

**The Impact of Social Media on Women's Postnatal Wellbeing: An Online
Experiment**

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Executive Summary

Motherhood Myths and Postnatal Distress: A Systematic Meta-discourse-analysis and Theory

- As many as 1 in 4 women suffer from any postnatal mental health problem and research suggests that this figure has increased over time (Almond, 2009).
- Quantitative research into postnatal mental health has yielded inconsistent and contradictory results (Yim et al., 2015) and researchers have been united in stating that the evidence for a purely biological model of postnatal depression (PND) is unconvincing (Mauthner, 1999; Knudson-Martin & Silverstein, 2009).
- “Motherhood myths” can be defined as cultural discourses pertaining to the norms and ideals of motherhood (McCloskey, 2008). For almost two decades, researchers have posited that culturally-informed “motherhood myths”- discourses about how ‘good’, ‘normal’ and ‘healthy’ mothers look, feel and behave- exert a powerful impact on women’s mental health (Beck, 2002; Stoppard, 2014; Choi, Henshaw, Baker & Tree, 2007). However, only a handful of these “myths” have been systematically identified through formal discursive methods.
- Additionally, traditional Cognitive-Behavioural Therapeutic (CBT) interventions may be less effective with a perinatal population (O’Mahen et al., 2012) and there is an impetus to identify pertinent maternal discourses that could be targeted in clinical practice.
- Therefore, the aim of this meta-data-analysis was to discursively analyse existing qualitative literature on postnatal depression, anxiety and distress in order to

identify which cultural discourses- or “motherhood myths”- can be identified in first-person accounts of distress.

Method

- A systematic search for empirical articles using qualitative methods to explore postnatal depression or anxiety was conducted on PsychINFO, CINAHL, PUBMED and Academic Search Complete. 139 citations were identified through systematic searches and four were identified through hand searching. After duplicate removal and screening, ten remained.
- Paper quality was assessed using the Critical Appraisal Skills Programme (CASP) tool. The qualitative data were aggregated and analysed using a novel approach which drew together general meta-synthesis techniques (Finfgeld-Connett, 2018) and Foucadian (1980) discourse analysis, which assumes that individuals will draw upon pertinent discourses in conversation to construct their experiences.

Results

- Papers varied in quality.
- The discourse analysis revealed ten dominant “motherhood myths”. Moreover, women used causal language to link these discourses to mental health outcomes, especially guilt, shame and disappointment. These discourses are summarised below:
 - (1) ‘The right way to birth’ refers to the discourse that ‘good/normal’ mothers give birth naturally, without medical intervention or pain relief, and experience birth as empowering and non-traumatic.

- (2) 'Love at first sight' refers to the discourse that 'good/normal/healthy' mothers invariably feel an immediate rush of overwhelming love towards their baby, such that slower bonding processes were pathologised.
- (3) 'The best, most natural way to feed' refers to the discourse that 'good/normal' mothers find breastfeeding a universally effortless and enjoyable experience.
- (4) 'Natural instinct' refers to the expectation that 'good' mothers instinctively know how to care for their babies without needing to learn or seek information, just as an animal knows how to care for her young.
- (5) 'Good, contented little babies' refers to the cultural assumption that infant temperament can be attributed to the quality of mothering.
- (6) 'Earth mothers and working mums' refers to the expectation that 'good/normal' mothers find parenting the most fulfilling role of their lives and long to stay at home with their children.
- (7) 'All you've had is a baby' minimises the emotional complexities of mothering and dictates that mothers should cope independently with the 'ordinary' challenges of parenting.
- (8) 'Mothering is women's work' refers to the cultural assumption that responsibility for baby care is disproportionately attributed to women and the construction of motherhood as naturally resulting from femaleness.
- (9) 'Getting your body back' refers to the expectation that the 'ideal' woman will regain a slim, attractive figure within months of giving birth.

Theory

- A CBT theory is presented as a template formulation illustrating how internalised motherhood myths can perpetuate postnatal distress. In particular, it aims to explain how cultural discourses can influence cognitive interpretations of experiences (e.g. “there must be something wrong with me, I don’t feel that immediate rush of love”) which in turn trigger particular emotions (e.g. shame, hopelessness), which motivate particular cognitive and behavioural coping mechanisms (e.g. thought suppression, social withdrawal). It suggests that these internalised discourses can therefore escalate cycles of shame, predispose women towards biased comparison to other mothers and prevent disconfirmation of beliefs through social withdrawal.

Discussion

- This meta-data-analysis demonstrated that it is possible to identify culturally transcendent, emotionally salient discourses, or “motherhood myths”, in women’s first-person accounts of postnatal depression, anxiety and distress. Additionally, it highlighted that women naturally use causal language to link the experience of myth incongruence with mental health outcomes.
- However, limitations must be noted. For example, although participants were diverse, the majority lived in urban contexts. This limits transferability, as women in rural areas may endorse different discourses. Additionally, the papers were somewhat outdated with the most recent being published in 2014.
- Strengths include systematic methods of searching and reviewing including use of a second rater. Other strengths include the identification of a novel question and the translation of results into a clinically applicable theory.

- Clinical approaches indicated by this study include the use of psychoeducation around motherhood myths as well as behavioural experiments to test and support ‘alternative beliefs’ (Padesky & Greenberger, 2012).

The Impact of Social Media and Cultural Factors on Women’s Postnatal Wellbeing: An Online Experiment

- The transition to motherhood is often a happy event. However, it can also be a tumultuous time in which women experience transformative change in all aspects of their lives. Research has revealed that mental health problems are significantly higher in new mothers than in new fathers. Thus, it has been suggested that postnatal distress is likely to be influenced by pervasive cultural norms surrounding womanhood in general and motherhood in particular (Choi et al., 2005).
- Motherhood norms have evolved over time. Moreover, the advent of the internet and other global trends may have shaped maternal expectations and experiences (McDaniel, Coyne & Holmes, 2012). For example, mothers of infants are increasingly isolated from family, causing many to rely on the internet for social support, entertainment and advice (MUSH, 2017).
- However, this exposes women to several potential mental health risks. For example, discourse analyses have identified that portrayals of parenting on image-based Social Networking Sites (SNSs) such as *Instagram* are predominantly idealised (LeMoignan et al., 2017), and idealised expectations of motherhood are associated with poor mental health outcomes (Choi et al., 2005). Additionally, experimental research has found that exposure to images displaying idealised female bodies has a depressant effect on non-perinatal women (e.g. Holland & Tiggeman, 2016).

- However, researchers have also reported the rise of a ‘counter-mainstream’ social media movement led by women who aim to ‘normalise’ deviation from motherhood ideals, expand the cultural conceptualisation of ‘good motherhood’ and improve maternal wellbeing (LeMoignan et al., 2017).
- 184 women were recruited to participate in an online experiment and were automatically randomised to one of three conditions: (1) a normalising condition, which displayed complex portrayals of the ‘highs and lows’ of motherhood, (2) an idealising condition, with posts reinforcing dominant motherhood norms, or (3) a control condition with urban photography. Expert-by-experience consultants validated the posts.
- Hypotheses were as follows:

Quantitative hypotheses

- (1) H1. Type of social media post (SMP) will significantly affect women’s wellbeing outcomes, such that exposure to idealising SMPs will be associated with decreases in body image satisfaction, life satisfaction and self-compassion, whereas normalising SMPs will have the opposite effect.
- (2) H2. Parenting sense-of-competence, which represents a proxy for pre-existing vulnerability, will moderate this relationship.

Methods

- Participants were recruited through word of mouth and predominantly generic *Facebook* groups.

Results

- To test H1, Analyses of Covariance (ANCOVA) were conducted with type of social media post as the independent variable and parenting sense of competence as a covariate. Follow-up ANCOVAs on significant results revealed that all pairs of comparisons were significantly different from each other, except for the comparison between the normalising and control conditions. This applied to all four outcome variables.
- Body image satisfaction, self-compassion and life satisfaction all decreased in the idealising condition and increased in both the normalising and control groups. Differences between normalising and control conditions were non-significant in all cases.
- Additionally, a moderation regression analysis using PROCESS software tested whether parenting sense of competence (PSOC) moderated this relationship for any of the outcome variables. The results were non-significant in all except one case: it was found that PSOC moderated differences in life satisfaction between the control and idealising groups, although it only explained an additional 1.2% of the variance in outcomes. Thus, hypothesis 2 was partially supported.

Discussion

- Overall, with the exception of negative mood which reduced slightly in the idealising as well as the other conditions, SMPs idealising motherhood had a consistently negative effect on body image satisfaction, life satisfaction and self-compassion. Additionally, rather than acting as a ‘neutral’ control, images of urban architecture appeared to function as an ‘active’ positive influence. Such images were aesthetically pleasing, and the follow-up surveys suggested that women paid close attention to them. A similar result was found in a ‘thin-ideal’ study with images of nature (Cohen et al., 2019). Consequently, it is hypothesised that this represented an unintentional ‘mindfulness’ exercise, since

mindfulness has been shown to positively impact wellbeing even after brief exposure.

The results were tentatively interpreted as suggesting that type of social media post had an important impact on women's wellbeing outcomes and that, despite the one significant moderation result, this was in general not substantially impacted by PSOC.

- Strengths of the study include that it posed a novel question with clear clinical implications and that it was well-powered. However, whilst participants came from diverse cultural backgrounds, they were predominantly white, and it is not known whether they were representative of women from both working class and middle-class contexts. This limits the generalisability of findings to diverse groups of women.

Impact, integration and dissemination

- In line with previous researchers, it is recommended that the identification and deconstruction of particular “motherhood myths” which are salient to individual women should be integrated as a part of postnatal mental health treatment. Additionally, assessments should inquire about social-media use but not assume that duration of use is equivalent to harm. Instead, clinicians should thoughtfully explore which sites a woman is using as well as the function and meaning she ascribes to them.
- This paper supports the use of several CBT, narrative and third wave approaches for women whose distress is fueled by harmful cultural ideals. For example, ‘defusion’ techniques from Acceptance and Commitment Therapy (ACT) could be adapted to externalise harmful cultural narratives (e.g. “there’s radio ‘perfect mum’ playing again”).
- Findings will be disseminated to my clinical perinatal team, the participants of the study and to new mothers via a remote workshop hosted by MUSH, a London organisation

supporting perinatal wellbeing. I also aim to submit the meta-data-analysis and the empirical article to a number of journals for peer review (e.g. *BMC Women's Health*).

**Motherhood Myths and Postnatal Distress: A Systematic Meta-Discourse-Analysis
and Theory**

Abstract

Background: For almost two decades, researchers have posited that “motherhood myths” – cultural discourses which convey expectations about ‘good’, ‘normal’ and ‘healthy’ mothers – exert a powerful impact on perinatal mental health (Hays, 1998; Choi et al., 2005). However, only a handful of these myths have been systematically identified through formal discursive methods. **Aims:** the aim of this meta-data-analysis was to systematically identify pertinent “motherhood myths” in women’s first-person accounts of postnatal anxiety, depression and distress. **Methods:** 139 citations were identified through systematic searching and four were identified through hand searching. After duplicate removal and screening, ten remained. Quality was assessed using the Critical Appraisal Skills Programme (CASP) checklist. Qualitative data were analysed using Foucauldian (1980) discourse analysis. **Results:** the discourse analysis yielded ten dominant discourses or “motherhood myths” which women linked to mental health outcomes (e.g. shame, depression) using causal language. These myths dictated specific expectations for how ‘good’, ‘normal’ and ‘healthy’ mothers birth, feed and feel towards their babies as well as motherhood more generally. **Theory:** A Cognitive Behavioural Therapeutic (CBT) theory suggests a pathway between internalised cultural discourses, pre-existing vulnerabilities and thoughts, feelings, behaviour and mood. **Conclusions:** This synthesis supports claims that cultural discourses influence perinatal mental health. Limitations include the lack of up-to-date papers and a dearth of participants from non-urban contexts.

Background

Postnatal mental ill health, which affects approximately 1 in 4 mothers (Almond, 2009), is a global public health issue which can be “devastating” (DoH, 2016, p. 14) for women, children and families (Almond, 2009; Knudson-Martin & Silverstein, 2009; Beck, 2002; Cooper & Murray, 1997; Roux et al., 1996). Indeed, 1 in 7 women is estimated to suffer from postnatal depression (PND) and approximately 1 in 4 is estimated to experience postnatal anxiety (PNA) (Almond, 2009). However, prevalence rates vary across cultures (Affonso et al., 2000) and the ability to obtain robust estimates is compromised by pervasive stigma which often discourages women from disclosing distress, even anonymously (Dennis & Cheung-Lee, 2006; Button, Thornton, Lee, Shakespeare & Ayers, 2017). From a medical perspective, symptoms of postnatal depression (PND) are not differentiated from depression in the general population and can include tearfulness, irritability and fatigue, social withdrawal and a perception of being unable to cope (APA, 2013). Similarly, postnatal anxiety is often characterised by hypervigilance to threat, irritability and intrusive thoughts (APA, 2013). However, there is a significant overlap in meaning between PNA and PND which distinguishes them from anxiety and depression in the general population. That is, concerns about being a “bad” mother according to societal standards dominate both (Knudson-Martin & Silverstein, 2009; Wardrop & Popadiuk, 2013).

Since the 1980s, researchers have been united in stating that the evidence for a purely biological model of PND is weak and unpromising (Knudson-Martin & Silverstein, 2009; Yim et al., 2015). Since then, quantitative researchers have sought to establish which biopsychosocial variables correlate with postnatal depression in particular (e.g. Cooper & Murray, 1997; Oates et al., 2004; Weissman & Olfson, 1995). Risk factors which moderately correlate with PND include

difficult infant temperament (Cooper & Murray, 1997), previous experience of perinatal mental health problems (Beck, 2002, Grigoriadis & Romans, 2006) and significant life stresses (Beck 2001; O' Hara, 2009; Roberston et al., 2004). However, one issue which has puzzled researchers is that different studies have yielded contradictory results and it is not well understood why some women with the same risk factors develop PND while others remain well (Cooper & Murray, 1997; Mauthner, 1999; Yim et al., 2015). For example, a systematic review by Yim and colleagues (2015) found that one-quarter of longitudinal studies demonstrated significant associations between prenatal stressful life events and PND, but the remainder reported nonsignificant effects or univariate effects which disappeared after multivariate analyses. Similarly, while some studies have shown that first-time mothers are more susceptible to PND, others have demonstrated a connection between PND and second-time motherhood, and yet others have found no association whatsoever between parity and distress (Green, 1990). Therefore, quantitative research has failed to fully illuminate the phenomenon of depression after childbirth.

Moreover, much of this research highlights the complex, nuanced and dynamic interplay between relational and social factors in a woman's environment. For example, marital status has no clear relationship to PND for the majority of women (Beck, 2002, O' Hara & Swain, 1996). However, being married or in a stable partner relationship appears to be highly protective for women from ethnic minorities (Kuo et al., 2004; Yonkers et al., 2001; Yim et al., 2015), and yet living with the baby's father confers a greater risk of PND for adolescent mothers (Figueiredo et al., 2007). Consequently, it has been argued that reviewing quantitative variables alone cannot fully illuminate our understanding since such methodologies inevitably strip psychosocial factors of meaning and context (Mauthner, 1999). In the past three decades, myriad individual

qualitative studies have resulted in rich, contextualised findings (e.g. Amankwaa, 2003; Hall, 2006; Stevenson, Purtell & Coe, 2014). Synthesising a broad range of qualitative studies, an increasingly recognised parallel technique to the meta-analysis of quantitative papers, has the potential to result in robust interpretations which can improve understanding (Evans, 2002; Thorne, Jensen, Kearney, Noblit & Sandelowski, 2004).

Cultural discourses and maternal mental health

One aspect of the psychosocial context which has consistently emerged as being potentially important (e.g. Mauthner, 1999; Beck, 2002; O' Mahen et al., 2012) is the relationship between cultural discourses, colloquially termed, "motherhood myths", and postnatal mental health (Mollard, 2014). "Motherhood myths" can be defined as cultural discourses pertaining to the norms and ideals of motherhood, where discourse refers to, "a belief, knowledge or practice that constructs reality and provides a shared way of understanding the world" (McCloskey, 2008, p. 4). For almost two decades, researchers have emphatically argued that such "myths" exert a powerful influence on maternal mental health (Hays, 1998; Beck, 2002; Stoppard, 2014; Choi, Henshaw, Baker & Tree, 2007). For example, one previous meta-synthesis identified the "myth" that becoming a mother would inevitably be the happiest time in a woman's life and posited that this contributed to unrealistic expectations (Knudson-Martin & Silverstein, 2009). Another study concluded after a conversation analysis that motherhood is constructed as an innate gendered talent (Cowdery & Knudson-Martin, 2005). Others have claimed that a discourse dictating that "good" mothers must sacrifice their own needs for those of their children contributes to excessive psychological pressure (e.g. Davies & Welch, 1986; Stoppard, 2014; Ambrosini & Stanghellini, 2012). However, the latter claim lacks grounding in

robust research methods and, ultimately, the particulars of these “myths”, as well as the question of whether they transcend cultural boundaries, remains to be fully explored.

Theoretical underpinnings of the relationship between maternal discourses and mental health

Several psychologists have proposed a relationship between motherhood discourses and postnatal distress by drawing on Higgins’ (1987) self-discrepancy theory (Haga et al., 2012; Liss, Schiffrin & Rizzo, 2013). Specifically, Higgins proposed that distress results when an individual perceives a discrepancy between the “ideal self”, which may be informed by cultural expectations, and the “actual” self as it is subjectively perceived. Psychoanalyst Daniel Stern’s seminal 1995 work ‘the Motherhood Constellation’ complements this theory. Specifically, Stern posited that women internalise a “schema” or blueprint for how good mothers should be which is shaped by the media, the cultural context and the community- or, as he puts it, “the grapevine” (Stern, 1995, p. 33). He wrote that “the culture places a high value on the maternal role” and that a woman is “in part evaluated as a person by her participation and success in [that] role” (p. 174). This suggests that the “ideal” maternal self may be informed by the cultural expectations to which women are perennially exposed.

Indeed, qualitative studies have lent support to the application of self-discrepancy theory to postnatal mental health. For example, meta-syntheses consistently highlight that distressed postnatal women appear to universally articulate a discrepancy between idealised cultural expectations and the lived reality of life with a baby (Beck, 2002; Knudson-Martin & Silverstein, 2009; Mollard, 2014), a phenomenon which was described as “crushed maternal role expectation” in Beck’s (2002) grounded theory analysis. Similarly, several qualitative studies have highlighted women’s perceptions that they are failing in comparison to an internalised

“ideal” mother (Mauthner, 1999, Knudson-Martin & Silverstein, 2009; Haga et al., 2012). For example, in a qualitative study exploring black women’s experiences of PND in America, Amankwaa (2003) wrote:

“African-American women reported that their mothers appeared to be “superwomen,” and they struggled to emulate their predecessors. They seemed to struggle between who they really were (the real self) and who they thought they were supposed to be (the ideal self)...being a superwoman meant that mothers adapted to caring for babies, work, homes, families, husbands and themselves without complaining of the pain or discomfort during their postpartum period” (p. 311).

Correlational research also supports the relevance of this theory to postnatal mental health. For example, Liss, Schiffrin and Rizzo (2013) found that self-perceived discrepancy between women’s “ideal” and “actual” maternal selves was strongly positively correlated with guilt and shame, and fear of negative evaluation by others moderated this relationship. Researchers have further demonstrated an association between the endorsement of idealised maternal norms and comparison and competitiveness with other mothers (Chae, 2005), as well as higher rates of anxiety and depression (Choi et al., 2005). Finally, women with idealised expectations in pregnancy appear to be at greater risk of developing mental health problems after birth (Pancer et al., 2000). Collectively, this research supports the hypothesis that a causal relationship may exist between the internalisation of pressurising discourses of motherhood and women’s postnatal wellbeing (Beck, 2002).

Clinical rationale for the present study

In Beck’s (2002) synthesis of qualitative studies exploring postnatal depression, she argued that “healthcare professionals have a responsibility to take an active role in putting an end

to the harmful myths of motherhood that are so prevalent in our society and that put our mothers' mental health at risk" (p. 470). However, clinical models incorporating maternal discourses do not yet exist and only a handful of these "myths" have been systematically identified through formal discursive methods (e.g. Cowdery & Knudson-Martin, 2005; Knudson-Martin & Silverstein, 2009). Additionally, previous meta-syntheses have invariably taken a broad sweep, with research questions seeking to understand all aspects of meaning related to postnatal depression or anxiety (Beck, 2002; Knudson-Martin & Silverstein, 2009, Mollard, 2014). Consequently, explorations of cultural constructions of motherhood have been limited to a single theme or paragraph, precluding rich and detailed investigation. The present study therefore argues that a synthesis focused specifically on the systematic identification of maternal discourses, as grounded in the empirical accounts of distressed mothers, is warranted. Furthermore, it argues that such an analysis could contribute meaningfully to the development of targeted models of prevention and intervention.

Indeed, one of the important functions of meta-synthesis is to constitute a bridge between research and clinical practice (Finfgeld-Connett, 2014). Although worldwide good practice guidelines on the treatment of PNDA do not exist, the current recommended approach for both postnatal anxiety and depression in the United Kingdom (UK) is Cognitive Behavioural Therapy (CBT) (NICE, 2014/2020) which combines behavioural activation with meaning-processing techniques such as cognitive restructuring (Padesky & Greenberger, 2012). However, standard CBT interventions make no explicit reference to the cultural context (Padesky & Greenberger, 2012), prompting concerns about the appropriateness of existing CBT models for this population (O'Mahen, Fedock, Henshaw, Himle, Forman, Flynn, 2012). Indeed, one study found that CBT was no more effective for postnatal women than exploratory counselling (Millgrom, Negri,

Gemmill, McNeil & Martin, 2005), whilst another found no difference between CBT and the delivery of supportive “listening visits” by untrained health visitors (Prendergast & Austin, 2001). Although it may be considered reassuring or even cost-effective that women are resilient enough to recover from serious distress with non-specialist support, this raises questions about whether postnatal women are currently receiving the most effective psychological treatments capable of creating lasting change (O’Mahen et al., 2012). The formulation of empirically-grounded, culturally sensitive understandings of PNDA which can inform the development of new interventions is, therefore, a matter of clinical priority (O’ Mahen et al., 2012).

Culturally sensitive CBT protocols have already been successfully implemented with other populations. For example, the CBT model of depression in older people incorporates generational “cohort beliefs” into its formulation of depression in older life (Laidlaw, Thompson, Dick-Siskin & Gallagher-Thompson, 2003). Additionally, it has been proposed that the integration of cultural perspectives into CBT models may increase their acceptability to service-users from diverse populations (Laidlaw et al., 2003). If myths such as “motherhood is always the happiest time in a woman’s life” could be identified, feelings of failure in comparison to these myths could be normalised through psychoeducational tools. Moreover, culturally informed beliefs about motherhood could be interrogated through classic CBT techniques such as surveys and behavioural experiments and alternative, more flexible beliefs could be collaboratively developed and tested (“e.g. motherhood can bring moments of immense joy along with moments of immense challenge”) (e.g. Padesky & Greenberger, 2012). Meta-syntheses integrate insights from large, diverse samples and combine the richness of qualitative approaches with the rigour of systematic methods. They therefore arguably increase the scope for

transferability (Thorne et al., 2004) and provide a solid foundation for the development of evidence-based clinical formulations (Finfgeld-Connett, 2014).

Aims and objectives

The aim of this meta-data-synthesis is to analyse primary qualitative literature exploring the meaning of postnatal distress, depression and anxiety in order to address the following research question:

- Which cultural discourses, or “motherhood myths”, can be identified in women’s first-person accounts of postnatal distress, depression and anxiety?

Following the identification of particular discourses, an attempt will be made to integrate such “myths” into a culturally sensitive, cognitive behavioural model of postnatal distress which could be used in clinical practice.

Method

The seven-step PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines were consulted as a blueprint for this review (Moher et al., 2009). Additionally, two further steps were added for hand-searching and theory development. In practice, all steps were traversed iteratively rather than linearly¹:

1. Literature review
2. Definition of research questions
3. Outlining inclusion and exclusion criteria and search strategies
4. Database searching, article retrieval and duplicate removal
5. Hand-searching relevant reference lists
6. Quality assessment of the selected studies
7. Discourse analysis of final studies
8. Development of the theoretical model
9. Finalising the synthesis and writing up the paper

Approach to meta-synthesis

Qualitative meta-synthesis can be defined as “the critical review, analysis, interpretation and comparison or integration of findings, or processed data, from primary qualitative studies”

¹ For example, preliminary analyses were conducted on articles from two databases, after which database searching was expanded to ensure comprehensiveness. This led to two additional articles being included at a second stage and the analysis was refined on this basis.

(Jones, 2004, p. 271). Unlike the meta-analysis of quantitative papers, it has been said that the overarching purpose of meta-synthesis is to “broaden the reader’s understanding of a particular phenomenon” (Boland et al., 2017, p. 151) by presenting an integration of primary data across studies. Additionally, it has been argued that true meta-synthesis goes beyond data integration to present novel theories with real-world clinical application (Finfgeld-Connett, 2014).

Myriad approaches to qualitative meta-synthesis exist, including meta-ethnography (Noblit & Hare, 1988), meta-summary (Sandelowski, Barroso & Voilis, 2007) and meta-aggregation (Joanna Briggs Institute, 2014). Most of these combine methods of data extraction and aggregation with primary qualitative approaches to analysing data, such as thematic analysis (Finfgeld-Connett, 2018). However, certain commonalities exist across approaches (Finfgeld-Connett, 2018). Moreover, it has been argued that the choice of approach should be guided above all by the research question and objective of the review (Boland et al., 2017). As Finfgeld-Connett has noted, “given the variety of research questions and the raw data that are involved in these types of investigations, the data analysis methods tend to be emergent and somewhat unique to each study” (p. 6).

The aim of this review was to extract and analyse discourses from primary qualitative studies exploring the meaning of postnatal distress. Consequently, the type of qualitative approach which aligned most closely with the overall objective was discourse analysis, which is an umbrella term referring to a collection of approaches that “emphasise human language as a socially contextual performance and [which bring] a socially critical lens to [their] study” (Wertz, 2011, p. 4). However, no existing approaches for meta-discourse-analysis currently exist.

