start. Inclusion of lone mothers at-risk to the current inclusion of deprived area postcodes could provide access to additional services and social support, which could reduce the risk of developing PND in the mother.

Longitudinal quantitative research and interviews would be beneficial to explore the financial implications of mothers returning to the workforce. They are often forced to accept reduced working hours or leave the employment entirely due to inflexibility of working hours. The employer loses the talent of the woman within the workforce and is subsequently required to retrain new staff. This research could also explore the effects of childcare costs on the making of these decisions.

This research study has illustrated that there are potential protective factors against developing symptoms of PND. These factors may be within a woman's locus of control, though there are also external influential factors to be aware of. The societal ideology of motherhood requires modifying for the illustration of realistic mothering to allow women to make informed decisions prior to pregnancy. This would allow prenatal understanding of the role to reduce the vast difference in expectations and reality (Choi et al. 2005). Feminist researchers are continually driving for a change to societal stereotyping of motherhood and this research supports these arguments. However, continual research that challenges these stereotypes and promotes positive mental health of mothers is required.

9.10 Key Findings from this Mixed Methods Research Study on PND Symptomology

- There was no association seen between social capital and EPDS scores when adjusted for sociodemographic variables. Finance was the main confounder on the association, with no independent effect seen after adjusting for the financial variable. Some women described issues with returning to work due to the cost of childcare.
- Low occupational balance was strongly associated with high EPDS scores, even after adjusting for multiple potential confounders including social capital.
- Identity loss and transformations assisted mothers in coping with the new role, with prior knowledge of the expected changes appearing to minimise depressive symptoms experienced.
- Self-stigmatisation of the mother was reported as common with the media and societal perceptions of the 'perfect' mother, which were often unattainable and resulted in some mothers refusing to accept support.

- Expectations reported by the mothers differed significantly from the realities of motherhood and the mothers often described themselves as the main caregiver responsible for the performance, mental load and outcomes surrounding the child.
- Many mothers struggled with the new level of responsibility and higher levels of depressive symptomology were associated with lower levels of confidence and happiness in role.
- When there was change in family structures, this had an impact on the levels of support available for the mothers, with higher employment rates, geographical mobility and single parent families responsible for these changes.
- Intimate relationship dynamics appeared to alter following a child and support networks become increasingly important, which was seen to positively impact well-being if acquired antenatally.
- For many, the impact of parenting on routine affected the occupational balance of the mother, being the first parent sacrificing leisure and self-care/rest, which was associated with depressive symptomology.
- The division of labour within the parenting dynamic appeared to have an association with depressive symptomology, with a more equal divide improving mental health of the mother.
- There appeared to be an association seen with lower depressive symptomology reported from mothers that amended her own perceptions of a 'good mother' and accepted the unpredictability of the role and routine. There was an importance to retain a sense of agency around the daily responsibilities despite these adapted views on mothering responsibilities.

This research can assist in increasing knowledge of perinatal healthcare professionals and encouraging the inclusion of OTs within perinatal services but most importantly, it has provided the women in this study with a voice, to share their experiences and stories.

Bibliography

Abdollahi, F., Lye, M.-S. and Zarghami, M. 2016. Perspective of postpartum depression theories: A narrative literature review. *North American Journal of Medical Sciences* 8(6), p. 232.

Acharya, V. 2014. Preparing for motherhood: a role for occupational therapy. *World Federation of Occupational Therapists Bulletin* 70(1), pp. 16-17. doi: 10.1179/otb.2014.70.1.005

Adam, F. and Rončević, B. 2003. Social Capital: Recent Debates and Research Trends. *Social Science Information* 42(2), pp. 155-183. doi: 10.1177/0539018403042002001

Allan, C., Carrick-Sen, D. and Martin, C. R. 2013. What is perinatal well-being? A concept analysis and review of the literature. *Journal of Reproductive and Infant Psychology* 31(4), pp. 381-398. doi: 10.1080/02646838.2013.791920

Almond, P. 2009. Postnatal depression: a global public health perspective. *Perspect Public Health* 129(5), pp. 221-227. doi: 10.1177/1757913909343882

Amaro, L. M., Joseph, N. T. and de los Santos, T. M. 2019. Relationships of Online Social Comparison and Parenting Satisfaction among New Mothers: The Mediating Roles of Belonging and Emotion. *Journal of Family Communication* 19(2), pp. 144-156. doi: 10.1080/15267431.2019.1586711

Amir, L. H. 2014. Breastfeeding in public: "You can do it?". *International Breastfeeding Journal* 9(187), doi: 10.1186/s13006-014-0026-1

Anaby, D., Jarus, T., Backman, C. L. and Zumbo, B. D. 2010. The role of occupational characteristics and occupational imbalance in explaining well-being. *Applied Research in Quality of Life* 5(2), pp. 81-104.

Angus, J. E. and Clark, A. M. 2012. Using critical realism in nursing and health research: promise and challenges. *Nursing Inquiry* 19(1), pp. 1-3. doi: 10.1111/j.1440-1800.2011.00580.x

Appelrouth, S. and Edles, L. D. 2011. *Sociological Theory in the Contemporary Era: Text and Readings*. 2nd ed. California: SAGE Publications.

Archer, C. and Kao, K.-T. 2018. Mother, baby and Facebook makes three: does social media provide social support for new mothers? *Media International Australia* 168(1), pp. 122-139. doi: 10.1177/1329878x18783016

Archer, M. S., Bhaskar, R., Collier, A., Norrie, A. and Lawson, T. 1998. *Critical Realism: Essential Readings*. London: Routledge.

Backman, C. L. 2004. Occupational balance: Exploring the relationships among daily occupations and their influence on well-being. *Canadian Journal of Occupational Therapy* 71(4), pp. 202-209.

Bar, M. A. and Jarus, T. 2015. The effect of engagement in everyday occupations, role overload and social support on health and life satisfaction among mothers. *International Journal of Environmental Research and Public Health* 12(6), pp. 6045-6065.

Barbic, S. P., MacKirdy, K., Weiss, R., Barrie, A., Kitchin, V. and Lepin, S. 2021. Scoping Review of the Role of Occupational Therapy in the Treatment of Women With Postpartum Depression. *Annals of International Occupational Therapy* 4(4), pp. e249-e259. doi: doi:10.3928/24761222-20210921-02

Barlow, K. and Sepulveda, A. 2020. The promotion of positive mental health for new mothers during Covid-19. *World Federation of Occupational Therapists Bulletin* 76(2), pp. 86-89. doi: 10.1080/14473828.2020.1822577

Bauer, A., Knapp, M. and Parsonage, M. 2016. Lifetime costs of perinatal anxiety and depression. *Journal of Affective Disorders* 192, pp. 83-90. doi: 10.1016/j.jad.2015.12.005

BBC. 2021. *Mental health: Wales' only unit for mothesr and baby opens*. Available at: <https://www.bbc.co.uk/news/uk-wales-56801037> [Accessed: 2nd June 2022].

Behnia, F., Rassafiani, M., Nakhai, S., Mohammadpour, M. and Ahmadi Kahjoogh, M. 2017. Time use of mothers of children with an Autism Spectrum Disorder: A comparative study. *Iranian Rehabilitation Journal* 15(1), pp. 49-56. doi: 10.18869/nrip.irj.15.1.49

Bhaskar, R. 1975. *A realist theory of science*. Leeds: Leeds Books Ltd.

Bilszta, J., Ericksen, J., Buist, A. and Milgrom, J. 2011. Women's experience of postnatal depression - beliefs and attitudes as barriers to care. *The Australian Journal of Advanced Nursing* 27(3), pp. 44-54.

Blair, S. E. E. 2000. The Centrality of Occupation during Life Transitions. *British Journal of Occupational Therapy* 63(5), pp. 231-237.

Borgh, M., Eek, F., Wagman, P. and Håkansson, C. 2018. Organisational factors and occupational balance in working parents in Sweden. *Scandinavian Journal of Public Health* 46(3), pp. 409-416.

Bourdieu, P. 1986. The Forms of Capital. In: Richardson, J.E. ed. *Handbook of Theory of Research for the Sociology of Education*. Westport: Greenword Press, pp. 241-258.

Bourdieu, P. 1990. *The logic of practice*. Cambridge: Polity Press.

Brandstetter, S., Rothfuß, D., Seelbach-Göbel, B., Melter, M., Kabesch, M. and Apfelbacher, C. 2020. Information on, knowledge and utilisation of support services during pregnancy and after childbirth:

cross-sectional analyses of predictors using data from the KUNO-Kids health study. *BMJ Open* 10(10), p. e037745. doi: 10.1136/bmjopen-2020-037745

Braun, V. and Clarke, V. 2006. Using thematic analysis in psychology. *Qualitative Research in Psychology* 3(2), pp. 77-101. doi: 10.1191/1478088706qp063oa

Breen, L. 2007. The researcher 'in the middle': Negotiating the insider/outsider dichotomy. *The Australian Community Psychologist* 19(1), pp. 163-174.

Briltz, V. 2019. *Occupational Therapy's Role in Maternal Mental Health within Transition from NICU to Home*. PhD Thesis, University of St Augustine for Health Sciences.

Brockington, I. F., Hall, P., Levings, J. and Murphy, C. 1993. The Community's Tolerance of the Mentally Ill. *British Journal of Psychiatry* 162(1), pp. 93-99. doi: 10.1192/bjp.162.1.93

Bryant, W., Fieldhouse, J. and Bannigan, K. 2014. *Creek's Occupational Therapy and Mental Health*. 5th ed. London: Elsevier Health Sciences.

Bryman, A. 2016. *Social Research Methods*. 5th ed. New York: Oxford University Press.

Burack, C. 1992. A house divided: Feminism and object relations theory. *Women's Studies International Forum* 15(4), pp. 499-506. doi: 10.1016/0277-5395(92)90083-8

Burnett, S. B., Gatrell, C. J., Cooper, C. L. and Sparrow, P. 2010. Well-balanced families?: A gendered analysis of work-life balance policies and work family practices. *Gender in Management: An International Journal* 25(7), pp. 534-549. doi: doi:10.1108/17542411011081356

Bygstad, B., Munkvold, B. E. and Volkoff, O. 2016. Identifying Generative Mechanisms through Affordances: A Framework for Critical Realist Data Analysis. *Journal of Information Technology* 31(1), pp. 83-96. doi: 10.1057/jit.2015.13

Cameron, E. E., Joyce, K. M., Delaquis, C. P., Reynolds, K., Protudjer, J. L. P. and Roos, L. E. 2020. Maternal psychological distress & mental health service use during the COVID-19 pandemic. *Journal of Affective Disorders* 276, pp. 765-774. doi: <https://doi.org/10.1016/j.jad.2020.07.081>

Cantwell, R. 2022. Perinatal mental health service development across the UK – many achievements, growing challenges. *Irish Journal of Psychological Medicine*, pp. 1-4. doi: 10.1017/ipm.2022.1

Chevalérias, M.-P. 2011. The Primal Bond and its Relationship to Humanization. *Recherches en Psychanalyse* (2), pp. 181-187.

Children Young People and Education Committee. 2017. *Perinatal mental health in Wales*. Available at: <https://senedd.wales/laid%20documents/cr-ld11234/cr-ld11234-e.pdf> [Accessed: 26th November 2022].

Chodorow, N. 1978. *The Reproduction of Mothering: Psychoanalysis and the Sociology of Gender*. London: University of California Press.

Chodorow, N. 1989. *Feminism and psychoanalytic theory*. New Haven, CT: Yale University Press.

Choi, P., Henshaw, C., Baker, S. and Tree, J. 2005. Supermum, superwife, supereverything: performing femininity in the transition to motherhood. *Journal of Reproductive and Infant Psychology* 23(2), pp. 167-180. doi: 10.1080/02646830500129487

Chojenta, C., Loxton, D. and Lucke, J. 2012. How Do Previous Mental Health, Social Support, and Stressful Life Events Contribute to Postnatal Depression in a Representative Sample of Australian Women? *Journal of Midwifery and Women's Health* 57(2), pp. 145-150. doi: <http://dx.doi.org/10.1111/j.1542-2011.2011.00140.x>

Chung, H. and Van der Lippe, T. 2020. Flexible working, work–life balance, and gender equality: Introduction. *Social Indicators Research* 151(2), pp. 365-381.

Clark, C. M. A. and Alford, H. 2019. The Throwaway Culture in the Economy of Exclusion: Pope Francis and Economists on Waste. *The American Journal of Economics and Sociology* 78(4), pp. 973-1008. doi: 10.1111/ajes.12295

Clark, F. A. et al. 1991. Occupational science: academic innovation in the service of occupational therapy's future. *American Journal of Occupational Therapy* 45(4), pp. 300-310. doi: 10.5014/ajot.45.4.300

Clark, T., Foster, L., Sloan, L. and Bryman, A. 2021. *Bryman's social research methods*. 6th ed. New York: Oxford University Press.

Colbourne, L. and Sque, M. 2004. Split personalities: Role conflict between the nurse and the nurse researcher. *NT Research* 9(4), pp. 297-304. doi: 10.1177/136140960400900410

Coleman, J. 1988. Social capital in the creation of human capital. *American Journal of Sociology* 94, pp. S95-S120.

Collins, N. L., Dunkel-Schetter, C., Lobel, M. and Scrimshaw, S. C. 1993. Social support in pregnancy: psychosocial correlates of birth outcomes and postpartum depression. *Journal of Personality and Social Psychology* 65(6), pp. 1243-1258. doi: 10.1037//0022-3514.65.6.1243

Cornish, L. D. and Dobie, R. S. 2018. Social Support in the "Fourth Trimester": A Qualitative Analysis of Women at 1 Month and 3 Months Postpartum. *Journal of Perinatal Education* 27(4), pp. 233-242. doi: 10.1891/1058-1243.27.4.233

- Corrigan, P. W. and Watson, A. C. 2002. The Paradox of Self-Stigma and Mental Illness. *Clinical Psychology: Science and Practice* 9(1), pp. 35-53. doi: doi.org/10.1093/clipsy.9.1.35
- Cox, J. 2004. Postnatal mental disorder: towards ICD-11. *World Psychiatry* 3(2), pp. 96-97.
- Cox, J. L., Holden, J. M. and Sagovsky, R. 1987. Detection of postnatal depression. Development of the 10-item Edinburgh Postnatal Depression Scale. *Br J Psychiatry* 150, pp. 782-786. doi: 10.1192/bjp.150.6.782
- Creek, J. and Lougher, L. 2008. *Occupational Therapy and Mental Health*. 4th ed. London: Elsevier Limited.
- Creswell, J. W. and Creswell, J. D. 2018. *Research Design: Qualitative, quantitative and mixed methods approaches*. 5th ed. California: Sage Publications, Inc.
- Crouch, R. and Alers, V. 2014. *Occupational Therapy in Psychiatry and Mental Health*. 5th ed. West Sussex: John Wiley & Sons, Ltd.
- Crow, G. and Wiles, R. 2008. Managing anonymity and confidentiality in social research: the case of visual data in community research. *NCRM Working Paper Series, 8/08*. London: Economic & Social Research Council.
- Cruikshank, J. 2012. Positioning positivism, critical realism and social constructionism in the health sciences: a philosophical orientation. *Nursing Inquiry* 19(1), pp. 71-82. doi: 10.1111/j.1440-1800.2011.00558.x
- Cummins, I. 2018. The Impact of Austerity on Mental Health Service Provision: A UK Perspective. *International Journal of Environmental Research and Public Health* 15(6), p. 1145.
- Cust, F. 2016. Peer support for mothers with postnatal depression: A pilot study. *Community Practitioner* 89(1), pp. 38-41.
- Dekker, P. and Uslaner, E. M. 2001. *Social capital and participation in everyday life*. New York: Routledge.
- DeLeón, C. 2012. A Pilot Study on Perceptions of Sleep Deprivation and Mother-Infant Interaction. *Journal of the Indiana Academy of the Social Sciences* 15(1), p. 6.
- Delmore-Ko, P., Pancer, S. M., Hunsberger, B. and Pratt, M. 2000. Becoming a parent: the relation between prenatal expectations and postnatal experience. *Journal of Family Psychology* 14(4), pp. 625-640. doi: 10.1037//0893-3200.14.4.625

Dennis, C.-L. 2004. Can we identify mothers at risk for postpartum depression in the immediate postpartum period using the Edinburgh Postnatal Depression Scale? *Journal of Affective Disorders* 78(2), pp. 163-169.

