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FIRST-TIME MOTHERS AND SOCIAL NETWORKING SITES

Section A: Literature review

First-time mothers and social networking sites: A narrative review of the empirical literature using a systematic search methodology

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Section B: Empirical paper

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Summary of MRP portfolio

Section A: This section presents a systematic review of the literature base pertaining to first-time mothers' use of social networking sites (SNS) and the impact. The methods used to conduct the electronic literature search are detailed. The ten retrieved studies are critiqued and synthesised. This review highlights future research recommendations and gaps in the literature. This review considers the clinical implications and presents recommendations.

Section B: This section presents empirical research exploring first-time mothers' experiences of using social networking sites (SNS) and how they make sense of the impact of SNS on their sense of identity and meaningful relationships. The research design involved an interpretative phenomenological analysis of individual semi-structured interviews conducted with purposively sampled self -identified first-time mothers with experience in using SNS. This research discusses the process of conducting interpretative phenomenological analysis and the resulting overarching themes. The research links the themes to the extant literature. The research then considers the clinical and research implications of the research findings.

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Section A: Literature review

First-time mothers and social networking sites: A narrative review of the empirical literature using a systematic search methodology

MAJOR RESEARCH PROJECT

Word count: 8120 (7910 & 210)

A thesis submitted in partial fulfilment of the requirements of Canterbury Christ Church University for the degree of Doctor of Clinical Psychology

Abstract

This review examined the current literature base pertaining to first-time mothers' use of social networking sites (SNS) and aimed to provide insight into how and why new mothers use SNS and its impact. The researcher conducted an electronic literature search using PsychINFO, Medline, CINAHL, Web of Science, and Assia databases. After excluding studies not reaching the inclusion criteria, the researcher critiqued the 10 retrieved studies using the Critical Appraisal Skills Programme. The reviewed literature provided insight into relationships between age, gender, SNS use, and tendency to seek external validation/to have perfectionistic expectations, perceived social support and self-efficacy, perceived parental overload, depression, and feelings of connection. It also showed that some new mothers use SNS to preserve their old identity, give and receive support, increase their confidence and knowledge, and to feel reassured and validated. There remain some gaps in this literature, including knowing how new mothers navigate and negotiate SNS and its impact.

Keywords: first-time mother, social networking sites, identity, well-being, literature review

Introduction

This systematic review examines the current literature base pertaining to first-time mothers' use of social networking sites (SNS) and the impact on their sense of well-being and adjustment to motherhood. For more than a decade, researchers' have examined the impact of SNS on adult and adolescent mental health. A recent critical review of the published literature examining the association between SNS use and well-being in the adult population highlighted the mixed results but concluded that social comparisons mediated the relationship between well-being and SNS use (Verduyn et al., 2017). This review suggested that passive use of SNS (e.g., not uploading photos, scrolling) decreases subjective well-being and is mediated by an increase in users' social comparison. Furthermore, increased social capital and feeling connected with others mediated the relationship between active SNS use (e.g., posting status or photos) and enhanced well-being.

Within the adult population, parents use SNS and online resources in a variety of different ways. A critical review of the published literature examining the impact of a range of online support (including "websites, email, chat rooms or video conferencing") for parents concluded that parents experience online support as helpful and fulfilling their emotional and informational needs (Doty & Dworkin, 2014, p.176). The review highlights the pros and cons of online support, such as the ease of access to support versus the lack of credibility. They noted that a gap in the literature exists concerning parents' use of mobile devices. This literature review did not separate the impact of seeking support online on mothers versus fathers.

Mothers can experience the transition to motherhood as rewarding (Petch & Halford, 2008) while also experiencing profound change, feelings of loss, isolation, and exhaustion (Barclay et al., 1997), which can negatively affect child development (Dennis et al., 2009). SNS use can increase during the transition into motherhood (Bartholomew et al., 2012). This

current systematic review aims to summarise and critique the literature related to new mothers' experiences of using SNS in the context of increased use of mobile devices, as it seems imperative to understand its use and impact during this potentially vulnerable time. There exists no review of the impact of SNS use in the early stages of motherhood.