It was ultimately decided that the risk of pursuing a novel approach was outweighed by an impetus to use the most appropriate methodology, and no other method (e.g. thematic meta-synthesis) would have yielded a set of discourses. Therefore, a novel approach to meta-synthesis was undertaken. However, this combined established approaches to discourse analysis with established methods for extracting and synthesising results across primary studies and therefore took inspiration from several existing approaches to meta-synthesis (see: Finfgeld-Connett, 2018). In order to ensure that the synthesis was conducted with rigour and replicability, the process (which was traversed iteratively) has been outlined below:

1. ***Data extraction and aggregation.*** To begin with, two types of data were extracted, basic characteristics of studies (e.g. date, participants, methods) and data for subsequent analysis. As Boland and colleagues (2017) have noted, it is important to only extract data which is deemed relevant to the research question. Consequently, primary qualitative data which referenced the cultural and relational context was extracted, with a broad definition of this being used in order to capture all potentially relevant information. An example of the kind of data that was not extracted would be a description of physical or psychological symptoms, such as metaphorical descriptions of fatigue, lethargy or hopelessness. Substantive qualitative results (including participants' words and the original authors' interpretations) were initially extracted together. However, the final analysis used participants' direct quotations only. This was considered more valid given the linguistic focus of discourse analysis and since each of the authors were guided by their own research questions, epistemological backgrounds and biases, as Mollard (2014) has argued. Data were organised in a series of tables in Microsoft Word.

2. **Data Analysis.** As mentioned, discourse analysis is an umbrella term for a family of analytic approaches and, ultimately, Foucauldian (1980) discourse analysis was selected for this review. Like other discourse approaches, Foucauldian analysis plays close attention to the use of language in reference to the broader social context (Foucault, 2003). Additionally, the Foucauldian approach assumes that “dominant” discourses exert influence on individual lives by constraining action and identity and it holds that all discourses are inextricably linked to institutional, political, social and economic power (Foucault, 2003). Crucially, it assumes that in the course of “micro” interactions (e.g. research interviews) individuals will utilise available discourses to rhetorically construct their experiences. It has been described as both a methodology and a, “perspective on social life” (McMullen, 2011, p. 205).

Following a familiarisation process through closely reading papers, the first step in data analysis was to cluster qualitative data into themes; at this stage, participants’ words and authors’ interpretations were kept together. Data were organised according to broad, recurrent, topic-driven themes with labels including ‘birth’, ‘breastfeeding’, ‘bonding’, ‘employment’, ‘body image’, ‘gender’, ‘coping’ and ‘healthcare’. Initial themes were then reviewed and those with insufficient supporting data were eliminated. The data were read several times with key words and phrases being underlined and bolded and annotations which were close to the raw data were generated to note distinctive terminology (e.g. ‘get body back’/‘back to myself’) as well as to capture meaning relating to the construction of identity (e.g. ‘Stay-at-home mother=Earth mother=proper mother’).

At the next stage, the most relevant data were filtered and transferred to a new table where they were categorised under the same thematic ‘codes’, some of which now included tentative discourses (e.g. ‘bonding- good mothers fall in love at first sight’). In this table, authors’ interpretations were removed unless the quotations to illustrate that code were weak or not included. Some quotations were clustered in more than one column until discourses distinctly emerged (e.g. two codes ‘loving every minute’ and ‘happiest time of your life’ shared several quotations initially). At the same time, a separate word document was developed with ‘within-study’ and ‘cross-study’ memos (Finfgeld-Connett, 2018) which consisted of concise descriptive statements of discourses within and across studies. This was used as a basis for what Jensen and Allen (1996), following Noblit and Hare (1988), referred to as “reciprocal translations” (Jensen & Allen, 1996, p. 555); that is, the process of, “comparing and contrasting...individual constructions” (p. 555).

McMullen (2011) makes a distinction between more “molecular” types of discourse analysis that focus on the minutia of language and more “molar” types, of which Foucauldian discourse analysis is one. The latter take a broader approach of focusing on how, “sets of statements come to constitute objects and subjects” (McMullen, 2011, p. 205). Foucauldian discourse analysis is also concerned with constructions of morality, however in this case the question was less about what makes one a good person and more about what makes one a good mother. Therefore, questions were asked of the data such as: what does it mean to be a good/normal/healthy mother? If a mother cannot breastfeed/give birth naturally/bond instantly/regain an attractive figure/adapt

uncomplainingly to motherhood, what does this say about her as a woman and as a mother, and what are the consequences for her wellbeing? In what ways do these constructions vary or remain constant across cultures? Which overarching discourses (e.g. feminism, domesticity, parenthood, naturalism) are being resourced, implicitly and explicitly? What are the “background normative conceptions” (Wetherell, 1998, p. 405), and who is the woman being positioned by (e.g. healthcare professionals, mother-in-law, peers, herself)? The tables and memos were subsequently elaborated into a draft analysis using a discourse analytic lens and this was refined and redrafted several times, with certain discourses being renamed or even removed late into the process.

Towards the end of the process, all primary articles were re-read multiple times to ensure that no important data had been missed due to personal biases or assumptions, and descriptions were edited to ensure goodness of fit to primary data. Saturation was judged to have emerged when the primary researcher was confident that, “despite the unlikely event that a small amount of contrary data could emerge, they would not alter the results in a significant way” (Finfgeld-Connett, 2018, p. 57). To enhance transparency, an extract of the coding development is displayed in table 1.

It is worth noting that some codes were highly distinctive and well developed in some papers but not in others due to the focus of each paper. For example, ‘the right way to birth’ was not present in all papers, which may have been influenced by the fact that many of the studies did not ask specifically about birthing experiences. Similarly, the topic of body image was not included in all studies. Perhaps this is unsurprising

considering that these could be considered to represent ‘subthemes’ of larger themes relating to motherhood, such as the theme of ‘discrepant expectations’. On the other hand, more global discourses such as ‘the happiest time of your life’ appeared universally. Discourses with insufficient support were removed at the final stage.

Table 1

Extract from a coding table

Article	Birth (natural birth vs medical birth)	Breastfeeding (breast is best)	Bonding (falling in love at first sight)	Body Image (losing the baby weight)
Haga et al. (2012)	<p>Women with rigid expectations of birth vs women with open expectations – “I was definitely <u>open</u> to the idea of painkillers...you have to <u>play it by ear</u>”</p> <p>“The birth was completely <u>opposite of what I had imagined</u>. We were <u>supposed to be</u> at the ABC-clinic, and <u>it was supposed to</u> happen in the most natural way, <i>no pain relief</i>... except from perhaps acupuncture... but then the water broke, and the water was colored, an indication that the baby was stressed, so <u>I was shipped</u> over to the <u>regular</u> area of the hospital... It was <u>freezing</u>, and all I wore was this hospital shirt and wool socks... <u>it was nothing like I had imagined</u>. I was <u>supposed</u> to be in this <u>big room with a soft chair, bath, where I could easily move around</u>... all this I was <u>missing out on</u>”</p> <p>“You have to play it by ear” (constructed as individual style, agency)</p> <p>Natural = no pain relief. Pain relief = cheating? Artificial?</p> <p>Fantasy juxtaposed with reality</p> <p>“Natural vs unnatural”</p> <p>“Supposed to be” X2</p> <p>“Like I imagined” – idyllic fantasy (control)</p> <p>Freedom vs degrading (“easily move around” vs “I was shipped”), comfort vs uncomfortable (“soft chair” vs “freezing”)</p> <p>Unnatural birth ‘done to’ her by medical institution? (Passive voice – “<i>I was shipped</i>”)</p> <p>Missing out on- psych consequences incl. loss, disappointment</p> <p>Diff accounts variously passive/active, blame for self and others- good mothers ‘manage’ to birth naturally (willpower? Innate ability? Strength of determination/love/motherliness?)</p>	<p>Author commentary: “Every interviewee, regardless of personal approach, talked extensively about the importance of <u>succeeding</u> with breastfeeding. All but one felt that <u>society, including professionals at the well-baby clinics</u>, exerts <u>an immense pressure</u> with regard to breastfeeding and that <u>being a good mother requires that you breastfeed</u>. In the hospitals it was communicated that if you <u>get sore or have trouble, you are not doing it right</u>. Many described how <u>midwives</u> at the hospital had given them a package of substitute to bring home, but with the clear message that it should only be used in extreme <u>emergencies</u>. Several of the women reported having struggled a lot with breastfeeding during the first weeks and <u>oftentimes months</u>, and they described how they had spent the time between breastfeeding sessions <u>dreading the next time they would have to breastfeed</u>. They particularly <u>dreaded the nights, worrying whether they would be able to breastfeed, as they felt more fragile and alone at night-time</u>. Thus, <u>failing or succeeding with breastfeeding appeared to be closely tied to well-being</u>”</p> <p>“The first month was really tough. The fact that breastfeeding was so hard <u>affected everything</u> else. <u>Since I didn’t manage to breastfeed properly, I didn’t want to go out and see people</u>, and so I ended up sitting on the couch all day”</p> <p>Breastfeeding positioned as central and pivotal– “affected everything”</p> <p>“Since I didn’t manage”– constructed as individual skill (e.g. versus ‘it didn’t happen for us’)</p> <p>Success – opposite implied (failure)</p> <p>Struggle = not ‘doing it right’</p> <p>‘Being a good mother requires that you breastfeed’ – prerequisite, intrinsic to ‘good mother’ concept</p> <p>Breastfeeding = ‘proper’, natural, right; bottlefeeding = ‘improper’, unnatural, last resort, ‘extreme’ – rare also implied. ‘Extreme emergencies’ = language of disaster, crisis</p> <p>Pressure directly from nursing staff (institution- medical) and ‘society’ (vague)</p> <p>If you are sore or struggling= mother’s fault, failure of technique? Failure of stoicism? Located individually</p> <p>Psych & behavioural consequences include worry/anxiety, fragility, loneliness, inadequacy, social avoidance (“I didn’t want to go out”), implying shame/hiding. Relational/bonding cons.= ‘dreading’ feeding (unspoken background narrative about breastfeeding and bonding?)</p>	<p>Nothing on bonding specifically – breastfeeding affecting bonding (‘dread’, ‘affected everything’)</p>	-

Inclusion and exclusion criteria

A systematic search for studies using qualitative methodology to explore the lived experience of postnatal distress, depression or anxiety was conducted on four databases: PsychINFO, PUBMED/Medline, CINAHL and Academic Search Complete with the final search being conducted on the 27/07/2020. It has been recommended that CINAHL, a social sciences database, is included for qualitative syntheses as a priority since it has been demonstrated that it is highly effective for retrieving qualitative papers (Flemming & Briggs, 2007). Due to the idiosyncratic nature of many titles of qualitative studies, Boland and colleagues (2017) also recommend that database searching is supplemented with handsearching. Handsearching can include investigating the reference lists of other relevant papers and conducting generic internet searches, a technique which is also known as “citation pearl growing” (Hartley, 1990). However, Boland and colleagues (2017) also caution against including too many papers in qualitative reviews and argue that capturing all possible studies is less important than including studies up to the point of data saturation: “if you draw upon methods from primary qualitative research then you will search only until you have retrieved sufficient studies to demonstrate that any additional studies do not provide any new information- you have, in qualitative terms, reached data saturation” (p. 149).

In the course of database searching and handsearching, only studies satisfying the following criteria were kept:

- Including studies with qualitative methodology using individual interviews only rather than focus groups or other methods. Studies including both focus groups and interviews should be excluded
- Excluding non-empirical and non-primary studies such as reviews, other meta-syntheses and theoretical articles
- Excluding evaluations of interventions
- Excluding doctoral dissertations or theses due to their length, which threatened to compromise feasibility
- Including articles specifically focusing on the experience of PND, PNA or general postnatal distress, but not rarer conditions such as postnatal psychosis. Postnatal distress shall be defined for the purposes of this review as an episode of non-psychotic depression, anxiety or significant distress (some resist medicalisation; see Mauthner (1999) and Hightet and colleagues (2014)) with onset occurring during the postnatal period, where the postnatal period is defined as the time spanning from the birth of a child to one year (Beck, 2002; Stewart et al., 2003)². As this appears to be a commonly used definition (e.g. Beck, 2002; Stewart et al., 2003), with most others including more conservative rather than more liberal criteria (e.g. Buultjens & Liamputtong, 2007; Wardrop & Popadiuk, 2013) studies which state that women had a diagnosis of PND or PNA without clarifying which definition of the postnatal period this diagnosis was based on can be included

² There is no one agreed definition of the postnatal period when it comes to the diagnosis of postnatal mental health problems (Wisner, Moses-Kolko & Sit, 2010) with some defining PND as stringently occurring within 4 weeks of birth and other studies diagnosing women up to 24 months after birth (Gardner et al., 2014).

- Studies are to be included where the women report experiencing postnatal depression, anxiety or distress either currently or in the past, with no limit as to how long it has been since the episode of postnatal mental ill health. This was decided because, as previous syntheses have demonstrated, many valuable articles exist in which women are reflecting on their experiences after the episode has passed and in fact, due to the ethical and logistical difficulties associated with interviewing unwell women, this approach seems to be common (e.g.; Mauthner, 1999; Amankwaa, 2003; Highet et al., 2014)³. Therefore, limiting the synthesis to those studies in which interviewees were currently experiencing postnatal distress risked constraining its scope
- Studies can be included where participants include postnatally distressed women alongside women who identify as being well or content in the postnatal period, as long as there is sufficient data focusing on the experience of distressed women (if at least half the sample is comprised of postnatally distressed women this could be used as a rule of thumb). Similarly, this is because valuable articles exist which include both distressed and non-distressed women together (e.g. Mauthner, 1999) such that excluding such articles incurs the risk of forgoing valuable insights
- Excluding women with chronic major depressive or anxiety disorders who happen to be in the postnatal period (i.e. the onset of the depression, anxiety or distress was before or after the postnatal period as defined above)
- Excluding non-perinatal depression or anxiety in women of young children rather than infants (e.g. major depressive disorder in mothers of toddlers or preschoolers)

³ Three known meta-syntheses focusing on women's lived experiences of postnatal depression have been published (Beck, 2002; Knudson-Martin & Silverstein, 2009; Mollard, 2014) and all include primary studies in which women were interviewed later in life and were reflecting back on their experiences (e.g. three or five years later).

- Excluding studies which interview pregnant women alongside postnatal women and studies exclusively focusing on pregnant women
- Including only studies which clearly focus on the phenomenology, meaning and lived experience of emotional suffering and distress, rather than related issues such as opinions about causes of postnatal depression (e.g. bad luck, hormones) which do not explore meaning. Studies with postnatally distressed women which have a specific focus other than meaning (e.g. help-seeking behaviour, breastfeeding difficulties, labour experience, stigma) should be excluded
- Including mothers' perspectives only– any studies including women's perspectives alongside those of healthcare workers, fathers or other family members should be excluded
- Including women of any age, culture, class, ability, sexuality, religion or ethnicity
- Excluding transgender women, as the themes and challenges are likely to be substantially different
- Excluding women in rare and extreme circumstances (such as women fleeing war), as the themes and challenges are likely to be substantially different
- Excluding women with post-adoption depression syndrome rather than postnatal depression, for the same reason as above
- Excluding women with preterm infants or ill babies, for the same reason as above
- Including studies published in English
- Including studies published between 1999 and 2020

Search strategy

Following an informal literature review, keywords were generated. Care was taken to include population terms that would capture international language variations (e.g., “postnatal”, “postpartum”). A search strategy was piloted on multiple databases and was subsequently refined to maximise inclusion of relevant papers. The Boolean operator ‘NOT’ was used to narrow the search and increase its efficiency by excluding unwanted studies such as those focusing on the views of fathers. Additionally, wildcard asterisks (*) were used to cover words with multiple endings or spellings.

A summary of the search strategy used is displayed in Table 2 and the three primary concepts guiding the strategy are outlined below:

- 1. Concept one:** population terms to capture the postnatal period (e.g. postpartum, perinatal, after childbirth).
- 2. Concept two:** terms to capture distress, anxiety or depression (e.g. depress*, mood disorder).
- 3. Concept three:** terms relating to study design (e.g. first-person accounts).

Table 2*The algorithm used in database searches*

Boolean operator	Search construction	Scope of search
	Postpartum OR postnatal OR perinatal OR “after childbirth” OR maternal	Title
AND	depress* OR distress OR “mood disorder*” OR anxiety OR “postpartum depression” OR “depression and motherhood”	Title
AND	qualitative OR "lived experience" OR “first person accounts” OR phenomenological OR thematic OR discourse OR “explanation of depression” Or “essential meaning structure”	Title
NOT	fathers OR fathering OR men OR parents' OR paternal OR "health workers" OR healthcare OR providers' OR health profess* OR pharmacists OR "healthcare providers" OR “healthcare professionals’ perspectives” OR “volunteer support” OR “nursing students” OR "systematic review" OR systematic OR review OR synthesis OR meta-synthesis OR "research literature" OR "clinic staff" OR meta-data-analysis OR obstetrics OR "general practitioners" OR stillbirth OR postadoption OR therapy OR screening OR treatment OR intervent*	Title

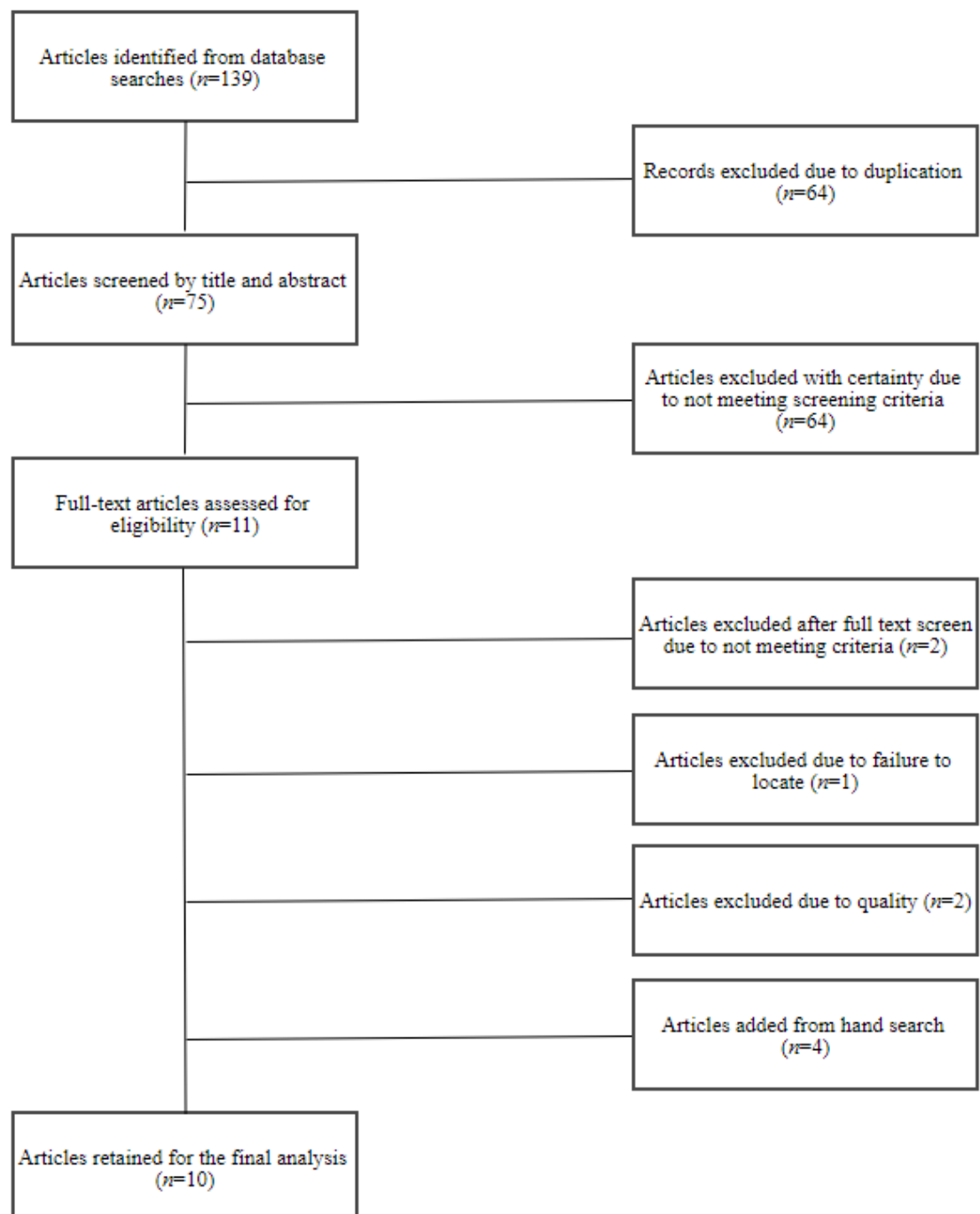
Screening procedure

139 papers were retrieved across the four databases (PsychInfo = 35; Medline = 41; CINAHL = 37; Academic Search Complete = 26) and Zotero, a referencing software, was used to remove duplicates. After duplicate removal, 75 citations remained. The primary author screened 100% of articles at the title and abstract screening phase and a second rater screened 20% of these. The

rate of agreement was 100%. At the title and abstract screening stage, 64 citations were excluded with certainty. 11 were then read in full, with two “maybe’s” and nine “probably yesses”. Two were excluded at this point for not meeting screening criteria. One of these was excluded because it diagnosed women with postnatal depression as late as 24 months after birth (Gardner et al., 2014) and one focused on perception of causes rather than meaning (Wittowski et al., 2011). Another paper was excluded because it could not be found despite extensive searching, including searching archives and contacting the authors (Chen, 1999). Two papers were further excluded due to poor quality as one included so few direct quotations that it would contribute negligibly to the analysis (Chan & Levy, 2004) and another included the authors’ summary of themes with no direct quotations whatsoever (Lawlor & Sinclair, 2003). This left six articles which were identified through systematic searching, and which were retained for the final analysis and an additional four articles were identified through hand searching, leaving ten in total. The most common reasons for exclusion were (1) that the paper was a thesis, (2) that it included pregnant women or (3) that it included the views of people other than the mother, usually healthcare staff. This information is displayed in figure 1.

Figure 1

PRISMA flow diagram of study selection.



Assessing paper quality

Critical appraisal has been defined as, “the process of systematically examining research evidence to assess its validity, results and relevance before using it to inform a decision” (Hill & Spittlehouse, 2003, p. 1). While there is widespread agreement on the importance of high standards in qualitative research, the question of whether systematic tools are appropriate for evaluating qualitative studies has been debated (e.g. Denzin, 2009; Hammersley, 2007; Reid & Gough, 2000). Nonetheless, standardised assessment of paper quality is necessary to ascertain the value and integrity of the data included in any systematic review (Lachal et al., 2017).

A quality checklist was therefore completed for each study based on the validated Critical Appraisal Skills Programme (CASP) (available from <http://www.casp-uk.net/>; Public Health Resources Unit, 2006). This tool was chosen because it is specifically designed for qualitative studies and was therefore arguably less likely to exhibit “quant-centric” biases (Campbell et al., 2003). Nine of the ten questions posed by the CASP checklist require a response of “yes”, “can’t tell” or “no” whilst the final question, “how valuable is the research?” invites a free-text response. This is outlined in Table 2.

Following title and abstract screening, the primary researcher evaluated all studies using the CASP checklist. A second rater scored 20% of these (2 papers) and the rate of agreement was 100%. In order to more precisely quantify quality, studies were scored according to Duggleby and colleagues’ (2010) quantitative scoring system for the CASP tool. Specifically, 3 points (denoting a strong score) were awarded for each item where the authors clearly fulfilled criteria

and extensively justified this, a score of 2 (denoting a moderate score) was awarded where authors appeared to address the issue but failed to fully elaborate an explanation and a score of 1 (a weak score) was allocated where authors failed to offer clear explanation of how they fulfilled the criterion. This scoring system was applied to eight of the items as Duggleby and colleagues (2010) propose that two of the questions function to screen out inappropriate studies. In total, each study could obtain a maximum score of 24. Since the CASP authors do not recommend using a quantitative scoring system to inform decisions, these results should be treated as informative only. Please see the CASP questions in Table 3.

Table 3

The Critical Appraisal Skill Programme (CASP) checklist

	Yes	Can't tell	No
Criteria			
Was there a clear statement of the aims of the research?			
Is a qualitative methodology appropriate?			
Was the research design appropriate to address the aims of the research?			
Was the recruitment strategy appropriate to the aims of the research?			
Were the data collected in a way that addressed the research issue?			
Has the relationship between researcher and participants been adequately considered?			
Have ethical issues been taken into consideration?			
Was the data analysis sufficiently rigorous?			
Is there a clear statement of findings?			
How valuable is the research?			

Results

Description of included studies

The final ten studies predominantly focused on women with postnatal depression ($n=8$) with one study including any women with “postnatal distress” and one study focusing on women with postnatal anxiety only. Studies were conducted in England ($n=3$), Australia ($n=2$), Norway ($n=2$), Hong Kong ($n=1$), Canada ($n=1$) and America ($n=1$) and the American study focused specifically on black American women. To our knowledge, none included non-heterosexual women or women with disabilities. Studies included a mixture of women who self-reported distress ($n=6$) and those who were formally diagnosed ($n=4$). Of those studies which interviewed formally diagnosed women, one interviewed women who had been diagnosed by clinicians upon admission to a Mother and Baby Unit and the remainder ($n=3$) included women who had been screened by researchers using the cut-off scores on the Edinburgh Postnatal Depression Scale (EPDS) (Cox, Holden & Sagovsky, 1987). Six studies interviewed women who were currently unwell and in the postnatal period at the time of the interviews and four studies interviewed women who were reflecting back on experiences of postnatal ill health and who were no longer in the postnatal period. Two of these specified that women needed to have experienced the period of postnatal depression within the last five years, one specified a limit of three years and one gave no time limit. It was not clear whether all these women considered themselves to be fully recovered or whether some were continuing to experience low mood and/or anxiety that had begun postnatally. Discourses were based on interviews with women exhibiting varying levels of distress, from those admitted to an inpatient psychiatric facility to women in the community who had experienced little functional impairment. All except two articles used semi-structured interviews, and the remaining two used an unstructured approach. Additionally, a

variety of analytic methods were used, including thematic analysis ($n=3$) and phenomenological approaches ($n=4$), as well as relational theory ($n=1$), a feminist biographic method ($n=1$), and the constant comparison technique ($n=1$). Notably, none were published later than 2014. In total, 149 women who had either experienced postnatal distress in the past or who were currently experiencing it at the time of the interviews contributed to the review. This information is summarised in table 4.