Dennis, C.-L. and Ross, L. 2005. Relationships Among Infant Sleep Patterns, Maternal Fatigue, and Development of Depressive Symptomatology. *Birth* 32(3), pp. 187-193. doi: <https://doi.org/10.1111/j.0730-7659.2005.00368.x>

Dennis, C. L. and Dowswell, T. 2013. Psychosocial and psychological interventions for preventing postpartum depression. *Cochrane Database of Systematic Reviews* (2), doi: 10.1002/14651858.CD001134.pub3

Dennis, C. L., Hodnett, E., Kenton, L., Weston, J., Zupancic, J., Stewart, D. E. and Kiss, A. 2009. Effect of peer support on prevention of postnatal depression among high risk women: multisite randomised controlled trial. *British Medical Journal* 338, p. a3064. doi: 10.1136/bmj.a3064

Dickson, M. 2020. "He's Not Good at Sensing That Look That Says, I'm Drowning Here!" Academic Mothers' Perceptions of Spousal Support. *Marriage & Family Review* 56(3), pp. 241-263. doi: 10.1080/01494929.2020.1712302

Diez, S. G. 2013. Measurement of social capital with the help of time use surveys. *Procedia-Social and Behavioral Sciences* 72, pp. 23-31.

Dodgson, J. E. 2019. Reflexivity in Qualitative Research. *Journal of Human Lactation* 35(2), pp. 220-222. doi: 10.1177/0890334419830990

Donath, O. 2015. Regretting Motherhood: A Sociopolitical Analysis. *Signs: Journal of Women in Culture and Society* 40(2), pp. 343-367. doi: 10.1086/678145

Dunbar, S. B. and Roberts, E. 2006. An exploration of mothers' perceptions regarding mothering occupations and experiences. *Occupational Therapy In Health Care* 20(2), pp. 51-73.

Duncan, E. A. S. and Nicol, M. M. 2004. Subtle Realism and Occupational Therapy: An Alternative Approach to Knowledge Generation and Evaluation. *British Journal of Occupational Therapy* 67(10), pp. 453-456. doi: 10.1177/030802260406701006

Dür, M. et al. 2014. Development of a new occupational balance-questionnaire: incorporating the perspectives of patients and healthy people in the design of a self-reported occupational balance outcome instrument. *Health and Quality of Life Outcomes* 12(1), pp. 1-11.

Earl, R. B. 2020. *The Practice of Social Research*. [Place of publication not identified]: Cengage Learning.

Eastwood, J., Kemp, L. and Jalaludin, B. 2016. Each Is in Different Circumstances Anyway:A Realist Multilevel Situational Analysis of Maternal Depression in South Western Sydney, Australia. *SAGE Open* 6(4), doi: 10.1177/2158244016676863

Eastwood, J. G., Jalaludin, B. B., Kemp, L. A., Phung, H. N. and Barnett, B. E. W. 2012. Relationship of postnatal depressive symptoms to infant temperament, maternal expectations, social support and other potential risk factors: findings from a large Australian cross-sectional study. *BMC Pregnancy and Childbirth* 12(1), p. 148. doi: 10.1186/1471-2393-12-148

Edwards, E. and Timmons, S. 2005. A qualitative study of stigma among women suffering postnatal illness. *Journal of Mental Health* 14(5), pp. 471-481.

Edwards, P. J. et al. 2009. Methods to increase response to postal and electronic questionnaires. *Cochrane Database of Systematic Reviews* (3), p. Mr000008. doi: 10.1002/14651858.MR000008.pub4

Edwins, J. 2008. *Community Midwifery Practice*. West Sussex: John Wiley & Sons Ltd.

Eklund, M. and Argentzell, E. 2016. Perception of occupational balance by people with mental illness: A new methodology. *Scandinavian Journal of Occupational Therapy* 23(4), pp. 304-313. doi: 10.3109/11038128.2016.1143529

Elmir, R., Schmied, V., Jackson, D. and Wilkes, L. 2011. Interviewing people about potentially sensitive topics. *Nurse Researcher* 19(1), pp. 12-16. doi: 10.7748/nr2011.10.19.1.12.c8766

Esdaile, S. A. and Olson, J. A. 2004. *Mothering Occupations: Challenge, Agency, and Participation*. Philadelphia: F.A. Davis.

Falah-Hassani, K., Shiri, R. and Dennis, C.-L. 2016. Prevalence and risk factors for comorbid postpartum depressive symptomatology and anxiety. *Journal of Affective Disorders* 198, pp. 142-147.

Feeney, B. C. and Collins, N. L. 2015. A New Look at Social Support:A Theoretical Perspective on Thriving Through Relationships. *Personality and Social Psychology Review* 19(2), pp. 113-147. doi: 10.1177/1088868314544222

Fellmeth, G., Opondo, C., Henderson, J., Redshaw, M., Mcneill, J., Lynn, F. and Alderdice, F. 2019. Identifying postnatal depression: Comparison of a self-reported depression item with Edinburgh Postnatal Depression Scale scores at three months postpartum. *Journal of Affective Disorders* 251, pp. 8-14.

Field, A. 2018. *Discovering Statistics Using IBM SPSS Statistics*. 5th ed. London: SAGE Publications Ltd.

Field, J. 2003. *Social Capital*. Oxon: Routledge.

Fonseca, A., Moura-Ramos, M. and Canavarro, M. 2018. Attachment and Mental Help-Seeking in the Perinatal Period: The Role of Stigma. *Community Mental Health Journal* 54(1), pp. 92-101. doi: 10.1007/s10597-017-0138-3

Francis-Connolly, E. 2002. The Unpredictability of Habits and Routines for Mothers of Preschool-Age Children. *OTJR: Occupation, Participation and Health* 22(1), pp. 94S-95S. doi: 10.1177/1539449202220s119

Gallagher, M., Muldoon, O. T. and Pettigrew, J. 2015. An integrative review of social and occupational factors influencing health and wellbeing. *Frontiers in Psychology* 6, p. 1281. doi: 10.3389/fpsyg.2015.01281

Gavin, N. I., Gaynes, B. N., Lohr, K. N., Meltzer-Brody, S., Gartlehner, G. and Swinson, T. 2005. Perinatal depression: a systematic review of prevalence and incidence. *Obstetrics & Gynecology* 106(5 Part 1), pp. 1071-1083.

Gelinas, L., Pierce, R., Winkler, S., Cohen, I. G., Lynch, H. F. and Bierer, B. E. 2017. Using Social Media as a Research Recruitment Tool: Ethical Issues and Recommendations. *The American Journal of Bioethics* 17(3), pp. 3-14. doi: 10.1080/15265161.2016.1276644

George, M. 2011. Proposed role for occupational therapy to serve new mothers. *Emerging Practice CATs, Paper 10*. Pacific University Oregon.

Gerson, K. and Torres, S. 2015. Changing family patterns. In: Scott, R.A. and Buchmann, M.C. eds. *Emerging Trends in the Social and Behavioral Sciences: An Interdisciplinary, Searchable, and Linkable Resource*. New York: John Wiley & Sons, Inc., pp. 1-15.

Gibson, J., McKenzie-McHarg, K., Shakespeare, J., Price, J. and Gray, R. 2009. A systematic review of studies validating the Edinburgh Postnatal Depression Scale in antepartum and postpartum women. *Acta Psychiatrica Scandinavica* 119(5), pp. 350-364. doi: 10.1111/j.1600-0447.2009.01363.x

Giddens, A. 1984. *The constitution of society: outline of the theory of structuration*. Cambridge: Polity Press.

Giddens, A. 1991a. *The consequences of modernity*. Cambridge: Polity.

Giddens, A. 1991b. *Modernity and self-identity: self and society in the late modern age*. Cambridge: Polity Press.

Giddens, A. and Turner, J. H. 1987. *Social theory today*. Cambridge: Polity Press.

Glanz, K., Rimer, B. K. and Viswanath, K. 2008. *Health Behavior and Health Education: Theory, Research, and Practice*. 4th ed. San Francisco: John Wiley & Sons.

Glynn, K., Maclean, H., Forte, T. and Cohen, M. 2009. The association between role overload and women's mental health. *Journal of Women's Health* 18(2), pp. 217-223.

Goffman, E. 1959. *The presentation of self in everyday life*. London: Penguin.

Goffman, E. 1963. *Stigma : notes on the management of spoiled identity*. Harmondsworth: Penguin.

GOV.UK. 2022. *Maternity pay and leave*. Available at: <https://www.gov.uk/maternity-pay-leave/leave> [Accessed: 3rd June 2022].

Government Equalities Office. 2019. *Family Friendly Policies: actions for employers*. Available at: <https://www.gov.uk/government/publications/family-friendly-policies-actions-for-employers> [Accessed: 26th June 2022].

Graham, M. 2020. Use of the Model of Human Occupation (MOHO) to Understand the Occupational Needs of Mothers With Perinatal Mental Illness: A UK Grounded-Theory Study. *The American Journal of Occupational Therapy* 74(4), doi: 10.5014/ajot.2020.74S1-PO9512

Grant, A. 2019. *Doing Excellent Social Research with Documents: Practical Examples and Guidance for Qualitative Researchers*. Oxon: Routledge.

Grant, A., Morgan, M., Gallagher, D. and Mannay, D. 2018. Smoking during pregnancy, stigma and secrets: Visual methods exploration in the UK. *Women and Birth* 33(1), pp. 1-7. doi: 10.1016/j.wombi.2018.11.012

Grant, A., Morgan, M., Gallagher, D. and Mannay, D. 2020. Smoking during pregnancy, stigma and secrets: Visual methods exploration in the UK. *Women and Birth* 33(1), pp. 70-76. doi: <https://doi.org/10.1016/j.wombi.2018.11.012>

Gray, L. M., Wong-Wylie, G., Rempel, G. R. and Cook, K. 2020. Expanding Qualitative Research Interviewing Strategies: Zoom Video Communications. *The Qualitative Report* 25(5), pp. 1292-1301.

Grier, G. and Geraghty, S. 2015. Mind matters: Developing skills and knowledge in postnatal depression. *British Journal of Midwifery* 23(2), pp. 110-114.

Grootaert, C., Narayan, D., Jones, V. N. and Woolcock, M. 2004. *Measuring Social Capital: An Integrated Questionnaire*. Washington: The World Bank.

Gunnell, D. J., Peters, T. J., Kammerling, R. M. and Brooks, J. 1995. Relation between parasuicide, suicide, psychiatric admissions, and socioeconomic deprivation. *BMJ* 311(6999), pp. 226-230. doi: 10.1136/bmj.311.6999.226

- Habel, C., Feeley, N., Hayton, B., Bell, L. and Zekowitz, P. 2015. Causes of women's postpartum depression symptoms: Men's and women's perceptions. *Midwifery* 31(7), pp. 728-734. doi: 10.1016/j.midw.2015.03.007
- Hanley, J. and Long, B. 2006. A study of Welsh mothers' experiences of postnatal depression. *Midwifery* 22(2), pp. 147-157.
- Hansson, S. O., Björklund Carlstedt, A. and Morville, A.-L. 2021. Occupational identity in occupational therapy: A concept analysis. *Scandinavian Journal of Occupational Therapy* 29(3), pp. 198-209. doi: 10.1080/11038128.2021.1948608
- Harwood, K., McLean, N. and Durkin, K. 2007. First-time mothers' expectations of parenthood: What happens when optimistic expectations are not matched by later experiences? *Developmental Psychology* 43(1), pp. 1-12. doi: 10.1037/0012-1649.43.1.1
- Hesse Tyson, C., O'Connor, J. and Sheehan, J. D. 2021. No space for mother's mind: A psychoanalytically oriented qualitative study of the experiences of women with a diagnosis of postnatal depression. *International Journal of Applied Psychoanalytic Studies* 18(4), pp. 393-407. doi: <https://doi.org/10.1002/aps.1687>
- Higgins, A., Downes, C., Monahan, M., Gill, A., Lamb, S. A. and Carroll, M. 2018. Barriers to midwives and nurses addressing mental health issues with women during the perinatal period: The Mind Mothers study. *Journal of Clinical Nursing* 27(9-10), pp. 1872-1883. doi: 10.1111/jocn.14252
- Highet, N., Stevenson, A. L., Purtell, C. and Coe, S. 2014. Qualitative insights into women's personal experiences of perinatal depression and anxiety. *Women and Birth* 27(3), pp. 179-184.
- Hitch, D., Pépin, G. and Stagnitti, K. 2014. In the Footsteps of Wilcock, Part One: The Evolution of Doing, Being, Becoming, and Belonging. *Occupational Therapy In Health Care* 28(3), pp. 231-246. doi: 10.3109/07380577.2014.898114
- Hockmeyer, A. 1988. Object Relations Theory and Feminism: Strange Bedfellows. *Frontiers: A Journal of Women Studies* 10(1), pp. 20-28. doi: 10.2307/3345935
- Hodgetts, S., McConnell, D., Zwaigenbaum, L. and Nicholas, D. 2014. The impact of autism services on mothers' occupational balance and participation. *OTJR: Occupation, Participation and Health* 34(2), pp. 81-93.
- Horne, J., Corr, S. and Earle, S. 2005. Becoming a Mother: Occupational Change in First Time Motherhood. *Journal of Occupational Science* 12(3), pp. 176-183. doi: 10.1080/14427591.2005.9686561
- Hosmer, D. W., Jr., Lemeshow, S., Sturdivant, R. X. and Hosmer, D. W., Jr. 2013. *Applied Logistic Regression*. New York: John Wiley & Sons, Incorporated.

Houle, L., Chiocchio, F., Favreau, O. E. and Villeneuve, M. 2009. Role conflict and well-being among employed mothers: the mediating effects of self-efficacy. *Gender in Management: An International Journal* 24(4), pp. 270-285.

Howard, L. M. and Khalifeh, H. 2020. Perinatal mental health: a review of progress and challenges. *World Psychiatry* 19(3), pp. 313-327. doi: 10.1002/wps.20769

Huang, Y. C. and Mathers, N. 2001. Postnatal depression—biological or cultural? A comparative study of postnatal women in the UK and Taiwan. *Journal of Advanced Nursing* 33(3), pp. 279-287.

Hultqvist, J., Lund, K., Argentzell, E. and Eklund, M. 2019. Predictors of clinically important improvements in occupational and quality of life outcomes among mental health service users after completion and follow-up of a lifestyle intervention: multiple regression modelling based on longitudinal data. *BMC Psychology* 7(1), p. 83. doi: 10.1186/s40359-019-0359-z

Jacelon, C. S. and Imperio, K. 2005. Participant diaries as a source of data in research with older adults. *Qualitative Health Research* 15(7), pp. 991-997. doi: 10.1177/1049732305278603

Jackson, L., De Pascalis, L., Harrold, J. A., Fallon, V. and Silverio, S. A. 2021. Postpartum women's psychological experiences during the COVID-19 pandemic: a modified recurrent cross-sectional thematic analysis. *BMC Pregnancy and Childbirth* 21(1), p. 625. doi: 10.1186/s12884-021-04071-2

Jain, S., Kuppili, P. P., Pattanayak, R. D. and Sagar, R. 2017. Ethics in psychiatric research: issues and recommendations. *Indian Journal of Psychological Medicine* 39(5), pp. 558-565.

Jolley, S. N. and Betrus, P. 2007. Comparing postpartum depression and major depressive disorder: Issues in assessment. *Issues in Mental Health Nursing* 28(7), pp. 765-780. doi: 10.1080/01612840701413590

Jonsdottir, S. S. et al. 2020. Pregnancy complications, sick leave and service needs of women who experience perinatal distress, weak social support and dissatisfaction in their partner relationships. *Scandinavian Journal of Caring Sciences* 34(1), pp. 167-180. doi: 10.1111/scs.12718

Kamalifard, M., Yavarikia, P., Babapour Kheiroddin, J., Salehi Pourmehr, H. and Iraj Iranagh, R. 2013. The effect of peers support on postpartum depression: a single-blind randomized clinical trial. *J Caring Sci* 2(3), pp. 237-244. doi: 10.5681/jcs.2013.029

Kearns, R. A., Neuwelt, P. M., Hitchman, B. and Lennan, M. 1997. Social support and psychological distress before and after childbirth. *Health & Social Care in the Community* 5(5), pp. 296-308.