Key terms: Definitions and context

Transition to motherhood

According to Arendell (2000), a mother is defined as a person who engages in the logistical and relational work of raising a child, while Forcey (1994) posits that mothering is "a socially constructed set of activities and relationships involved in nurturing and caring for people" (p. 357). In contemporary society, women fulfill numerous social roles, with many women also fulfilling the traditional role of mothering (Arendell, 2000). Mothers can experience the transition to motherhood as rewarding, fun, and full of affection and togetherness (Petch & Halford, 2008). However, motherhood is also a life stage when there is an increased likelihood of experiencing mental health difficulties (Nomaguchi & Milkie, 2003). The transition to motherhood involves profound change, which can include enormous "realizing," "working it out," feeling "unready," and feelings of loss, isolation, and exhaustion (Barclay et al., 1997). Lack of social support and low self-esteem are risk factors for postnatal depression and anxiety (Leigh & Milgrom, 2008; Raine et al., 2019), both of which can negatively impact family functioning and child development (Dennis et al., 2009).

Conceptual models of adjustment to parenthood highlight the importance of understanding how individual differences, factors within the couple's relationship, and factors external to the couple's relationship influence the likelihood of a healthy transition to motherhood (Belsky, 1984; Kluwer, 2010). These models emphasise the importance of

contextual support, that is, support from friends and family as significant determinants in the adjustment process. This support appears particularly pertinent to the successful transition of new parents to parenthood (Fielden & Gallagher, 2008).

Two forms of social capital, or resources, have been conceptualised: bonding capital and bridging capital (Putnam, 2000). Bonding social capital occurs in "strong-tie networks" (Granovetter, 1983), such as long-term relationships, with high levels of emotional support, intimacy, and trust. This social capital often occurs between family members and close friends and is essential when adjusting to new motherhood. Indeed, contact with "strong-tie networks" has been shown to increase in the late stages of pregnancy and throughout the infant's first year (Belsky & Rovine, 1984). Bridging capital, or "weak-tie networks," also increases during the transition to motherhood (Belsky & Rovine, 1984) and has been shown to enhance the coping skills of new parents (Madge & O'Connor, 2006). New parents often seek out and value relationships with other new parents during this transition (Deave et al., 2008).

The standards expected of "good mothering" appear to have escalated during the past century (Douglas & Michaels, 2004). Sharon Hays coined the term "intensive mothering" when describing how mothering is socially constructed since the 1980s. This ideology purports that mothers should care for their children, they should be expert-guided, emotionally absorbing of their context, and mothering should be labour intensive. This ideology posits that infants and children are cherished (Hays, 1996, p.54). Only women who can fully commit their time and energy to mothering should be mothers, which involves a level of self-sacrifice that requires abandoning a mother's own needs (Bassin et al., 1994, p.2). Their mothering abilities and identity are measured by what they try to do rather than their thoughts or feelings (Ruddick, 1994).

Social networking sites

In this review, SNS will be used to refer to social networking sites and social media. According to techopedia (2020):

> *"A social networking site is an online platform that allows users to create a public profile and interact with other users. Social networking sites usually allow a new user to provide a list of people with whom they share a connection, and then allow the people on the list to confirm or deny the connection. After connections are established, the new user can search the networks of connections to make more connections."*(What does social networking site (SNS) mean? section, para. 1)

SNS's include Facebook, Instagram, Snapchat, Twitter, and blogs. The popularity of SNS has increased alongside smartphones' parallel development and handheld devices capable of connecting to the internet, providing users with constant access to SNS.

Facebook offers both communicative features and the option to exchange information. In 2006, Facebook opened membership to include non-university students and people outside the US, permitting any person worldwide access to Facebook. Joinson (2008) reported seven fundamental uses of Facebook, including 1. A means of connecting/reconnecting with others, 2. A means of forming/establishing a shared identity, 3. Sharing and accessing photographs, 4. A means of learning about people one has met offline, 5. Viewing friends of friends' profiles, 6. Posting status updates and reading that of others, 7. Engaging in apps, games, and quizzes provided by Facebook. Gilbert and Karahalios (2009) describe Facebook as a means of establishing and maintaining "weak-tie networks," meaning that the connections may be extensive but are limited. Spottswood and Hancock (2016) posit that Facebook postings are not necessarily closely connected to reality and that there is a bias towards the positive when

posting on SNS. People tend to portray their lives as more positive on SNS than the reality (Chiang & Suen, 2015).