Table 4*Characteristics of Studies and Quality Appraisal Scores*

Sample Characteristics				Intervention Characteristics		Quality appraisal score (Duggleby et al., 2010)
Authors (Date)	Source	Research Aim	Sample Size	Population	Qualitative method	
Coates, Ayers & de Visser (2014)	Systematic search	To determine how women themselves conceptualise their postnatal distress.	17	Women who experienced “emotional difficulties” (diagnostic boundaries were deliberately rejected) in England. All women had “given birth in the last year” and were therefore interviewed during the postnatal year. All except one were white and one was Chinese.	Semi-structured interviews in person (n=15) for those living in South East England and over the phone (n=2) for those in other parts of England. All analysed with Interpretative Phenomenological Analysis.	21/24

Leung, Arthur & Martinson (2005)	Systematic Search	To describe the lived experience of postpartum stress among depressed Hong Kong Chinese mothers.	11	Hong Kong mothers were diagnosed with the Edinburgh Postnatal Depression Scale at their sixth postnatal week. Only those with scores of 13 and above were included. All participants were interviewed in person at the sixth postnatal month.	Semi-structured interviews analysed with Colaizzi's (1978) Descriptive Phenomenological Method.	21/24
Highet, Stevenson, Purtell & Coe (2014)	Systematic search	To gain insight into women's lived experience of postnatal depression and anxiety, the factors that contribute to them and the context in which they develop.	28	Women from both urban and rural areas in Australia who self-identified as having experienced either postnatal anxiety or depression (they were recruited through a charity for postnatal anxiety and depression). Women were interviewed within five years of having experienced PND/A.	Semi-structured interviews conducted face-to-face (n=24) and over the phone (n=4) and interviews were analysed using thematic analysis.	21/24

Hall (2006)	Systematic search	To explore the thoughts and feelings held by mothers who suffered from postnatal depression.	10	Women scoring above the clinical threshold on the EPDS in Northwest England who were also showing impaired daily functioning. All women had been recently diagnosed with PND and were interviewed during the period of postnatal depression.	Unstructured interviews analysed using Interpretative Phenomenological Analysis.	20/24
Vik and Hafting (2012)	Systematic search	To analyse mothers' descriptions of loss related to childbirth and PND. Note: mothers were not asked explicitly about loss and the definition of "loss" was used very broadly in the paper (e.g. loss of	15	Women were diagnosed with the EPDS at a Norwegian health centre on their sixth postpartum week but were interviewed when their babies were between six and 22 months.	Semi-structured interviews analysed using a phenomenological approach (Sokolowski, 2000)	24/24

freedom, identity)
and it was felt that
the paper focused
sufficiently on
meaning to warrant
inclusion.

Haga, Lynne, Slinning & Kraft (2012)	Systematic search	To gain insight into why some women find the transition to motherhood to be so emotionally taxing that they feel some level of depressed mood, while others feel mostly content after having a baby.	12; depressed (<i>n</i> =8), non- depressed (<i>n</i> =4)	Women were 12 first-time Norwegian mothers, eight of whom self-reported experiencing postnatal depression. Participants were all interviewed within the postnatal year.	Semi-structured interviews analysed with thematic analysis.	21/24
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Mauthner (1999)	Hand search	To explore motherhood and postpartum depression from women's point of view.	40; distressed (n=23), non- distressed (n=17)	23 women in England who self-identified as having been distressed during the postnatal period along with 17 who identified as having been non- distressed. Women were interviewed after the postnatal period and were reflecting back, with no time limit on how long it had been. One woman was of Afro-Caribbean origin and the remainder were white.	Unstructured interviews analysed using relational theory.	24/24
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Amankwaa (2003)	Hand search	To describe the nature of postpartum depression among African American women.	12	African American women either diagnosed with or self- reporting having experienced PND. The women were interviewed within three years of the period of postnatal depression.	Semi-structured interviews analysed with the constant comparison technique.	21/24
Buultjens & Liamputtong (2007)	Hand search	To capture the missing voices of mothers who are suffering postnatal depression.	10	Women clinically diagnosed with PND and admitted to a Mother-and-Baby Unit in Melbourne, Australia. Women were inpatients and were therefore all currently unwell at the time of the interviews.	Semi-structured interviews analysed with thematic analysis.	21/24

Wardrop & Popadiuk (2013)	Hand search	To explore first-time mothers' experiences of postpartum anxiety.	15	White Canadian, heterosexual professional women who self-identified as having suffered from postnatal anxiety as their main difficulty, with onset up to six months postpartum. Women were interviewed up to three years later.	Semi-structured interviews analysed with a feminist biographic method (Denzin, 1989)	24/24
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Quality assessment

All studies met the screening criteria (Duggleby et al., 2010) and scores ranged between 20 and 24 points. Four articles (Mauthner, 1999; Leung, Arthur & Martinson, 2005; Vik & Hafting, 2012; Wardrop & Popadiuk, 2013) achieved maximum points based on the Duggleby and colleagues' (2010) system. The most common weakness was the failure to adequately consider the relationship between researcher and participants, which applied to sixty per cent of the papers. Additionally, several papers failed to formulate original research questions or contribute distinctly novel findings and few included questions specifically about the cultural or relational context of women's distress. This suggested a potential bias towards psychiatric nosology exhibited by some researchers who disproportionately inquired about observable symptoms (e.g. loss of pleasure, sleep disruption) rather than meaning, depriving some results of richness. All studies formulated clear research questions, gained ethical approval and all appeared to use appropriate methodology. These scores should demonstrate that discourses were extracted from studies with varying degrees of quality. These results are displayed in Table 5.

Table 5

Quality appraisal scores based on the CASP tool using Duggleby and colleagues' (2010) system

Article	Design	Sampling	Data collection	Reflexivity	Ethics	Analysis	Findings	Value	Total score
Coates, Ayers & de Visser (2014)	3	3	3	1	3	3	3	2	21
Leung, Arthur & Martinson (2005)	3	3	3	3	3	3	3	3	24
Hight, Stevenson, Purtell & Cooley (2014)	3	3	3	1	3	3	3	1	21
Hall (2006)	3	3	3	1	3	3	3	1	20
Vik & Hafting (2012)	3	3	3	3	3	3	3	3	24
Haga, Lynne, Slinning & Kraft (2012)	3	3	3	2	1	3	3	3	21
Mauthner (1999)	3	3	3	3	3	3	3	3	24
Amankwa (2003)	3	2	3	1	3	3	3	3	21
Buultjens & Liampittong (2007)	3	3	3	1	3	3	3	3	22
Wardrop & Popadiuk (2013)	3	3	3	3	3	3	3	3	24

Results of the discourse analysis

The discourse analysis is summarised in Table 6.

Table 6

Summary of the Discourse Analysis

Headings	Brief description of discursive “motherhood myth”
The right way to birth	Good mothers give birth “naturally”, i.e. with minimal medical intervention and pain relief, and experience birth as empowering and non-traumatic
Love at first sight	Good mothers feel an immediate rush of overwhelming love towards their baby after birth
The best, easiest, most natural way to feed	Good mothers breastfeed effortlessly and enjoy it as a magical bonding experience
Natural instinct	Good mothers instinctively know how to competently care for and soothe their babies
Good, contented little babies	Good mothers have good, contented little babies who are happy and sleep most of the time
The happiest time of your life	Good mothers experience the postnatal period as the happiest, most joyful time of their lives
Earth mothers and working mums	Good mothers find mothering the most fulfilling role in their lives. They enjoy all tasks associated with mothering and resist returning to employment as they cannot bear to be parted from their child
All you’ve had as a baby	Good mothers cope effortlessly with the ‘ordinary’ and ‘unremarkable’ transition to motherhood and do not complain, struggle or need help
Mothering is women’s work	Good mothers shoulder a disproportionate sense of responsibility for baby care enthusiastically and without complaint because this is their natural, female calling
Getting your body back	Good mothers regain a slim, attractive figure within the first few months after having a baby and always present as well-groomed

The right way to birth

The discourse of the natural world was invoked to construct a hierarchy of birth, whereby “natural” birth was considered the right way to do it (“the way it should be”). Women’s language implied that birth with medical intervention or pain relief represented the antithesis to this: it was unnatural, wrong and inferior. The experience of disappointing birth was therefore constructed as a failure of individual women (“I felt a bit useless”), even where intervention was necessary to ensure the safety of mother and baby, suggesting that according to the dominant discourse, natural birth is exalted as an individual achievement of womanhood. Further, “natural” birth was imagined in romanticised terms and constructed as a rite of passage into motherhood to which each woman is entitled and which many longed for. Several women imagined that natural birth would optimally set them and their babies up for motherhood, such that “missing out” on this ritual “thwarted” the proper course of nature and contributed to a sense of loss as well as disappointment and anger, with faceless individuals (medical professionals? Ethereal forces?) being blamed for, “[taking] something away from me”:

“I still felt a bit useless about it. I wanted to feel like I was the mummy who just did it all naturally and it was all gorgeous and the way it should be” (Coates, Ayers & de Visser, 2014)

“The birth was completely opposite of what I had imagined...I was supposed to be in this big room with a soft chair, bath, where I could easily move around...all this I was missing out on” (Haga et al., 2012)

“[Labour and birth] was nothing like I imagined so I just felt...at a disadvantage. Like I’d been thwarted all the way through and, um, something was taken away from me” (Coates, Ayers & de Visser, 2014)

Love at first sight

The discourse dictating that there is a “right” way to feel after birth was invoked through idyllic images of a mother falling in immediate, overwhelming love with her baby. Potential factors contributing to the absence of this feeling, such as overwhelm, pain, exhaustion or the after-effects of traumatic birth, were notably absent, suggesting that women invariably expected this of themselves. One woman suggested that this norm is constructed through word of mouth; it is something that other mothers, “often talked about”. In other accounts it was referenced as something the interviewer would have taken-for-granted knowledge of (“that gush”), suggesting that this is a widespread expectation. Moreover, checking that one has fallen in “instant love” became a thermometer test for assessing whether a mother was ‘normal’ or ‘pathological’, such that the absence of this feeling was interpreted as a cause for concern and a sign of possible madness; it was not “right” and “weird”. By subverting this narrative, one participant hinted at its dominant features: she insisted that for her bonding involved, “hard work” and represented, a “process”; something requiring “nurturing”. In other words, it involved active effort. This suggests that, within the dominant discourse, instant bonding is assumed to occur as a passive, instantaneous and biologically determined event:

“As soon as she was born, I didn’t feel right, like I didn’t have a connection with her...it was weird” (Coates, Ayers & de Visser, 2014)

“I didn’t feel that gush like I expected” (Hall, 2006)

“That bond was the result of hard work. When my daughter came out, I loved her, but I hadn’t yet fallen in love with her, and that falling in love is a process” (Wardrop & Popadiuk, 2013)

The best, easiest, most natural way to feed

In women’s accounts of breastfeeding, the categories “natural” and “easy” were conflated. Consequently, women’s experiences of struggle, as denoted by “pain”, “discomfort”, distress (“in tears”) and tensions in the mother/infant relationship (“[I] dread[ed] Laura feeding”) fell outside this norm and came to symbolise failure and abnormality. One woman acknowledged the myth that breastfeeding is “natural and easy” by debunking it as “not true”. There was also a pervasive sense that, “no one actually tells you” how painful and difficult it can be, contributing to feelings of having been let down. There are clear implications of not having been ‘warned’ and having been led to believe that breastfeeding struggles are rare, transient and merely inconvenient, including shock, alienation, self-blame and a suspicion of one’s own abnormality and ineptitude. Since the discourse is that breastfeeding is, ‘the most natural thing in the world’, it becomes constructed as something that ‘natural’ mothers should take to effortlessly. Therefore, the logical conclusion is that there is something inherently flawed, unnatural or unmaternal about a mother who struggles. Guilt resulted not from the breastfeeding challenges themselves, but

from women's socially informed beliefs that their experiences of struggle were both rare and caused by a deficiency in innate mothering ability. Consequences included feelings of shock and inadequacy as well as behaviours such as self-attack:

"I always assumed breastfeeding would be easy and natural - not true. It was always painful. The discomfort made me dread Laura feeding and I was always in tears" (Mauthner, 1999)

"You feel like you're the only one, and I think if maybe they're more open about the problems you can face, because no one actually tells you, "oh, your baby might not feed from you"...then it's not such a shock" (Coates, Ayers & de Visser, 2014)

The 'breastfeeding is the best, easiest and most natural way to feed' discourse did not seem to be generated locally amongst women. Instead, it was constructed as originating from powerful sources: in particular, nurses, midwives and medical institutions. Moreover, breastfeeding was not constructed as a preference, but as something women were mandated to do by authorities in exchange for approval. It was not that it was considered the 'best' way, but rather the *only* legitimate way to feed, such that 'giving up' or 'bottle feeding' involved resigning oneself to being considered a failed mother in the eyes of authorities. When a healthcare professional told one woman that she didn't, "have to do this", the terms "authorised" and "have to" reinforce that this is not ordinarily a choice a woman can make of her own volition, underscoring her lack of agency. Rather, the right to deviate from the norm can only be granted by a representative of that institution which regulates the morality of infant feeding. In the below

quotation, this was constructed as a subversive act of rebellion and mutiny on the part of a professional, as evidenced by the nurse's confession that, "I shouldn't be telling you this":

"One of the ward nurses came in and sat down on my bed when I was trying to feed him and said, 'you don't, I shouldn't be telling you this, but you don't have to do this. And it was such a relief, again, to be authorised to not beat myself up about it'" (Coates, Ayers & de Visser, 2014)

Natural instinct

The discourse of the natural world and biological determinism was extended to the myth that 'natural' mothers who are 'fit for the task' should instinctively know how to soothe and care for their infants. Accordingly, tasks associated with baby care and accurate interpretation of ambiguous cues were constructed as things women should innately 'just know', in the same way that an animal 'just knows' how to care for her young. The implication was that not knowing, feeling uncertain, needing to learn or soliciting information equated to "constantly getting it wrong" and had implications for whether a woman considered herself 'cut out' for the role. Consequently, not knowing was experienced as highly threatening and triggered anxiety and shame.

Common phrases such as, 'trust your instincts' and 'mum knows best' were notably absent, suggesting that women do not consciously attribute their interpretations to cultural influences. For example, one woman laughed at herself and asked, "how did I think that [knowing everything automatically] would just happen?" suggesting that that the answer to this

question was not obvious. Instead, women took for granted this discourse as a given truth. Moreover, pregnancy was set up as a logical precursor to knowledge such that it was expected that maternal instinct would be passively received according to biological law. Across cultures, women believed that “good” mothers “should” know how to mother “intuitively”, simply because, “I carried them, they’re mine”, causing uncertain women to be produced as failures:

“You should know when they need a feed, you should know when they’re thirsty, you should know but you don’t....you think, ‘I should know, I’ve carried them, they’re mine, I should know what to do’” (Coates, Ayers & de Visser, 2012)

“I thought I would intuitively know everything, and you know, be a good mother and that would just happen, somehow (laughs). How did I think that would happen?” (Wardrop & Popadiuk, 2013)

Good, contented little babies

The theme of unsoothable infants was pervasive throughout accounts and was linked to an expectation that most infants are ‘good’, contented little babies. Specific emotions evoked by crying were not named, suggesting that they are perhaps primitive, inexpressible or unnamable. However, feelings of helplessness and desperation were apparent, as well as feelings of “overwhelm” and of not being able to “tolerate” it. Indeed, the mirroring of distress in mother and infant was apparent in descriptions of maternal “sob[bing]” and the symmetrical description that, “she cried...I cried too”. A good mother/good baby pair was implied through the implication

that a crying baby indicates failure on the part of the mother, whose primary function is to soothe and nurture. The opposite of these linguistic categories was also implied: if a 'good' baby equals a 'good' mother, then a 'bad' baby must equal a 'bad' mother. For example, one mother worked to justify that the crying was not the result of negligence; she had "comforted her, changed her diaper".

For some women, this image of the "screaming", inconsolable baby was juxtaposed with a fantasised image of a "totally different" baby that "sleep[s] most of the time", leading to shock. Notably, sources of this fantasy were absent. However, there was a sense that other people's screaming infants were kept behind closed doors, so that unsoothable babies became constructed as abnormal. One woman's sense of helplessness and desperation was evident in her search for meaning: she wondered if her crying baby represented a divine punishment ("is it something I have done?"), reinforcing the idea that disconsolate infants represent a rare misfortune that is linked to maternal badness:

"I think it was because my idea of what he'd be like was totally different" (Buultjens & Liamputtong, 2007)

"[I had been] fighting against it all the time- saying, "you shouldn't be like this, you should be quiet, you shouldn't be crying" (Mauthner, 1999)

"...she was screaming the whole time. I thought babies sleep for most of the time, but she didn't...I was sitting up in the hospital at night and crying thinking how can it be this bad?"
(Buultjens & Liamputtong, 2007)

“There were times when the baby was crying. So, what, I can’t deal with this...I would sob. And I said, “Lord, Lord Jesus, what is it? Why is it happening to me?... Is it something I have done?” (Amankwaa, 2003)

The happiest time of your life

The expectation that early motherhood would be the happiest time in a woman’s life was portrayed through diverse terminology including, “joyous”, “really happy”, “fantastic”, “fabulous”, “perfect” and “content”. Here, commercial media were explicitly invoked with reference to a “Huggies ad”. Causal language (“for that reason”) was used to link misleadingly romantic portrayals of early motherhood in popular culture with the psychological experience of disappointment. Unhappiness was constructed as resulting not from the struggle inherent in the challenges, but from the confrontation with a vast discrepancy between fantasy and reality:

“There was nothing I didn’t look forward to [in pregnancy]. I even looked forward to the birth itself. That’s probably why I ‘fell so hard’ when she came” (Haga et. al., 2012)

“I guess I thought motherhood would be a really happy time...there is that picture that the Huggies ad paints where it is all warm and furry...and it’s not. I guess for that reason I was let down by those expectations” (Buultjens & Liamputtong, 2007)

“I thought it was supposed to be a really joyous occasion” (Buultjens & Liamputtong, 2007)

“Having a baby is not fantastic like I expected” (Hall, 2006)

While some women were disappointed to find that early motherhood was not perpetually blissful as they had been led to expect, others were let down by expectations of manageability, as well as by the lived emotional reality of challenges. Women seemed particularly shocked by how consuming and engulfing early motherhood could be and commonly reported feeling trapped and overwhelmed by the responsibility, disruption, relentlessness and all-consuming nature of motherhood which left them feeling, “anxi[ous]”, bewildered and detached from constructions of former selves:

“We were probably very unrealistic about what was going to happen afterwards (...) I just assumed we would maintain the same standards” (Highet et al., 2014)

“During pregnancy, I knew it would be hard, but I didn’t know that it completely changed everything!” (Vik & Hafting, 2012)

“Actually...[I] didn’t expect so much problems” (Leung, Arthur & Martinson, 2005)

“My lack of experience and, um, what do you call it like shock of misunderstanding...probably exacerbated my anxiety” (Wardrop & Popadiuk, 2013)

Earth mothers and working mums

Another discourse dictated that good mothers never want to be parted from their babies and long to stay at home; they are told that motherhood will be the most fulfilling role of their lives and that they will ‘love every minute’. This was inconsistent with Hays’ (1998) analysis that working mothers are held to an ideal standard for ‘having it all’. A dichotomy emerged between the “Earth” mother, whose identity was connected to the natural world and who was positioned as the “proper” mother who “make[s] jam and [goes] to the local playgroups”, and the “businesswoman” who is by implication “[im]proper” as well as selfish, neglectful and unmaternal and who needed to be, “[swept]...under the carpet” in order to succeed at motherhood. Giving up work, and with it valued aspects of identity, was constructed as a necessary “sacrifice” that good mothers “should” willingly make without conflict, even if it means “pushing my own needs down to the bottom of the bag”. This interacted with another discourse that dictated that good mothers should willingly sacrifice all their own needs for those of their child such that paid employment was constructed as a selfish indulgence. However, whether women experienced this expectation directly or covertly varied profoundly across cultures. For example, one Chinese mother was told by her sister-in-law that soliciting childcare was equivalent to putting her baby in a “concentration camp”, with all its associations of torture, dehumanisation and death and the consequent positioning of the mother as evil, abandoning and abusive.

When pondering their ambivalence about working identities, women’s unhappiness was often constructed as resulting from a discrepancy between ‘ideal’ and ‘actual’ selves; it was the consequence of a lost fantasised image of oneself as a mother who was indeed ‘loving every minute’ as well as from the suppression of authentic aspects of self. These narratives also suggested that confronting unwanted identities was so intolerable that women resorted to

psychological coping mechanisms such as denial and self-deceit (“I had to admit to myself”) as well as thought suppression (“shut off”/“sweep...under the carpet”). However, due to the limited number of questions about employment in more recent papers, caution is advised when transferring these findings to contemporary societal contexts:

“I really felt that one of the reasons I felt so down was because I had to admit to myself that I was not an Earth mother, and no matter how much I wanted to be the sort of parent that stayed at home, perhaps I had to accept the fact that I was going to be happier at work...I think it was a sort of conflict really” (Mauthner, 1999)

“I...thought it would be so enjoyable and so rewarding but I was just bored to death”
(Hall, 2006)

“I kept thinking, ‘No, if I’m going to do this mother thing properly, I’m going to be at home, I’m going to watch neighbours, I’m going to make jam and I’m going to go to the local playgroups. What I did was...sort of sweep the businesswoman under the carpet and say, ‘Ah but I’m this now’....I was intent on ‘This is my big sacrifice, this is me changing my lifestyle for the good of Suzie and pushing my own needs down to the bottom of the bag” (Mauthner, 1999)

All you’ve had is a baby

Another discourse invoked what several scholars have referred to as the paradox by which motherhood is simultaneously idealised and minimised (e.g. Stoppard, 2014; Mauthner, 1999). That is, having a baby was constructed as the pinnacle of female achievement and also

“no big deal”, something that virtually everyone does. Any emotional turbulence experienced along the way was deemed unworthy of validation due to the ‘commonplace ordinariness’ of motherhood, creating psychological pressure to just “cope” and “get on with it”. Women’s internalisation of this discourse led them to respond to their own experiences of suffering with invalidation, dismissal and judgment. Attributes of ideal motherhood which were linked to this included, ‘independence’, ‘not asking for help’, ‘coping’, ‘not making a big deal’ and ‘doing it all on my own’. The implications were that acknowledging vulnerability and asking for help implied failure and invited judgments of oneself as weak, dependent and melodramatic (‘making a big deal out of it’).

Some women attributed this pressure to unique cultural influences, such as African American culture and Christianity. For example, in Amankwaa’s (2003) study, there is a vivid image of the “strong black woman” whose strength emerged from surviving generations of slavery and racial oppression. Thus, admitting weakness in this context took on particularly poignant and momentous meaning as it came to represent the failure to honour one’s ancestors by admitting to struggling with the comparably ‘unremarkable’ challenges of motherhood. However, although the particulars varied, its core meaning appeared to be culturally transcendent:

“If I were not African American and Christian, it wouldn’t be so hard, because there are some things that I believe are unique to...But so two things, in African American culture, the idea of being able to handle your own problems and black women being strong” (Amankwaa, 2003)

“There is a lot of pressure in my family...we are expected to just have children and cope”
(Buultjens & Liamputtong, 2007)

“...there was this sort of feeling, It’s no big deal. You’ve had a baby, that’s all you’ve had. It’s actually very difficult to ask for help. As a mother, you’re expected to cope” (Mauthner, 1999)

“There was these little voices at the back of my head...I can’t cope with this, I can’t deal with it, how am I going to manage for a whole day...and on the other hand there was me saying to myself, for heaven’s sake, it’s only two children, some people have four...and so it was a battle going on in my head” (Mauthner, 1999)

Mothering is women’s work

Reflections on how gendered expectations affected divisions of responsibility in parenthood were prevalent, although disparities were more far more pronounced in some cultures (e.g. Chinese culture) compared with others. In this sense, the data were consistent with Cowdery and Knudson-Martin’s (2005) analysis and Hays’ (1998) speculation that mothering is constructed as an innate, gendered talent. However, some women in more equitable, liberal cultures had developed expectations that male partners would participate actively and equally, precipitating “surprise” and “shock” as well as resentment and a sense of feeling “let down” in cases where these expectations were not fully met. Many women drew on broader discourses of gender equality to portray their partners as considerate and progressive in other ways, which

constructed this behaviour as being out of character and unexpected, thus compounding the hurt and confusion. The expectation that women would ‘do it all’ was reinforced by the behaviour of family and others around them, and women interpreted this as resulting from the fact of their “female[ness]” and “woman[hood]”:

“As a mother and as a female, there’s an expectation that if you’re there, you’re in charge and you’ll take care. And it’s with my husband but it’s also with everyone else. Like, if we go out, I’m the default carer for our son...I was really surprised because I had, like, I’m the breadwinner in our family” (Wardrop & Popadiuk, 2013)

“I just felt this huge weight on me. For the first time I felt it was unfair that I was the woman and I’m the mom, so I have to stay with the baby and feed him every two hours” (Wardrop & Popadiuk, 2013)

The psychological consequences of the ‘mothering is women’s work’ discourse included overwhelm in the form of “anxiety”, burnout and a heavy (“weight[y]”) burden on women’s shoulders. However, another consequence for some was a sense of loneliness and reduced emotional intimacy in relationships. This applied to women who no longer recognised their partners in fatherhood, but also to women whose partners were kind, supportive and well-meaning. For these women, the source of the discourse was located not in male partners but in societal structures such as maternity/paternity leave policies, since a disproportionate responsibility for the repetitive, mundane labour of baby care almost inevitably fell to women to do, “day in, day out”:

“Oh yeah he is great and as helpful as he can be...but he doesn’t understand how I felt at all...he is not there day in, day out” (Buultjens & Liamputtong, 2007)

“He had to work a lot, and the hours felt really long, and I felt very alone...there is actually no-one who really understands what I’m going through” (Haga et al., 2012)

“I became angry at my husband because I’d say to him, I don’t think you understand how hard it is” (Highet et al., 2014)

A paradox also emerged, whereby women had little choice other than to embrace this role in order to be produced by society as a ‘good mother’. As a result, some women blamed themselves for becoming active participants in their own oppression. Moreover, women who protested or subverted this norm risked being positioned negatively as cold, unmotherly, selfish or even “prudish”, since freedom seemed to be constructed as a privilege that men are entitled to but which women are expected to surrender in exchange for the rewards of mothering:

“I really want him to stay more at home, but it is really difficult to ask. I don’t want our friends, or him, to think that I am prudish; rather I want them to think that I give him the freedom he needs” (Vik & Hafting, 2012)

“I was the one that got up every three hours and I was the one that took care of her and I was the one that still did the laundry and cleaned the house and made supper for my husband. So I felt like all those things still had to happen. So I was really kind of partly responsible for my own anxiety, right?” (Wardrop & Popadiuk, 2013)

Getting your body back

The ‘getting your body back’ discourse caused women to expect to reclaim (‘get back’) their ‘pre-baby bodies’ not only to ‘recover’ their identity, of which sexual attractiveness often represented a vital component, but also because ‘being attractive’ was constructed as a core aspect of ideal womanhood. However, ‘being put together’ also had a secondary function in that women who were “dressed by noon” could signal to themselves and others that they were coping. For some, fitness represented a lifestyle characterised by vitality, freedom and youthfulness which was now no longer tenable. Thus, bewildering changes in daily routine combined with unfamiliar postnatal bodies to elicit painful feelings of loss, dissatisfaction and a sense of being disconnected from oneself:

“I discovered myself after birth, um, being there with the child and I looked awful. I wasn’t prepared at all, think of it, a woman that is slim and fit and working all the time, doing exercise and workouts, and suddenly she is supposed to sit at home with the baby, um...you rapidly gain weight...it would be so good to be myself again, without that big belly” (Vik & Hafting, 2012)

“The biggest thing for me was that my body shape changed” (Highet et al., 2014)

“[I expected to look] more put together and... dressed by noon...that was very, very wrong” (Wardrop & Popadiuk, 2013)

Theory

Finfgeld-Connett (2014) has argued that, “metasynthesis investigations frequently result in isolated findings rather than findings in relationship, and opportunities to generate research hypotheses and theoretical models are not always fully realized” (p. 1581). Several meta-data-syntheses and associated theories of postnatal distress already exist (Beck, 2002; Knudson-Martin & Silverstein, 2009; Mollard, 2014). However, despite representing important contributions to the literature, these theories have remained alienated from clinical practice. Thus, the present study seeks to enhance the clinical utility of the present analysis by translating the cultural discourses into a specific Cognitive Behavioural Therapeutic (CBT) model.