Khanna, R. 2009. Reflections on Sara Ruddick's "Maternal Thinking". *Women's Studies Quarterly* 37(3/4), pp. 302-304.

- Kielhofner, G. 2008. *Model of Human Occupation: Theory and Application*. 4th ed. Baltimore: Lippincott Williams & Wilkins.
- Kinnvall, C. and Mitzen, J. 2018. Ontological security and conflict: the dynamics of crisis and the constitution of community. *Journal of International Relations and Development* 21(4), pp. 825-835. doi: 10.1057/s41268-018-0161-1
- Kleiman, K. 2008. *Therapy and the Postpartum Woman: Notes on Healing Postpartum Depression for Clinicians and the Women Who Seek their Help*. New York: Taylor & Francis.
- Kohler, H.-P. 2013. Do Children Bring Happiness and Purpose in Life? In: Kaufmann, E.P. and Wilcox, W.B. eds. *Whither the Child? Causes and Consequences of Low Fertility*. New York: Routledge.
- Kristensen, H. K. and Petersen, K. S. 2016. Occupational science: An important contributor to occupational therapists' clinical reasoning. *Scandinavian Journal of Occupational Therapy* 23(3), pp. 240-243. doi: 10.3109/11038128.2015.1083054
- Kritsotakis, G. et al. 2013. Social capital in pregnancy and postpartum depressive symptoms: A prospective mother-child cohort study (the Rhea study). *International Journal of Nursing Studies* 50(1), pp. 63-72. doi: 10.1016/j.ijnurstu.2012.08.012
- Kruse, J. A., Low, L. K. and Seng, J. S. 2013. Validation of alternative indicators of social support in perinatal outcomes research using quality of the partner relationship. *Journal of Advanced Nursing* 69(7), pp. 1562-1573. doi: doi:10.1111/jan.12015
- La Placa, V. and Knight, A. 2014. Well-being: its influence and local impact on public health. *Public Health* 128(1), pp. 38-42. doi: <https://doi.org/10.1016/j.puhe.2013.09.017>
- Laing, R. D. 1965. *The divided self : an existential study in sanity and madness*. Harmondsworth: Penguin.
- Lamarca, G. A., Leal, M. D. C., Sheiham, A. and Vettore, M. V. 2013. The association of neighbourhood and individual social capital with consistent self-rated health: A longitudinal study in Brazilian pregnant and postpartum women. *BMC Pregnancy and Childbirth* 13(1), doi: 10.1186/1471-2393-13-1
- Laney, E. K., Hall, M. E. L., Anderson, T. L. and Willingham, M. M. 2015. Becoming a mother: The influence of motherhood on women's identity development. *Identity* 15(2), pp. 126-145.
- Law, M. 2002. Participation in the occupations of everyday life. *The American Journal of Occupational Therapy* 56(6), pp. 640-649.

- Lazarus, K. and Rossouw, P. J. 2015. Mother's expectations of parenthood: The impact of prenatal expectations on self-esteem, depression, anxiety, and stress post birth. *International Journal of Neuropsychotherapy* 3(2), pp. 102-123. doi: 10.12744/ijnpt.2015.0102-0123
- Leahy-Warren, P., McCarthy, G. and Corcoran, P. 2011. Postnatal Depression in First-Time Mothers: Prevalence and Relationships Between Functional and Structural Social Support at 6 and 12 Weeks Postpartum. *Archives of Psychiatric Nursing* 25(3), pp. 174-184. doi: 10.1016/j.apnu.2010.08.005
- Leahy-Warren, P., McCarthy, G. and Corcoran, P. 2012. First-time mothers: Social support, maternal parental self-efficacy and postnatal depression. *Journal of Clinical Nursing* 21(3-4), pp. 388-397. doi: [10.1111/j.1365-2702.2011.03701](https://doi.org/10.1111/j.1365-2702.2011.03701)
- Leahy-Warren, P., Newham, J. and Alderdice, F. 2018. Perinatal social support: panacea or a pitfall. *Journal of Reproductive and Infant Psychology* 36(3), pp. 219-221. doi: 10.1080/02646838.2018.1477242
- Leahy Warren, P. 2005. First-time mothers: social support and confidence in infant care. *Journal of Advanced Nursing* 50(5), pp. 479-488. doi: 10.1111/j.1365-2648.2005.03425.x
- Lefkovic, E. et al. 2018. Effect of maternal depression and anxiety on mother's perception of child and the protective role of social support. *Journal of Reproductive and Infant Psychology* 36(4), pp. 434-448. doi: <http://dx.doi.org/10.1080/02646838.2018.1475726>
- Leistikow, N., Baller, E. B., Bradshaw, P. J., Riddle, J. N., Ross, D. A. and Osborne, L. M. 2022. Prescribing Sleep: An Overlooked Treatment for Postpartum Depression. *Biological Psychiatry* S0006-3223(22), doi: 10.1016/j.biopsych.2022.03.006
- Levis, B., Negeri, Z., Ying, S., Andrea, B., Thombs, B., Stein, A. and Group, D. S. D. E. 2020. Accuracy of the Edinburgh Postnatal Depression Scale (EPDS) for screening to detect major depression among pregnant and postpartum women: systematic review and meta-analysis of individual participant data. *BMJ* 371, doi: 10.1136/bmj.m4022
- Lewis-Beck, M. S., Bryman, A. and Liao, T. F. 2004. *The SAGE Encyclopedia of Social Science Research Methods*. California: SAGE Publications, Inc.
- Liechty, T., Coyne, S. M., Collier, K. M. and Sharp, A. D. 2018. "It's Just Not Very Realistic": Perceptions of Media Among Pregnant and Postpartum Women. *Health Communication* 33(7), pp. 851-859. doi: 10.1080/10410236.2017.1315680
- Lin, N. 2001. *Social capital a theory of social structure and action*. Cambridge: Cambridge University Press.
- Mannay, D., Creaghan, J., Gallagher, D., Marzella, R., Mason, S., Morgan, M. and Grant, A. 2018. Negotiating closed doors and constraining deadlines: the potential of visual ethnography to

effectually explore private and public spaces of motherhood and parenting. *Journal of Contemporary Ethnography* 47(6), pp. 758-781.

Martin, J. L., McLean, G., Park, J., Martin, D. J., Connolly, M., Mercer, S. W. and Smith, D. J. 2014. Impact of socioeconomic deprivation on rate and cause of death in severe mental illness. *BMC Psychiatry* 14(1), p. 261. doi: 10.1186/s12888-014-0261-4

Mason, J. 2009. Six strategies for mixing methods and linking data in social science research. *NCRM Working Paper*. ESRC National Centre for Research Methods.

Maternal Mental Health Alliance. 2018. *Wales Perinatal Mental Health is Everyone's Business*. London: Maternal Mental Health Alliance.

Maternal Mental Health Alliance. 2020. *Map of Specialist Community Perinatal Mental Health Teams (Wales)*. London: Maternal Mental Health Alliance.

Maternity Action. 2022. *Cost of living on maternity leave survey*. Available at: <https://maternityaction.org.uk/cost-of-living-survey/> [Accessed: 25th November 2022].

Matley, D. 2020. "I miss my old life": Regretting motherhood on Mumsnet. *Discourse, Context & Media* 37, p. 100417. doi: <https://doi.org/10.1016/j.dcm.2020.100417>

Matthey, S., Kavanagh, D. J., Howie, P., Barnett, B. and Charles, M. 2004. Prevention of postnatal distress or depression: an evaluation of an intervention at preparation for parenthood classes. *Journal of Affective Disorders* 79(1-3), pp. 113-126. doi: 10.1016/s0165-0327(02)00362-2

Matvienko-Sikar, K., Meedya, S. and Ravalidi, C. 2020. Perinatal mental health during the COVID-19 pandemic. *Women and Birth* 33(4), p. 309.

McArthur, M. and Winkworth, G. 2017. What do we know about the social networks of single parents who do not use supportive services? *Child and Family Social Work* 22(2), pp. 638-647. doi: <http://dx.doi.org/10.1111/cfs.12278>

McCarthy, M. and McMahon, C. 2008. Acceptance and experience of treatment for postnatal depression in a community mental health setting. *Health Care for Women International* 29(6), pp. 618-637. doi: 10.1080/07399330802089172

McCosker, H., Barnard, A. and Gerber, R. eds. 2001. *Undertaking sensitive research: Issues and strategies for meeting the safety needs of all participants*. *Forum: Qualitative Social Research*.

McLeish, J. and Redshaw, M. 2017. Mothers' accounts of the impact on emotional wellbeing of organised peer support in pregnancy and early parenthood: a qualitative study. *BMC Pregnancy and Childbirth* 17(1), p. 28. doi: 10.1186/s12884-017-1220-0

Medina, S. and Magnuson, S. 2009. Motherhood in the 21st century: Implications for counselors. *Journal of Counseling and Development* 87(1), pp. 90-96.

Meeussen, L. and Van Laar, C. 2018. Feeling pressure to be a perfect mother relates to parental burnout and career ambitions. *Frontiers in Psychology* 9, p. 2113.

Meltzer-Brody, S., Boschloo, L., Jones, I., Sullivan, P. F. and Penninx, B. W. 2013. The EPDS-Lifetime: assessment of lifetime prevalence and risk factors for perinatal depression in a large cohort of depressed women. *Archives of Women's Mental Health* 16(6), pp. 465-473.

Mental Health Foundation. 2016. *Mental Health in Wales: Fundamental Facts 2016*. Available at: <https://www.mentalhealth.org.uk/sites/default/files/2022-06/The-Fundamental-facts-about-mental-health-2016.pdf> [Accessed: 18th October 2022].

Mercer, R. T. 2004. Becoming a mother versus maternal role attainment. *Journal of Nursing Scholarship* 36(3), pp. 226-232. doi: 10.1111/j.1547-5069.2004.04042.x

Miller, T. 2007. "Is This What Motherhood is All About?": Weaving Experiences and Discourse through Transition to First-Time Motherhood. *Gender and Society* 21(3), pp. 337-358. doi: 10.1177/0891243207300561

Mirick, R. G. and Wladkowski, S. P. 2019. Skype in Qualitative Interviews: Participant and Researcher Perspectives. *The Qualitative Report* 24(12), pp. 3061-3072.

Mitchell, S. et al. 2018. The Millennium Villages Project: a retrospective, observational, endline evaluation. *The Lancet Global Health* 6(5), pp. e500-e513. doi: 10.1016/S2214-109X%2818%2930065-2

Moffat, M. A., Bell, J. S., Porter, M. A., Lawton, S., Hundley, V., Danielian, P. and Bhattacharya, S. 2007. Decision making about mode of delivery among pregnant women who have previously had a caesarean section: A qualitative study. *BJOG: An International Journal of Obstetrics and Gynaecology* 114(1), pp. 86-93. doi: 10.1111/j.1471-0528.2006.01154.x

Molgora, S. and Accordini, M. 2020. Motherhood in the Time of Coronavirus: The Impact of the Pandemic Emergency on Expectant and Postpartum Women's Psychological Well-Being. *Frontiers in Psychology* 11, p. 567155. doi: 10.3389/fpsyg.2020.567155

Moon, R. Y., Mathews, A., Oden, R. and Carlin, R. 2019. Mothers' Perceptions of the Internet and Social Media as Sources of Parenting and Health Information: Qualitative Study. *Journal of Medical Internet Research* 21(7), p. e14289. doi: 10.2196/14289

Moore, J. W. 2016. What Is the Sense of Agency and Why Does it Matter? *Frontiers in Psychology* 7, p. 1272. doi: 10.3389/fpsyg.2016.01272

Morriss, L. 2018. Haunted futures: The stigma of being a mother living apart from her child(ren) as a result of state-ordered court removal. *The Sociological Review* 66(4), pp. 816-831. doi: 10.1177/0038026118777448

Munk-Olsen, T., Laursen, T. M., Pedersen, C. B., Mors, O. and Mortensen, P. B. 2006. New parents and mental disorders: a population-based register study. *JAMA* 296(21), pp. 2582-2589.

Myers, S. and Johns, S. E. 2018. Postnatal depression is associated with detrimental life-long and multi-generational impacts on relationship quality. *PeerJ* 6, p. e4305.

Nagle, U. and Farrelly, M. 2018. Women's views and experiences of having their mental health needs considered in the perinatal period. *Midwifery* 66, pp. 79-87. doi: <https://doi.org/10.1016/j.midw.2018.07.015>.

Nagy, E., Moore, S., Silveira, P. P., Meaney, M. J., Levitan, R. D. and Dubé, L. 2020. Low socioeconomic status, parental stress, depression, and the buffering role of network social capital in mothers. *Journal of Mental Health*, pp. 1-8. doi: 10.1080/09638237.2020.1793118

Nakamura, Y., Takeishi, Y., Ito, N., Ito, M., Atogami, F. and Yoshizawa, T. 2015. Comfort with motherhood in late pregnancy facilitates maternal role attainment in early postpartum. *The Tohoku Journal of Experimental Medicine* 235(1), pp. 53-59.

National Assembly for Wales. 2018. *Work it out: parenting and employment in Wales*. Available at: www.assembly.wales/laid%20documents/cr-ld11669/cr-ld11669-e.pdf [Accessed: 2nd May 2019].

National Childbirth Trust. 2018. *The baby blues: what to expect*. Available at: <https://www.nct.org.uk/life-parent/how-you-might-be-feeling/baby-blues-what-expect> [Accessed: 2nd May 2019].

National Health Service. 2011. *Postnatal depression 'often unreported'*. Available at: <https://www.nhs.uk/news/pregnancy-and-child/postnatal-depression-often-unreported/> [Accessed: 2nd May 2019].

National Health Service. 2018. *Overview - Postnatal depression*. Available at: <https://www.nhs.uk/mental-health/conditions/post-natal-depression/overview/> [Accessed: 18th June 2022].

Nelson-Coffey, S. 2018. Married... with children: The science of well-being in marriage and family life. In: Diener, E., Oishi, S. and Tay, L. eds. *Handbook of well-being*. Salt Lake City, UT: DEF Publishers.

Netsi, E., Pearson, R. M., Murray, L., Cooper, P., Craske, M. G. and Stein, A. 2018. Association of persistent and severe postnatal depression with child outcomes. *JAMA Psychiatry* 75(3), pp. 247-253.

Nijhawan, L. P., Janodia, M. D., Muddukrishna, B. S., Bhat, K. M., Bairy, K. L., Udupa, N. and Musmade, P. B. 2013. Informed consent: Issues and challenges. *Journal of Advanced Pharmaceutical Technology and Research* 4(3), pp. 134-140. doi: 10.4103/2231-4040.116779

Nomaguchi, K. and Milkie, M. A. 2020. Parenthood and Well-Being: A Decade in Review. *Journal of Marriage and Family* 82(1), pp. 198-223. doi: 10.1111/jomf.12646

Nyström, K. and Öhring, K. 2004. Parenthood experiences during the child's first year: literature review. *Journal of Advanced Nursing* 46(3), pp. 319-330.

O'Neill, P., Cycon, A. and Friedman, L. 2019. Seeking social support and postpartum depression: A pilot retrospective study of perceived changes. *Midwifery* 71, pp. 56-62. doi: 10.1016/j.midw.2019.01.003

O'Mahoney, J. and Marks, A. 2014. *Researching Identity*. Oxford: Oxford University Press.

Oakley, A. 1979. *Becoming a mother*. Oxford: Martin Robertson & Company Ltd.

Oates, M. R. et al. 2004. Postnatal depression across countries and cultures: A qualitative study. *British Journal of Psychiatry* 184(46), pp. s10-16. doi: 10.1192/bjp.184.46.s10

Odenweller, K. G., Rittenour, C. E., Dillow, M. R., Metzger, A., Myers, S. A. and Weber, K. 2020. Ambivalent Effects of Stay-at-Home and Working Mother Stereotypes on Mothers' Intergroup and Interpersonal Dynamics. *Journal of Family Communication* 20(1), pp. 16-35. doi: 10.1080/15267431.2019.1663198

Office for National Statistics. 2019. *Families and the labour market, UK: 2019*. Available at: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/familiesandthelabourmarketengland/2019> [Accessed: 24th February 2022].

Office for National Statistics. 2022. *Employment rate of parents living with dependent children by family type and age of the youngest child in the UK: Table R*. Available at: <https://www-ons-gov-uk.abc.cardiff.ac.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/datasets/employmentrateofparentslivingwithdependentchildrenbyfamilytypeandageoftheyoungestchildtable/current> [Accessed: 27th November 2022].