SNS and Parenthood

Identity theory posits that individuals have multiple identities (Stryker, 1980) and that people express these identities through self-presentation, whereby a desired image is directly or indirectly communicated to the other. SNS is a medium through which people can select an aspect of their identity that they wish to present to others. Many SNS users tend to present a positive self-image (Chiang & Suen, 2015), which Valkenburg et al., (2006) demonstrated as more likely to result in positive feedback or positive interactions from others, resulting in enhanced user's self-esteem. Thus, users can express their chosen identity to society and receive affirmation via feedback. Social comparison theory posits that when one receives information about the other, information is compared with the self, resulting in either positive or negative self-evaluations (Festinger, 1954). Although social comparison can and does occur in face-to-face interactions, SNS provides access to thousands of parents and therefore provides the opportunity to engage in many more social comparisons. Given that people tend to present their "best selves" on SNS (Lee, 2014), readers often experience negative feelings when engaging with SNS. When using SNS, users often focus on the other's idealised image rather than focusing on creating a positive self-image (Vogel & Rose, 2016).

As motherhood involves spending much time in the home, caring for the infant, establishing, and maintaining social connections can be difficult. SNS provides a means of connecting with others from home. With SNS as an option when attempting to strengthen social connections or access information, this could position SNS as a means of increasing the likelihood of successful adjustment to motherhood. SNS may be a medium through which new parents can expand and build upon their social capital. This may be particularly

important for new mothers who do not reside near their family of origin or close friendship groups (Drentea & Moren-Cross, 2005). New mothers often desire affirmation from their support network, as this is a notably uncertain life stage (Belsky, 1984). These experiences can now occur via SNS, in addition to the more traditional face-to-face interactions.

The intensive mothering ideologies create norms that mothers should spend a large amount of time interacting with their children to enhance their social and educational development (Douglas & Michaels, 2004; Hays, 1996). Mothers may use Facebook or other SNS forms to demonstrate that they live up to impossibly high standards portrayed in some cultural narratives. This may explain why when there is an increase in tasks and responsibilities, mothers find the time to use SNS (Bartholomew et al., 2012). SNS may allow mothers to create online personas consistent with "cultural gender norms" (Schoppe-Sullivan et al., 2017). Whether real or imagined, mothers may feel pressure to create an online image of doing mothering well.

Tomfohtde and Reinke (2016) demonstrated that there is often an increase in parents' use of SNS when they transition to parenthood, with mothers engaging with SNS more than fathers. Gameiroet and colleages (2010) describe this increased use of SNS as possibly reflecting "social nesting" behaviour. Bartholemew and colleagues (2012) theorise that people post more photos on SNS when they transition to parenthood as photos of their infant are likely to increase social capital given that adults are attracted to infants' faces (Fullard & Reiling, 1976).

Engaging in social comparisons through SNS use is associated with parental mental health difficulties, parenting, and relationship outcomes (Coyne et al., 2017). People experiencing depression are more likely to engage in negative social comparisons when using SNS (Bazner et al., 2006). New parents can experience an increase in feelings of stress,

which can be associated with depression. Therefore, new parents may be more likely to engage in negative social comparison. Some parents may try to portray a perfect image of their abilities and their families, resulting in other parents making negative social comparisons when using Facebook (Rui & Stefanone, 2013). Co-parenting is a crucial determinant of adjusting to parenthood's new role (McConnell & Kerig, 2002). Comparing relationships with those viewed online may also result in negative feelings. Parents often use Facebook to portray their desired identity (Bartholomew et al., 2012).

SNS and Motherhood

Women are more negatively impacted when considering their body image online and are more likely to edit and alter their online image more regularly than men (Fox & Vendemia, 2016). New mothers may be vulnerable to the adverse effects of SNS due to the numerous new challenges they face when beginning motherhood. Literature suggests that the use of the internet empowers mothers by increasing social connection and knowledge (Hall & Irvine, 2009; Sutton & Pollock, 2000), but that it also reinforces social narratives about femininity and consumerism, which can lead to mothers questioning their competence and experiencing increased feelings of stress (Pitts, 2004).