The choice of CBT was carefully considered. Often, researchers with feminist or social constructionist lenses resist CBT approaches, preferring narrative or other modalities. However, this arguably minimises the potential impact of the research since CBT represents the current recommended intervention for postnatal depression and anxiety (NICE, 2014/2020). Thus, this synthesis aims to follow Laidlaw and colleagues (2003) in suggesting that culture and cognitive-behavioural therapy need not be mutually incompatible. Instead, as Laidlaw and colleagues (2003) have argued, integrating culture into psychological models may increase the likelihood that such models will be experienced as non-blaming and relevant to diverse women. This paper further argues that, similarly to older people (Laidlaw 2014), depression and anxiety in mothers is likely to be highly influenced by not only the woman’s early experiences, but also her interpretation of the sociocultural context surrounding motherhood, which will surely interact with her “core beliefs” (Beck et al., 1979). Additionally, her experiences will inevitably be

experienced within the live, dynamic and evolving relationship with her baby as well as with those in the “micro” environment. For these reasons, bespoke perinatal formulations of depression and anxiety which integrally incorporate the cultural and relational context are warranted.

The present formulation is compatible with previous theories (e.g. Mauthner, 1999; Beck, 2002; Knudson-Martin & Silverstein, 2009; Mollard, 2014) and seeks to complement and collaborate with them rather than compete. However, it adds a unique contribution in several ways. First, it is based on a rigorous systematic analysis of discourses pertaining to motherhood such that the included “motherhood myths” are grounded in evidence rather than anecdotal speculation. Second, unlike previous syntheses, this analysis identified cognitive coping strategies, such as thought suppression and critical self-talk, which may operate alongside behavioural strategies (e.g. social withdrawal) to perpetuate distress. This assertion is supported by robust experimental evidence linking thought suppression and self-criticism to a range of pathological outcomes in diverse populations (Wegner et al., 1987; Wenzlaff, Wegner & Klein, 1991; Clark & Purdon, 2009).

Cognitive-Behavioural Formulation of Postnatal Depression with “Motherhood Myths”

Formulations can be understood as narratives that make sense of distress by integrating theory, research and the idiosyncratic meaning of the person’s experiences in context (Butler, 1998). Notably, formulations should be hypothetical, flexible and adaptable whilst providing an empirically grounded framework for clinical practice and a blueprint for intervention (BPS,

2011). Unfortunately, constructing a culturally informed model of anxiety as well as depression was beyond the scope of this study. However, a culturally informed cognitive-behavioural model of postnatal depression, developed out of the current synthesis, existing cognitive and behavioural principles (Padesky & Greenberger, 2012) as well as previous theories (Mauthner, 1999; Knudson-Martin & Silverstein, 2009) is presented. In order to illustrate the formulation, a fictional example is used.

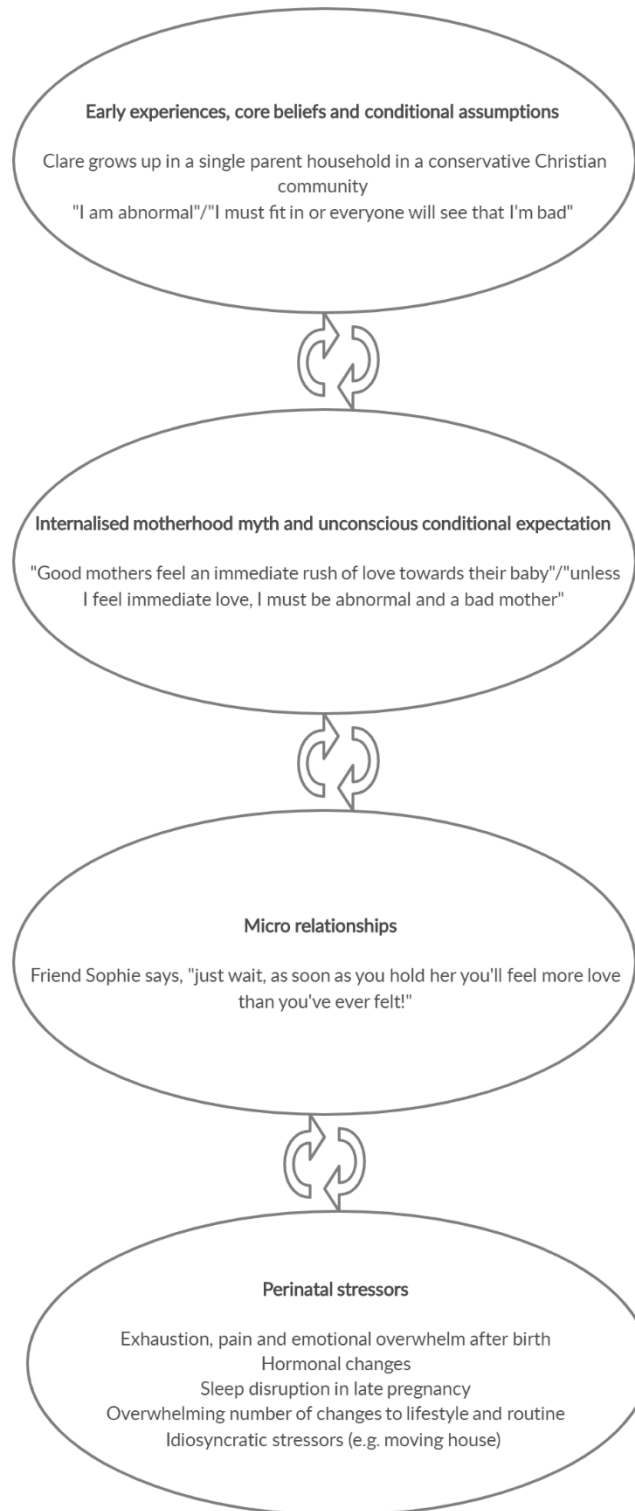
It is worth pointing out several assumptions of the proposed model. First, whether a discourse becomes salient for a particular woman is presumed to depend on two factors: one, encountering challenges which render her experience incongruent with a particular “myth” or discourse (i.e. if a woman finds breastfeeding effortless, the ‘breast is best’ discourse will be unproblematic for her). Second, this myth will only be problematic in the context of a lack of available normalising narratives, as others have argued (Mauthner, 1999; Knudson-Martin & Silverstein, 2009). Related to this, it is proposed that an inextricable relationship exists between “micro” relational factors, “macro” cultural discourses and individual cognitive interpretation. For example, if the woman’s friend had said, “by the way, you might be too exhausted to experience that ‘rush’ of love after birth, that’s totally normal- it happened to me”, she would have had a competing explanation for her experience which might have disrupted the subsequent cycle. It is further hypothesised that ‘upward social comparison’ (Festinger, 1980) to only those mothers in the woman’s mind and environment who seem perfect (e.g. Kate Middleton, a neighbour) is proposed as a cognitive ‘bias’ which contributes to cycle maintenance (Padesky & Greenberger, 2012). This is based findings from the discourse analysis which could not be included due to the scope of the present study (see Appendix A). Finally, it is hypothesised that

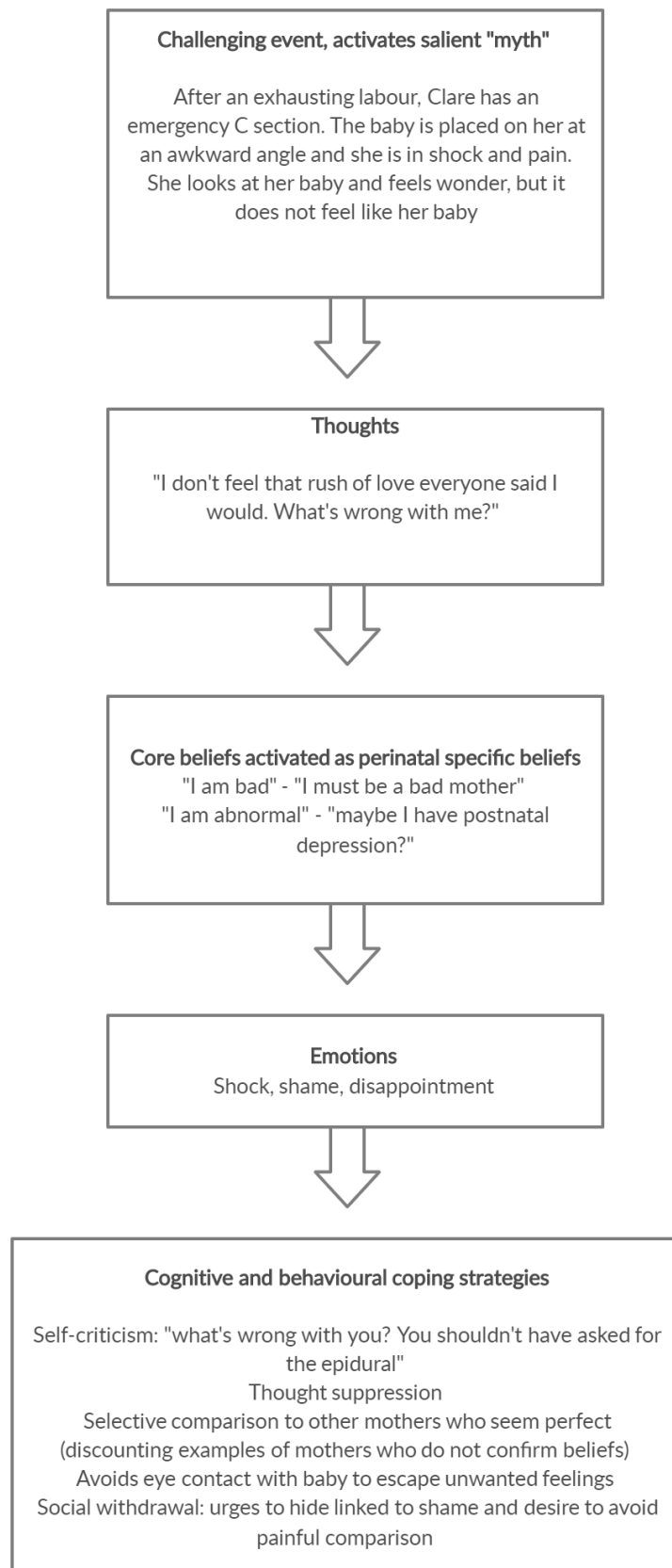
social withdrawal and putting forward a false image of perfection represent behavioural coping mechanisms which may function to catalyse distress into depression by preventing opportunities for the disconfirmation of beliefs/debunking of myths as well as by reducing opportunities for pleasure, accomplishment and connection (Mantell et al., 2013).

Figure 2

Culturally informed Cognitive-Behavioural Model of Postnatal Depression with Example

“Motherhood Myth”





Second activating event: struggles to latch baby, baby cries loudly

Thoughts in relation to infant: “This just proves that I am a bad mother” (belief reinforced)- “see, she is rejecting me. She doesn’t want my milk; I am not good enough for her. There’s definitely something wrong with me, I can’t do what I’m supposed to do. Other mothers find breastfeeding easy”.

Emotions: despair/hopelessness, shame is magnified

Behaviours: hands baby over to partner, begins to socially isolate as seeing other mothers would be intolerable (texts friends to say that the nurses won’t allow visitors), resolves to put forward a false image of perfection (texts friends to say “so in love! Mum and baby doing great!”)

Attention and reasoning biases (selective attention): selectively attending to only the baby’s cries (which are interpreted as rejections, thereby reinforcing her belief) and selectively comparing herself only to those mothers who seem ‘perfect’ maintain beliefs, interpretations and mood.

Discussion

Previous meta-data-syntheses of qualitative studies exploring postnatal distress (e.g. Beck, 2002; Knudson-Martin & Silverstein, 2009; Mollard, 2014) have been resounding in their recommendation that clinicians have a duty to reduce the harm associated with “myths of motherhood...that put our mothers’ mental health at risk” (Beck, 2002, p. 470). However, without rigorous identification of the most pertinent, prevalent and culturally transcendent discourses affecting postnatal women, this recommendation has remained notional. The present study therefore represents a unique, novel and potentially clinically useful contribution to both the research literature and the clinical landscape of perinatal mental health. Specifically, it has demonstrated that it is possible to identify motherhood discourses which are anchored in women’s accounts of distress and which transcend cultural boundaries. Moreover, it has identified that women themselves use an abundance of causal terms to link the internalisation of such discourses with psychological consequences. In doing so, the study lends credibility to widespread claims (e.g. Mauthner, 1999; Beck, 2002; Knudson-Martin & Silverstein, 2009; Mollard, 2014) that “motherhood myths” have direct consequences for maternal mental health. In addition, this study has presented the first cognitive-behavioural model of postnatal depression to integrate empirically grounded cognitive coping mechanisms, cultural discourses and relational processes with established cognitive-behavioural principles.

Limitations

Several limitations must be noted. First, whilst the cultural diversity of participants was a strength, participants were primarily white women living in Western, urban contexts. Therefore, the voices of women living in many diverse communities around the world were unfortunately

excluded. Additionally, although a substantial number of women were represented, the nature of meta-synthesis is such that it is interpretative rather than aggregative. Consequently, it is not possible to calculate precise probability estimates for how representative or transferable claims are to different cultural contexts or populations. Furthermore, the dearth of available qualitative studies conducted in recent times was a notable limitation for the study (the most recent studies were published in 2014). Culture evolves rapidly, and in the last two decades social media and global internet trends have profoundly affected women's experiences and expectations (McDaniel, Coyne & Holmes, 2012). As a result, it is possible that the specific content of these discourses has subtly changed. Moreover, although previous research has acknowledged the consistency of themes across accounts of distressed and non-distressed mothers (e.g. Mauthner, 1999), these findings are limited to mothers who identified themselves as experiencing significant distress. Thus, caution is advised when transferring these findings to non-distressed women.

This review was also inevitably limited by the data already collected by previous researchers, and few researchers asked specific questions relating to cultural and relational factors. In one sense, this strengthens conclusions since the identified discourses were so integral to women's accounts of motherhood that they were invoked even when not directly asked about. However, it does mean that additional myths could have been missed (e.g. "good mothers always stimulate their baby's cognitive development by using the latest educational toys"). Future research could conduct up-to-date interviews which specifically explore these areas and could work towards validating a quantitative measure of "motherhood myths" to establish their prevalence and reliably verify their content.

Strengths

Several strengths can also be highlighted. For example, previous meta-syntheses have had remarkably similar research questions (e.g. Knudson-Martin & Silverstein, 2009; Mollard, 2014) whereas this study identified a novel primary question with clear clinical application. The use of systematic methods of searching, quality assessment and data analysis and the use of a second rater also add to its rigour, credibility and claims to validity. Additionally, as Mollard (2014) has argued, conducting a meta-synthesis which analyses previous researchers' interpretations alongside participant quotations can be a limitation, since the ultimate results end up being far removed from participants' original words. Thus, a strength of this study is that it used first-person quotes as the primary unit of analysis. Finally, critics (e.g. Schreibder, Crooks & Stern, 1997; Finfgeld-Connett, 2014) have argued that the most useful meta-syntheses are those which generate theory capable of constituting a bridge between research and clinical practice. The present study presented a model which can not only aid formulation and psychoeducation, but which can additionally provide a foundation for the development of creative interventions.

The adoption of a novel approach to meta-synthesis can be considered a strength as well as a limitation. For example, the application of well-established approaches such as meta-ethnography can ensure rigour and replicability. At the same time, it should be acknowledged that replicability in the domain of metasynthesis is different from the same concept in the field of meta-analysis due to the inevitable subjectivity of qualitative inquiry. As Sandelowski (1993, p. 3) has written, in the interpretative paradigm, "reality is deemed multiple and constructed, rather than singular and tangible". Nonetheless, meta-syntheses should be conducted with the same standards of rigour, transparency and systematisation as their quantitative counterparts, and it is hoped that the outlining of steps taken in the course of analysis as well as the inclusion of a

coding extract can enhance these qualities in this review. On the other hand, as others have pointed out, the field of meta-synthesis is emergent and original approaches can sometimes be advantageous (Finfgeld-Connett, 2018). Specifically, the application of a novel approach ensured that the method was congruent with the research question and it also arguably opens a door for others to apply discourse analytic tools to the synthesis of qualitative studies.

Clinical implications

The primary function of formulation is to develop a blueprint for clinical intervention (BPS, 2011) and the theoretical model presented in this paper points towards several CBT-informed approaches which could potentially reduce distress. For example, psychoeducation about motherhood myths and use of scaling questions (“on a scale of 1 to 10 how much do you believe the statement that ‘most mothers take to breastfeeding easily and enjoy it’?”) could be used to assess which discourses are pertinent for each woman and to measure change. While it could be argued that women would contribute these beliefs spontaneously, their associations with shame and stigma suggests that this is may not be likely. Thus, the presentation of such “myths” could validate women’s experiences and additionally initiate an important process of normalisation.

The use of anonymous surveys distributed to other mothers could further normalise taboo emotions and struggles (e.g. “did you struggle with breastfeeding?”). Behavioural experiments and evidence gathering could also be used to test and support “alternative beliefs” (Padesky & Greenberger, 2012). For example, a suggested alternative belief to the ‘happiest time of your life’ discourse could be phrased as: “normal, good mothers experience a range of emotions in early motherhood, from gratitude, love and wonder to loneliness, boredom and anxiety”.

Additionally, given the evidence that thought suppression and self-criticism may catalyse distress into pathology, techniques such as defusion (gaining distance from thoughts), acceptance and mindfulness (Hayes, 2007) as well as compassion-focused techniques (Cree, 2015), could represent promising approaches. The next step would be to develop these recommendations into specific protocols and to test their efficacy using randomised-controlled trials.

Conclusion

This meta-data-analysis suggests that distressed women from diverse cultural backgrounds appear to be universally affected by discourses dictating the norms and ideals of motherhood. Women used causal language to link the influence of such discourses with a range of psychological consequences, including depression, anxiety and shame, as well as with cognitive coping strategies which previous research has linked to pathology (e.g. Wegner et al., 1987; Wenzlaff, Wegner & Klein, 1991), namely thought suppression and self-criticism. To sum, this study represents a unique contribution to the existing body of evidence suggesting that culturally informed “motherhood myths” substantially affect women’s identity, interpretation of experience and mental health during the postnatal period.

The Impact of Social Media on Women's Postnatal Wellbeing: An Online Experiment

Abstract

Background: Becoming a mother represents a monumental life transition which can bring complex and contradictory emotions, such as love and anxiety, joy and disappointment. However, discourse analyses suggest that cultural depictions of motherhood on image-based Social Networking Sites (SNSs) are predominantly simplistic and idealised (LeMoignan et al., 2017). This poses potential mental health risks to mothers, since research has found that the internalisation of idealised maternal norms harms women (Choi et al., 2005). A large body of experimental research has also found that exposure to images idealising female bodies can have immediate consequences for mood and body image satisfaction, and that those with pre-existing vulnerabilities may be more susceptible (Holland & Tiggeman, 2016). **Aims:** The current study aimed to investigate the impact of idealising portrayals of motherhood on image based SNSs on postnatal mental health. **Methods:** An experimental design was used. 184 postnatal women were randomised to one of three experimental conditions: (1) an idealising condition, (2) a normalising condition or (3) an architectural photography control. **Results:** Body image satisfaction, life satisfaction and self-compassion all decreased in the idealising condition but increased in the normalising and control conditions, with no significant differences between the latter two groups. Negative mood reduced slightly in all conditions. Differences in life satisfaction between the idealising and control groups were significantly moderated by parenting sense of competence, although the effect size was small and no other moderation effects were found. **Conclusions:** This study supports claims that cultural factors have an important bearing on postnatal mental health and that different types of social media can be a force for harm as well as for good.

Introduction

The transition to motherhood is universally recognised as a transformative life event that is often characterised by joy, wonder and hopeful expectation (Harwood, McLean & Durkin, 2007). However, it is also a process requiring the negotiation of myriad unprecedented challenges, including those which are psychological, physical and social in nature (Harwood, McLean & Durkin, 2007). For women in particular, the demands associated with becoming a parent are numerous and complex, a reality which is reflected in significantly higher rates of mental health difficulties amongst new mothers compared with new fathers (Yiong Wee et al., 2011), even amongst adoptive parents (Foli et al., 2012). This is therefore likely to be only partially explained by the additional physical and psychological challenges associated with pregnancy, childbirth and breastfeeding for biological mothers. Indeed, many agree that it is also likely to be influenced by the disproportionate responsibility for childcare assumed by women on average (Pancer et al., 2000) as well as by pervasive and powerful cultural norms surrounding womanhood in general and motherhood in particular to which all women are repeatedly exposed from infancy (Stoppard, 2014; Choi, Henshaw, Baker & Tree, 2007).

Prevalence of perinatal mental health difficulties

Considering the challenges as well as the opportunities posed to personal identity, autonomy, body image, responsibility and relationships that having a child represents, it is perhaps unsurprising that women are at greater risk of developing mental health problems during the puerperium than at most other times during their lives (RCOG, 2017). Indeed, whilst approximately one in seven will be diagnosed with postnatal depression (PND), many more anonymously report experiencing major distress but feeling too ashamed to seek help (Dennis & Cheung-Lee, 2006) and as many as forty percent experience lesser known mental health

difficulties, such as postnatal obsessive-compulsive disorder (RCOG, 2017). Research also suggests that a significant minority experience a transient but nonetheless distressing period of tearfulness and mood disruption known popularly as, “the baby blues” (Faisal-Cury et al., 2008), while as many as 92% report experiencing, “intense loneliness” at some point during the postnatal period (MUSH, 2017). This suggests that mothering includes complexity and struggle for the majority rather than the few. However, research suggests that the preponderance of cultural representations of motherhood are simplistic and idealised in nature, portraying mainly, “the romantic, all happy cooey-coo experience[s]” (Brady & Guerin, 2010, p. 14).

Whilst the tasks associated with bearing and caring for new infants have remained relatively stable over time, it is notable that rates of maternal suffering have not (Pearson et al., 2018). In fact, despite improvements in the quality and accessibility of maternal healthcare, at least in the ‘developed’ world (Clark et al., 2008), rates of antenatal mental health problems appear to have increased by 50 per cent compared with the previous generation (Pearson, Carnegie & Cree, 2018). Several hypotheses have been put forward to explain this, including the presumed loss of practical and emotional support resulting from increased geographical distance between many modern mothers and their families of origin (Cree, 2015; MUSH, 2017). However, perhaps the most frequently suggested factor is the increasing complexity of ‘macro-cultural’ constructions of normative and aspirational motherhood, as well as dramatic changes in the modes of transmission of these cultural norms (Mauthner, 1999; Choi et al., 2005).

Contemporary motherhood norms and the Internet

Although women of the ‘Baby Boomer’ generation had fewer choices and less autonomy (Hays, 1998), it has also been noted that they would have typically been confronted with motherhood norms intermittently, either in ‘real life’ or on traditional media (Cree, 2015). In

contrast, the ‘Millennial’ mother spends on average 8.3 hours of her day online in search of information, connection, entertainment and advice, and research suggests that the majority of this time is spent on Social Networking Sites (SNSs) (BabyCentre, 2013). This may be influenced by the isolation of many modern mothers (MUSH, 2017), the shame reported by women when they do not ‘naturally’ know how to parent (Mauthner, 1999) or the concern that grandmothers’ knowledge is, “thirty years out of date” (O’ Connor & Madge, 2004, p. 351). Additionally, women who are sleep deprived and managing frequent interruptions may be inclined to resort to easily digestible forms of digital leisure with minimal attentional demands (Mayoh, 2019). However, whilst the internet can undoubtedly represent a valuable source of information (O’ Connor & Madge, 2004) and compassionate social support, particularly on private support forums (Hall & Irvine, 2009; Brady & Guerin, 2010), it arguably puts new mothers at risk of immersive exposure to complex cultural representations of motherhood, as well as to a potentially overwhelming number of opinions about what constitutes ‘the right way’ to parent (Choi et al., 2005).

It is not merely the means of accessing motherhood norms that has changed over time; their qualitative content has also evolved (Hays, 1998). The discursive umbrella encompassing these norms has commonly been referred to as the, “intensive mothering ideology” (Hays, 1998). Analyses of this ideology highlight that standards of ‘ordinary, good’ mothering have become increasingly complex, individualistic and arguably unattainable (Choi et al., 2005). For example, women are now expected to be ‘breadwinners’ capable of competing economically with men whilst simultaneously becoming more rather than less involved in all aspects of childcare, including children’s emotional and intellectual development (Douglas & Michaels, 2004). Furthermore, the ubiquity of the internet seems to have precipitated an expectation that mothers

ought to attain expert status on all disciplines pertinent to child development, from paediatric nutrition to developmental psychology (Hays, 1998; Kleinman & Raskin, 2013). Finally, exposure to idealised mothering content online (LeMoignan, 2017; Mayoh, 2019) may perpetuate the erroneous perception that normative motherhood is effortless and perpetually joyful for all.

Motherhood norms and mental health

Critics argue that prevalent cultural constructions of ‘normal’, ‘aspirational’ and ‘good’ motherhood are harmful to women because they are inevitably internalised and ultimately manifest in excessively high expectations as well as a painful discrepancy between the ‘ideal maternal self’, which is culturally influenced, and the ‘real self’ as experienced (Higgins, 1987; Warner, 1995). Indeed, a remarkably consistent finding across dozens of cross-cultural qualitative studies exploring the phenomenology of postnatal depression is that distressed women invariably describe confronting a shocking discrepancy between culturally informed expectations of motherhood and the lived reality (Mauthner, 1999; Mollard, 2014; Knudson-Martin & Silverstein, 2009). Quantitative research has also found that higher endorsement of idealised cultural expectations is associated with increased comparison and competitiveness with other mothers (Chae, 2005) as well as higher rates of anxiety and depression (Choi et al., 2005) and women with idealised expectations in pregnancy are at greater risk of developing mental health problems after birth (Pancer et al., 2000). Notably, it is striking that even women whom actively resist these norms report that they nonetheless feel pressure to conform to them, leading to claims that the internalisation of excessively high standards is ultimately, “inescapable and detrimental to all” (Choi et al., 2005, p. 141).