Ohara, M. et al. 2017. Social support helps protect against perinatal bonding failure and depression among mothers: a prospective cohort study. *Scientific Reports* 7(1), p. 9546. doi: 10.1038/s41598-017-08768-3

Osorio-Castaño, J., Rodriguez-Gazquez, M. and Carvajal-Carrascal, G. 2017. Preparation for motherhood during pregnancy: A concept analysis. *Nursing Research and Education* 35(3), pp. 296-305. doi: 10.17533/udea.iee.v35n3a06

Pancer, S. M., Pratt, M., Hunsberger, B. and Gallant, M. 2000. Thinking ahead: complexity of expectations and the transition to parenthood. *Journal of Personality* 68(2), pp. 253-280. doi: 10.1111/1467-6494.00097

Payne, C. S. 2017. *Leisure Time in the UK: 2015*. Available at: <https://www.ons.gov.uk/economy/nationalaccounts/satelliteaccounts/articles/leisuretimeintheuk/2015> [Accessed: 23rd January 2019].

Pedersen, S. 2016. The good, the bad and the 'good enough' mother on the UK parenting forum Mumsnet. *Women's Studies International Forum* 59, pp. 32-38. doi: <https://doi.org/10.1016/j.wsif.2016.09.004>

Peltz, J. S., Rogge, R. D. and Sturge-Apple, M. L. 2018. Transactions within the family. *Journal of Family Psychology* 32(5), pp. 553-564. doi: 10.1037/fam0000413

Pham, L. 2018. *A Review of key paradigms: positivism, interpretivism and critical inquiry*. Adelaide: The University of Adelaide.

Philpott, L. F., Savage, E., Leahy-Warren, P. and Fitzgearld, S. 2020. Paternal Perinatal Depression: A Narrative Review. *International Journal of Mens Social and Community Health* 3(1), pp. e1-e15.

Pizur-Barnekow, K. and Erickson, S. 2011. Perinatal posttraumatic stress disorder: Implications for occupational therapy in early intervention practiced. *Occupational Therapy in Mental Health* 27(2), pp. 126-139. doi: 10.1080/0164212X.2011.566165

Poortinga, W. 2006. Social capital: an individual or collective resource for health? *Social Science and Medicine* 62(2), pp. 292-302.

Powell, C., Bedi, S., Nath, S., Potts, L., Trevillion, K. and Howard, L. 2020. Mothers' experiences of acute perinatal mental health services in England and Wales: a qualitative analysis. *Journal of Reproductive and Infant Psychology* 40(2), pp. 1-13.

Prabhakar, A. S. et al. 2017. "Let me know if you need anything": support realities of new mothers. *Proceedings of the 11th EAI International Conference on Pervasive Computing Technologies for Healthcare*. Barcelona, Spain, 23rd-26th May 2017. Spain: Association for Computing Machinery, pp. 31-40. doi: 10.1145/3154862.3154863

Putnam, R. D. 1993. *Making democracy work : civic traditions in modern Italy*. Princeton: Princeton University Press.

Razurel, C. and Kaiser, B. 2015. The Role of Satisfaction with Social Support on the Psychological Health of Primiparous Mothers in the Perinatal Period. *Women and Health* 55(2), pp. 167-186. doi: 10.1080/03630242.2014.979969

Razurel, C., Kaiser, B., Sellenet, C. and Epiney, M. 2013. Relation between perceived stress, social support, and coping strategies and maternal well-being: a review of the literature. *Women and Health* 53(1), pp. 74-99.

Read, D. M. Y., Crockett, J. and Mason, R. 2012. "It was a horrible shock": The experience of motherhood and women's family size preferences. *Women's Studies International Forum* 35(1), pp. 12-21. doi: 10.1016/j.wsif.2011.10.001

Redshaw, M. and Henderson, J. 2016. Who is actually asked about their mental health in pregnancy and the postnatal period? Findings from a national survey. *BMC Psychiatry* 16(1), p. 322. doi: 10.1186/s12888-016-1029-9

Regan, S. and Brown, A. 2019. Experiences of online breastfeeding support: Support and reassurance versus judgement and misinformation. *Maternal & Child Nutrition* 15(4), p. e12874. doi: 10.1111/mcn.12874

Rezigalla, A. A. 2020. Observational Study Designs: Synopsis for Selecting an Appropriate Study Design. *Cureus* 12(1), p. e6692. doi: 10.7759/cureus.6692

Rich, A. 1984. *Of woman born : motherhood as experience and institution*. London: Virago.

Richiardi, L., Pizzi, C. and Pearce, N. 2013. Commentary: Representativeness is usually not necessary and often should be avoided. *International Journal of Epidemiology* 42(4), pp. 1018-1022. doi: 10.1093/ije/dyt103

Righetti-Veltema, M., Bousquet, A. and Manzano, J. 2003. Impact of postpartum depressive symptoms on mother and her 18-month-old infant. *European Child & Adolescent Psychiatry* 12(2), pp. 75-83.

Roth, G., Vansteenkiste, M. and Ryan, R. M. 2019. Integrative emotion regulation: Process and development from a self-determination theory perspective. *Development and psychopathology* 31(3), pp. 945-956. doi: 10.1017/S0954579419000403

Royal College of Occupational Therapists. 2017. *Occupational therapy in neonatal services and early intervention: Practice Guideline*. Available at: <https://www.rcot.co.uk/practice-resources/rcot-publications/downloads/neonatal-services> [Accessed: 14th January 2019].

Royal College of Occupational Therapists. 2020. *Perinatal mental health training for occupational therapists: how involving clinical experts ensured programme relevance and credibility*. Available at: <https://www.rcot.co.uk/perinatal-blog-aug> [Accessed: 7th July 2022].

Royal College of Psychiatrists. 2015. *Perinatal Mental Health Services: Recommendations for the provision of services for childbearing women*. Available at:

<https://www.rcpsych.ac.uk/usefulresources/publications/collegereports/cr/cr197.aspx> [Accessed: 22nd January 2019].

Royal College of Psychiatrists. 2018. *Postnatal Depression*. Available at: <https://www.rcpsych.ac.uk/mental-health/problems-disorders/post-natal-depression> [Accessed: 27th November 2022].

Ruddick, S. 1995. *Maternal thinking : toward a politics of peace*. Boston: Beacon Press.

Ruthven, I., Buchanan, S. and Jardine, C. 2018. Isolated, overwhelmed, and worried: Young first-time mothers asking for information and support online. *Journal of the Association for Information Science and Technology* 69(9), pp. 1073-1083. doi: 10.1002/asi.24037

Ryan, G. 2018. Introduction to positivism, interpretivism and critical theory. *Nurse Researcher* 25(4), pp. 14-20. doi: 10.7748/nr.2018.e1466

Ryan, G. S. 2013. Online social networks for patient involvement and recruitment in clinical research. *Nurse Researcher* 21(1), pp. 35-39. doi: 10.7748/nr2013.09.21.1.35.e302

Saldaña, J. 2021. *The coding manual for qualitative researchers*. 4th ed. Los Angeles: SAGE Publications Ltd.

Schaffnit, S. B. and Sear, R. 2017. Support for new mothers and fertility in the United Kingdom: Not all support is equal in the decision to have a second child. *Population Studies* 71(3), pp. 345-361. doi: 10.1080/00324728.2017.1349924

Schuppan, K. M., Roberts, R. and Powrie, R. 2019. Paternal Perinatal Mental Health: At-Risk Fathers' Perceptions of Help-Seeking and Screening. *The Journal of Men's Studies* 27(3), pp. 307-328. doi: 10.1177/1060826519829908

Sepulveda, A. 2019. A Call to Action: Addressing Maternal Mental Health in Pediatric Occupational Therapy Practice. *Annals of International Occupational Therapy* 2(4), pp. 195-200. doi: 10.3928/24761222-20190813-02

Shaw, R. L. and Giles, D. C. 2009. Motherhood on ice? A media framing analysis of older mothers in the UK news. *Psychology & Health* 24(2), pp. 221-236. doi: 10.1080/08870440701601625

Shrestha, D., Dhoubhadel, B. G., Parry, C. M., Prajapati, B., Ariyoshi, K. and Mahaseth, C. 2017. Predicting deaths in a resource-limited neonatal intensive care unit in Nepal. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 111(5), pp. 287-293. doi: 10.1093/TRSTMH/TRX053

Sims-Schouten, W. and Riley, S. 2014. *Employing a Form of Critical Realist Discourse Analysis for Identity Research*. Oxford: Oxford University Press.

Sin, C. H. 2005. Seeking informed consent: Reflections on research practice. *Sociology* 39(2), pp. 277-294.

Slootjes, H., McKinstry, C. and Kenny, A. 2016. Maternal role transition: Why new mothers need occupational therapists. *Australian Occupational Therapy Journal* 63(2), pp. 130-133. doi: 10.1111/1440-1630.12225

Smith, J. A. 1999. Towards a relational self: Social engagement during pregnancy and psychological preparation for motherhood. *British Journal of Social Psychology* 38(4), pp. 409-426.

SmithBattle, L. I. 2013. Reducing the stigmatization of teen mothers. *MCN. The American Journal of Maternal Child Nursing* 38(4), pp. 235-241. doi: 10.1097/NMC.0b013e3182836bd4

Soltani, F., Maleki, A., Shobeiri, F., Shamsaei, F., Ahmadi, F. and Roshanaei, G. 2017. The limbo of motherhood: Women's experiences of major challenges to cope with the first pregnancy. *Midwifery* 55, pp. 38-44.

Spowart, L. and Nairn, K. 2013. (Re)performing emotions in diary-interviews. *Qualitative Research* 14(3), pp. 327-340. doi: 10.1177/1468794112473498

Stanescu, A. D., Balalau, D. O., Ples, L., Paunica, S. and Balalau, C. 2018. Postpartum depression: Prevention and multimodal therapy. *Journal of Mind and Medical Sciences* 5(2), pp. 163-168.

Staneva, A. and Wittkowski, A. 2013. Exploring beliefs and expectations about motherhood in Bulgarian mothers: A qualitative study. *Midwifery* 29(3), pp. 260-267. doi: 10.1016/j.midw.2012.01.008

Statista. 2022a. *Mental health in the United Kingdom (UK)*. Available at: <https://www.statista.com/topics/8164/mental-health-in-the-uk/> [Accessed: 9th June 2022].

Statista. 2022b. *Employment rate in the UK 1971-2022, by gender*. Office for National Statistics. Available at: <https://www.statista.com/statistics/280120/employment-rate-in-the-uk-by-gender/> [Accessed: 10th June 2022].

Statistics for Wales. 2008. *A Statistical Focus on Rural Wales*. Welsh Assembly Government Available at: <https://gov.wales/sites/default/files/statistics-and-research/2018-12/080515-statistical-focus-rural-wales-08-en.pdf> [Accessed: 27th November 2022].

Strange, C., Bremner, A., Fisher, C., Howat, P. and Wood, L. 2016. Mothers' group participation: associations with social capital, social support and mental well-being. *Journal of Advanced Nursing* 72(1), pp. 85-98. doi: 10.1111/jan.12809

Sullivan, O. and Gershuny, J. 2017. Speed-Up Society? Evidence from the UK 2000 and 2015 Time Use Diary Surveys. *Sociology* 52(1), pp. 20-38. doi: 10.1177/0038038517712914

Sun, H., Conrad, F. G. and Kreuter, F. 2020. The Relationship between Interviewer-Respondent Rapport and Data Quality. *Journal of Survey Statistics and Methodology*, doi: 10.1093/jssam/smz043

Suwalska, J., Napierała, M., Bogdański, P., Łojko, D., Wszolek, K., Suchowiak, S. and Suwalska, A. 2021. Perinatal Mental Health during COVID-19 Pandemic: An Integrative Review and Implications for Clinical Practice. *Journal of Clinical Medicine* 10(11), doi: 10.3390/jcm10112406

Swann Jr., W. B. and Bosson, J. K. 2008. Identity Negotiation: A Theory of Self and Social Interaction. In: O. P. John, R. W. Robins and L. A. Pervin eds. *Handbook of Personality: Theory and Research*. 3rd ed. New York: Guilford Press, pp. 448-471.

Swann, W. B., Johnson, R. E. and Bosson, J. K. 2009. Identity negotiation at work. *Research in Organizational Behavior* 29, pp. 81-109. doi: 10.1016/j.riob.2009.06.005

Taherdoost, H. 2016. Validity and Reliability of the Research Instrument; How to Test the Validation of a Questionnaire/Survey in a Research. *International Journal of Academic Research in Management* 5(3), pp. 28-36. doi: <http://dx.doi.org/10.2139/ssrn.3205040>

Tani, F. and Castagna, V. 2017. Maternal social support, quality of birth experience, and post-partum depression in primiparous women. *Journal of Maternal-Fetal & Neonatal Medicine* 30(6), pp. 689-692. doi: 10.1080/14767058.2016.1182980

Tanner Stapleton, L. R., Schetter, C. D., Westling, E., Rini, C., Glynn, L. M., Hobel, C. J. and Sandman, C. A. 2012. Perceived partner support in pregnancy predicts lower maternal and infant distress. *Journal of Family Psychology* 26(3), pp. 453-463. doi: 10.1037/a0028332

Tariq, S. and Woodman, J. 2013. Using mixed methods in health research. *JRSM short reports* 4(6), p. 2042533313479197. doi: 10.1177/2042533313479197

The Social Issues Research Centre. 2011. *The Changing Face of Motherhood*. Available at: <http://www.sirc.org/publik/CFOM.pdf> [Accessed: 24th February 2022].

Thombs, B. D. et al. 2015. Diagnostic accuracy of the Edinburgh Postnatal Depression Scale (EPDS) for detecting major depression in pregnant and postnatal women: protocol for a systematic review and individual patient data meta-analyses. *BMJ Open* 5(10), p. e009742.

Timans, R., Wouters, P. and Heilbron, J. 2019. Mixed methods research: what it is and what it could be. *Theory and Society* 48(2), pp. 193-216. doi: 10.1007/s11186-019-09345-5

Topolovec-Vranic, J. and Natarajan, K. 2016. The use of social media in recruitment for medical research studies: a scoping review. *Journal of Medical Internet Research* 18(11), p. e286.

Townsend, E. A. and Polatajko, H. J. 2007. *Enabling occupation II : advancing an occupational therapy vision for health, well-being & justice through occupation*. Ottawa: Canadian Association of Occupational Therapists.

Tsivos, Z.-L., Calam, R., Sanders, M. R. and Wittkowski, A. 2015. Interventions for postnatal depression assessing the mother-infant relationship and child developmental outcomes: a systematic review. *International Journal of Women's Health* 7, pp. 429-447. doi: 10.2147/IJWH.S75311

Turpin, M. J. and Iwama, M. K. 2010. *Using Occupational Therapy Models in Practice: A Fieldguide*. London: Churchill Livingstone.

Tzanakis, M. 2013. Social capital in Bourdieu's, Coleman's and Putnam's theory: empirical evidence and emergent measurement issues. *Educate* 13(2), pp. 2-23.

Uthede, S., Nilsson, I., Wagman, P., Håkansson, C. and Farias, L. 2022. Occupational balance in parents of pre-school children: Potential differences between mothers and fathers. *Scandinavian Journal of Occupational Therapy*, pp. 1-10. doi: 10.1080/11038128.2022.2046154

Van den Broeck, J., Cunningham, S. A., Eeckels, R. and Herbst, K. 2005. Data cleaning: detecting, diagnosing, and editing data abnormalities. *PLOS Medicine* 2(10), p. e267. doi: 10.1371/journal.pmed.0020267

Vigod, S. N., Tarasoff, L. A., Bryja, B., Dennis, C.-L., Yudin, M. H. and Ross, L. E. 2013. Relation between place of residence and postpartum depression. *Canadian Medical Association Journal* 185(13), pp. 1129-1135.

Wagman, P. and Håkansson, C. 2014. Introducing the occupational balance questionnaire (OBQ). *Scandinavian Journal of Occupational Therapy* 21(3), pp. 227-231.