Women who are new to motherhood use SNS to communicate and connect with other new mothers (McDaniel et al., 2012), perhaps due to its easy access and convenience (Kaufmann & Buckner, 2014). Engaging with SNS and blogs has been shown to improve the well-being of new mothers (McDaniel et al., 2012), but that mothers may also feel pressured to portray a positive self-image, in line with the idealised motherhood ideology (Bartholemew et al., 2012; Jane & Dworkin, 2014). Facebook has numerous pages and groups related to motherhood, which contain information aimed at supporting mothers through the process of being a mother and child-rearing (Kaufmann & Buckner, 2014).

Coyne and colleagues (2017) showed that in their mothers' sample, feelings of role overload and low competence were associated with social comparison on SNS. Social comparison was associated with higher levels of depression in mothers. They also found that those who were more likely to engage in social comparisons were more likely to feel unsupported by their partner and were more likely to engage in conflict over SNS use. Heightened use of and engagement with celebrity culture and the internet is shown to be related to "intensive mothering" (Chae, 2015). For mothers, trust is shown to mediate their self-disclosure to an extent on SNS (Mital et al., 2010).

Aims

The current published literature reviews present literature related to both parents. As entering motherhood is posited as one of the most stressful life experiences (Leigh & Milgrom, 2008), it is crucial to consider mothers at the beginning of motherhood and their experiences of using SNS in order to provide insight to mothers, health practitioners, and academics on the benefits and unintended consequences of engaging with SNS as a new mother. This systematic review aims to use a systematic search methodology to answer the following research questions:

1. In what ways do new mothers use SNS?
2. Why do new mothers use SNS in the first 18 months?
3. What impact does the literature suggest SNS has on new mothers' sense of well-being and identity in the first 18 months?

This review synthesises and critiques the retrieved literature and summarises each of these research questions' current findings. This review focus solely on the literature related to mothers and hopes to identify gaps in the current literature base.

Methodology

The researcher completed a systematic review (Robinson & Lowe, 2015). A systematic review: uses precise questions to generate evidence relating to a specific topic; uses precise terms to search databases, which are also typically specified; extracts data from each reviewed paper; uses recognised methods to analyse the data (e.g., Critical Appraisal Skills Programme/ CASP); analysed papers are presented in chart form (e.g., PRISMA); the reviewed papers draw clear conclusions (Robinson & Lowe, 2015).

Inclusion criteria

This review identified research examining first-time mothers' use of social networking sites. Table 1 lists the inclusion criteria for the systematic literature search. This review included studies that reported experiences of both mothers and fathers but reported their findings separately. The review only included mothers' experiences.

Table 1

Inclusion Criteria for Systematic Literature Search

Inclusion Criteria
Published in English
Published in or after 2006
Research examines social networking sites, as defined
Research examines first-time mothers' use, with a child under 18 months
Research examines well-being/impact, as defined
Research is qualitative or quantitative in design

Literature search

The researcher conducted an electronic literature search using PsychINFO, Medline, CINAHL, Web of Science, and Assia databases. The date range included the 1st of January 2006 to the 1st of November 2020. A review of relevant literature informed the search terms.

Key terms were combined with the Boolean operators 'AND' and 'OR.' The researcher also used exploded subject headings. The search terms included the following:

(mother OR motherhood OR mum OR maternal OR post-partum OR postpartum OR postnatal OR parent OR parent*)

AND

(new OR first OR "first-time" OR "first year" OR transition OR primiparous OR primipara*)

AND

("social media" OR "online social network" OR "social network* site*" OR Facebook OR Instagram OR Snapchat OR Twitter OR WhatsApp OR Blog*)

AND

("mental health" OR self-esteem OR self-efficacy OR self-compassion OR compassion OR "social support" OR "social capital" OR well-being OR wellbeing OR "life satisfaction")

The researcher initially screened the retrieved literature titles for relevance. Subsequent screening involved reading article abstracts and full texts, to determine whether they met the inclusion criteria. Reference lists of retrieved studies were also searched for studies that met the inclusion criteria. Following this screening process, this literature review included ten papers. Figure 1 depicts the number of papers retrieved at each stage of the literature search process, presented using a PRISMA flow chart (Moher et al., 2009).