Social networking and motherhood

‘Digital leisure’ (Spracklen, 2015) has been described as an activity which takes place in online spaces where, “experiences are lived [and] identities and networks of belonging are constructed” (Mayoh, 2019, p. 204). In the 21st century, social media represents a powerful vehicle for the transmission of motherhood norms. However, whilst mothers’ digital leisure has been a longstanding topic of research interest, the literature is outdated and has exclusively focused on anonymous question-and-answer style forums such as *Mumsnet*. These studies have found that accessing reassurance, compassion and encouragement in such spaces can improve women’s sense of connectedness and emotional wellbeing (Drentea & Morten-Cross, 2005; Hall & Irvine, 2008; Brady & Guerin, 2010). However, discussion forums represent just one type of SNS, and research suggests that other image based SNSs, such as *Instagram*, may be accessed more frequently by women (BabyCentre, 2013). Such networks differ from support forums in several key ways. Namely, they are non-anonymous, image-based sites which include celebrity profiles alongside those of one’s peers and facilitate ‘passive’ more than ‘active’ social engagement (Nielsen, 2015). Additionally, ubiquitous tools such as filtering and airbrushing technology augment reality and are available to celebrities and non-celebrities alike (Cwynar-Horta, 2016). As Mayoh (2019) writes:

“Instagram, with over [1 billion users accessing the platform each month (Instagram, 2019)] is a distinctive channel in that the focus is on sharing and consuming happy images or ‘snapshot’ photography...it offers users the opportunity to adjust, sharpen, crop, lighten and apply filters to images to distort reality into an ideal to be shared” (p. 205)

In one notable study, a conversation analysis reported a sharp delineation between women’s talk in private and public spaces (Tardy, 2000). In public, women were inclined to

present themselves as conforming to dominant motherhood norms; this has been referred to as the ‘front stage’ persona (Goffman, 1959). Conversely, intimate conversational spaces facilitated disclosures of doubts, insecurities and ambivalent emotions (Tardy, 2000). This is consistent with a content analysis of 4, 000 parenting photographs on *Instagram* which found that most images were either devoid of struggle or represented minor parenting failures as ostensibly extreme cases, paradoxically reinforcing the impression that idealised motherhood is normative (LeMoignan et al., 2017). This suggests that SNSs such as *Instagram* represent sites for ‘front stage’ rather than ‘back stage’ (Goffman, 1959) self-presentation. The microculture on such platforms may therefore increase the likelihood of ‘upward social comparison’ (Mayoh, 2019), a cognitive process involving comparison to others with perceived superiority in particular domains (Festinger, 1980). This has potentially important implications for wellbeing, since comparing ‘upwardly’ can lower mood and increase shame (Johnson & Knobloch-Westerwick, 2014).

Despite research suggesting that the average UK mother spends up to a third of her day online, as well as reports that image-based SNSs can have a depressant effect on the general population (Baker & Algorta, 2016), the impact of social networking on perinatal women has been entirely neglected. This is particularly concerning when one considers the distinctive characteristics of perinatal women which may increase their vulnerability to the deleterious effects of social media. For example, selective comparison to other mothers in the context of a lack of alternative, balanced representations of motherhood has been associated with self-criticism (Mauthner, 1999). Additionally, mothers of infants face myriad practical barriers to engaging socially in the early stages of motherhood, including birth-related injury and demanding infant feeding and sleep routines; such barriers potentially minimise opportunities for

counterbalancing unrealistic representations of motherhood with exposure to women in ‘real life’. Furthermore, social comparison theory suggests that people experiencing major life transitions are more likely to engage in ‘upward’ rather than ‘downward’ social comparison in order to inform judgments about whether they are ‘normal’, ‘competent’ or ‘coping’ (Festinger, 1980). If women are disproportionately exposed to idealised representations of other women that selectively portray the, “all happy” experiences (Brady & Guerin, 2010, p. 14) to the exclusion of the, “excrement-filled, sleep deprived, heart-crushing messy work” (Przystup, 2017, p. 1), during a period in which they are especially vulnerable to incorporating such comparisons into their self-image, this has potentially important implications for mental health.

Moreover, a substantial body of experimental studies has established that exposure to idealised images of women’s bodies has a reliable, immediate and harmful effect on mood and body image satisfaction amongst non-perinatal women, which can be magnified for those who are vulnerable to begin with (Holland & Tiggeman, 2016; Grabe, Ward & Hyde, 2008). This is important, because perinatal women experience unprecedented changes to the form, function, shape and experience of their bodies after a lifetime of socialisation to the ‘thin ideal’ which render them more vulnerable (Hodgkinson, Smith & Wittowski, 2014) and, indeed, poor body image satisfaction is weakly but positively correlated with postnatal depression (Silveira, Ertel, Dole & Chasan-Taber, 2015). Social-media images may therefore be especially damaging to this population because they not only idealise motherhood, but also the postnatal body (Cook-Shonkoff, 2018).

A ‘normalising’ countermovement

Collectively, these factors may increase postnatal women’s susceptibility to the harmful effects of idealising social media. However, researchers have observed the rise of a ‘counter-

mainstream’ movement on image-based SNSs which has been compared to the ‘body positivity’ movement and which Mayoh (2019) has referred to as ‘social-media activism’. This trend is led by women who aim to ‘normalise’ deviation from motherhood norms, expand the cultural conceptualisation of ‘good motherhood’ and improve maternal wellbeing (LeMoignan et al., 2017; Mayoh, 2019). Moreover, it appears to be gaining momentum. For example, in December 2019, the ‘Speak the Secret’ campaign on *Instagram*, which strives to destigmatise taboo emotions in motherhood, was linked to 4.3 thousand posts (Instagram, 2019). Mayoh posits that, “these [posts] allow for more varied and realistic constructions of the [postnatal] subject” (p. 206). From this epistemological perspective, blogs and *Instagram* accounts are not neutral cultural sites produced merely for frivolous entertainment. Instead, social media can be understood as an accessible discursive platform for women to perform feminine norms or challenge and subvert them. As Ambrosini and Stanghellini (2012) have commented, these are spaces which can facilitate:

“the evolution of the female discourse on motherhood... [By conveying the] complexity of maternal experience, [motherhood can be] freed from timeworn myths and returned to women” (p. 277)

For the purposes of this study, ‘normalisation’ shall be defined as a process of re-framing as normal, understandable and acceptable private experiences which were formerly interpreted as abnormal, unacceptable or worthy of shame. Notably, analyses of group treatments for PND have found that normalisation is a key component of successful recovery (Leahy-Warren et al., 2011). Additionally, research with the general population has found that some forms of social media can be harmful, whilst others can be beneficial (Baker & Algorta, 2016). Consequently, digital subcultures can be conceived as complex cultural sites which possess the potential for

ameliorating as well as perpetuating distress (Ambrosini & Stanghellini, 2012). However, no study to date has systematically investigated whether this is the case.

The present study

An experiment was conducted to investigate whether exposure to idealising and normalising social-media discourses has an immediate impact on mental health outcomes for postnatal women, and whether pre-existing vulnerability moderates this relationship. A large number of women were recruited to participate in an online experiment in which they were randomised to view service-user validated social-media posts (SMPs) in one of three conditions: an ‘idealising’ condition containing SMPs reinforcing simplistic, idealised motherhood norms; a ‘normalising’ condition containing SMPs portraying complex, integrated and balanced portrayals of the ‘highs and lows’ of motherhood; or a control condition containing architectural photography.

Hypotheses

- (1) H1. Type of SMP will affect women’s wellbeing outcomes, such that exposure to idealising SMPs will have an acute negative impact on body image satisfaction, life satisfaction and self-compassion, whereas normalising SMPs will have the opposite effect.
- (2) H2. Parenting sense of competence, which represents a proxy for pre-existing vulnerability, will moderate this relationship.

Method

Design

A mixed experimental randomised controlled design was used, with between-subjects randomisation to condition (idealising, normalising and control) and within-subjects measurement of dependent variables at pre- and post-exposure (Time 1 and Time 2).

At the design stage, it was decided that participants would only be required to complete outcome measures immediately before the experiment (T1) and immediately after (T2), but not at a later time point such as one week later (T3). This decision was informed by several considerations. First, it was hypothesised that many participants would be likely to view social media posts of various types in between T2 and T3, especially considering statistics reporting the high rates of social media use amongst mothers (BabyCentre, 2013). This would introduce variables outside of the researchers' control and could potentially 'dilute' or interfere with the effects of the idealising or normalising posts. Second, the online experiment already required a substantial time commitment of 35 to 45 minutes from participants, who would be busy mothers of young children. Adding an additional time point could affect ease of participation and lead to a considerable loss of participants between T2 and T3 which, in turn, could compromise the feasibility of reaching a sample size capable of detecting an effect. Finally, as this was a novel study, it seemed prudent to first establish whether one-time exposure to idealising and normalising social media posts has an immediate impact on wellbeing in mothers before investigating the impact of repeated exposure over time, which may require a different design

altogether (for example, requiring women to view a social media feed dominated by either ‘idealising’ or ‘normalising’ posts every evening for one week).

Participants

Participants were 184 women whom each had at least one baby aged 12 months or under. Demographics will be fully described in the results chapter.

Ethical approval was granted by Royal Holloway University of London. Participants were incentivised with an opportunity to win an Amazon voucher worth 80 pounds.

Power analysis

The G*Power programme was used to calculate the sample size required to detect an effect based on the primary hypothesis that there will be significant differences between the three groups using ANCOVA. This used an estimated small-to-medium effect size ($d=0.3-0.5$) reported by Grabe, Ward & Hyde (2008) in their meta-analysis of the impact of ‘thin-ideal’ images on women’s mood and body image satisfaction. This was considered the most analogous example as no study to date has investigated the impact of idealised images of motherhood on postnatal women. In order to detect an effect with an alpha level of $p<0.05$ and a power of 80 per cent probability, this calculation recommended a minimum of 111 participants (37 per group).

Measures and materials

Experimental manipulation type

Three types of visual stimuli were presented, each sourced from public social-media accounts. Each condition contained twenty posts. A ‘post’ refers to an image and text/caption combination. A larger number of posts (40 normalising and 40 idealising) were sourced by the researcher and presented to eight postnatal women in a mixed-methods consultation. During the service-user consultation stage, consultants were requested to rate each post out of 10 (from ‘not at all’ to ‘very much’) according to how much they fit the definitions of ‘normalising’ and ‘aspirational’ provided below (aspirational was used as it was predicted that ‘idealising’ may have negative connotations):

“Women may react in different ways to the ‘aspirational’ posts; they may not depict a lifestyle to which you personally aspire. However, these posts should depict a glamorous, polished and aesthetically curated portrayal of motherhood that does not include genuine disclosures of struggle or ‘taboo’ emotions. ‘Aspirational’ posts include images and captions which fit society’s mainstream views of what ‘ideal’ motherhood looks like”.

“Again, women may respond to the ‘normalising’ posts in different ways. Regardless of how you feel about them, a ‘normalising’ post is less glamorous and does not obviously conform to idealised standards of femininity or motherhood. It should also include genuine disclosures of difficulty, struggle or challenge. Normalising posts are not necessarily negative;

in fact, they may celebrate wonderful aspects of motherhood. However, they are likely to show the good, the bad and the ugly rather than just the good”.

Posts representing different aspects of motherhood (e.g. birth, breastfeeding, body image) and meeting a minimum rating of 7/10 for normalising or idealising were kept. Normalising posts tended to include lengthy disclosures alongside messages promoting self-acceptance. Conversely, idealising posts had brief captions which ‘gushed’ about motherhood. They were also more often commercialised and included paid advertisements. For this reason, matching captions on the basis of word count was not possible. However, all images had to be real photographs (i.e. not illustrations or infographics) and include a woman with at least one baby. For the motherhood-neutral posts, images of urban photography with no human subjects were chosen. Please see Appendix B for all posts used.

The Trait Parenting Sense-of-competence Scale (PSOC) (Gibaud-Wallston & Wandersman, 1978)

The PSOC is a global measure of a mother’s confidence in her parenting abilities (i.e. self-efficacy). It contains 17 items and uses a six-point likert scale. An example item states, “if anyone can find the answer to what is troubling my child, I am the one”. Its test-retest reliability is perhaps surprisingly robust ($r=.80$), considering that one would expect a mother’s confidence to change over time (Bui et al., 2017). The measure also appears to remain valid despite its development in the seventies as Karp, Lutenbacher and Wallston (2015) reported that it had good internal consistency ($r=.85$) and correlated moderately with three other measures of parental

confidence in a large, diverse sample ($n=218$). The PCOS comprises two stable and distinct subscales, parenting satisfaction and parenting self-efficacy (Ohan, Leung & Johnson, 2000).

State mood and body image satisfaction Visual Analogue Scales (Harper & Tiggeman, 2007)

Following similar studies with ‘thin-ideal’ posts (e.g. Harper & Tiggeman, 2007; Slater et al., 2017; Cohen et al., 2019), visual analogue scales (VAS) were used to rate mood and body image satisfaction pre- and post-exposure. Harper and Tiggeman (2007) developed a brief, two-item VAS for measuring state body image satisfaction which invites participants to consider how satisfied they feel with their “weight” and “appearance” “right now” by sliding a button along an unmarked 100 millimetre line between “not at all” and “very much”. Research suggests that aversive and pleasant mood states are experienced independently in low-stress situations (Reich et al., 2003). Therefore, participants were asked to separately rate sadness, happiness, confidence and anxiety. The pleasant mood scales were reverse coded and combined with the aversive scores to create a summary ‘negative mood’ score. Similarly, the ‘weight’ and ‘appearance’ sliders were presented separately and subsequently averaged (Harper and Tiggeman, 2007).

It has been hypothesised that unmarked sliders are especially sensitive to change as they reduce the likelihood that participants will recall previous scores (Heinberg & Thompson, 1995). The body image scales have good internal consistency with each other ($r=.80$) and construct validity when correlated with other measures of appearance satisfaction (e.g. the Physical Appearance State and Trait Anxiety Scale) ($r=0.74, p<0.05$) (Reed et al., 1991). The mood scale has good to excellent internal consistency (e.g. Cronbach’s $\alpha=0.79, 0.92$) (Harper &

Tiggeman, 2007; Cohen et al., 2019). The construct validity of the mood VAS is moderate and significant when correlated with comparable measures of state mood ($r=0.68$; $r=0.60$, $p<0.01$) (McNair, Lorr & Droppelman, 1971; Heinberg & Thompson, 1995).

The Satisfaction with Life Scale (SWLS) (Diener et al., 1985)

The SWLS represents one facet of subjective wellbeing and purports to measure cognitive and affective evaluations one's life conditions (Diener et al., 1985). Put another way, it is a measure of the perceived discrepancy between one's ideal and actual life. This was deemed appropriate for measuring the impact of posts portraying a holistic representation of idealised womanhood. The SWLS is feasible to administer, with just five likert items. It has good internal consistency (Cronbach's $\alpha=0.87$) which has remained consistent across diverse samples (American and Iranian) (Diener et al., 1985; Pavot & Diener, 2008), and it also has very good test-retest reliability over a two-month period ($r=0.82$) (Diener et al., 1985). To our knowledge, the sensitivity of the measure has not been evaluated in relation to 'ultra-brief' exposures; however, it has been found to be highly sensitive to change following one-off life events (Magnus & Diener, 1991) and after just one month of therapeutic intervention (Pavot & Diener, 2009). The SWLF correlates moderately and significantly with an array of other measures of subjective wellbeing (see: Pavot & Diener, 2009 for a review) and is strongly negatively correlated with clinical measures of distress (e.g. $r= -.72$, $p<.001$) (Blais et al., 1989).

The State Self-Compassion Scale: Short form (SSCS-SF) (Raes et al., 2011)

Self-compassion is a quality of relating to oneself, especially one's struggles, that is characterised by kindness, understanding and support (Neff, 2003). Several studies suggest that self-compassion may be especially relevant to perinatal wellbeing and that its antitheses (self-criticism, self-judgment and self-shaming) are related to perinatal distress (e.g. Dunn et al., 2012; Goodman et al., 2014). Additionally, most 'normalising' posts included in this study explicitly promote messages of 'self-love' or 'self-compassion', and core to self-compassion is the concept of 'shared humanity' or the recognition that others suffer in similar ways to oneself, which is believed to promote feelings of belonging and alleviate shame (Neff, 2003). In this sense, shared humanity could potentially overlap with the concept of 'normalisation'.

Self-compassion has both trait and state qualities (Hayes et al., 2016). Specifically, when arousal and struggle increase, state self-compassion is hypothesised to decrease (Hayes et al., 2016). The state version has recently been developed and was accessed by email in September 2019 with permission for use (K Neff, personal communication, 21 September, 2019). The 18-item measure asks participants to conjure a challenging situation they are experiencing at the moment that is painful. It then asks them to rate their agreement with statements on a 5-point scale from "not at all true for me" to "very true for me", for example, "I'm remembering that difficult feelings are shared by most people". The scale has excellent internal consistency (Cronbach's $\alpha=.944$) and construct validity, as it was significantly associated with positive ($r=.547$) and negative ($r=-.598$) affect with a large effect size (Neff, Toth-Kiraly, Knox, Kuchar & Davidson, in Preparation).

Procedure

Recruitment

Following ethical approval, participants were recruited using online media and word of mouth. Women were considered eligible if they self-identified as having at least one infant aged 12 months or under. Multiparous and primiparous mothers and women with unique parenting experiences (e.g. premature birth) were eligible, as diverse women are exposed to social media. Participants were mainly recruited from generic private *Facebook* groups (e.g. local buy-and-sell groups) to ensure representativeness.

Procedure and participant experience

The advertisement contained an electronic link to an information sheet and consent form on the survey software *Qualtrics*, after which participants were automatically randomised to one of three exposure conditions containing 20 posts each. Prior to randomisation, participants answered three demographic questions (ethnicity, age and how many children they had). Participants then indicated which out of thirty-one perinatal stressors they had experienced along with how much these stressors had impacted them from ‘not at all’ to ‘a great deal’. All participants received identical questions and instructions before and after viewing the social media posts, regardless of which group they were subsequently randomised to.

The ethos of the study was inspired by participatory-action research (Whyte, Greenwood & Lazes, 1989) which strives to go beyond the ‘bare minimum’ ethical requirements to carefully consider power, coercion and participant experience. Consequently, steps were taken to develop

a warm and compassionate tone for the survey, and a particularly extensive and transparent debrief form and resource list was developed. The survey included supportive messages throughout. For example, after the question on perinatal stressors a message read: “Thank you for answering these questions. We know that they are sensitive and may bring up upsetting memories and we are very sorry if you suffered any of these difficult circumstances. Please feel free to take a break now if you need to”.

Before exposure, participants completed a one-off measure of parenting sense-of-competence. They also completed measures of mood, life satisfaction, self-compassion and body image satisfaction which were repeated immediately post-exposure. All participants could request an electronic copy of the normalising posts and were encouraged to do so if they felt low after viewing idealising posts. Finally, all participants viewed a debrief form which summarised in lay terms the design and hypotheses of the study with total transparency and included sample posts from each condition. An extensive resource list included British and international resources, including books, information websites and helplines for general and specific stressors (e.g. colicky babies). Pathways for accessing professional services were outlined in detail for women in the UK and Ireland. Considering the widely reported ambivalence and fear about seeking support for postnatal mental health difficulties (Dennis & Cheung-Lee, 2006) the primary researcher, who was also working clinically in a perinatal service, developed an additional guide to support and encourage women to take ‘baby steps’ towards reaching out for support which included a ‘screenshot-able’ message women could show to a health professional.

Results

Overview

This section begins with descriptive statistics, followed by preliminary statistical procedures to assess whether variables were normally distributed and whether problematic outliers existed. Details of the statistical procedures which were conducted are outlined along with their results. All data were processed using the Statistical Package for Social Sciences (SPSS, version 21). All results are reported to two decimal places and exact p values are given. The threshold for statistical significance was set at $p < .05$. As all statistical assumptions were met, parametric tests were used.

Sample Characteristics

184 participants completed the experiment. A majority was White British (39.8%), a substantial percentage was White Irish (25.9%) and 28.1% was categorised as White Other/Caucasian. The latter came from culturally and geographically diverse backgrounds, including Germany, Armenia, Lebanon, the United Arab Emirates, Australia, New Zealand, the Czech Republic, Poland, Turkey, South Africa and North America. 2.5% described themselves as Asian/South East Asian/Mixed White and Asian/British Asian/Indian, 1.8% of the sample described themselves as Black/Biracial/Mixed Black and White, and one woman (0.6%) described herself as Latina. The average age was 32 and 52% of the women were primiparous while 48% were multiparous. Percentages of perinatal stressors endorsed are presented in the table below. The most frequently endorsed stressors were (1) major struggles with breastfeeding (63%) (2) the “baby blues” (47%) and (3) challenges with baby sleep (44.7%). The average impact of perinatal stressors was 2.5, representing a mid-point between ‘only a little’ and ‘a moderate amount’.

Table 7*Percentage Endorsements of Perinatal Stressors*

Perinatal stressor	Percentage
Multiple birth (twins, triplets...)	3.8%
Coped with significant conflict with a family member or friend during postnatal period	9.24%
Chronic physical or mental health condition which made perinatal period more challenging	10.87
Suffered a bereavement around the time of having a baby or previous loss emotionally stirred up	13.04%
Disappointment with how quickly or intensely infant bonding occurred	13.59%
Suffered the tragedy of infant loss before having most recent baby/babies	15.76%
Experienced financial or housing worries during perinatal period	16.3%
Employment, study or work-related stress during perinatal period	29.5%
Child was born prematurely, spent time in the Neonatal Intensive Care Unit (NICU) or was born with a disability or significant medical complication	17.39%
Had another child at home who was under 3 years old	21.2%
Experienced relationship difficulties with partner during postnatal period	22.28%
Separated from partner during perinatal period	3.8%
Worried about a close friend or family member who was physically or mentally unwell during perinatal period	23.91%
Suffered complications during pregnancy, including hyperemesis gravidarum	29.35%
Expectations for social contact postnatally not met	27.17%
Expectations for emotional support not met	34.78%
Expectations for practical support not met	37.5%
Expectations for baby sleep not met	44.57%
Expectations for how manageable or enjoyable the postnatal experience would be not met	42.93%

Baby had colic	24.46%
Struggled emotionally in pregnancy and self-identify as having had antenatal depression or anxiety	24.46%
Persistent low mood after birth and self-identify as having postnatal depression	23.37%
Identify as having suffered with postnatal anxiety	33.15%
Disappointed with support from healthcare staff	35.87%
Traumatic birth	36.96%
Difficult birth	38.59%
The “baby blues” without postnatal depression	47.1%
Major struggles with breastfeeding which became upsetting	63%
Another stressor not captured or not sure how to answer	15.2%

Preliminary statistical procedures

Missing data

Due to being sufficiently powered, any participants who failed to complete 100% of the experiment were removed, such that the final dataset ($n=184$) contained no missing data.

Outliers

Boxplots were visually inspected to identify univariate outliers and data points were investigated as potential outliers if they fell more than three standard deviations from the mean (Field, 2013) based on manual calculations. Considering that the planned analysis involved between-group comparisons, all data were examined for outliers based on sample means and standard deviations at time one (T1) and within each condition at time two (T2). Five cases were

identified as representing potential outliers and were investigated further. Three of these cases displayed an erratic pattern of scores that suggested possible invalidity (for example, a 14-point difference in life satisfaction before and after exposure to the control condition along with a chaotic patterns of responses). Consequently, these three cases were removed. Although this can lead to a loss of power and increase the likelihood of Type 2 error (Beker & Wichert, 2010), the sample size already exceeded the requirements based on power calculations by 73 participants, so this decision was considered necessary and justifiable. The fourth and fifth potential outliers were inspected and retained on the basis of appearing to represent valid and meaningful variation within the sample, despite representing extreme scores.

Distribution, skew and kurtosis

To ensure that assumptions of normality were met, all variables were checked for skew and kurtosis by investigating histograms and manually calculating z scores (Tabachnick & Fidell, 2007). These calculations were conducted for all variables at baseline as well as post-exposure in each condition. Results suggested that life satisfaction was significantly positively skewed at T2 for conditions two and three (normalising and control) ($z = 3.47, p < .01$). Consequently, a square-root transformation was performed, which successfully normalised the variable across all time points and conditions. The overall skew for life satisfaction at T2 after transformation was $z = 2.3$ ($p > .01$).

Baseline equivalence testing

A series of one-way analyses of variance (ANOVAs) were conducted to ensure that there were no initial differences on target variables across experimental conditions at baseline. While it is acknowledged that scores at T1 would be controlled for in ANCOVA analyses, these

preliminary tests were conducted in order to check that randomisation had been successful and to identify any significant differences between groups at baseline. Levine's test confirmed that homogeneity of variance could be assumed in all cases. The null hypotheses that there were no significant group differences in parenting sense of competence ($F(2, 182) = 2.35, p = .098$), pre-exposure (T1) body image ($F(2, 182) = .206, p = .81$), life satisfaction ($F(2, 182) = .18, p = .83$), self-compassion ($F(2, 182) = 1.29, p = .28$) or negative mood ($F(2, 182) = .467, p = .628$) were accepted.

Main Analyses

The first hypothesis states that type of social media post will significantly affect women's wellbeing outcomes, such that exposure to idealising SMPs will be associated with increases on all outcomes and exposure to normalising SMPs will be associated with decreases. To test this prediction, Analyses of Covariance (ANCOVA) were conducted with type of social media post as the independent variable, outcomes at T2 as the dependent variables and outcomes at T1 as the covariates. This approach is recommended by Vickers and Altman (2001) for controlled experiments with baseline and follow-up measurements even where no pre-existing differences have been detected at baseline because ANCOVA has greater statistical power to detect effects compared with other methods. Dependent variables were not clustered together as there was no clear evidence that these could be treated as conceptually similar. Therefore, ANCOVA was conducted for each dependent variable separately. Using the select cases function in SPSS, follow-up ANCOVAs were subsequently conducted on pairs of groups (idealising and normalising, idealising and control, control and normalising) for all variables where the first ANCOVA resulted in statistically significant findings.