Wagman, P. and Håkansson, C. 2018. Occupational balance from the interpersonal perspective: A scoping review. *Journal of Occupational Science*, pp. 1-9. doi: 10.1080/14427591.2018.1512007

Wagman, P. and Håkansson, C. 2019. Occupational balance from the interpersonal perspective: A scoping review. *Journal of Occupational Science* 26(4), pp. 537-545.

Wagman, P., Håkansson, C. and Björklund, A. 2012. Occupational balance as used in occupational therapy: A concept analysis. *Scandinavian Journal of Occupational Therapy* 19(4), pp. 322-327. doi: 10.3109/11038128.2011.596219

Wagman, P., Håkansson, C. and Jonsson, H. 2015. Occupational Balance: A Scoping Review of Current Research and Identified Knowledge Gaps. *Journal of Occupational Science* 22(2), pp. 160-169. doi: 10.1080/14427591.2014.986512

Wallwiener, S. et al. 2019. Epidemiology of mental disorders during pregnancy and link to birth outcome: a large-scale retrospective observational database study including 38,000 pregnancies. *Archives of Gynecology and Obstetrics* 299(3), pp. 755-763.

Weinstein, E. A. and Deutschberger, P. 1963. Tasks, Bargains, and Identities in Social Interaction. *Social Forces* 42(4), pp. 451-456.

Welsh Government. 2017a. *Flying Start - Annex: Parenting Support Guidance*. Available at: <https://gov.wales/sites/default/files/publications/2019-07/flying-start-parenting-support-guidance.pdf> [Accessed: 18th May 2022].

Welsh Government. 2017b. *Flying Start Health Programme Guidance*. Available at: https://gov.wales/sites/default/files/publications/2019-07/flying-start-health-programme-guidance_0.pdf [Accessed: 18th May 2022].

Welsh Government. 2022a. *Flying Start: Guidance*. Available at: <https://gov.wales/flying-start-guidance> [Accessed: 13th May 2022].

Welsh Government. 2022b. *Welsh Index of Multiple Deprivation (WIMD) 2019*. Available at: <https://statswales.gov.wales/Catalogue/Community-Safety-and-Social-Inclusion/Welsh-Index-of-Multiple-Deprivation> [Accessed: 14th January 2022].

Wheatley, D. 2017. *Time Well Spent: Subjective Well-Being and the Organization of Time*. London: Rowman & Littlefield International.

Wilcock, A. A. and Hocking, C. 2015. *An Occupational Perspective of Health*. 3rd ed. New Jersey: SLACK Incorporated.

Wiles, R., Crow, G., Heath, S. and Charles, V. 2008. The Management of Confidentiality and Anonymity in Social Research. *International Journal of Social Research Methodology* 11(5), pp. 417-428. doi: 10.1080/13645570701622231

Willson, R. 2019. Transitions theory and liminality in information behaviour research. *Journal of Documentation* 75(4), pp. 838-856. doi: 10.1108/JD-12-2018-0207

Winkworth, G., McArthur, M., Layton, M. and Thompson, L. 2010. Someone to check in on me: Social capital, social support and vulnerable parents with very young children in the Australian capital territory. *Child and Family Social Work* 15(2), pp. 206-215. doi: 10.1111/j.1365-2206.2009.00660.x

Witcombe-Hayes, S., Jones, I., Gauci, P., Burns, J., Jones, S. and O'Leary, S. . 2018. *From bumps to babies: perinatal mental health care in Wales*. Cardiff: NSPCC, N.C.f.M.H., Mind Cymru, Mental Health Foundation, Maternal Mental Health Everyone's Business. Available at: <https://www.nspcc.org.uk/globalassets/documents/research-reports/from-bumps-to-babies-perinatal-mental-health-care-in-wales-full-report-english.pdf> [Accessed: 13th January 2022].

World Federation of Occupational Therapists. 2012. *About Occupational Therapy*. Available at: <https://www.wfot.org/about-occupational-therapy> [Accessed: 16th May 2019].

World Health Organisation. 2014. *Mental health: A state of well-being*. Available at: https://www.who.int/features/factfiles/mental_health/en/ [Accessed: 8th May 2019].

World Health Organisation. 2022. *Mental disorders*. Available at: <https://www-who-int.abc.cardiff.ac.uk/news-room/fact-sheets/detail/mental-disorders> [Accessed: 10th June 2022].

World Health Organization. 2019. *Maternal mental health*. Available at: https://www.who.int/mental_health/maternal-child/maternal_mental_health/en/ [Accessed: 2nd May 2019].

Yazdani, F., Harb, A., Rassafiani, M., Nobakht, L. and Yazdani, N. 2018. Occupational therapists' perception of the concept of occupational balance. *Scandinavian Journal of Occupational Therapy* 25(4), pp. 288-297. doi: 10.1080/11038128.2017.1325934

Yim, I. S., Stapleton, L. R. T., Guardino, C. M., Hahn-Holbrook, J. and Schetter, C. D. 2015. Biological and Psychosocial Predictors of Postpartum Depression: Systematic Review and Call for Integration. *Annual Review of Clinical Psychology* 11(1), pp. 99-137. doi: 10.1146/annurev-clinpsy-101414-020426

Zachariadis, M., Scott, S. and Barrett, M. 2013. Methodological Implications of Critical Realism for Mixed-Methods Research. *MIS Quarterly* 37(3), pp. 855-879.

Zhou, C. et al. 2018. Associations between social capital and maternal depression: results from a follow-up study in China. *BMC Pregnancy & Childbirth* 18, pp. 1-1. doi: 10.1186/s12884-018-1673-9

Zimmerman, D. H. and Wieder, D. L. 1977. The Diary: Diary-Interview Method. *Urban Life* 5(4), pp. 479-498. doi: 10.1177/089124167700500406

Zimmerman, M., Posternak, M. A., Chelminski, I. and Friedman, M. 2005. Standardized clinical outcome rating scale for depression for use in clinical practice. *Depression and Anxiety* 22(1), pp. 36-40. doi: 10.1002/da.20046

Appendices

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Appendix 1: Desired Responses (Phase One)

Research Questions	Answering Questions	Predicted answers from participants
<p>1. What is understood by the terms occupational engagement, balance of occupations and social capital in relation to motherhood?</p>	<p>What is occupational engagement for you as a mother? Is this primarily a solitary activity or social? Is this important?</p>	<p>Transition to activities revolving around the baby - better as a social activity rather than isolation</p>
	<p>How do you think occupations can be balanced? Is this an important factor within life? Does this include elements of all three categories: self-care, leisure and productivity?</p>	<p>Right levels of activities for both baby and mother - having support to look after the baby and take a break - including baby in activities that you want to do as a woman, e.g. meet friends or exercise</p>
	<p>Do you think the experiences of relationships from your past has influenced your role as mother? Do you think social support is important? Does societal expectations affect how you interact with others and ever alter the occupations you engage in? Do you think it is important to engage in community activities?</p>	<p>Experience of relationship with own mother was an influencer, witnessing other mothers (friends/relatives) has also influenced own role. Social support is important for understanding role and reinforcing confidence within role. Community activities can be very helpful but more available in deprived areas, feel have to do more for yourself if living in more affluent areas</p>

<p>2. How does the level of accrued social capital, differences in daily occupational engagement and occupational balance between mothers impact on postnatal depression symptoms?</p>	<p>Accrued social capital: Did you have a close relationships with your parents? Do you still have a close relationship with your parents? Do you have supportive friends? Do you have friends with children of similar ages? Do you engage in community activities with your baby? Do you feel confident within your role as mother? Do you feel supported within your role? Who gives you the most support? Can you ask for more support if it is needed? Do you have opportunities to socialise with and without your child?</p>	<p>Good relationship with parents and parent support: lower EPDS score. Good relationship with partner: lower EPDS score. Social support and community engagement: lower EPDS score. Most supported by partner? Ability to ask for more support: lower EPDS score</p>
	<p>Occupational engagement: Daily routine (normal). Are there any other activities that would be considered within a daily routine? Are there any activities that would be considered more special occasions that happen? How often do these happen?</p>	<p>Daily routine includes activities for the mother and a level of support: lower EPDS score. Ability to have time to self, e.g. babysitting etc. can reduce stress and lower EPDS score</p>
	<p>Occupational Balance: Would you say there is balance in your life? Do you feel you get enough sleep, rest time, leisure, self-care, work and family? Do you have the time to do any activities you previously enjoyed? Do you feel satisfied with the activities that currently make up your day?</p>	<p>If balanced and satisfied: Lower EPDS score</p>
<p>Demographics</p>	<p>Is this affected by age, number or children, marital status, employment status, financial position, previous history of mental health problems?</p>	<p>Age increased: lower EPDS score. Number of children increases: higher EPDS score. Married: Lower EPDS score. Employed: higher EPDS score (- may be lower if work is a positive environment). Better finances: lower EPDS score. Previous MH problems: higher EPDS score.</p>

Appendix 2: Questionnaire Layout (Phase One)

Ques No.	Question	Responses	Skips
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1 These first questions will be finding out about you and your family to better understand your individual lifestyle

Please can you tell me your age?

Numerical text box

2 **TABLE**
Please can you provide the following information about your child/children (responses allowed for up to 7 children):

Please can you provide the following information about your child/children:				
	When was this child born?		Does this child live with you?	Does this child have a disability?
	Month (MM)	Year (YYYY)		
Child 1	<input type="text"/>	<input type="text"/>	<input type="text" value=""/>	<input type="text" value=""/>
Child 2	<input type="text"/>	<input type="text"/>	<input type="text" value=""/>	<input type="text" value=""/>
Child 3	<input type="text"/>	<input type="text"/>	<input type="text" value=""/>	<input type="text" value=""/>
Child 4	<input type="text"/>	<input type="text"/>	<input type="text" value=""/>	<input type="text" value=""/>
Child 5	<input type="text"/>	<input type="text"/>	<input type="text" value=""/>	<input type="text" value=""/>
Child 6	<input type="text"/>	<input type="text"/>	<input type="text" value=""/>	<input type="text" value=""/>
Child 7	<input type="text"/>	<input type="text"/>	<input type="text" value=""/>	<input type="text" value=""/>

a) When was this child born?

Numerical text box (month and year)

b) Does this child live with you?

Yes

No

Deceased

		Prefer Not to Say
	c) Does this child have a disability?	Yes
		No
		Prefer Not to Say
3	How would you best describe your current relationship status?	In a married couple
		In a civil partner couple
		In a cohabiting couple
		Lone parent
		Other (please specify)
4	If you're in a relationship, is your partner:	Opposite sex
		Same sex
		Prefer not to say
		Not applicable
5	What is your postcode? (e.g. CF10 3AT)	<i>Text box</i>
	This information is to check if you live within an area with schemes available, such as Flying Start	
6	What is your current employment status?	Full-time employee
	Please select all that apply	Part-time employee
		Volunteer

- 7 Who helps to care for your child/children?
Please select all that apply
- Student
 - Self-employed
 - Not employed
 - Maternity leave
 - Prefer not to disclose
 - Other (please specify)
 - Partner (current)
 - Partner (former)
 - Grandparents
 - Other Family
 - Nursery
 - Playgroups
 - School
 - Childminder
 - Nanny
 - Other (please specify)
 - None
- 8 How would you describe your financial situation?
- Comfortable
 - Manageable
 - Difficult

9 Have you ever been diagnosed with, or received treatment for, a mental health problem?

Yes
No

If “no” selected, skip to question 14

10 Please state the mental health condition, if you are happy to do so.

Text box

11 Have you ever been diagnosed with, or received treatment for, a mental health problem **related to your pregnancy or since giving birth?**

Yes
No

If “no” selected, skip to question 14

12 Please state the mental health condition, if you are happy to do so.

13 **TABLE**

Have you had any input from the following?

Have you had any input from the following?			
	Did you have input?		How long were you supported by this team? <i>Please provide an estimate if not sure</i>
	Yes	No	Months
Community specialist perinatal team	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Admission to mental health ward	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Admission to mother and baby unit	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Support from perinatal charity	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Homestart	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Flying Start	<input type="radio"/>	<input type="radio"/>	<input type="text"/>
Other (Please Specify) <input type="text"/>	<input type="radio"/>	<input type="radio"/>	<input type="text"/>

a) Did you have input?

Yes
No

b) How long were you supported by this team? Please provide an estimate if not sure

Numerical text box (months)

14 **EPDS**

As you have recently had a baby, we would like to know how you are feeling. Please choose the answers that come closest to how you have felt in the **past 7 days** - not just how you feel today.

I have been able to laugh and see the funny side of things

- As much as I always could
- Not quite so much now
- Definitely not so much now
- Not at all

15 I have looked forward with enjoyment to things

- As much as I ever did
- Rather less than I used to
- Definitely less than I used to
- Hardly at all

16 I have blamed myself unnecessarily when things went wrong

- Yes, most of the time
- Yes, some of the time
- Not very often
- No, never

17 I have been anxious or worried for no good reason

- No not at all
- Hardly ever

		Yes, sometimes
		Yes, very often
18	I have felt scared or panicky for no good reason	Yes, quite a lot
		Yes, sometimes
		No, not much,
		No, not at all
19	Things have been getting on top of me	Yes, most of the time I haven't been able to cope at all
		Yes, sometimes I haven't been coping as well as usual
		No, most of the time I have coped quite well
		No, I have been coping as well as ever
20	I have been so unhappy that I have had difficulty sleeping	Yes, most of the time
		Yes, some of the time
		Not very often
		No, never
21	I have felt sad or miserable	Yes, most of the time
		Yes, some of the time
		Not very often
		No, never
22	I have been so unhappy that I have been crying	Yes, most of the time
		Yes, quite often

		Only occasionally	
		No, never	
23	The thought of harming myself has occurred to me	Yes, quite often	Links to NHS and MIND website with information on postnatal depression: signs, symptoms and treatment options. Link to PANDAS, which provides advice and support on postnatal depression with a support helpline telephone number.
		Sometimes	
		Hardly ever	
		Never	
	<p>Please speak to your Health Visitor, Midwife or other healthcare professional if you would like to discuss any of the topics raised here.</p> <p>Your health visitor or midwife can also help if you would like further information about support services offered via the NHS. You will find their details on your antenatal notes.</p> <p>You can also talk to the Samaritans in confidence, 24 hours a day, for free from any phone on 116 123.</p> <p>Additional information is available from the following sources:</p> <p>NHS</p> <p>MIND</p>		

PANDAS

- 24 This section will be exploring your experience of motherhood and the associated activities.
- The use of the word 'activities' within this next section includes any activity you engage in, for example getting dressed, making food, meeting up with friends/family. The repetitive activities you complete each day (e.g. make bed, clean teeth, eating, caring for your child/children) are called 'daily activities'.
- Looking back to before the birth of your first child, what were your feelings about becoming a mother? *Text box*
- 25 Following the birth of your child/children, how do you feel about being a mother? *Text box*
- 26 Please can you indicate which activities you complete in a typical week day:
- Please indicate all activities, no matter how small *Afternoon*
- Example of Morning: Wake up around 6am or when baby awake, feed baby, change baby, *Evening*

	brush my teeth, toilet break, make quick breakfast around 8am, get myself and baby changed into new clothes, sit down to watch TV for half hour	Night	
	Example of Night: Baby woke up 4 times for feeds, awake for roughly 1 hour each time, baby and myself managed to get back to sleep		
27	Have your daily activities/routines changed since having a child?	Everything has changed Most things have changed Not much has changed Nothing has changed at all	
28	If there are changes, please tell me how these activities/routines have changed?	<i>Text box</i>	Only shown if “Nothing has changed at all” is not selected
29	Whose company do you like when you are doing your daily activities? (for example, caring for children or eating meals) Please select all that apply	Alone Partner (current) Partner (former) Your mother Your father Your mother-in-law Your father-in-law	

- Other family members
- Friends with children
- Friends without children
- Other (please specify)

30 How do you understand the term 'balance' in relation to your daily activities and routines?

Text box

31 **TABLE**

Would you agree or disagree that a balanced lifestyle should include activities within each of the following categories:

Would you agree or disagree that a balanced lifestyle should include activities within each of the following categories:				
	Strongly Agree	Agree	Disagree	Strongly Disagree
Self-care <i>(for yourself)</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Leisure <i>(any enjoyable activities)</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Productivity <i>(activities resulting with a sense of achievement)</i>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Rest/Sleep	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

a) Self-care (for yourself)

b) Leisure (any enjoyable activity)

c) Productivity (activities resulting with a sense of achievement)

d) Rest/Sleep

- Strongly Agree
- Agree
- Disagree
- Strongly Disagree

32 Are you a member of or attend any of the following groups or organisations?

This can include activities for yourself and the baby or just for yourself. This can include

- Mother and baby playgroup
- Sensory group
- Swimming playgroup

formal and informal groups, for example paid groups, support groups, leisure groups or online community groups.