Critical Appraisal Skills Programme (CASP , 2018) was used to appraise the retrieved papers. This involved assessing each qualitative research paper, using the following questions as a guide: 1. was there a clear statement of the aims of the research? 2. Is a qualitative methodology appropriate? 3. Was the research design appropriate to address the aims of the research? 4. Was the recruitment strategy appropriate to the aims of the research? 5. Was the

data collected in a way that addressed the research issue? 6. Has consideration been given to the relationship between the researcher and participants? 7. Have ethical issues been taken into consideration? 8. Was the data analysis sufficiently rigorous? 9. Is there a clear statement of findings? 10. How valuable is the research?

The Critical Appraisal Skills Programme (CASP , 2018) for cohort studies was used to assess each quantitative paper. This involved using the following questions as a guide: 1. Did the study address a clearly focused issue? 2. Was the cohort recruited in an acceptable way? 3. Was the exposure accurately measured to minimise bias? 4. Was the outcome accurately measured to minimise bias? 5. (a) Have the authors identified all important confounding factors? 5. (b) Have they taken account of the confounding factors in the design and/or analysis? 6. (a) Was the follow up of subjects complete enough? 6. (b) Was the follow up of subjects long enough? 7. What are the results of this study? 8. How precise are the results? 9. Do you believe the results? 10. Can the results be applied to the local population? 11. Do the results of this study fit with other available evidence? 12. What are the implications of this study for practice?

Review

The systematic search of the literature revealed ten studies meeting the inclusion criteria. Table 1. details key information extracted from each study. Of the ten studies retrieved, five used a purely quantitative methodology, and five used qualitative methodologies. The researcher published these studies in the UK, USA, Canada, and Australia between 2012 and 2018. The structure of this review is in line with the aims previously outlined. The review begins by answering the question in what ways do new mothers use SNS? The review then answers the question, why do new mothers use SNS in

the first 18 months? The review then answers the question, what impact does the literature suggest SNS has on new mothers' sense of well-being and identity in the first 18 months?
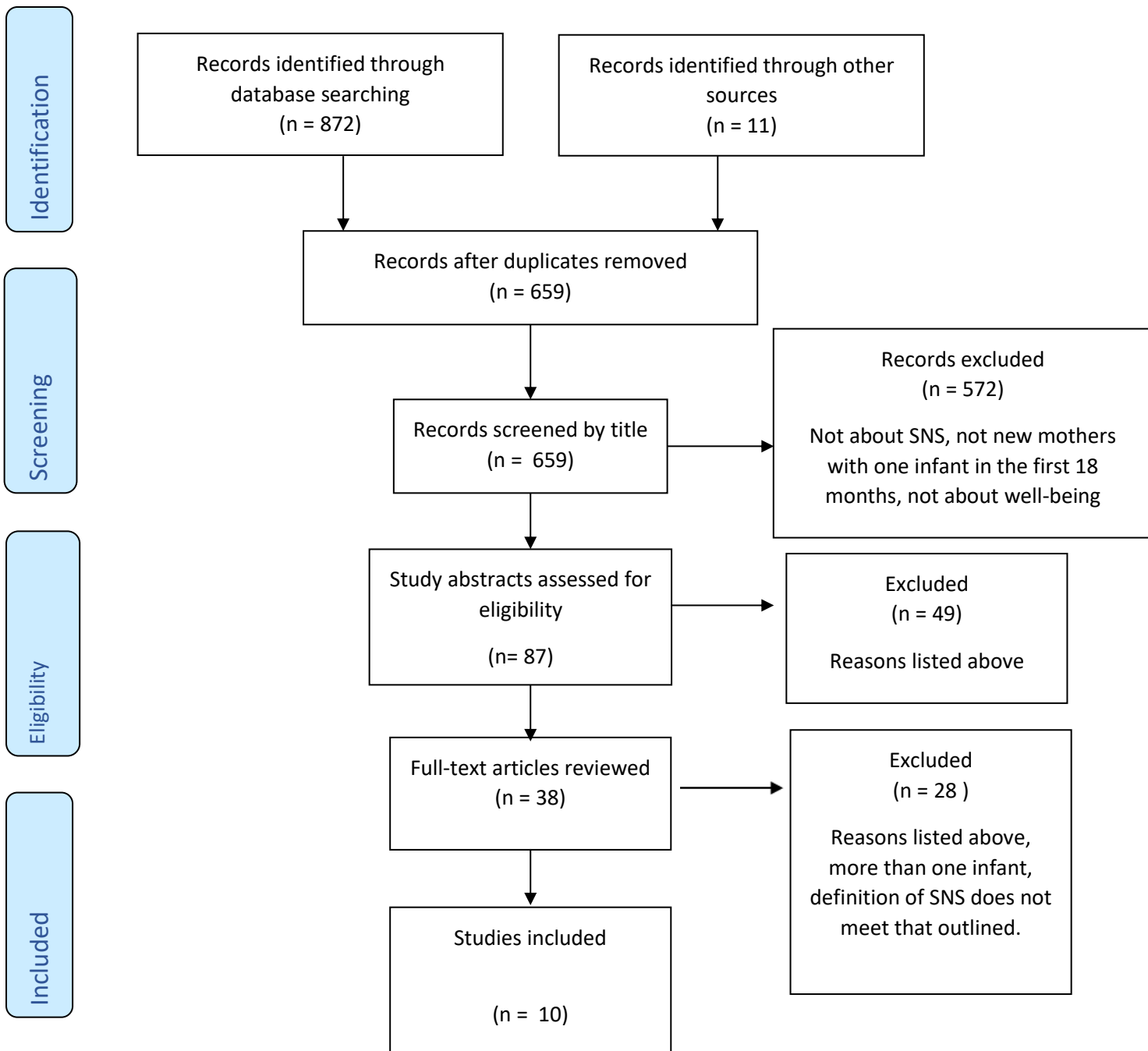