To test the second hypothesis that parenting sense of competence would moderate the relationship between type of social media post and outcomes, moderation regression analyses were performed using the PROCESS (model 1) macro for SPSS (Hayes, 2018), with each of the outcomes being entered into the model as dependent variables. Moderation analyses were only performed on pairs of groups where a significant effect was found while testing hypothesis 1, as otherwise there would be no significant effect to moderate.

Assumptions

All assumptions of ANCOVA and regression moderation analysis were satisfactorily met.

Means and standard deviations

The mean change scores and their respective standard deviations are presented in the table below.

Table 8

Means (SDs) and Mean change scores for Negative Mood, Body image Satisfaction, Life Satisfaction and Self-compassion by Exposure Condition

	Pre-exposure	Change	Post-exposure
Negative Mood			
Idealising	4.44(2.02)	-0.08	4.36(2.26)
Normalising	3.87(1.91)	-0.75	3.12(1.93)
Control	4.14(1.8)	-1.12	3.02(1.5)
Body Image Satisfaction			
Idealising	3.87(3.12)	-0.61	3.31(3.04)
Normalising	3.59(2.73)	0.58	4.17(2.84)
Control	3.73(2.69)	0.34	4.07(2.71)
Life Satisfaction			
Idealising	3.67(.86)	-0.052	3.62(.11)
Normalising	3.67(.86)	0.32	3.91(.89)
Control	3.49(.69)	0.21	3.71(.75)
Self-Compassion			
Idealising	52.24 (14)	-2.34	49.92 (15.7)
Normalising	51.76(11.9)	2.8	54.56(12.8)
Control	51.73(12.2)	2.1	53.83(11.93)

Hypothesis 1

Negative Mood

The ANCOVA revealed that changes in negative mood over time were significantly different for those exposed to different types of social-media post when parenting sense-of-competence (PSOC) was controlled for as a covariate ($F(4, 174)=6.3, p=.001, \eta^2 = .07$), with negative mood decreasing in the idealising condition (-.008), as well as in the normalising condition (-.075) and the control condition (-1.12). Follow-up ANCOVAs comparing pairs of conditions at a time using the select cases function in SPSS revealed that differences in negative

mood were significant when comparing the normalising and idealising conditions ($F(2, 175)=7.26, p=.006, \eta^2 = .06$), as well as the idealising and control conditions ($F(2, 175)=16.54, p=.000, \eta^2 = .126$), but differences between normalising and control conditions were non-significant. Thus, hypothesis 1 was partially supported since type of social media post did have a significant effect on negative mood, however this did not show the clear predicted pattern whereby normalising posts were predicted to decrease negative mood and idealising posts were predicted to increase negative mood.

Body image satisfaction

The ANCOVA yielded a significant interaction between type of social-media post and time on body image satisfaction, whilst controlling for PSOC ($F(4, 174)=618.75, p=.000, \eta^2 = .18$), with scores decreasing in the idealising condition (-.061) and increasing in the normalising (+0.58) and control (+0.34) conditions. Follow-up ANCOVAs on selected cases revealed that differences in body image satisfaction were significant when comparing the normalising and idealising conditions ($F(2, 175)=22.95, p=.001, \eta^2 = .16$), and the idealising and control conditions ($F(2, 175)=21.86, p=.001, \eta^2 = .16$), but differences between normalising and control conditions were non-significant. This result supports hypothesis 1.

Life Satisfaction

The ANCOVA revealed a significant interaction between type of social-media post and time on life satisfaction, whilst controlling for PSOC ($F(4, 174)=13.87, p=.000, \eta^2 = .14$), with life satisfaction decreasing in the idealising condition (-.0052) and increasing in the normalising (+0.32) and control (+0.21) conditions. Follow-up ANCOVAs demonstrated that differences in life satisfaction were significant when comparing the normalising and idealising conditions ($F(2,$

175)=22.85, $p=.001$, $\eta^2 = .16$), and the idealising and control conditions ($F(2, 175)=13.97$, $p=.000$, $\eta^2 = .014$) but differences between the normalising and control conditions were non-significant. This also supports hypothesis 1.

Self-compassion

The ANCOVA revealed a significant interaction between type of social-media post and time on self-compassion, whilst controlling for PSOC ($F(4, 174)=9.84$, $p=.000$, $\eta^2 = .1$), with self-compassion decreasing in the idealising condition (-2.34) and increasing in the normalising (+0.32) and control (+0.21) conditions. Follow-up ANCOVAs on pairs of conditions at a time demonstrated that differences in self-compassion were significant when comparing the normalising and idealising conditions to each other ($F(2, 175)=12.44$, $p=.001$, $\eta^2 = .095$), and the idealising and control conditions ($F(2, 175)=7.26$, $p=.006$, $\eta^2 = .06$) but differences between the normalising and control conditions were non-significant.

Figure 3

Changes in negative mood across time for each exposure condition

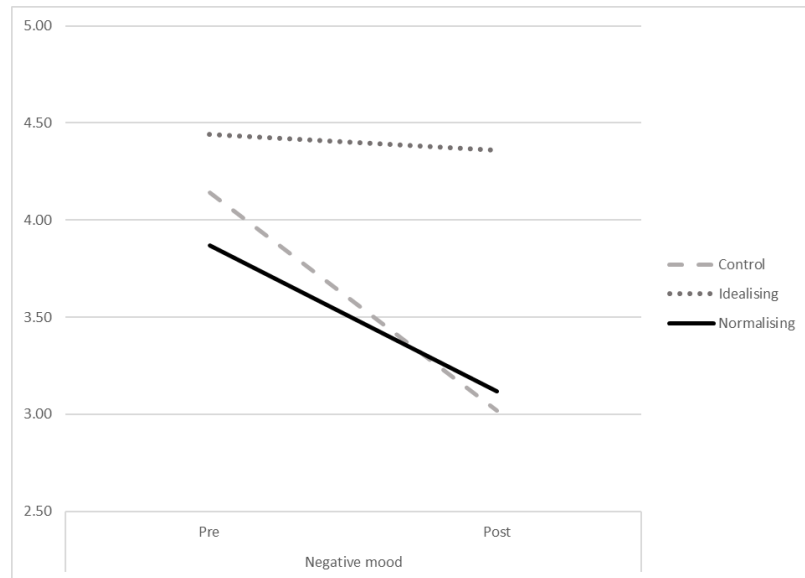


Figure 4

Changes in body image satisfaction across time for each exposure condition

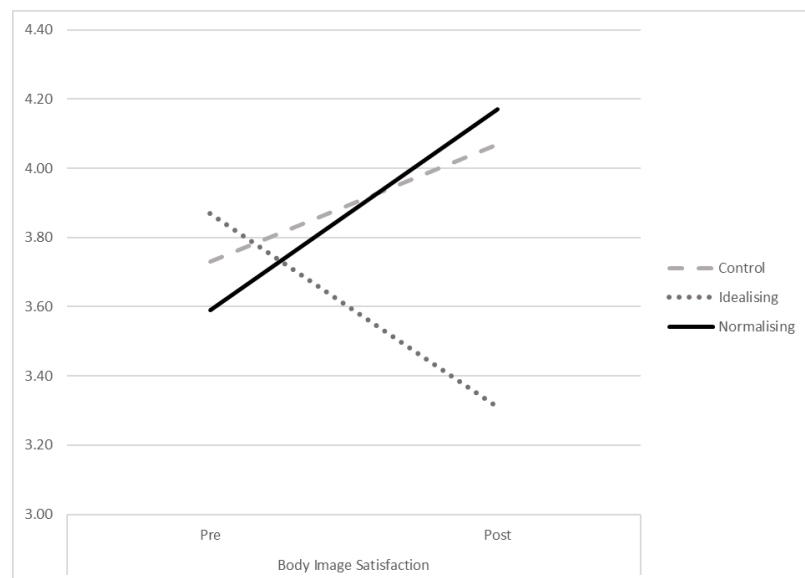


Figure 5

Changes in life satisfaction across time for each exposure condition

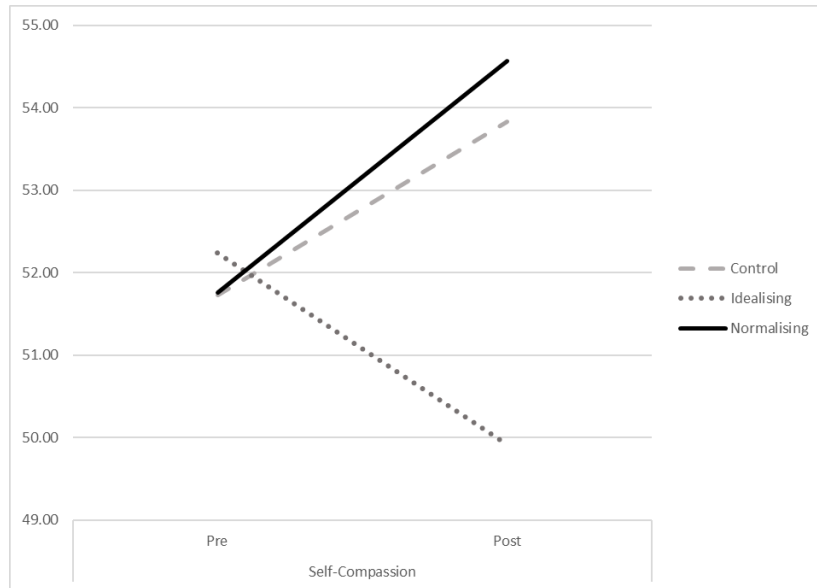
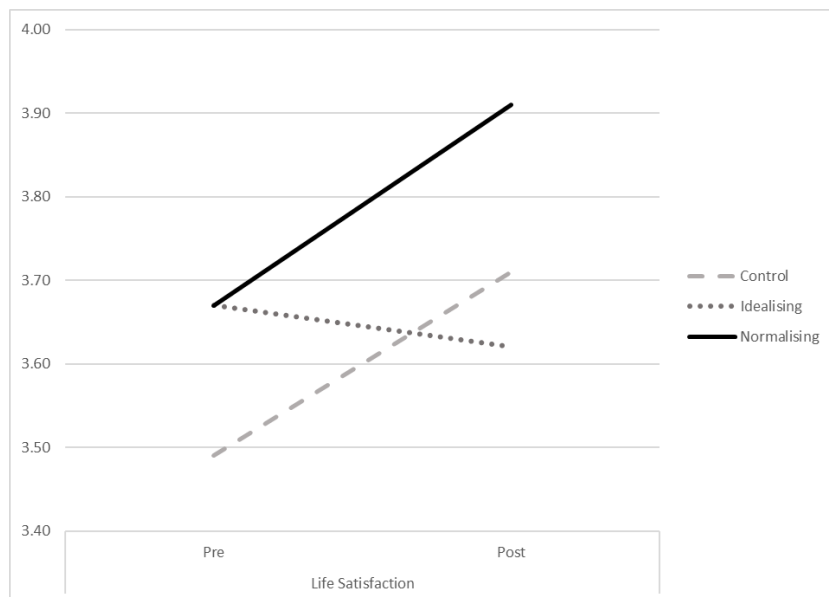


Figure 6

Changes in self-compassion across time for each exposure condition



Hypothesis 2

To test hypothesis 2, moderated regression analyses were performed. These analyses investigated whether significant differences in pre-post outcomes between conditions were moderated by Parenting Sense of Competence (PSOC). Therefore, condition (type of social media post) was entered into the regression model as the independent variable. The select cases function was used to test whether differences between normalising and idealising groups, and control and idealising groups were respectively moderated by PSOC. No test explored whether differences between normalising and control conditions were moderated by PSOC because no significant differences were found between these groups to begin with on any of the outcome variables.

Negative mood

The first moderation analysis tested whether differences in negative mood between the idealising and normalising groups were moderated by PSOC. Results revealed that the interaction was non-significant, $t = .26$, $p=0.8$, and the bias-corrected bootstrap confidence interval did cross zero: 95% CI [-.0130, +.0169]. The second analysis exploring whether differences in negative mood between idealising and control groups were moderated by PSOC was also non-significant: $t = .807$, $p=0.42$; 95% CI [-.0147, +.0348]. This suggested that parenting sense of competence did not moderate the relationship between type of social media post and negative mood.

Body image satisfaction

When examining whether differences in body image between the idealising and normalising groups were moderated by PSOC, the interaction was non-significant, $t = -.23$, $p=0.82$, and the bias-corrected bootstrap confidence interval did cross zero: 95% CI [-.044, +.035]. The second analysis explored whether differences in body image satisfaction between idealising and control

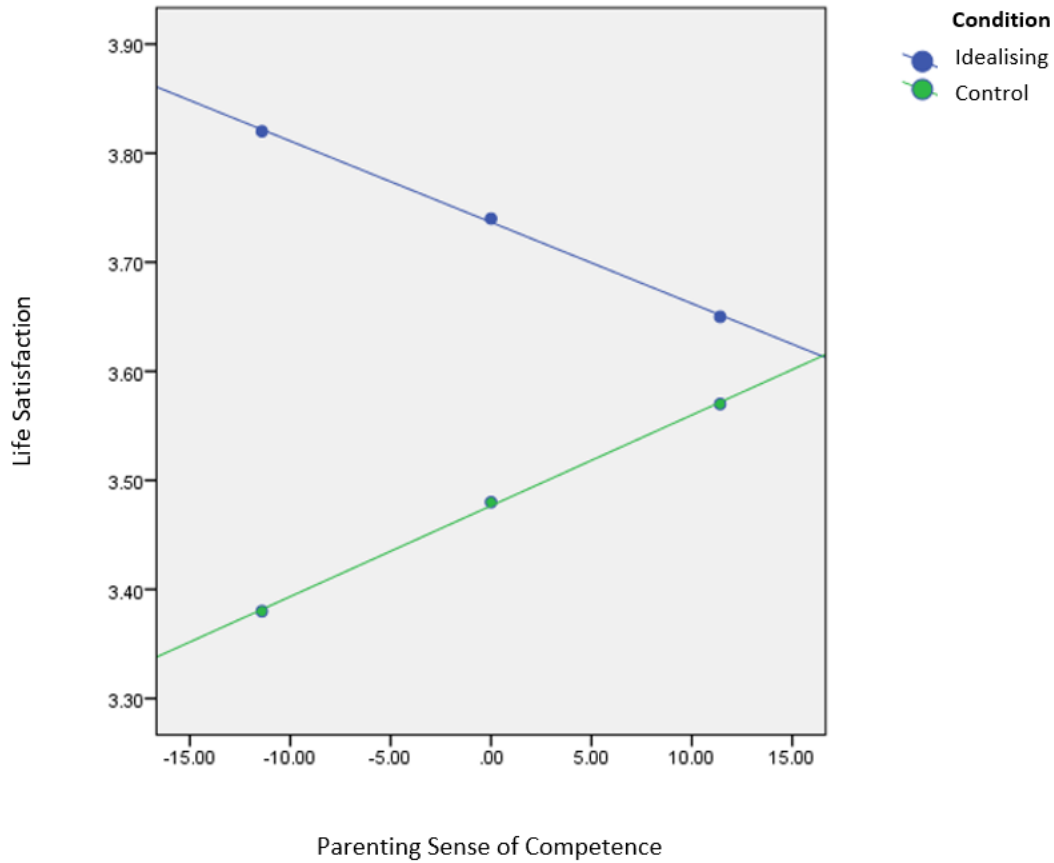
groups were moderated by PSOC. This was also non-significant, $t = -.71$, $p=0.48$; 95% CI [- .0229, + .0108]. This suggested that parenting sense of competence did not moderate the relationship between type of social media post and body image.

Life satisfaction

When examining whether differences in life satisfaction between the idealising and normalising groups were moderated by PSOC, this was non-significant, $t = -.2943$, $p=.76$, 95% CI [- .015, .0122]. However, the second analysis revealed that differences in life satisfaction between idealising and control groups were significantly moderated by PSOC: $t = 15.34$, $p=.00$, 95% CI [.0017, .0141]. An examination of the simple slopes plot suggested that at lower levels of PSOC the differences in life satisfaction between those in the idealising and control groups were bigger (life satisfaction increased in the control group and decreased in the idealising group) but at higher levels of parenting sense of competence the differences in life satisfaction were smaller. This is displayed in figure 7 below. However, it is notable that the R squared change suggested that PSOC only explained an additional 1.2% of the variance in life satisfaction, suggesting that type of social media post explained 98.8% of the variance. This pattern of results suggested that PSOC partially moderated the relationship between type of social media post and life satisfaction.

Figure 7

Simple slopes plot illustrating the way in which differences in life satisfaction between the idealising and control groups were moderated by PSOC



Self-compassion

When examining whether differences in self-compassion between idealising and normalising groups were moderated by PSOC, the interaction was non-significant, $t = -.71$, $p=0.48$, 95% CI [- .3365, +.1589]. The second analysis examining whether differences in self-compassion between the idealising and control groups were moderated by PSOC was also non-significant, $t = -.177$, $p=0.79$; 95% CI [-.2091, + .0117]. This suggested that PSOC did not moderate the relationship between type of social media post and self-compassion.

Taken together, these results suggest that PSOC only partially moderated the relationship between type of social media post and wellbeing outcomes. Hypothesis 2 was therefore partially supported.

Discussion

Summary of key findings

This study experimentally examined the immediate impact of social-media posts idealising motherhood as well as posts normalising the complexities of motherhood on women's mood, body image satisfaction, life satisfaction and self-compassion. Additionally, it investigated whether parenting sense of competence moderated the relationships between type of social media post and wellbeing outcomes.

The study had several key findings. First, in support of the primary hypothesis, type of social-media post had a significant impact on all wellbeing outcomes. Except for negative mood, a consistent pattern emerged whereby exposure to idealising posts was associated with reductions in body image satisfaction, life satisfaction and self-compassion, whereas normalising and control posts were associated with increases in these outcomes. Although the impact of normalising posts was slightly higher than that of control posts, the differences between them were non-significant. A notable exception to this pattern was negative mood, which decreased across all conditions but decreased most in the control group and least in the idealising group.

Additionally, the second hypothesis was only partially supported. Most group differences were not moderated by PSOC, except for differences in life satisfaction between the idealising and control groups. More specifically, those with lower PSOC were more susceptible to increases in life satisfaction following exposure to control posts whilst, conversely, those with low PSOC were more susceptible to decreases in life satisfaction following exposure to idealising posts. This suggests that pre-existing vulnerability can, to some extent, exacerbate the impact of provocative motherhood content on women's wellbeing. However, it is notable that the same pattern was not observed between normalising and idealising groups, nor were any

significant moderation effects found with negative mood, body image satisfaction or self-compassion. Additionally, PSOC only explained 1.2% of the variance in group differences in life satisfaction between the idealising and control groups. Overall, this seems to suggest that type of social media post had an important effect on women's wellbeing and that this relationship was minimally rather than substantially affected by parental self-efficacy.

Interpretation of results

The finding that SMPs portraying idealised mothers have a negative impact on body image satisfaction, life satisfaction and self-compassion is consistent with the large body of experiments exploring the impact of images of idealised female bodies on predominantly young women (Holland & Tiggeman, 2008). Likewise, the finding that some types of social media can be helpful for mothers whilst others can be harmful is supported by research with the general population (Baker & Algorta, 2016).

However, the fact that PSOC did not moderate group differences for all variables could be considered surprising in the context of studies with idealised images of women's bodies. For example, studies have found that high 'drive for thinness' and 'self-objectification' increases susceptibility to thin-ideal exposure (Holland & Tiggeman, 2008). This discrepancy could possibly be accounted for by differences between posts portraying idealised bodies and those portraying idealised motherhood. For example, the latter evoked multiple domains of maternal and feminine norms rather than one specific ideal (i.e., physical appearance), including birth, breastfeeding, bonding, relationships and more. Due to this variety, it is possible that one or more eventually evoked insecurity. Alternatively, it could be the case that another variable would better represent pre-existing vulnerability, such as 'internalisation of maternal ideals', which is

consistent with the finding that some body image related variables moderated the effects of thin-ideal exposure whilst others did not (Slater, Varsani & Diedrichs, 2017).

Another notable finding was that PSOC moderated differences between the control and idealising group on life satisfaction, but it did not moderate group differences on other outcomes such as self-compassion, body image satisfaction or mood. It could be that those who are struggling with parenting are also generally more dissatisfied with life and may therefore be slightly more susceptible to the harmful cognitive process of ‘upward social comparison’ (Festinger, 1987), particularly when consuming images which present parenthood, and life, as effortless and permanently joyful. However, it is unclear why PSOC would not then also moderate differences in mood. As the first study to explore this phenomenon, ultimately these hypotheses remain tentative and speculative. Future research could perhaps include a qualitative component to elicit rich information on women’s responses to the images, as this could provide further insight into the relationships between social media exposure and different wellbeing outcomes.

One finding that is harder to explain is that mood improved across all conditions including the idealising condition, albeit only slightly. This was despite the fact that idealising participants experienced decreases in all other outcomes, some of which have been reliably positively correlated with mood, such as life satisfaction (e.g. Pavot, Diener, Colvin & Sandrik, 1991). A couple of hypotheses warrant consideration. First, it is worth pointing out that the preponderance of thin-ideal studies disguised their research aims; for example, some purported to examine memory or conduct market research (Bessenoff, 2006; Slater, Varsani & Diedrichs, 2017). As this study aspired to principles of participatory-action research, it was deemed unnecessary to deceive participants. Thus, the introduction was vague but transparent, and it

would not have been difficult for participants to accurately predict the research aims. Arguably, this increases the risk of ‘social desirability’ and ‘self-presentation’ bias (Nederhof, 1985). Moreover, it could be argued that the mood VAS scale could be most susceptible to bias, due to both its simplicity as well as its positioning immediately post-exposure. Conscious or unconscious manipulation of results would presumably be less likely with more complex measures such as the self-compassion scale, which includes reverse items for this reason (Kulas, Klahr & Knights, 2019). Helpfully, one participant provided consent to anonymously share her feedback on this matter:

“I saw the “idealised” images. I was irritated by them and actually found it hard to read all the text because I do know that these are not a realistic reflection of motherhood and that reading them can make me feel bad. When answering the questions afterwards about my state of mind, I think I put similar responses to what I had chosen before because I was in the mindset of, “I’m not going to let these annoying supermums affect how I feel about myself”. But perhaps that is then not the most accurate reflection of how these kinds of posts make me feel.”

Given that this is the feedback of a single participant, it is prudent to interpret this with considerable caution. However, it does raise questions about the validity of the mood scale considering the marginal nature of the results as well as their inconsistency with the broader pattern of both quantitative and qualitative findings. An alternative possibility is that some sub-groups of women responded positively whilst others responded negatively, but that the parenting sense of competence scale failed to capture these differences- or that such influences were simply not pronounced enough to reach a threshold of statistical significance.

Another interesting finding was that the pattern of results strongly suggests that control images were not ‘neutral’ with respect to wellbeing, but in fact operated as a second, active

intervention which exerted a positive impact on all outcomes. Control images were photographs of urban architecture accompanied by reflective quotes and could be considered pleasing in nature. It is therefore possible that these images inadvertently acted as an “ultra-brief” mindfulness intervention, where mindfulness can be defined as, “a process of awareness that emerges through paying attention on purpose in the present moment, non-judgmentally, to things as they are” (Kabat-Zinn, 1994, p. 4). Myriad meta-analyses have found that mindfulness can reduce distress and improve self-compassion (e.g. Grossman et al., 2004; Bohlmeijer et al., 2010; Khoury et al., 2013) and that even “ultra-brief” interventions lasting a few minutes can be effective (e.g. Lim & Loke, 2016; Kamboj et al., 2017). This hypothesis is supported by a study on *Instagram* “fitspiration” images by Tiggeman and Zaccardo (2015), which found that control images of travel photography left participants feeling, “inspired to go travelling” (p. 66) as well as by a ‘thin-ideal’ study which found that nature photography lifted mood (Cohen et al., 2019). It is thus tentatively suggested that creating space from thoughts by becoming absorbed in pleasant images could benefit wellbeing.

An important caveat is that it is incumbent upon us to emphasise that highlighting the potentially harmful effects of idealising social-media content is not the same as criticising the women who produce this content. There are innumerable reasons why social-media bloggers might resist disclosing personal struggles online, including the desire to protect themselves from backlash. In a climate in which social-media trolling, bullying and judgment is rife (Hosseinmardi et al., 2015), such a desire could be considered prudent and understandable. Additionally, in a historical context in which women have had limited opportunities to balance work and motherhood (Hays, 1998), social-media blogging is a potentially lucrative industry (Schaefer, 2015) which allows women to be involved mothers and simultaneously provide for

their families. Considering the ethical stance of this study, it would be remiss to perpetuate the harmful cultural trend of female competition by suggesting that the actions of one group of women is laudable and the other derisible.

Limitations

One potential limitation is the ecological validity of the experiment. For example, the study was hosted on the site *Qualtrics* whilst certain previous studies used false *Instagram* accounts (e.g. Tiggeman & Zaccardo, 2015). Additionally, an artificial distinction was drawn between “idealising” and “normalising” content, whereas in reality the lines are blurred. While screening content, the researcher discovered mixed normalising/idealising content not just within accounts, but also within posts; for example, an image of a glamorous mother and smiling baby accompanied by a deeply vulnerable disclosure of postnatal depression. Additionally, it is unusual for idealising or normalising posts to be viewed consecutively. As Stater and colleagues (2015) have pointed out, “social-media feeds, such as those on *Instagram*, can contain a mixture of images of real-life friends, acquaintances and celebrities” (p. 93) along with illustrations, infographics, photography and more. Future research could explore whether exposure to a fourth condition containing idealising posts interspersed with additional, varied content exacerbates or dilutes the effect.

Other limitations include the one-off nature of the study, since it cannot be assumed that acute effects on mood translate into a long-term effect on mental health, although thin-ideal studies have found that prolonged exposure to idealised media can harm emotional wellbeing (e.g. Stice, Spangler & Agras, 2001). Future research could include a follow-up longitudinal design and could even randomise women to repeatedly view idealising or normalising content in pregnancy and examine the impact postnatally. Additionally, another limitation is the lack of

validation of the Satisfaction with Life Scale (Diener et al., 1985) for use before and after a brief intervention. However, the consistency of life satisfaction results with other state measures strongly suggests that this nonetheless captured meaningful change.