Please select all that apply

- Singing and story group
- Pram walking group
- Parent Teacher Association
- Breastfeeding support group
- A regular meet-up (e.g. with other new mums)
- Religious groups
- Workout class
- Mums go green (online)
- Mumsnet (online)
- Mums of little ones (online)
- Out and about activities (online)
- Other groups (please specify)
- I don't attend any groups

If "I don't attend groups" is selected, skip to question 37

33 Has your involvement with groups/organisations changed since having a child/children?

- Yes, increased overall
- Stayed about the same but the groups have changed
- Stayed about the same and the groups are the same
- Yes, decreased overall

34 Which group/organisation would you consider as the most important to you?

Only the groups selected in question 32 will appear here

Please note, no options will appear here if you have not ticked any group involvement in the above question

- 35 On average, how often do you engage with this group/organisation?
- Daily
 - Every 2-3 days
 - Weekly
 - Monthly
 - Yearly
 - Other (please specify)
- 36 What is the main benefit of the group/organisation?
- Please select all that apply
- Mutual support
 - Making friends
 - Children to play with my own child
 - Gathering knowledge
 - Advice
 - Reassurance
 - Quality time with child
 - Other (please specify)
- 37 We take on a number of different roles in life. Which of these roles do you think apply to you?
- Please select all that apply
- Wife
 - Partner
 - Daughter

- Daughter-in-law
- Mother
- Sister
- Cousin
- Niece
- Aunty
- Godmother
- Friend
- Employee
- Employer
- Student
- Advocate
- Volunteer
- Other (please specify)

38 This section will explore the support you receive and how important that support is to you.

TABLE

Please can you identify the type of support you receive from the following persons:

Please select all that apply

a) Financial

b) Emotional

c) Childcare (for work)

d) Childcare (for social)

e) Advice

f) Domestic chores

g) Transport

Shopping

h) Call on in an emergency

i) Can ask for additional help if needed

39

Who are the most important people in your support network?

Please select all that apply

Please can you identify the type of support you receive from the following persons:							
Please select all that apply							
	Father(s) of your child/ children	Your parents	Your in-laws	Other family members	Your friends/colleagues	Healthcare professional	No support received
Financial	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Emotional	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Childcare (for work)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Childcare (for social)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Advice	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Domestic Chores	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Transport	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shopping	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Call on in an emergency	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Can ask for additional help if needed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Father(s) of your child/children

Your parents

Your in-laws

Other family members

Your friend/colleagues

Healthcare professional

No support received

Partner (current)

Partner (former)

Mother

Father

Sister

- Brother
- Mother-in-law
- Father-in-law
- Other family member (please specify)
- Friends with children
- Friends without children
- Other mothers
- Online friends
- Colleagues
- Healthcare professional
- Other (please specify)

40 How do you feel about accepting support from others?

Text box

41 Is there additional support you feel you need?

Yes (please specify)

No

TABLE

Please can you provide information on how you socialise, i.e. spend time:

Please select all that apply

- a) Partner (current)
- b) Partner (former)
- c) Mother
- d) Father
- e) Mother-in-law
- f) Father-in-law
- g) Family member (no young children)
- h) Family member (with young children)
- i) Friends (no young children)
- j) Friends (with young children)
- k) Other (please specify)

i. How often do you socialise?

Please can you provide information on how you socialise, i.e. spend time:

Please select all that apply

	How often do you socialise?	Where do you socialise?			Type of Activity					
		At home	Outside of the home	At group	Family gatherings	Informal catch-up	Physical activity, e.g. gym, sports	Social activity, e.g. shopping	Other activity	Not Applicable
Partner (Current)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Partner (Former)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mother	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Father	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Mother-in-law	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Father-in-law	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family member (no young children)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Family member (with young children)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends (no young children)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Friends (with young children)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (please specify)	<input type="text"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

- Daily
- 2-3 days
- Weekly
- Monthly
- I don't feel I can socialise

	ii. Where do you socialise?	At home
		Outside of the home
		At group
	iii. Type of activity	Family gatherings
		Informal catch-up
		Physical activity (e.g. gym, sports)
		Social activity (e.g. shopping)
		Other activity
		Not applicable
43	Do you have opportunities to socialise without your child/children?	Often
		Sometimes
		Rarely
		Never
44	Do you feel confident within your role as mother?	Very confident
		Confident
		Unconfident
		Very unconfident

TABLE

Please answer with how you feel at this point in time.

- a) There is a balance between activities for myself and completing activities for others
- b) There is a balance between doing activities by myself and with others
- c) My activities are meaningful to me
- d) I have the time to do the activities I enjoy
- e) My activities sufficiently fill my time during a regular week
- f) I am content with the number of activities completed during the week
- g) I have the time to complete my necessary activities, for example caring for my child, housework, employment etc.
- h) There is a healthy balance between my necessary and chosen activities in my everyday life
- i) I am content with how my time is allocated within my daily routines
- j) There is a balance between employment, family, relaxation, sleep, leisure and home

Please answer with how you feel at this point in time.				
	Strongly Agree	Agree	Disagree	Strongly Disagree
There is a balance between activities for myself and completing activities for others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a balance between doing activities by myself and with others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My activities are meaningful to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the time to do the activities I enjoy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My activities sufficiently fill my time during a regular week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am content with the number of activities completed during the week	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have the time to complete my necessary activities, for example caring for my child, housework, employment etc.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a healthy balance between my necessary and chosen activities in my everyday life	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am content with how my time is allocated within my daily routines	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a balance between employment, family, relaxation, sleep, leisure and home	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can control the choices around important decisions for myself and my family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Strongly agree

Agree

Disagree

Strongly disagree

k) I can control the choices around important decisions for myself and my family

- 46 In general, how happy do you consider yourself to be?
- Very happy
 - Happy
 - Neither happy or unhappy
 - Unhappy
 - Very unhappy

- 47 Are there any activities you would like to make time for?
- Yes (please specify)
 - No

- 48 Finally, please can you tell me a bit more about the things that you really think have influenced you within your mothering role?
- Text box*

For example, where you live, other parents you have seen, the society you live in

We would like to explore daily activities and social support in more detail with a few of the mothers who have completed this questionnaire. This will involve keeping an activity diary for two weeks and taking part in two short interviews (to discuss the results of both the survey and diary). The activity diary will be set up on the same system as the survey, so accessible on the computer or on our mobile and will consist of you logging the activities you complete during each day.

If you'd like to do this, please let us know by ticking "yes" in response to the question below.

If you agree, the researcher will need to know your name and some contact details so that they can contact you. However, this will be kept confidential and anonymity maintained within the project, as per the Data Protection Act 2018. This will also give you the opportunity to withdraw from the research at any time up until verbal consent to continue is gained after the final interview.

Please be aware that even if you consent to further contact, you may or may not be contacted, as only a small number of participants are required for this follow up part of the research. This consent allows the researcher to contact you if required.

Thank you for participating in this survey.

Yes

Would you be agreeable to be contacted for further participation in this research study?

No

Thank you for your continued participation, please provide contact details for the researcher:

Name

Email

Contact Number

If no selected, skip to end of survey

End of Survey **Please speak to your Health Visitor, Midwife or other healthcare professional if you would like to discuss any of the topics raised here.**

Your health visitor or midwife can also help if you would like further information about support services offered via the NHS. You will find their details on your antenatal notes.

You can also talk to the Samaritans in confidence, 24 hours a day, for free from any phone on 116 123.

Additional information is available from the following sources:

NHS

MIND

PANDAS

Progress updates on the research will be available on Twitter: @mothers_SC_OB

Appendix 3: Interview One Schedule (Phase Two)

Thank you for agreeing to take part in the second phase of this research and completing the consent form before this interview. The consent is for this interview, an online activity diary and an interview after you've done the diary.

The interviews should last roughly 30 minutes and the activity diary should take up a small amount of time during each day for one week.

Do you have any questions about this research before we begin?

I will need to ask you once more to verbally give me permission to continue with this next phase of the research.

As this is now an interview which is not anonymous, if for any reason I was worried about the safety of either yourself or your child/children, I would need to inform agencies that would be able to help. By taking part, you are also stating you are aware of this process and are willing to provide your full name, address and children's names. Please be assured that within the research project your anonymity is assured.

Do you still feel you would like to continue? (If yes: Please could I take you and your child's details).

The purpose of this research is to look at a mother's daily life and see if this has an influence on mental health. This interview will look back at your survey answers and explore these in a bit more depth.

There will then be a section to explore the potential impact of lockdown restrictions and how this has changed your daily activities.

You are welcome to take breaks during the interview and you can request to stop at any time. Please let me know if you feel at all uncomfortable or would like to finish the interview.

Antenatal			<ul style="list-style-type: none"> • Tell me a little about yourself and your child/children • Prior to becoming a mother, what sort of friendships did you have? • How many of your close friends/family have children? • Did you have any education or advice about motherhood prior to becoming a mother?
Expectations Vs Reality			<ul style="list-style-type: none"> • Tell me about your expectations of becoming a mother, and of motherhood generally? • Do you feel there is a difference between what you imagine a mother should be like and the perception of your own mothering style? • What do you value most as a mother?

			<ul style="list-style-type: none"> • What is the hardest part of being a mother?
Children	First child		
		Second or subsequent child	<ul style="list-style-type: none"> • Has your experience changed between children? • If so, was there a reason for this, e.g. new relationship, better finances, learnt coping strategies?
Groups	Attend groups		<ul style="list-style-type: none"> • Why do you attend groups? • How many of your friends are from groups you attend as a mother? • How beneficial would you say group support is for you?
		Don't attend groups	<ul style="list-style-type: none"> • Why don't you attend groups? • (If would like to but can't) What benefits do you think you would gain from groups? • Where do you source your emotional support from? • Do you have a lot of friends or family that offer support? • Do you do other social activities for your child/children outside of group structures?
Friendships			<ul style="list-style-type: none"> • Have your friendships changes since becoming a mother? • If so, how have they changed? • Do you spend a lot of time with/talking to friends? • If yes, do these friends have children? • Do you feel the relationships you have now and in the past have positively or negatively influenced your role as a mother, e.g. partner/family/friends?
Work	Working		<ul style="list-style-type: none"> • How was the decision-making process on deciding to return to work? (was there conflict) • How do you feel others view this decision? • How does being in work impact on you, both positively and negatively? • What is your childcare arrangement? • Are you happy with this?
		Not working	<ul style="list-style-type: none"> • What do you think of this decision? • Do you feel this gives you more time to do activities for yourself/yourself and your child/children?
Finances			<ul style="list-style-type: none"> • How often do you feel getting out and about with your child/children requires money?

			<ul style="list-style-type: none"> • Do you feel able to do all the activities you would like to do? • If not, what activities would you like to be able to do and what stops this? • Has considering money ever stopped you from doing any activities in the past?
COVID-19	In a Relationship		<ul style="list-style-type: none"> • Do you feel the activities you would engage in normally have been changed due to the lockdown restrictions? • How has the lockdown impacted on your mental health? • Have you had support online/via telephone/in person? • If so, from whom? • Have you missed the level of socialisation yourself and your child/children had prior to lockdown? • If so, what parts have you missed the most? • How important have activities with your child/children become during lockdown? • Have there been more activities with your children since lockdown? • Do you feel you have been able to balance your activities during lockdown? • Do you think lockdown has influenced your thoughts on how you engage in activities in the future? • Has your partner taken enough responsibility to look after the child/children during lockdown? • Have you been able to take any rest periods?
		Lone Parent	<ul style="list-style-type: none"> • Have your children continued to go between households? • Did you feel this gave you a break?
	More than one child		<ul style="list-style-type: none"> • How has this experience been different to your previous child/children?
Confidence	Confident		<ul style="list-style-type: none"> • What aspects of motherhood do you feel most confident with? • Where do you feel the confidence in your role as mother came from?
		Not Confident	<ul style="list-style-type: none"> • What aspects of motherhood do you feel less confident with? • Do you have any thoughts on what might build your confidence?
Reflections			<ul style="list-style-type: none"> • Would you define physical (e.g. childcare, housework) or emotional (e.g.


			<p>chats, advice) support as the most important as a mother?</p> <ul style="list-style-type: none"> • Do you feel you need more time for yourself? • If so, can you explain why? • Do you feel other mothers/family/social media has an influence on your experience as a mother? • Is there anything you would like to have been told before becoming a mother? • What advice/encouragement would you give new mothers?
			<ul style="list-style-type: none"> • Is there anything that we haven't covered you would like to discuss? • Are there any questions you would like to ask me?

Thank you for taking part in this interview. The resource sheet that was attached to the consent form has some useful links to published support information for mothers, particularly surrounding lockdown and restricted access to facilities and support.

The next part of the research is to complete a daily activity diary online, including on your phone. This asks you about the things you've done during the day. There are instructions on the first page when the survey loads, please read through this. The link opens in your browser and you can close it and open it again and it will stay on the page you have most recently completed. This should only take a short amount of time per day. Please complete at your own pace and during times that are convenient for you. Email reminders will be sent daily, I know I would need reminders! Please get in touch if you have any questions or you are unsure about anything and I will be back in contact in one weeks' time to organise the final interview.

Thank you again for taking part. I really appreciated it.

Appendix 4: Activity Diary Layout (Phase Two)

 **Cardiff University**

Instruction

The purpose of this activity diary is to get an overview of the daily activities completed by mothers of young children.

Each day is split into 4 hour slots (midnight to 4am, 4am to 8am etc.) and there are options to add up to 4 activities for each time slot. Only one activity can be added on each page.

If all activities are recorded for one time slot (and less than 4), the not applicable option at the top will take you to the next time section. If there are more than 4 activities, there is a box at the end of the time block to add additional activities for that time slot.


If you need to recap, you can make use of the back button at the bottom of each page. When you need to leave the activity and return, the browser will retain the information already collected for you.


Where possible, please record the activities in the time order that they occur in your day. Please try to complete daily to make sure you remember what activities you did during the day.


Any questions, please don't hesitate to contact the researcher Sarah Cavill: cavillse@cardiff.ac.uk


Day 1 00.00-04.00 Activity 1

Day 1 Midnight-4am Activity 1
What activity were you doing?
Where possible, please record the activities in the order they happen


Feed Baby


Bathing/Dressing/Changing Baby


Play with Baby/Children


Getting baby/children to sleep



Cooking/Eating



Housework



Sleep

Showering/Getting Self Ready (get dressed/apply make-up/fresh pjs)



Shopping



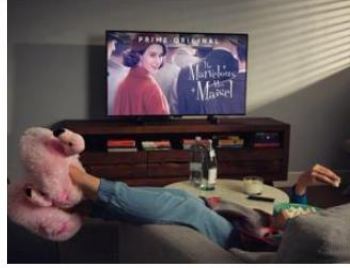
Socialising: in-person or virtual



Attended group



Workout



Watch TV/Listen to music/Online activities/personal hobby

Other (please specify)

Who was with you for this activity? (Please tick all that apply)

Alone (children napping/with others)

Father-in-law

Baby/Child

Sister

More than one child

Brother

Partner (current)

Friends with children

Partner (former)

Friends without children

Mother

Other mothers

Father

Colleagues

Grandparent

Healthcare professional

Mother-in-law

Other (please specify)

What type of activity was this? (the most relevant)

Self-care: taking care of personal health and well-being

Leisure: completed for enjoyment

Productivity: sense of accomplishment or providing services to others

Rest/Sleep: self recovery

Self-care

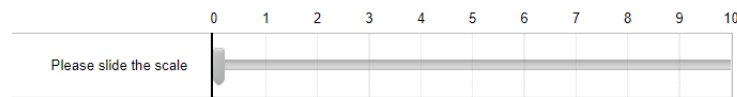
Leisure

Productivity

Rest/Sleep

How happy did you feel during this activity?

0 = Sad; 10=Happy



Day 1 00.00-04.00 Activities 2-4

Day 1 Midnight-4am Activity 2

What activities were you doing?

Where possible, please record the activities in the order they happen

Appendix 5: Interview Two Schedule (Phase Two)

Thank you for completing the activity diary and agreeing to take part in this final interview. Do you have any questions before we begin?