Although the geographical diversity of participants was a strength, an important limitation was that the experiment was limited to English-speaking women, the majority of whom were Caucasian. Additionally, no measures of social class were taken so it is possible that the sample was non-representative of working-class mothers, and, ultimately, only 4.9% were non-white compared with approximately 14% of the British population (ONS, 2011). This issue was discussed during the recruitment phase with a cultural consultant who suggested that use of words such as, “mental health” could alienate women from South Asian and minority communities; however, changing the wording of advertisements and targeting minority *Facebook* groups had a limited effect. It may have been that a white researcher stirred up distrust, perhaps due to a history of oppression perpetrated by European researchers against those from other ethnic groups (Bulhan, 1981), or perhaps due to more general difficulties relating to a white psychologist. It may also have been that non-white women feel alienated from contemporary cultural representations of motherhood, as Candice Brathwaite, founder of the organisation ‘*Make Motherhood Diverse*’, posited in ‘*Not Your Baby Mother: What it’s like to be a black British mother*’ (Brathwaite, 2020). Brathwaite calls into question the representativeness of previous research which provides a foundation for this project, saying that black British, working class mothers feel alienated from maternal support forums such as *Mumsnet*, as well as from social media bloggers and popular depictions of motherhood in British magazines. She writes:

“Where on Earth are the black mothers on *Instagram*?...the only kind of motherhood making waves is one that I cannot all the way connect with...all women who become mothers [face] similar if not exact choices and problems, [however], there are nuances and original things solely related to being a black mother of a black child” (Brathwaite, 2017, p. 1)

This calls into question the representativeness of this research, since the majority of ‘idealising’ mothers were unavoidably white, middle class and affluent, suggesting that issues of racial and class supremacy may be bound up with the very concept of idealised motherhood. It is therefore imperative that future white researchers proactively address this issue, for example, by involving service-user consultants from black, Asian and minority ethnic (BAME) communities at the design and recruitment stages. Exploring the impact of social media and cultural factors specifically on BAME mothers could also be an important topic for a future qualitative study.

Strengths

This study also had several notable strengths. First, it was a novel design which participants perceived to be of clinical importance. For example, participant feedback included, “I am so glad someone is recognising the damage social media causes mothers”, and “thank you for doing this study. It is such an important topic and I wish more was known about it”. Additionally, the inclusion of service-user consultants and the participatory-action ethos which involved time consuming steps to enhance participant experience was a strength which likely enhanced both its validity and ethical integrity. Many comments were received confirming that this was appreciated. Finally, the large sample size and cross-cultural nature of the study are important strengths. For a project exploring cultural factors, ensuring cultural diversity is crucial to capture universally meaningful insights about motherhood.

Clinical and research implications

Clinicians should recognise that, for isolated mothers of young children, the internet represents a diverse cultural landscape that includes risks for mental health as well as opportunities for resilience. Practitioners should be aware of the extent to which mothers rely on the internet and should be thoughtful about some of the systemic and social factors which may contribute to this, such as community isolation. This reliance on the internet is likely to be heightened during the Covid-19 health crisis, since women will be considerably more isolated from family as well as peers and are also likely to be more anxious about infant health as well as more reluctant to attend GP surgeries and hospitals. It is incumbent upon us to become familiar with up-to-date, evidence-based research about the nuanced and complex relationship between mothers and the internet in order to provide appropriate guidance. Further clinical and research implications will be considered in detail in the next chapter.

The current study could be extended in several ways. For example, future experiments could compare the efficacy of preventative, pre-exposure psychoeducational interventions, such as information on critical thinking and the artificiality of social-media content, psychoeducation about “motherhood myths” or psychoeducation about self-compassion as well as the additive effects of these. Previous researchers have used ‘media literacy’ education successfully to reduce the propensity to internalise appearance ideals (Yamamiya et al., 2005). Researchers could also incorporate a longitudinal design with repeated exposures over several weeks, and could explore myriad alternative mediators and moderators, including demographic variables related to race and class as well as patterns of social media use, trait comparison tendencies, media literacy or maternal-ideal internalisation.

Conclusion

This was the first study to experimentally examine the impact of exposure to idealising and normalising mothering content on postnatal women's wellbeing. The data overall points to the conclusion that idealising social-media harms women, perhaps by perpetuating unrealistic standards and reinforcing ideal-self/real-self discrepancies (Higgins, 1987) which affect life satisfaction, body image satisfaction and the propensity to be compassionate to oneself. The results also support the conclusion that normalising content, which integrates the 'highs and lows' of motherhood, has a beneficial impact, perhaps by destigmatising taboo emotions and reassuring women that their complex mothering experiences are normal, acceptable and non-shameful. The findings point to the importance of dismantling feminine ideals, debunking "motherhood myths" and normalising complex, ambivalent and diverse maternal experiences in both prevention and intervention work with perinatal women.

Integration, Impact and Dissemination

Integration and impact

For over two decades, researchers have posited that cultural discourses, especially idealising “myths” of motherhood, exert a profound impact on perinatal mental health (e.g. Hays, 1998; Stoppard, 2014; Choi et al., 2005). More recently, psychologists have speculated that exposure to an overwhelming number of online opinions is harming women and that social media functions as a dangerous vehicle for the transmission of damaging norms (e.g. McDaniel, Coyne & Holmes, 2012; Kleinman, 2019). However, the preponderance of this research has been qualitative (e.g. Mauthner, 1999; Knudson-Martin & Silverstein, 2009), theoretical (e.g. Hays, 1998; Stoppard, 2014) or correlational (e.g. Choi et al., 2007; McDaniel, Coyne & Holmes, 2012) in nature.

Both the meta-data-analysis and the empirical article extend this body of research in important ways through the use of systematic and experimental methods. Moreover, the experimental study builds on and extends the meta-data-analysis by examining whether the transmission of idealised cultural norms via one important contemporary vehicle of cultural transmission, image-based SNSs (BabyCentre, 2013), has a direct and quantifiable impact on mood, self-compassion, body image satisfaction and life satisfaction. The meta-data-analysis highlighted that women used causal language to link the internalisation of cultural content with mental health outcomes (e.g. “so I was partly responsible for my own anxiety, right?”). The experiment built on this by investigating whether brief exposure to idealising content could quantifiably impact wellbeing.

The use of robust research methods to assess the relationship between culture and postnatal wellbeing is both timely and important. Postnatal mental health issues remain highly

prevalent in the UK and improving maternal mental health is an official national priority (DoH, 2016). Moreover, evidence suggests that traditional CBT approaches, which are widely used with perinatal women, may be less effective for this population (O'Mahen et al., 2012), perhaps because exploration of personal, cultural and relational meaning is integrally important to women with perinatal distress (Mauthner, 1999). However, without systematic identification of relevant cultural discourses affecting mothers from diverse socioeconomic groups, the incorporation of cultural factors into clinical models of perinatal distress remains haphazard and relies on anecdotal speculation as well as weaker research methods (O' Mahen et al., 2012).

Collectively, these findings create the possibility of developing specific, evidence-based adaptations to current clinical models of postnatal depression and anxiety. For example, the meta-data-analysis makes it possible for clinical innovators to develop a psychoeducational tool with lay descriptions of “motherhood myths” to be used in CBT interventions, similar to the widely used list of “thinking errors” (Padesky & Greenberger, 2012). Further, clinicians wishing to develop behavioural interventions for social-media use can be guided by evidence rather than intuition. For example, reducing exposure to harmful content could be complimented by increasing exposure to ‘beneficial’ content, including normalising bloggers as well as content unrelated to motherhood, such as nature or architectural photography, since such images positively impacted wellbeing despite being classified as belonging to “control” conditions. Clinicians may even consider gathering normalising SMPs to use as ‘evidence’ against self-defeating beliefs (e.g. “I’m the only one who feels this way about breastfeeding, most women enjoy it”). In the wake of the current Covid-19 crisis, it will be even more important for clinicians to be informed with up-to-date, evidence-based knowledge about which online communities are likely to facilitate support.

However, clinical implications also extend beyond CBT. For example, narrative approaches have traditionally been well-positioned to integrate cultural and social-constructionist influences into mental health treatments (Hedges, 2005). One potentially fruitful technique could be to adapt the ‘self-characterisation’ narrative tool (Androutsopoulou, 2001) by collaboratively drawing a labelled ‘diagram’ of the ‘ideal mother’, according to the client. The narrative therapist could inhabit a stance of curiosity and not-knowing and use narrative and systemic questions to elicit stories that have influenced the development of the ‘ideal mother’ for that particular woman (e.g. the ‘good mothers must sacrifice everything’ story). The therapist could also support clients to become curious about which personal relationships reinforce or challenge such stories and to explore childhood memories as well as experiences of race, class, ability, religion, sexuality and gender which have shaped their identities and expectations of motherhood.

Findings also support the use of Buddhist-derived, third-wave therapeutic approaches, especially Compassion Focused Therapy (CFT) and Acceptance and Commitment Therapy (ACT). For example, the meta-data-synthesis identified cognitive and behavioural coping strategies used by women when confronting a discrepancy between culturally informed expectations and reality, which ACT therapists refer to as a ‘reality slap’ (Harris, 2012). These coping strategies included self-criticism and thought suppression, both of which are directly targeted by ACT and CFT. For example, ACT therapists often use a technique called ‘thought defusion’ to externalise thoughts and reduce their power (Harris, 2019). Techniques such as ‘naming the story’ or ‘radio doom and gloom’ could be adapted to help mothers renegotiate their relationship to internalised cultural mandates— e.g. ‘there’s the bad mother story again’, ‘that’s just radio perfect mum broadcasting’ or ‘thank you mind for showing me that I care so much

about being a good mum that I feel guilty about how much screen time the kids have had during lockdown’. Additionally, values clarification exercises could be used to separate parenting values into the categories: ‘not important to me’, ‘somewhat important to me’ and ‘very important to me’ (Harris, 2019). This exercise could help women develop confidence in their chosen values (e.g. playfulness, affection) and deprioritise unhelpful cultural values by relegating them to the ‘not important to me’ column (e.g. sacrificing all of my own interests and needs). Results also found that exposure to normalising posts was associated with increased self-compassion. CFT therapists could therefore use such disclosures as imaginative aides to support techniques such as ‘loving kindness’ meditations (Leppma, 2012), ‘the compassionate hand exercise’ (Harris, 2012) or compassionate letter writing (Cree, 2015). For example, the clinician could invite the woman to send warmth and goodwill towards the ‘social-media mother’ (“Imagine this mother opened up to you and told you that she felt guilty about not loving all aspects of motherhood after a baby class. What would you say? What tone would you use?”). Clinicians could subsequently guide clients to connect with the quality of warmth and words of reassurance directed towards the other woman in order to turn them towards herself.

The findings of this study also support the incorporation of cultural psychoeducation into community-based preventative approaches to reducing perinatal distress on a population level, especially through antenatal classes. It could be argued that this is especially pertinent in the currently strained economic and healthcare climate, in which the focus is increasingly shifting towards cost-effective, universal interventions (Bower & Gilbody, 2005). Psychologists could play a pivotal role in preventative work by consulting to and collaborating with multidisciplinary colleagues in the design of antenatal classes. To better support perinatal mental health, such classes could dispel motherhood myths, equip women with the tools to develop healthy

relationships to social media and support them to develop more integrated and nuanced expectations of motherhood which are hopeful but not idealised.

Finally, the meta-data-analysis paves the way for more precise research on social media, cultural factors and maternal wellbeing. For example, idealising SMPs could be ‘matched’ to specific “motherhood myths” to increase the validity of future experimental studies.

Additionally, the development and cross-cultural validation of a quantitative outcome measure assessing the extent of women’s agreement with particular “motherhood myths” and measuring trait “maternal-ideal internalisation” could increase the cultural sensitivity and scope of future quantitative research as well as representing a useful clinical tool. Ultimately, this study will only impact the cultural, clinical and community landscape as part of a larger body of work which includes the innumerable studies which have preceded it, as well as, hopefully, the innumerable studies which will follow.

Dissemination

The dissemination of findings to a wide variety of audiences is a prerequisite to change. Moreover, the impetus to disseminate widely and effectively is compounded by the feedback of participants of this study, several of whom reported feeling that this research had clinical importance and expressed hopes that it would not only be published, but also integrated into perinatal healthcare systems. As one participant wrote:

“I am delighted that somebody has recognised the damage that social media is doing to new mothers...I think all the moms who took part will really appreciate that someone cares about their feelings. Usually, it’s all about the baby!”

The findings have already been summarised via an audio-recorded presentation which has been made available to other Royal Holloway clinical trainees. It is hoped that trainees with ambitions to work in perinatal services will gain an increased awareness of the need to explore cultural factors affecting perinatal mental health in clinical assessments and will be encouraged to expand formulations to include broad systemic influences. Additionally, I volunteered and was accepted to give a workshop on “motherhood myths and maternal wellbeing” remotely via Zoom to new mothers with the agency MUSH, which aims to reduce loneliness and improve maternal wellbeing in the UK. I have been informed that, on average, approximately 250 new mothers attend these workshops and a date has been booked for this in October 2020. Perhaps most importantly, I have begun work on a detailed document containing a lay summary of the research which will be shared with the women who took part in the study. As I am currently on a 12-month perinatal mental health placement, it has already been agreed that I will present the findings of my research to my team, which includes psychologists, family therapists and psychiatrists working with perinatal women.

To ensure that the current research has a wide impact in academic circles, I plan to submit the systematic review and empirical article for submission to academic journals for peer review and publication.

Journals to consider for the empirical article include *the Journal of Experimental Psychology* and *Computers and Human Behaviour*. For the meta-data-analysis, *BMC Women's Health* and *Feminism and Psychology* could be appropriate. A variety of conferences also warrant consideration, including the *NW London Perinatal Mental Health Conference* and *Maternal Mental Health Network*.

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Appendices

Appendix A: Social Media Posts for Normalising, Idealising and Control Conditions

Normalising Condition



I feel almost bad saying “we survived” the 1st month but that’s honestly how it feels. I’ve never considered myself to be very “maternal” so when @ralph_mazz & I decided to start a family & got pregnant, I’ll admit, it took me a while for the identity of “MOM” to sink in.👉👉

I realized this week it is #maternalmentalhealthweek and I believe mental wellness is So important - as a new mom more than ever! Tons of “picture perfect” motherhood photos flood my feed daily, and I’ve shared my share too, but it’s comforting to see the real {not so glam} parts of #newmomlifetoo.👉👉

There’s moments I literally cry just looking at his little face because I feel so blessed...and there’s also times I get easily overwhelmed & snap at my husband, because this little guy won’t stop crying unless I stop everything I’m trying to do and carry him.👉👉

The #fourthtrimester is rewarding and challenging. I try to prioritize self care as much as possible because while it’s tough, It’s VITAL!👉👉 Sharing what’s helping me in case it helps you!👉👉

1. Find an uplifting podcast or personal growth book you can listen to/read during breastfeeding.👉👉
2. Get outside and walk as much as you can daily. Hubby’s watches the baby so I get alone time, but stroller walks rock too!
3. Keep uplifting music on in your home! I’ve got @hillsongunited blasting every morning.👉👉
4. Stay connected to positive people- for me, I have a tribe of really positive mom friends on social who help me feel normal👉 and stay motivated. You can search hashtags and connect with others in your same season or there’s lots of local baby meetup’s or hospital-run baby groups too!👉👉
5. Ask for help! My husband and I had a talk about how we’d share the responsibilities before baby and that helps! If you have a partner, talk to them! It takes 2 to tango so you can work something out so you both get a little freedom. And if you’re a single mom (hats off to you!) ask family!👉👉

One more big thing - Try to stay in the PRESENT. When I think too far ahead, I wonder how I’ll get

everything done on my lists, that's overwhelming. Take it one day at a time and if your little human's alive, you're doing GREAT



Growing a baby and giving birth. Just because it's something that women have been doing since the dawn of time does not mean it's easy does it? I've heard the phrase "it's the most natural thing in the world" so many times, and yes it is, but just because women were given a womb, it doesn't mean that it's easy having all your bodily organs vacuum packed to make room for growing a human whilst simultaneously being bombarded with more hormones than there are characters in game of thrones does it?

The damage we do to ourselves becoming mothers comes in so many forms it's impossible to name them all, but that damage becomes our armour, because we got it in the greatest battle we have ever fought and won. Identity plays such an important part in our mental health, and when our bodies feel so so different, our identities and our minds can too. Is it really any wonder that a mental struggle can be the consequence? For me, the damage was Hyperemesis Gravidarum. I vomited my way through both pregnancies and labours with countless admissions along the way, but every time I found myself back in a hospital bed I knew I was surrounded by women fighting harder battles than I was. Because yes, so many things in both body and mind can go haywire when you are making and growing a life. If you think about it, how could a job as important as nurturing a precious baby ever be carefree?

Whether it's the pregnancy or afterwards...healing after a C section, dreading that first post labour trip to the loo (and 2nd, and 22nd), spending 2 hours you would rather be sleeping massaging mastitis knots in the shower, opening your wardrobe and thinking you might as well eBay the lot....Everyone's damage is different, but do you know what? Your body might not be the same as it was before but that's because before you were a plot of land and now you are a garden. You nurtured, you grew, you flourished, and you hurt along the way but look at you now. You are a mummy, and a small face looks up at yours and knows that there is no one in the world more incredible than you are. There really is no prouder way to wear a scar than that♡



My first photo as a mum.

Exhausted after a 34 hour labour, relieved it was over. No idea what to do with our new little bundle. Horrified with my empty saggy belly. Lost all dignity with midwives getting me in various positions to try and breastfeed Leo.

Peeing for the first time afterwards as tentatively as I could, scared the stitches would break. Barely being able to walk- sweating just to get to the bathroom. Having to tell my husband I wanted to stay in hospital for another night as just didn't feel up to leaving, yet longing to be home. But so reassuring with nurses checking on us every hour.

It wasn't the 'natural' birth that our NCT course practitioner had banged on about. I felt I had somehow failed a bit having had pethidine, gas & air, and an epidural, then forceps. The other mums from our course had similar experiences so that really helped me not feel like I'd done it all wrong. There is something special about sharing this journey with other ladies experiencing it at the same time. Being born as mothers together.

I do think we need better birth and motherhood preparation- not just courses but by us mums sharing what it's really like & supporting each other so we feel a little less alone and don't resort to Googling every little concern every 30 seconds like a maniac.



Insta vs reality..... to all my new mammy friends, first time mummies etc.... THIS is reality! Lately I've been following a couple of new mammy bloggers and I couldn't help feel like a complete failure. A failure because I didn't look like they did after giving birth, that I spent most days in pjs, that makeup hasn't seen my face since second trimester, that I struggled to get out and about with my baby while they head off to events when baby 2 weeks old, that my baby wasn't asleep content in cot or buggy most of the time(ever), that my baby doesn't feed as well and as easy as they make it seem....BUT then i spoke with all my mammy friends and realised that what you see in this photo is reality.....they may not choose to show that side of their "perfect" insta lives, but this is normal..... don't feel like your failing at motherhood if you look like this 90% of the time, your not failing, in fact your winning! Why? because all your needs are set aside for the moment and you are making sure your child gets all they need! You don't have time to care what you look (or smell) like cause your baby needs you, you are doing all you can for your baby right now, you are completely selfless....Therefore... I'm FUCKING WINNING at motherhood!



I've debated on this post for a while but I've decided that I'd show the hard parts of the aftermath of giving birth, and the ultimate sacrifice that mothers make from day one.

Kevin snapped this of me. This was 2 days after I gave birth to Layla. Eating my "nice meal" provided by the hospital. An over cooked steak and sides. I was in new territory. Learning to breastfeed this little human being that I just brought into the world. Wearing these big mesh panties, still sporting a pregnant belly.. no one told me your belly doesn't go down immediately. No one told me I'd be bleeding out.

No one told me that I would spend hours crying and full of emotion. I remember just laying there in the hospital bed crying. I was crying because my babygirl was finally here.. FINALLY! But wait.. that means she isn't protected inside of me anymore. And that's a scary feeling.

At what point, I think Kevin was at a loss. I realized that when I was being held by him in the hospital's shower and I was just crying uncontrollably. It's all a blur but I do remember saying "she's not safe inside of me anymore" and that was a really hard thing to work through.

I was also in so much pain.. no one tells you that typically with a "quick delivery" comes a bad rip. I ripped all the way up and down, and also side to side. The weeks following I couldn't walk. I couldn't use the bathroom. I wore these big depends diapers. I never thought I would be normal again. Kevin had to help me do EVERYTHING from pee, to walk up stairs.

Being a mom is the ultimate sacrifice.

You give up your body for 9 months to grow this little baby.

You go through labor and delivery.

You go through the emotions that come with childbirth.

You let go of all shame as you walk around your house in diapers and ask your SO to spray warm water on your rip while you pee to avoid that burn.

You spend tireless hours latching your baby and feeding your baby to establish and keep up your milk supply because you want to breast feed so. damn. bad.

You remain patient through leaps, growth spurts, and cluster feeding.

But most importantly, moms give up who they were before they were a mother. Most moms give up a lot of their hobbies, dreams, and plans. Moms put their lives on hold so their babies can live out theirs. We deal with so many emotions that we internalize- just so we can be mothers to our babies.

Don't ever discredit a mother. You don't know the half.

I used to be Autumn. Fun loving, crazy, outgoing Autumn. But now I'm Layla's mama. And I'm okay with that.



A few days prior I had lost my home birth due to him going Breech last minute. I was also anxious to meet him as we knew he was going to be born with a cleft lip and I didn't know exactly what it would look like, how I would feel or if I would be able to breastfeed. When he was passed to me he just looked utterly beautiful and thankfully the lip didn't stop him being able to latch. (With a lot of patience from me and support from the midwives). What I was completely unprepared for was the feelings I got over the next few days. I didn't instantly feel the rush of love everyone had told me I would feel when I first saw him. I thought I had ruined our lives, my relationship with my husband and I was terrified we would never sleep again, i a little bit wanted to give him back. So much guilt for feeling these feelings and fear that I didn't 'love' my son. Luckily as I settled in to our new lives the love grew and the fear dissipated but I was so scared at the time to tell anyone how I was feeling and it was only a couple of years on I felt able to share this.

Being a mum is amazing but it's tough too, you don't expect it to bring so many unexpected emotions. I hear so many stories of worry, overwhelm, guilt, anger, sadness from mums in the clinic and these are only the ones that open up about the issues they've faced.

At the Women's wellness conference at the weekend I listened to @urbanhatch - Sofie Jacobs giving a fantastic talk on postnatal loss. Everything from loss of yourself, your ability to breastfeed, your mental health, anything. She really hit home how important it is to make space for mums to be heard, to feel safe and not alone. Questions like 'how are you TODAY?' And being careful with the words we choose to reply with can truly make a difference to the way we all feel



Here I am in my postpartum body. I've been having the harshest thoughts of myself lately. Why is it so easy to beat yourself down but bring others up? Why do I see such beauty in my best friend's body or other mama's postpartum body but not in myself. Lately, I've had such conflicting thoughts within my daily thoughts, a contrast of messages from appreciation to self disgust. Rationally I know that I have just given birth and my advice to anyone else would be so simple and so obvious, "you are incredible, you have grown and birthed a beautiful baby, who is healthy and happy. Feeling like yourself again will take time, be kind to yourself." DUH! I've been through this shit with you guys a million times! BUT transparently, I am just not there. Despite the fact that I preach self love day in and day out, I think I said "F\$%K this shit" about 20 times last week. Here's one scenario; As its getting hotter, I tried to find ONE PAIR OF EFFING SHORTS that fit, I tried at least 6 pairs and I barely got them over my thighs, let alone my butt. After deconstructing my entire wardrobe, I could feel my frustration and waterworks not far from being in full motion, but as I was simultaneously entertaining Lola with a sock puppet and singing Baby Shark for the 86th time for Lexi, life just carries on. Mama life doesn't allow you the time to feel. I realised that the time that I would spend on the positive counter-thoughts to my mean, unreasonable thoughts does not really fit in to the whole mum of two thing. Or at least I wasn't prioritising it. Being kind to myself, loving myself should be a the TOP of my list each day. I would expect the same from my two girls, why not model that for them. So here I am, its Sunday and this week I WILL LOVE MY BODY and I will say things I appreciate it about it. 5 times for every time I say something mean to it. Are you with me?



I've bleated on for some time that things have not been easy since Jacob arrived: a traumatic birth, separated for our first 24 hours, colic, reflux, allergies, hospitalisations, little sleep, and long periods of being signed off all helped feed horrendous postnatal depression (or the robbing little bastard to give it the technical term). I have had some fantastic support from friends and family in that time, and the most supportive husband imaginable, without which my story would be a lot different. Despite the challenges, I can honestly say that Jacob is the best thing in my life and I'm in awe of him everyday (though sometimes I just wish he'd sleep!) His inquisitiveness, bravery, wily intelligence, daft sense of humour, amazing dancing, kind and loving nature, and his unfailing determination to overcome whatever difficulty or obstacle lies in his path makes me so so SO proud to be his mama. I guess what I'm trying to say is that even though my PND journey is not over, there is a light ahead. For anyone reading this that is on this same journey, there are many of us to help you along. Don't struggle alone. Above all, PND does NOT define you or your relationship with your child, despite what the dickhead in your brain is trying to make you think



It's so hard to ask for help. Because you're supposed to be 'Mommy'. And you never want to say, 'I need help being mommy'. I carried this person for nine months. I knew she was coming. I felt like I should be able to handle it and I didn't want to ask other people to stop their lives. Especially if they had not part in making this baby. But eventually I had to give in. I'm just one person and being mama 24/7 can make you crazy. I found myself getting frustrated that other people were going on with their lives. I'd let things fester. And it was unhealthy for my relationships. I'd get heated with my mother and boyfriend. Instead of beginning with, "can you help?" I'd lose my temper and jump straight to: "why aren't you helping?"



5 month sleep regression your f*cking killing me. This is me getting some rest whilst Harper is asleep in the car. She has been waking every 2 hours (night and day) and just wants to be held. I'm parked outside our house. I haven't showered today and let's not even get started on my hair situation...!

Interestingly I just came from the post office where a lovely old lady smiled at Harper and asked me how motherhood was going. I cheerily replied, "it's great" but what I really meant was...it's been a tough week. Motherhood can be at times exhausting. It is constantly worrying about not being good enough, doing enough and not being present enough. It is that moment at 2am that makes you wonder if you can keep going and wondering if anyone else ever reaches that point too?

It is missing your husband and that carefree quality time together. It is the relentless lack of sleep, the littering of half drunken cups of coffee all over the house and the constant selfless attentiveness to this little needy, gorgeous human. That's motherhood right now. But other than that, yeah it's fantastic!

#grumpyandtired #motherhoodisnotahuggiesadd #rawandreal



Even though I'm one day late, I'd like to do a gratitude post per day. So here goes.
1/30. The boy in this picture. By the way, he was fine ;). Since we learned we were having a fourth baby, around this time last year, this boy has rocked my world.

When I found out I was pregnant, I cried. Not tears of joy. I couldn't believe we were starting over...again. This would change everything.. For all of us but mainly for me. Selfishly, this would be ANOTHER back seat for my career, which has always taken a backseat to our kids. And please no comments on this, this is just how my family chooses to operate- I'm not judging you, please don't judge us. This would mean less time for Brian and me. Less time for me to spend with our big kids. More money. Buying ALL the baby stuff AGAIN. The list could go on and on

BUT.