This final section will expand on the information gathered within the activity diaries and how this fits in relation to your feelings about your daily life.

You are welcome to take breaks during the interview and you can request to stop at any time. Please let me know if you feel at all uncomfortable or would like to finish the interview.

Themes	Questions
COVID-19	<p>How did you feel the week went like in general? Is this a representation of a typical week currently? Would this diary be completed differently if there were no COVID-19 lockdown and restrictions? If yes, how would this be different?</p>
Balance of SC P L & R	<p>In the diary, I asked you to decide if you felt an activity was primarily SC/L/P/R. <u>(Self-care: taking care of personal health and well-being</u> <u>Leisure: completed for enjoyment</u> <u>Productivity: sense of accomplishment or providing services to others</u> <u>Rest/Sleep: self recovery)</u> This was to look at how many activities come within each category to look at how your day is balanced as overall, there should be elements of all four within a week. Did you feel like there was a balance between SC, P, L & R when filling the diary out? If not, where do you think this imbalance is? How do you feel about this imbalance? How would you like things to be different? Do you feel there are any activities you would like to be able to fit in that you current can't? Do you think there is time in the day to fit these in after filling in this diary? Do you feel your balance of activities has been affected by the current pandemic?</p>
Happiness levels in relation to activities	<p>I notice you were most happy when doing ___ activity, can you tell me a little more about this? I notice you were least happy when doing ___ activity, can you tell me a little more about this? Do you feel your happiness levels have been affected by the current pandemic?</p>
Level of rest and interruption of sleep	<p>Do you feel the sleep and quality of sleep you get is enough? If no, do you feel this has an impact on the activities you complete during the day? Do you feel your level of rest/sleep has been affected by the current pandemic?</p>

Social activities versus activities alone	You appear to be happiest when completing activities alone/with others, is that a true reflection of how you feel you like to complete activities? Has this changed at all since the pandemic began?
Overall happiness	<p>Completing this diary, did you feel you were overall happy with your day to day life currently? Do you think there is anything that could improve your levels of happiness?</p> <p>The survey was an exploration of your daily activities, group engagement and support networks. We further explored your available supports, experiences of motherhood and reflections on your role. This further explored the impact of COVID-19 restrictions, which was seen in the activity diary as we are still fresh out of lockdown and restrictions are still in place. All of this research engagement has given us an insight into your daily life and how you manage on a day to day basis. I thank you for your engagement and would like to just finally let you reflect on how this research has made you feel?</p>

Another final Thank you for engaging in this research. You have completed a questionnaire, two interviews and an activity diary and I am very grateful. All of this information gathered will be used in data analysis to try and find connections between the data to make recommendations for improvements or coping strategies for mothers. This information will be presented at conferences and may be published in the future. The PhD itself will be submitted for marking at the end of the course, I am currently going into my third year so hopefully in roughly a year's time. I will keep updating the Twitter and Facebook accounts with updated information. I hope you have enjoyed being involved and am contactable on my email address if there are any further questions or queries. Thank you again for all of your time. It really has been a pleasure chatting with you and I wish you all the best.

Appendix 6: Ethical Approval



School of
Social Sciences
Ysgol y Gwyddorau
Cymdeithasol

Cardiff University
Glamorgan Building
King Edwards VII Avenue, Cardiff
CF10 3WT, Wales, UK
Tel +44(0)29 2087 5179
Fax +44(0)29 2087 4175
www.cardiff.ac.uk/social-sciences

28 May 2019

Our ref: SREC/3336

Sarah Cavill
PhD Programme
SOCSI

Prifysgol Caerdydd
Adeilad Morgannwg
Rhodfa'r Brenin Edward VII, Caerdydd
Ffon +44(0)29 2087 5179
Ffacs +44(0)29 2087 4175
www.cardiff.ac.uk/social-sciences

Dear Sarah,

Your project entitled '*Comparing the Occupational Balances of Mothers With and Without Postnatal Depression and the Influences from Social Support & Social Capital*' has now been approved by the School of Social Sciences Research Ethics Committee of Cardiff University and you can now commence the project should all necessary forms of approval been received.

If you make any substantial changes with ethical implications to the project as it progresses you need to inform the SREC about the nature of these changes. Such changes could be: 1) changes in the type of participants recruited (e.g. inclusion of a group of potentially vulnerable participants), 2) changes to questionnaires, interview guides etc. (e.g. including new questions on sensitive issues), 3) changes to the way data are handled (e.g. sharing of non-anonymised data with other researchers).

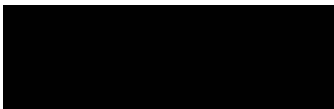
In addition, if anything occurs in your project from which you think the SREC might usefully learn, then please do share this information with us.

All ongoing projects will be monitored and you will be obliged periodically to complete and return a SREC monitoring form.

Please inform the SREC when the project has ended.

Please use the SREC's project reference number above in any future correspondence.

Yours sincerely



Professor Alison Bullock
Chair of School of Social Sciences Research Ethics Committee



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Appendix 7: Ethical Approval Following Amendments (Phase Two)

Sarah Cavill

From: soci-ethics
Sent: 07 May 2020 16:13
To: Sarah Cavill
Subject: RE: Ethics amendment

Hi Sarah,

Many thanks for your detailed response. This has been forwarded to the Ethics Chair and she is happy with your response. Please can you note the following, from the Chair's response:

- Please think about and discuss with your supervisor how you will manage remote interviews with participants who can't find a quiet private space for the discussion
- Please note if you are planning to record conversations over Skype or Zoom etc, you should not record directly using the software. Instead you should record using an external device next to your computer such as a dictaphone or similar that can pick up the audio.

Many thanks,
James

From: Sarah Cavill <CavillSE@cardiff.ac.uk>
Sent: 06 May 2020 20:51
To: soci-ethics <soci-ethics@cardiff.ac.uk>
Cc: James Griffiths <GriffithsJ39@cardiff.ac.uk>
Subject: Ethics amendment

Dear Ethics Committee,

Due to the unforeseen circumstances of COVID-19, the associated lockdown measures and uncertainty of duration, I am requesting ethical approval to amend my data collection methods in the following manner.

Title of study: Comparing the Occupational Balances of Mothers With and Without Postnatal Depression and the Influences from Social Support & Social Capital
Reference Number: SREC/3336

Phase one of the research was an online survey sent to mothers in Wales, which was closed on March 1st 2020. Ethical approval was granted within my original submission to follow this up with a smaller sample size (roughly ten mothers) for interviews and activity diaries. The final question in the survey asked for approval to be contacted for further participation, so only mothers who gave permission would be contacted (the other responses were anonymous).

I am proposing, if the mothers are agreeable, that these interviews are completed virtually, on a university approved platform, with optional completion of activity diaries during the lockdown period – accessible via a link and completed in Qualtrics.

As the initial interview is regarding the survey responses with subsequent interviews regarding the activity diaries, there would only be changes in relation to discussion of the Pandemic and the associated difficulties regarding this. There is a greater potential for participants to become upset when discussing the lockdown due to the lack of external support and change in routines, so questions would be designed with sensitivity and support information provided. As stated in the original proposal, information for online or telephone support systems and helpful information about postnatal

depression from support websites will be given. There will also be advice and contact information for seeking support from the appropriate healthcare professionals.

Plan A:

If the mothers are agreeable and the lockdown is lifted before July, the original plan would take place: interviews and activity diaries of normal day-to-day routines roughly one month after lockdown is lifted.

Plan B:

If the lockdown is extended beyond early July, virtual interviews and activity diaries would be the alternative Phase 2 data collection. These would be completed throughout July to September.

Plan C:

If Plan B is completed and subsequently within two months (latest during November) the restrictions are lifted, those mothers will be asked if they would like to complete a second round of interviews and activity diary. Again, this would be roughly one month after lockdown finishes, but would be completely optional.

Plan D:

If the above mothers (Plan C) were not agreeable to complete the second round of interviews, but there is still time to complete interviews and activity diaries as per my original plan (outside of lockdown restrictions), these would be offered to mothers from the survey that did not partake in Plan B but consented to be contacted.

If the lockdown/restrictions continue past November, the data collected from Plan B will be the sole phase 2 data collection. Even if Plan C went ahead, all participant numbers would be kept within the 30 maximum for Phase 2 data collection, as per the original ethics submission. The reason for multiple plans and the push to get mothers to complete outside of the lockdown restrictions is due to the main focus of this research being on social capital, social support and community engagement. The lockdown is not representative of a mother's normal day-to-day routines.

New ethical issues for consideration are raised by these changes, including the current pandemic impacts, informed consent and the virtual interview method.

There may be additional impacts on each mother's mental health and coping abilities with the restrictions on outings, support networks and peer support groups, adding complexity to an already sensitive subject area. Engaging in interviews and partaking in diaries may cause additional stress and anxiety, especially if they do not have any support with childcare to have the time to engage in interviews. To attempt to mitigate these issues, mothers will be offered interviews at a time that is most convenient for themselves and their routines, for example evenings or during nap times. The interviews will be structured to last roughly 30 minutes and the mothers can terminate the interview at any time. The activity diaries will be accessible on mobile phones and will be quick to administer.

Consent will need to be in the form of recorded verbal audio consent during the interview, rather than the traditional written consent. This will be stored on a secure encrypted, password-controlled computer.

Interviews utilising video-conferencing technology are preferable to telephone interviews as seeing the researchers encourages rapport and trust. The video would therefore show the inside of the researcher and participants homes, in comparison to meeting at a neutral location, for example a café. To attempt to reduce any issues around researcher boundaries, I will complete the interviews with a neutral background and no interruptions to the interview.

Please let me know if you would like any further information.

Sarah Cavill

*PhD Researcher / Ymchwilydd PhD
School of Social Sciences / Ysgol y Gwyddorau Cymdeithasol*

Appendix 8: Participant Information Sheet and Consent Form (Phase One)

Comparing the occupational balance and social capital of mothers with and without postnatal depression.

You are being invited to take part in a research study. Before you decide whether or not to take part it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully and discuss it with others if you wish.

1. What is the purpose of this research?

Motherhood is a time of transition for all women, whether a first-time mother or mother to more than one child. There is little research into the daily lives of mothers to understand how mothers cope with the everyday complexities of parenthood. This can result in depressive symptoms for some women (1 in 7 women) and this research aims to explore how women's activities contrast with each other to potentially provide educational information for mothers in the future. This research will explore the types of activities mothers engage in, how satisfied they are with these activities and how much external support is received.

2. Why have I been invited?

You have been invited because you are the mother to a child below the age of 18 months.

3. Do I have to take part?

No, it is up to you to decide whether or not to take part. If you do decide to take part, there will be a consent check box to begin the questionnaire. If you decide not to take part, you do not have to explain your reasons.

4. What will happen to me if I take part?

You will complete this questionnaire, taking approximately 20 minutes. It consists of an Edinburgh Postnatal Depression Screening tool to identify any depressive symptoms, a demographic section to gather information on your personal circumstances and then a range of questions discussing your activity engagement and social supports.

5. Will I be paid anything for taking part?

No, engagement is on a voluntary basis.

6. What will my questionnaire be used for?

This research is part of a Cardiff University Doctor of Philosophy Degree Thesis. All interview data collected will be used to answer the research questions:

1. What is understood by the terms occupational engagement, balance of occupations and social capital in relation to motherhood?
2. How does the level of accrued social capital, differences in daily occupational engagement and occupational balance between mothers impact on postnatal depression symptoms?

7. What are the possible benefits of taking part?

There will be no direct advantages or benefits to you from taking part, but your contribution will help to develop information leaflets for mothers with advice on occupational engagement and social interaction. This research may identify areas for further professional input providing prenatal advice and postnatal coping strategies.

8. What are the possible risks of taking part?

There may be disadvantages to taking part in this study. If you have a personal history of postnatal depression or are currently feeling you are unable to manage your activities, there is the potential for some emotional distress.

9. Will my taking part in this study be kept confidential?

All information collected during the study will be kept strictly confidential in accordance with the Data Protection Act 2018. You can fill out this questionnaire as anonymous.

10. What will happen to the results of the study?

The results of the study will be submitted as part of a Doctor of Philosophy Thesis for marking.

11. What if there is a problem?

If you are harmed by taking part in this research study, there are no special compensation arrangements.

If you have concerns around the conduct of the study, then please contact the Chair of the School of the School Research Ethics Committee / School Ethics Officer:

Professor Emma Renold

School of Social Sciences

Cardiff University

Glamorgan Building

CF10 3WT

Tel: 44+ (0)29 2087 6139

12. Who is organising and funding this research?

The research is organised by the researcher through Cardiff University. Funding is received from the Economic and Social Research Council for this project.

13. Who has reviewed this study?

This study has been reviewed and given a favourable opinion by the School of Social Sciences Research Ethics Committee, Cardiff University.

14. Further information and contact details

Should you have any questions relating to this study, you may contact the researcher during normal working hours:

Sarah Cavill

07802526699

cavillse@cardiff.ac.uk

I would like to thank you for considering taking part in this study. If you decide to participate you will be given a copy of the information sheet and a signed consent form to keep.

Appendix 9: Participant Information Sheet and Consent Form (Phase Two)

Comparing the occupational balance and social capital of mothers with and without postnatal depression.

You are being invited to take part in the second phase of my research study about motherhood and its' impact on mood and self-identity, to try and identify how care and support for mothers can be improved. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully and discuss it with others if you wish.

1. What is the purpose of this research?

The information provided during the second phase will be used to support and expand on the information gathered from the surveys in phase one. This survey asked questions about your day to day life, support networks and your experiences of being a mother

2. Why have I been invited?

At the end of the survey, you consented for the researcher to reach out to you for phase two of the research project.

3. Do I have to take part?

No, it is up to you to decide whether or not to take part. If you do decide to take part, you will need to give your written and verbal consent. If you decide not to take part, you do not have to explain your reasons.

4. What will happen to me if I take part?

You will be asked to complete a short virtual interview with the researcher via Zoom. This will expand on the answers that were given during the online survey you completed. Then you will be asked to complete an activity diary for one week, in which you are asked to select the activities that applied to you for the day, who you were with and how you felt about these activities (in the form of tick boxes). This will give the researcher an idea of how your week is made up. Finally, you will be asked to complete another short virtual interview with the researcher to discuss the information provided in the activity diary.

Each interview will be roughly thirty minutes long and the diary should only take a maximum of fifteen to twenty minutes per day.

5. Will I be paid anything for taking part?

No, engagement is on a voluntary basis.

6. What will my questionnaire be used for?

This research is part of a Cardiff University Doctor of Philosophy Degree (PhD) Thesis. All data collected will be used to answer two research questions. These questions explore what typical daily activities relate to motherhood and how they are organised by each individual, alongside the various levels of support received. These results will be analysed to look for trends related to symptoms of

depression. The results of these analyses will be published in academic and practitioner publications.

7. What are the possible benefits of taking part?

There will be no direct advantages or benefits to you from taking part, but your contribution will help to develop information leaflets or activities for mothers, with advice on occupational engagement and social interaction. This research may identify areas for further development of occupational therapy services including providing prenatal advice and postnatal coping strategies to mothers in the future.

8. What are the possible risks of taking part?

There may be disadvantages to taking part in this study. If you have a personal history of postnatal depression or are currently feeling you are unable to manage your activities, there is the potential for some emotional distress. Information will be provided on sources of support available if you feel distressed at any time.

9. Will my taking part in this study be kept confidential?

All information collected during the study will be kept strictly confidential. This means that non-anonymised information will not be shared with others unless I was worried about someone's safety; in these situations, information may need to be shared with statutory bodies. Data collected will be kept in accordance with the General Data Protection Regulation (GDPR), the Data Protection Act 2018 and Cardiff University procedures/policies. You may withdraw at any time up to the final interview. Following this, the data may be already used within data analysis and presented.

10. What will happen to the results of the study?

The results of the study will be submitted as part of a Doctor of Philosophy Thesis. The results of the study may be used for academic and practitioner publications (including presentations). In instances where direct quotes may be used, pseudonyms (false names or numbers) will be used and any identifiable characteristics will be removed to aid with anonymity. All data will be retained for no less than 5 years or at least 2 years post-publication and then destroyed in accordance with the GDPR. Anonymised data may be made available for other researchers to use as secondary data to aid with future research projects if you are agreeable.

11. What if there is a problem?

If you have concerns around the conduct of the study, then please contact either [Thomas Slater](mailto:ThomasSlater@cardiff.ac.uk) (slatertb1@cardiff.ac.uk) or [Lisa Hurt](mailto:LisaHurt@cardiff.ac.uk) (hurtl@cardiff.ac.uk), the supervisors for this study.

12. Who is organising and funding this research?

The research is part of a doctoral study at Cardiff University. This doctorate is funded by the Economic and Social Research Council Wales Doctoral Training Partnership for Wales.

13. Who has reviewed this study?

This study has been reviewed and given a favourable opinion by the School of Social Sciences

Research Ethics Committee, Cardiff University, reference number SREC/3336.

14. Further information and contact details

Should you have any questions relating to this study, you can contact myself, the researcher, during normal working hours:

Sarah Cavill
cavillse@cardiff.ac.uk

Progress updates on this research will be available on Twitter: @mothers_SC_OB

If you are happy to continue, please read through and sign the following consent boxes. Please note an electronic name entry will be taken as consent.

You have to agree to the first three statements before you can take part.

Consent Statement	Signature
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I confirm that I have read and understood the information provided regarding the study and have had the opportunity to ask questions and these have been answered satisfactorily

I understand that my participation is voluntary, and I am free to stop the interview or diary at any time without giving a reason up until the final interview. Following this, the data will be anonymised and used within data analysis.

I agree to take part in this study

(Optional)

I am happy for anonymised data to be made available for other researchers to use as secondary data (didn't collect it themselves) to aid with future research projects.

(Optional)

Appendix 10: Support Information on Questionnaire (Phase One)

Please speak to your Health Visitor, Midwife or other healthcare professional if you would like to discuss any of the topics raised here.

Your health visitor or midwife can also help if you would like further information about support services offered via the NHS. You will find their details on your antenatal notes.

You can also talk to the Samaritans in confidence, 24 hours a day, for free from any phone on 116 123.

Additional information is available from the following sources:

NHS

MIND

PANDAS

Appendix 11: Resource Sheet (Phase Two)

Maternal Mental Health Alliance

Looking after your mental health during pregnancy and after birth:

<https://maternalmentalhealthalliance.org/resources/mums-and-families/covid-19-looking-after-your-mental-health-during-pregnancy-and-after-birth/>

Available in English and Welsh.

Support for mums and families:

<https://maternalmentalhealthalliance.org/resources/mums-and-families/>

Institute of Health Visiting

Parenting Through Coronavirus:

<https://ihv.org.uk/families/parenting-through-coronavirus-covid-19/>

NSPCC

Some tips for parents on how to deal with mental health during lockdown:

<https://www.nspcc.org.uk/keeping-children-safe/support-for-parents/baby-parenting/>

Adapting our perinatal mental health services during coronavirus:

<https://learning.nspcc.org.uk/news/2020/may/adapting-our-perinatal-mental-health-services-during-coronavirus>

NHS

List of resources for any mental health need:

<https://www.nhs.uk/conditions/stress-anxiety-depression/mental-health-helplines/>

Royal College of Psychiatrists

Mental health before, during and after pregnancy:

<https://www.rcpsych.ac.uk/mental-health/treatments-and-wellbeing/perinatal-care-and-covid-19>

MIND

Mental Health and Motherhood: Information and support:

<https://www.mind.org.uk/information-support/types-of-mental-health-problems/postnatal-depression-and-perinatal-mental-health/about-maternal-mental-health-problems/>

Hafal

Variety of recovery services and advice:

<https://www.hafal.org/>

Appendix 12: Frequencies and Cross-Tabulation Social Capital Categories (Phase One)

Cross-Tabulation of Confidence with EPDS Scores (Cut-off Score 9)

	Frequency (N=212)	Percentage	EPDS <9	% Confidence	EPDS ≥9	% Confidence	P-value
Unconfident	37	17.5%	1	2.9%	34	97.1%	0.000 ²
Confident	140	66.0%	60	42.9%	80	57.1%	
Very Confident	35	16.5%	24	64.9%	13	35.1%	

Cross-Tabulation of Number of Roles with EPDS Scores (Cut-off Score 9)

	Frequency (N=212)	Percentage	EPDS <9	% Number Roles	EPDS ≥9	% Number Roles	P-value
1-5	32	15.1%	6	18.8%	26	81.3%	0.027 ¹
6-9	114	53.8%	49	43.0%	65	57.0%	
10-14	66	31.1%	30	45.5%	36	54.5%	

Cross-Tabulation of Emotional Support with EPDS Scores (Cut-off Score 9)

	Frequency (N=212)	Percentage	EPDS <9	% Emotional Support	EPDS ≥9	% Emotional Support	P-value
<4	34	16.0%	6	17.6%	28	82.4%	0.010 ¹

4-7	109	51.4%	46	42.2%	63	57.8%	
8+	69	32.5%	33	47.8%	36	52.2%	

Cross-Tabulation of Physical Support with EPDS Scores (Cut-off Score 9)

	Frequency (N=212)	Percentage	EPDS <9	% Physical Support	EPDS ≥9	% Physical Support	P-value
<4	91	42.9%	31	34.1%	60	65.9%	0.266 ¹
4-7	103	48.6%	45	43.7%	58	56.3%	
8+	18	8.5%	9	50.0%	9	50.0%	

Cross-Tabulation of Monetary Support with EPDS Scores (Cut-off Score 9)

	Frequency (N=212)	Percentage	EPDS <9	% Monetary Support	EPDS ≥9	% Monetary Support	P-value
<4	128	60.4%	48	37.5%	80	62.5%	0.652 ¹
4-7	72	34.0%	32	44.4%	40	55.6%	
8+	12	5.7%	5	41.7%	7	58.3%	

Cross-Tabulation of Additional Support with EPDS Scores (Cut-off Score 9)

	Frequency (N=212)	Percentage	EPDS <9	% Additional Support	EPDS ≥9	% Additional Support	P-value
<4	44	20.8%	11	25.0%	33	75.0%	0.032 ¹
4-7	102	48.1%	41	40.2%	61	59.8%	
8+	66	31.1%	33	50.0%	33	50.0%	

Cross-Tabulation of Socialisation with EPDS Scores (Cut-off Score 9)

	Frequency (N=212)	Percentage	EPDS <9	% Socialisation	EPDS ≥9	% Socialisation	P-value
1-5	61	28.8%	17	27.9%	44	72.1%	0.059 ¹
6-9	91	42.9%	39	42.9%	52	57.1%	
10-14	60	28.3%	29	48.3%	31	51.7%	

Appendix 13: Cross-Tabulations Support Categories for Grouping Check (Phase One)
 Cross-tabulation of Emotional Support and Confidence Levels (% within ES variable)

		Very Confident		Confident		Unconfident		Very Unconfident		P-value
Emotional support	<4	6	17.6%	17	50.0%	9	26.5%	2	5.9%	0.065 ²
	4-7	20	17.7%	74	65.5%	18	15.9%	1	0.9%	
	8+	12	17.1%	52	74.3%	6	8.6%	0	0.0%	

Cross-tabulation of Physical Support and Socialisation without Children (% within PS variable)

		Often		Sometimes		Rarely		Never		p-value
Physical support	<4	4	4.3%	22	23.9%	44	47.8%	22	23.9%	0.035 ²
	4-7	4	3.7%	45	42.1%	55	51.4%	3	2.8%	
	8+	2	11.1%	7	38.9%	7	38.9%	2	11.1%	

Cross-tabulation of Monetary Support and Financial Status (% within MS variable)

		Comfortable		Manageable		Difficult		p-value
Monetary support	<4	46	35.4%	61	46.9%	23	17.7%	0.413 ²
	4-7	31	41.3%	36	48.0%	8	10.7%	
	8+	4	33.3%	6	50.0%	2	16.7%	

Cross-tabulation of Additional Support and Additional Support Required (% within AS variable)

		No		Yes		P-value
Additional support	<4	15	34.1%	29	65.9%	0.057 ¹
	4-7	72	67.9%	34	32.1%	
	8+	50	74.6%	17	25.4%	

¹Pearson Chi-Square Test ²Fisher's Exact Test

Appendix 14: Missing Data Comparison Table

		Women included in analysis (n=212)	Women excluded from analysis (n=120)
Total EPDS	<9	85 (40.1%)	38 (31.7%)
	≥9	127 (59.9%)	74 (61.7%)
	Missing	0 (0.0%)	8 (6.7%)
Mother's Age	<30	46 (21.7%)	41 (34.2%)
	30-34	92 (43.4%)	41 (34.2%)
	35+	74 (34.9%)	38 (31.7%)
Number of Children	1	130 (61.3%)	67 (55.8%)
	2	61 (28.8%)	43 (35.8%)
	3+	21 (9.9%)	10 (8.3%)
Finance	Comfortable	81 (38.2%)	38 (31.7%)
	Manageable	98 (46.2%)	64 (53.3%)
	Difficult	33 (15.6%)	17 (14.2%)
	Missing	0 (0.0%)	1 (0.8%)

Appendix 15: Multicollinearity (Phase One)

Sociodemographic Variables		VIF
Mother's Age	<30 30-34 35+	1.050
Number of Children	(Continuous)	1.074
Current Relationship	Married/Civil Partnership Other Relationship/Lone	1.109
Employment Status	Employed Not Employed	1.147
Finance	Comfortable Manageable Difficult	1.397
Quintiles	1&2 3, 4&5	1.131
Mental Health Diagnosis	Yes No	1.155
Social Capital Score	High Medium Low	1.134

Appendix 16: Social Capital Logistic Regression Model Sociodemographic Variables with EPDS Score (Cut-off 9) (Phase One)

Adjusted for Variable: Mother's Age

	OR* Not adjusted	95% CI	p-value	OR* Adjusted	95% CI	p-value
High	Reference		0.015			0.018
Medium	2.298	0.971-5.441	0.058	2.435	1.011-5.864	0.047
Low	4.343	1.598-11.803	0.004	4.385	1.581-12.157	0.004

Adjusted for Variable: Number of Children

	OR* Not adjusted	95% CI	p-value	OR* Adjusted	95% CI	p-value
High	Reference		0.015			0.013
Medium	2.298	0.971-5.441	0.058	2.348	0.988-5.579	0.053
Low	4.343	1.598-11.803	0.004	4.528	1.647-12.452	0.003

Adjusted for Variable: Relationship Status

	OR* Not adjusted	95% CI	p-value	OR* Adjusted	95% CI	p-value
High	Reference		0.015			0.024
Medium	2.298	0.971-5.441	0.058	2.186	0.918-5.203	0.077
Low	4.343	1.598-11.803	0.004	4.040	1.475-11.065	0.007

Adjusted for Variable: Employment

	OR* Not adjusted	95% CI	p-value	OR* Adjusted	95% CI	p-value
Social Capital						
High	Reference		0.015			0.039
Medium	2.298	0.971-5.441	0.058	2.354	0.975-5.680	0.011
Low	4.343	1.598-11.803	0.004	3.784	1.358-10.543	0.057

Adjusted for Variable: Finance

	OR* Not adjusted	95% CI	p-value	OR* Adjusted finance	95% CI	p-value
High	Reference		0.015			0.218
Medium	2.298	0.971-5.441	0.058	1.871	0.774-4.527	0.164
Low	4.343	1.598-11.803	0.004	2.522	0.884-7.194	0.084

Adjusted for Variable: Postcode

	OR* Not adjusted	95% CI	p-value	OR* Adjusted	95% CI	p-value
High	Reference		0.015			0.023
Medium	2.298	0.971-5.441	0.058	2.295	0.964-5.462	0.061
Low	4.343	1.598-11.803	0.004	4.083	1.491-11.182	0.006

Adjusted for Variable: Previous Mental Health Diagnosis

	OR* Not adjusted	95% CI	p-value	OR* Adjusted	95% CI	p-value
High	Reference		0.015			0.051
Medium	2.298	0.971-5.441	0.058	1.905	0.774-4.688	0.161
Low	4.343	1.598-11.803	0.004	3.567	1.259-10.109	0.017

Appendix 17: Occupational Balance Logistic Regression Model Sociodemographic Variables with EPDS Score (Cut-off 9) (Phase One)

Adjusted for Variable: Mother's Age

	OR Not adjusted	95% CI	p-value	OR Adjusted	95% CI	p-value
High	Reference		0.000			0.000
Medium	3.273	1.006-10.649	0.049	3.484	1.051-11.552	0.041
Low	20.571	5.166-81.915	0.000	22.356	5.457-91.584	0.000

Adjusted for Variable: Number of Children

	OR Not adjusted	95% CI	p-value	OR Adjusted	95% CI	p-value
High	Reference		0.000			0.000
Medium	3.273	1.006-10.649	0.049	3.245	0.987-10.673	0.053
Low	20.571	5.166-81.915	0.000	20.469	5.125-81.752	0.000

Adjusted for Variable: Relationship Status

	OR Not adjusted	95% CI	p-value	OR Adjusted	95% CI	p-value
High	Reference		0.000			0.000
Medium	3.273	1.006-10.649	0.049	3.355	1.024-10.990	0.046
Low	20.571	5.166-81.915	0.000	20.774	5.184-83.252	0.000

Adjusted for Variable: Employment

	OR Not adjusted	95% CI	p-value	OR Adjusted	95% CI	p-value
High	Reference		0.000			0.000
Medium	3.273	1.006-10.649	0.049	3.778	1.076-13.264	0.038
Low	20.571	5.166-81.915	0.000	24.158	5.655-103.204	0.000

Adjusted for Variable: Finance

	OR Not adjusted	95% CI	p-value	OR Adjusted	95% CI	p-value
High	Reference		0.000			0.000
Medium	3.273	1.006-10.649	0.049	3.125	0.919-10.623	0.068
Low	20.571	5.166-81.915	0.000	14.811	3.538-62.010	0.000

Adjusted for Variable: Postcode

	OR Not adjusted	95% CI	p-value	OR Adjusted	95% CI	p-value
High	Reference		0.000			0.000
Medium	3.273	1.006-10.649	0.049	3.192	0.976-10.437	0.055
Low	20.571	5.166-81.915	0.000	19.439	4.856-77.820	0.000

Adjusted for Variable: Previous Mental Health Diagnosis

	OR Not adjusted	95% CI	p-value	OR Adjusted	95% CI	p-value
High	Reference		0.000			0.000
Medium	3.273	1.006-10.649	0.049	3.071	0.909-10.368	0.071
Low	20.571	5.166-81.915	0.000	14.903	3.594-61.798	0.000

Adjusted for Variable: Social Capital

	OR Not adjusted	95% CI	p-value	OR Adjusted	95% CI	p-value
High	Reference		0.000			0.000
Medium	3.273	1.006-10.649	0.049	3.364	1.018-11.116	0.047
Low	20.571	5.166-81.915	0.000	18.597	4.616-74.917	0.000

Appendix 18: Secondary Analysis: Social Capital Cross-Tabulation and Logistic Regression (Phase One)

Cross-Tabulation of Social Capital with EPDS score (Cut-off Score 13)

	Frequency (N=212)	Percentage	EPDS <13	% SC	EPDS ≥13	% SC	P-value
High	26	12.3%	22	84.6%	4	15.4%	0.001*
Medium	134	63.2%	88	65.7%	46	34.3%	
Low	52	24.5%	23	44.2%	29	55.8%	

*Fisher's Exact Test

Social Capital Logistic Regression (EPDS Cut-off Score 13)

	OR* Not adjusted	95% CI	p-value	OR* Adjusted	95% CI	p-value
Social Capital						
High	Reference					
Medium	2.875	0.935-8.842	0.065	2.014	0.578-7.017	0.272
Low	6.935	2.094-22.971	0.002	3.904	1.001-15.218	0.050

*The estimates are adjusted for all sociodemographic variables.

Appendix 19: Secondary Analysis: Occupational Balance Cross-Tabulation (Phase One)

Cross-Tabulation of Occupational Balance with EPDS score (Cut-off Score 13)

	Frequency (N=209)	Percentage	EPDS <13	% OB	EPDS ≥13	% OB	P-value
High	16	7.7%	16	100.0%	0	0.0%	*0.000
Medium	138	66%	102	73.9%	36	26.1%	
Low	55	26.3%	13	23.6%	42	76.4%	

Appendix 20: Thematic Map