This boy is also quite possibly the best thing that has happened to our family. It has been a massive learning curve, which I am still not used to yet, but he has been nothing but pure joy. The older kids love him in a way I certainly wasn't prepared for and I couldn't ask for more from them. They adore him, and he adores them.

But it's also okay to say that change is hard. It's hard to admit that a pregnancy (when so many people are trying to become pregnant) is not what you planned for, but it's many folks reality and important to be able to say out loud without judgement.

You can simultaneously mourn the loss of many things and be overjoyed by the addition of so much love and happiness #thestrongmotherguide ##postpartumjourney



This is me. Right now. Trying not to pull my hair out. I have been trying to finish the laundry I started yesterday and do the dishes (we don't have a dishwasher because I AM THE DISHWASHER.) My oldest son is bouncing off the walls (literally, there is a frigging dent in the wall), my middle wild child just bonked his head while spelunking in the linen closet and now has an ice pack on his developing egg, and the baby - pictured here - is either starting to teethe or is testing out the theory that if she screams loud enough and for long enough that I will actually cry. CRY.

Getting anything done in this house is dizzying. I haven't showered, eaten, or even gotten dressed for that matter and it's already 2pm. And you know what? I don't feel #blessed in this moment. I feel frustrated and tired.

But that's what parenting is, right? It's this crazy journey that is mostly rewarding but pock marked by sh**tty days like this one. These are the if-it-doesn't-kill-you kind of days. I file these moments away in my heart for those days that I need to remind myself that I am only one person. Like every other mom, I am trying my best to do this right. And I totally screw it up at least a dozen times a day.

I won't ever color neatly inside the lines of motherhood, but I love my kids with all my heart.

And right now while the sink is full of dirty dishes, at least one kid is whining, and I smell faintly of pee and spit up (don't ask) that big feeling of love is all I got. And I call that a win.



I love seeing all these beautiful women in their beautiful nursing clothes smiling down at their babes as they lovingly look up back at them hand in hand while breastfeeding away. That is not my reality, right now that is. This is real & as much as I want to stay strong and be the soldier I feel I can be I cannot hide the struggle that is BREASTFEEDING. Whether she is not latching properly, whether I am not producing enough milk to keep up with her demand, whether my nipples might not be adequate, whether we confused her with having to give her a bottle after pumping...whatever it may be it has been an emotional & painful struggle. Today has been full of no naps, sucking and not eating, crying and frustrated parents. This photo depicts my reality of this Breastfeeding journey so far & that first latch & the pain I endure. Keeping it real.

Thank you to all those women coming to my rescue even the times I didn't reach out. All your kind words & encouragement have been a blessing <3. #nationalbreastfeedingweek



No one teaches you how to love a child you didn't plan to have. No one shows you how to traverse the emotional complexity of loving a child you weren't happy about being pregnant with. It's even more difficult at those times when they're having tantrums and pushing you to a point of emotional exhaustion.

It's confusing...

When the same people who told you you pretty much ruined your life are smiling ear to ear at your baby shower a few months later.

It's hard...

Looking at your beautiful baby and being bogged down by thoughts of how you will take care of them and how much life will change.

It's so easy...

To project the pain of your wounded inner child onto your baby. It is the lethal cycle of undeath with trauma...

This stage of motherhood has forced me to look at my reflection in my daughter's eyes and realize that no I don't enjoy being a mother all the time, but this child has been the catalyst for major growth. She is the mirror that allows me to look into my past and see the fears still controlling me now...

When we heal our deepest pains we are speaking to our ancestors across the space time illusion and holding a cross-generational conversation within our dna that heals old wounds and rectifies long lost problems. Motherhood hasn't just healed me it's healed the mother's that came before me

...

The reality is I don't want to be a mother everyday. I don't want to feel held back from chasing my dreams and goals. I don't want to be exhausted. But I KNOW this little girl has brought me face to face with things that would have otherwise been ignored in my bubble of childless freedom.

...

Dear mama, who is going through an unplanned pregnancy, don't feel guilty, don't feel afraid, don't feel ashamed. That baby chose YOU to be it's mothers at the perfect time. Surrender to the journey of unpredictability and let this new being show you a whole new part of yourself you didn't know was there.

#takebackpostpartum #thefourthtrimester #birthofamama #blackmomsblog #millennialmom
#motherhoodunplugged



Shoutout to all the mums who didn't get much sleep last night. 😴

My nipples feel worn down to nothing, my arms and back ache from sitting up. The only place she would sleep in right here. Every time I would lay her down in her cot her eyes pop wide open but as soon as she was back in my arms she was fast asleep! Some nights are so long and in the dark of night it's very lonely but as soon as the sun rises you get up and get on with it and prepare yourself to do it all over again the next night.

Instead of worrying what I'm doing "wrong" I'm choosing to see what I'm doing right. I'm creating a safe, warm and loving environment for my baby, she feels safe with me especially when she's not feeling well. She has a strong attachment to me and I know that it's benefiting her in so many ways from her mental well-being to her development.

For now she's dependent on me but this is just a season and in this season I chose for her to feel safe, attached and secure. ❤️

If you had a crappy night sleep, I see you & I feel you mama. Let try to do something to fill up our own cups today and just know You're not alone xx



This is postpartum.

Literally sat in bed and binged on Netflix for 4 hours today instead of working out WHILE DRESSED IN WORKOUT CLOTHES. I've been in a shit mood all day, and as much as I know how a good workout changes that, I still didn't want to do it. Why do we sometimes LIKE to sit in our own shitty moods? What is that all about?

Finally pressed play and hated every minute of it because it was cardio day (fuck off). My body wasn't moving the way I wanted it to. I had to take a lot of breaks. I swore at myself. I had hurtful thoughts about the way my body is shaped now. I wished for my old body back. And for a split second I thought about blaming my son who was lying next to me happily playing.

How ungrateful, right?

This is postpartum for me. This is my experience. I have crazy thoughts, but what I've learned is that so do you. And so do hundreds of other mothers out there. What I've found that's helped me work through these thoughts and my negative emotions is voicing them out loud. Allowing myself to be in the emotion allows me to get out of it quicker.

So yes, I let myself have a pity party on the mat for a couple minutes today. But then I got my ass up and finished my workout. And now as I'm dripping in sweat rocking my baby boy to sleep for his afternoon nap, I feel accomplished. I feel grateful. I feel love. #goodmomshavescarythoughts #thisispostpartum



This is a picture of me 3 days postpartum. I was so raw and so open, I was a f**ing mess. I loved my baby, I missed his daddy (he went back to work that day), I was mad at my mom, my heart hurt for my brother because my mom left us and now I had a little boy that looked like him, my nipples were cracked and bleeding, my milk was almost in, my baby was getting really hungry, I was feeling sad that people kill babies, like on purpose, I had not slept since I went into labor, I didn't know how to put my boobs away, my vagina was sore from sitting on it while nursing constantly, I was kinda losing my mind.

Sarah took this picture of me. She walked in with food and said, "Hi! How are you!?" I said, "I'm a mess". We talked, she listened, she said, "I've been right where you are. It helped to know she went crazy once too!!! Then she said, "I know this might sound crazy but do you have a camera? You look so raw and beautiful". I'm so glad she took this picture. She was just planning to drop off food. She ended up staying for much longer. I needed her. She knew it. I called Rachel, I needed her. I needed her to nurse my baby, I needed more help with his latch. I called Shell. I needed her to tell me my baby was ok. This is real PP mamas.

I had a magical postpartum. It wasn't easy but I was so supported and fed and reminded that the mothers before me had been through this part of motherhood, and that I'd get through it just fine too.



Nobody told me that my traumatic birth would affect how I bonded with my daughter. Guys, I didn't even know that I had given birth to a baby until 13 hours later. I was asleep for her birth, her first feed, and when I was hooked up to a pump for the first time. When I awoke at 3am after having her at 4.39pm the day before, I was notified that I had had a baby, and they placed her in my arms. She was so sweet! And so cute! And so cuddly! But she didn't feel like mine. She felt like a stranger. I am beyond thankful for modern medicine because without it, neither one of us would be here, but because of it, I missed out on my daughter's birth. I STRONGLY believe my birth attributed to my #postpartumdepression. I remember the very first time I felt love for Ella - she was 8.5 weeks old. So, yeah. Nobody told me that my insanely hard birth would contribute to bonding issues and postpartum depression. Nobody told me that it was possible to NOT feel love for your own child. But here I am. It happened to me. And not only do I hate it for me, but it breaks me for Ella. I am so glad that season is behind us.



Everyone worries about their baby stopping breathing, right? Or worries that they're too hot or too cold? That they've got a slight rash or they're not eating enough? But does everyone worry that they're child's going to be beheaded? And not just worry about it. Constantly visualise it. Play the scenario out again and again. The man comes into the shopping centre, I try to run but he gets the baby and essentially decapitates him. So I'd figure out an escape route, I'd go in the fire exit and hide whilst desperately trying to keep the baby quiet. The man finds me again but this time he just repeatedly stabs the baby in the chest.

This would replay in my head over and over and over. It wasn't just the shopping centre either, I couldn't walk down the road without visualising the cars veering off the road and crushing my son.

I tried telling my first therapist about it but the thing is its really hard to verbalise just how far my brain was taking these thoughts. It probably only came out as, "I'm having some worries about my son dying". Which of course was met with 'oh that's normal, it's your instincts and hormones kicking in'. I stopped the sessions, I felt like my thoughts weren't normal mum worries and felt embarrassed when people said they were.

I did eventually get some great therapy, where I could just say whatever horrendous scary thing was in my brain and it wasn't met with well-meaning comments. Just acknowledgement and discussion about them. And eventually the man stopped appearing as often and the cars stayed on the road most of the time.

Idealising Condition



I think it's still #worldbreastfeeding week in some parts of the world...a photo from yesterday's beach day with this boy who is happiest when nude! :)

I feel so thankful I've been able to feed all my babies <3



Chasing that summer feeling! It's 30 degrees out - miss chunky pants and I couldn't be happier 🌻 favourite spot in the house!

Living in these soft [@bimbyandroyintimates](#) - perfect for sleep, swim, feeding and they come in the most amazing colours 🌸



My heart could not be more full (and neither could our sofa!). Being their mama was all I ever wanted to be. ♡
 Happy Mother's Day to all the mamas, to those wishing to be mamas, to my mother-in-law and to my own beautiful mumma. Love from all of us. 🤍👶👶👶👶👶



Person: Pollyanna, when did you start yoga?

Pollyanna: Oh, when I was 10 months old! #babyyoga #postpartumwellbeing 😊



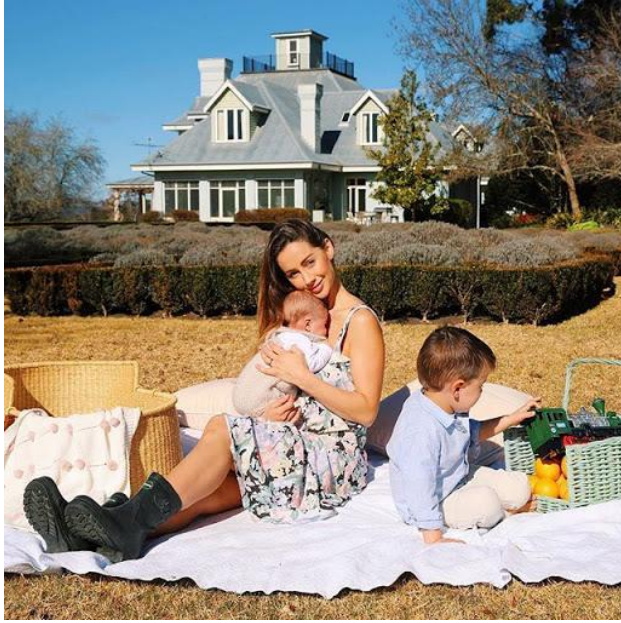
I have a thing for Olive 😊

She's slipped in so perfectly here, adding only more beauty to the chaos of three under four. With each new baby it has become easier, understanding their wants and needs and knowing just how to soothe them. Wish I had been this relaxed and confident in motherhood first time around but I'm so happy to be here now 🌿

Been lounging around in this super soft and comfortable nursing friendly dress by @the_comfortmama ~ Proceeds from the sale of each dress are donated to www.cope.org.au ~ A charity promoting the awareness of post natal depression



Out for a morning stroll with a spring in our step! #momlife #springhassprung



Loving these Sunday picnics in the winter sun ☀️ Daydreaming about having our very own farm house one day! Wearing @augustethelabel



Mamahood.

♡♡ missing days on the beach with my nuggets



What a treat to find this @shopdoen memory from last spring in my inbox this morn! Bleary-eyed new mom of two, cherishing some one-on-one time with my first, surrounded by @amyanneblessing's fairytale setting and a community that has filled our LA life with nothing but goodness and light. A happy Friday indeed! 🏠



It's really hard to put our birth experience into words. I hadn't considered a home-birth before, it wasn't something I really knew you could do. A friend sent me Ina May's Guide to Childbirth when we got pregnant, which first got me thinking about it, we then heard so many phenomenally powerful experiences from you guys before meeting [@kghypnobirthing](#) and our independent midwife, who helped us understand a little more about hypnobirthing, water births and home-births and it just felt so right for us. I'd heard so many horror stories and had a lot of fear around the process, so I was really interested in exploring something a bit different if I could. It goes without saying that there's no right or wrong way to bring a child into this world, all that matters is that they come into it safely, and we feel so lucky to have had a healthy pregnancy and been able to chose what we wanted to do. It was incredible though. The birth was intense, it's certainly a physical experience, and I've never felt more powerful. I had a sense that she was coming on Friday and woke up to my waters breaking early on Saturday morning. We pottered around at home for a few hours, went to the farmers market, made breakfast, watched Notting Hill and then as it started to pick up we put our fave calming music on, lit candles, closed the curtains and filled the birth pool. About five hours later she shot into the world like a rocket, came out the water straight on to my chest where she fed for about an hour and a half while we waited for the placenta and our midwife checked we were both ok. I went totally into my own space during the birth, focusing on every sensation and visualising what was happening during it, thinking of each one as a wave. It's a whole other level of surrendering and trusting your body totally, and we spent months focusing on letting go of fear, learning everything we could about birth, so that we felt as educated and informed about every step of the process and every decision along the way. Our doula took this and I saw it for the first time this morning, it says everything about that moment perfectly. It wasn't easy but it was so powerful





Love how often we find mister Conrad plopped down at his art table making some sort of exciting masterpiece while saying things under his breath like, "A little more yellow heeeere," "how about a tree?" or "I just like Bob the Painter!" referencing Bob Ross whom he loves to watch so much. 😊 (Anyone else remember him??) Loving all the bright and playful styles over at @gymboree for little ones this spring! Great for the art table, too. I believe a childhood should be full of color and want to always encourage creativity and fun for my kiddos. #followyourart #sponsored



Booty gains! 🍑



In this digital age, there is no shortage of photos of my babies, and it's easy to document milestones on blogs and here on Instagram. But there is something extra special about a physical baby book. I've created handmade photo books for each of my children -- hoping that some day they will appreciate the printed photos and special, handwritten notes written by their mama. (I still have my own baby book my mom made for me!) This week I've spent time working on Wilkie's book. I've chosen the 'Story of You' book from @artifactuprising, and it is the most beautiful baby book I've ever seen. It makes me want to go back and re-do the other children's books. :) Read more on Somewhere Slower (link in profile). ✨
#sponsored



On the island of Paros at the end of our month in Greece. I had someone ask on my Q&A for tips taking a one year old on a trip around Europe. I say just do it! (& take a great travel pram) Even the 34567 flight with two kids isn't deterring from heading to Spain in September. I've never been! Which is the best Island to go to? Would love your recommendations. [#family](#) [#travel](#) [#mamandmini](#) [#winningforlife](#)



Baby bump hugs. 🥰🥰 Just over here with the fullest heart getting to be their mama!! Can't wait to be a mama of 5 [#happysunday](#) [#twinpregnancy](#) [#motherhood](#)



An extra-special Monday morning shoot to say the least! :)



Probably the happiest 20 mins of my life, which we repeat almost every day. Mornings are my fave time with Skye. We go for a walk in the wrap, get a smoothie and a coffee, and cuddle as I sip all the good stuff and go through emails and social media inboxes. I thought I was going to burst with happiness the first time as we cuddles here 😊😊😊 P.S for anyone asking, we use the Hana wrap, probably the best thing I've bought so far, she loves it and I'm totally hands free, and the smoothie is in a big Keep Cup ♡



Fairytale afternoon with my babe <3



The look of love (times three) 🥰🥰🥰 #nickisebastianphotography



OK guys! Date Night dress 1,2 or 3 from [@sundaysthe label](#) which is your fave? ... I'm channeling the "let's chat about baby number 3" vibe 🤔🤔 [#datenight](#) [#ootn](#) [#ballerinalife](#)

Control Condition



It was a murder of crows. The branches were weighted down with birds so black they looked more like shadows, or perhaps silhouettes cut from the dawn canopy above. #angelaabraham #citybirds



Feet firmly planted on the ground I look up at a defiant sky, the dome of our existence. #kildaretom #dome



The tiny iron balcony was hung, as though for a carnival, with its lantern-shaped jet black flowers. #balconybeauty



Now they stand in a grid pattern that makes the downtown core, they are steel but on any cloudy day they mirror perfectly the lazy puffs of white. #angelaabraham #skyscrapers #downtown



I have sat at the rivers edge, a stone in hand, and wondered what it would take to build a bridge.
#bridgebeauty #angelaabraham



A great building must begin with the unmeasurable, must go through measurable means when it is being designed and in the end must be unmeasurable. #louiskahn #uniquebuildings



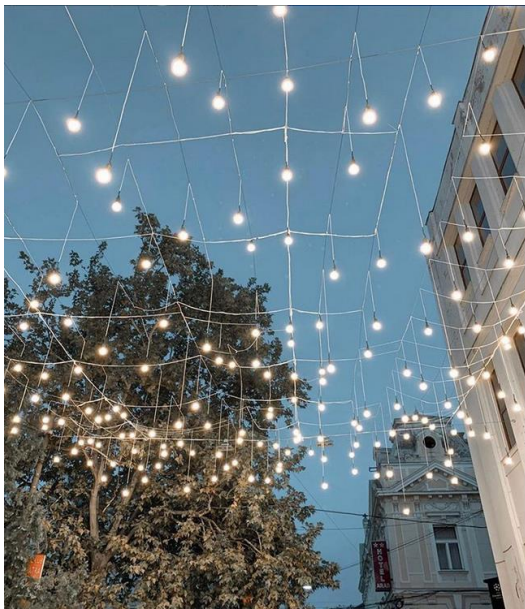
Simplicity is the ultimate sophistication #davinci #modernelegance



Without black, any colour has depth. #amygrant #multicolourliving



The breaking of a wave cannot explain the whole sea #urbanwave #vladimirnabokov



Lights blink on and off, racing across the green boughs. Their reflections dance across exquisite glass globes and splinter into shards against tinsel thread and garlands of metallic filaments that disappear underneath the other ornaments and finery. #veranazarian #lightsinthecity



It's not what you look at that matters, it's what you see #thoreau #perspective



Symmetry is what we see at a glance; based on the fact that there is no reason for any difference...
#blaisepascalpensees



The only way of catching a train I have ever discovered is to miss the train before. #GKchesterton



Whatever good things we build, end up building us #jimrahn



Divine nature built the seas, human art built the cities #varro #natureinthecity

Appendix B: Information sheet and consent form

Research Study: Social Media and Mothers

Thank you so much for considering taking part in my research. My name is Hannah Ryan, I am a Trainee Clinical Psychologist and I am currently carrying out a doctoral study exploring new mothers' perceptions of social media, supervised by Dr Afsane Riazi.

What is the purpose of the project?

The goal of the project is to understand the impact of culture, especially social media, on women's identities and experiences of motherhood. The purpose of the study is to explore women's emotional responses to, and opinions about, social media images.

What would I have to do?

If you decide to take part, I will ask you to complete a series of steps online.

First, I will ask you to fill out a few brief questionnaires. These will ask you about any stressful life experiences you have dealt with during the perinatal period and about various aspects of your life right now. This should take no longer than 15 minutes.

I will then ask you to look at 20 social media images with captions, which should take between 10-15 minutes.

Next, I will ask you for your opinion on these images as well as asking you to answer some more brief questionnaires, which should take between 15 and 25 minutes, depending on how much you wish to say.

The entire project should take 45-50 minutes to complete and you can take part from the comfort of your own home using a laptop, tablet or smartphone.

All we ask is that you try to find some **undisturbed time** to take part from one point onward. You will be made aware of a 'break points' towards the beginning of the survey, and after a certain point you will be asked to continue without taking breaks if possible. We appreciate that this is likely to be extremely difficult when you are responsible for looking after a young baby or babies.

Will it be completely confidential?

Yes. You will be asked to provide the day and month of your date of birth and a memorable word. This is so that I can identify your data if you email me and ask to withdraw from the study at a later date. You can give any four numbers instead of your own birth day and month as long as you know you can remember these numbers.

Nobody except myself and my supervisor will be allowed to see your questionnaire results, and in the study you will be known only by a randomly assigned number. Your identifying word and number combination will be kept in a separate, password-encrypted excel file on a secure computer at my university on a temporary basis.

After I write up results, your results will only be visible in anonymised form as part of an 'aggregated' data set with other participants' results. Your information will not be passed to any other body under any circumstances. Because of this, your information will be kept completely confidential and participation anonymous.

How will my data be stored and managed? Important General Data Protection Information (GDPR)

Royal Holloway, University of London is the sponsor for this study and is based in the UK. They will be using information from you in order to undertake this study and will act as the data controller for this study. This means that they are responsible for looking after your information and using it properly. Any data you provide during the completion of the study will be stored

securely on local servers. Royal Holloway is designated as a public authority and in accordance with the Royal Holloway and Bedford New College Act 1985 and the Statutes which govern the College, we conduct research for the public benefit and in the public interest. Royal Holloway has put in place appropriate technical and organisational security measures to prevent your personal data from being accidentally lost, used or accessed in any unauthorised way or altered or disclosed. Royal Holloway has also put in place procedures to deal with any suspected personal data security breach and will notify you and any applicable regulator of a suspected breach where legally required to do so. To safeguard your rights, Royal Holloway will use the minimum personally-identifiable information possible (i.e., your memorable word and number combination). The lead researcher will keep your contact details confidential and will use this information only as required (i.e., to delete your data if you email to request this). The lead researcher will keep information about you and data gathered from the study for 5 years after the study has finished. Certain individuals from RHUL may look at your anonymous research records to check the accuracy of the research study. If the study is published in a relevant peer-reviewed journal, the anonymised data may be made available to third parties. The people who analyse the information will not be able to identify you.

You can find out more about your rights under the GDPR and Data Protection Act 2018 by visiting <https://www.royalholloway.ac.uk/about-us/more/governance-and-strategy/data-protection/> and if you wish to exercise your rights, please contact dataprotection@royalholloway.ac.uk.

Are there any potential risks associated with taking part?

The posts included here are taken from real women's public Instagram accounts, so the risks of viewing the images and captions are not expected to be much greater than you would expect from going onto social media and scrolling for 20 minutes.

However, as we all know, social media can sometimes be emotive and can bring up lots of feelings for us, pleasant and unpleasant. On your own page you have a choice about who to follow, whereas here the images have been chosen on your behalf. If you are feeling particularly

fragile today and you suspect it might not be the right time for you to take part, then that is completely your choice. It is important that you look after your emotional health first.

You will also be asked to fill out some survey questions that will prompt you to reflect on aspects of your emotional wellbeing and stressful experiences you had after giving birth. This may bring up uncomfortable memories or emotions for you. On the other hand, some women find it helpful to reflect in this way. Again, if you think that this may be particularly difficult for you today then it is important that you put your well-being first. If you wish to exit the survey at any time you can leave, and your answers will not be saved.

At the end of the survey, you will be given information about a range of supports for various stressful and difficult circumstances. You can also email me and ask for support with finding information and resources relating to specific difficulties. I cannot provide direct therapeutic support, but I will be more than happy to signpost you onward.

Are there any potential benefits associated with taking part?

You will be given space to reflect on your experience of viewing the images and on your opinions of what it is like to be a mother in the 21st century. Some people in our pilot group found this to be an interesting and valuable experience.

On a broader level, by taking part you will be contributing to improving our understanding of the impact of culture on the experience of modern motherhood. I hope (although I cannot guarantee) that this will one day contribute to initiatives designed to improve the wellbeing of women during the perinatal period.

Do I have to take part?

It is really important that you know that you are completely free to choose whether or not to take part and you are under absolutely no obligation to participate in this study.

Moreover, if you do decide to take part, you may withdraw your decision at any time up until the final write up of the report (which is likely to be finalised in May 2020) without having to give a reason and without any obligation to complete further paperwork. Your decision not to take part or to withdraw consent for participation will have no negative consequences for you.

Can I ask more questions?

Please do not hesitate to ask me any questions before you complete the consent form on the next page; it is important that you feel completely comfortable about participating before agreeing to do so.

You can contact me at [email] or my supervisor at [email].

Please screenshot this page or write down my email address so that you can email me if you need to. I will have no way of contacting you during this survey as your participation is completely anonymous.

This study has been reviewed and approved by the College Ethics Committee at Royal Holloway, University of London.

If you are happy to proceed, please click the button to continue to the consent form. Thank you.

Consent form

Consent Form

Study Title: Social Media and Mothers

You have been asked to participate in a study about social media and new mothers, which is being carried out by Hannah Ryan, Trainee Clinical Psychologist, and is supervised by Dr Afsane Riazi.

Please circle to indicate whether you agree or disagree with the following statements:

I have read the information sheet about the study. I understand the nature and purpose of the study and the potential risks and benefits involved in participation. Yes no

I have had an opportunity to ask questions

I have received satisfactory answers to my questions (if relevant) Yes no

I understand that my participation is completely voluntary. I understand that I am free to withdraw from the study at any time, without having to give a reason (and with no negative consequences for me) Yes no

I agree to take part in the study Yes no

Yes no

Please sign your name:

Name in block letters: _____

Signature: _____

Date: _____

NB: This consent form will be stored separately from the recorded interview/transcripts.

Appendix C: evidence of ethical approval



Ethics Application System <ethics@rhul.ac.uk>

Wed 23/10/2019 16:23



To: Ryan, Hannah (2017); afsane.riazi@richmond.ac.uk; ethics@rhul.ac.uk

PI: Dr Afsane Riazi

Project title: New mothers and social media: investigating the relationship between online peer comparison and postnatal wellbeing

REC ProjectID: 1781

Your application has been approved by the Research Ethics Committee.

Please report any subsequent changes that affect the ethics of the project to the University Research Ethics Committee ethics@rhul.ac.uk