Figure 1. PRISMA Flow chart detailing papers retrieved at each stage of the literature search process

Table 2

Key information in research retrieved from literature search

Study	Authors (year), location of study	Study aim	Sample size, average age of mothers (SD), average age of infant (SD)	Measures of social media use, experiences, and impact	Type of analysis	Main findings
1	Aston (2017), Canada	To examine where and how new mothers seek support and information	*n*= 19 (focus groups), M= 28 yrs. *n*= 18 (online interviews) M= 31 yrs. Infant < 6 mts.	*Qualitative methods:* Focus groups Online electronic interviews with open text boxes	Discourse analysis in accordance with Feminist post-structuralism methodology	-Desire for face-to-face interactions with both peers and healthcare professionals -Participants used personal agency to critique and compare information gained from multiple sources including online SNS (did not automatically trust sources) -Expressed need for support in caring for infant *and* support with personal health needs, in their new role -Information and support were often rejected if those delivering the information appeared to lack empathy -Need for reassurance and validation
2	Bartholomew (2012), USA	To examine new parents' use of Facebook, any change in use during the transition to parenthood, gender differences and association between use and	*n*= 127, M= 28.18 yrs. (SD= 4.05) Infant < 9 mts.	*Quantitative questionnaire exploring Facebook use:* Questions purposively developed for this research: 1. How many Facebook friends are family/friends? 2. How many do you communicate with outside Facebook? 3. Have you uploaded photos of your infant? 4. How often do you visit your account, manage your account and upload photos of your infant? 5. Has your use changed since becoming a parent? 6. Before your infant's birth, how many photos did you upload?	Sample comparison analysis Pearson's correlations	-New mothers with Facebook accounts were significantly younger than those without -Mothers with Facebook accounts did not differ from those without on measures of parental adjustment. -Mothers with more Facebook friends who were family members or relatives, reported greater satisfaction with the parenting role. -Mothers who reported that their friends were likely to comment on photos they had posted of their infant also reported greater satisfaction in the parenting role. -Facebook use was not uniformly associated with better adjustment to parenthood. -No aspect of Facebook use was significantly associated with parenting self-efficacy for mothers,

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		adjustment to parenthood.		7. How likely are you to receive comments on your uploaded photos? *Adjustment to parenthood measure:* Motherhood satisfaction scale (Pistrang, 1984); rate 24 items on a five-point scale (Cronbach's α= .78) *Parenting self-efficacy measure:* Parenting self-efficacy scale (Teti & Gelfand, 1991), rate 10 items on a four-point scale (Cronbach's α= .81) *Parenting stress measure:* Parenting stress scale (Abidin, 1995; Filippone & Knab, 2005), rate 5 items on a four-point scale (Cronbach's α= .66).		-More frequent visits to Facebook accounts and more frequent content management were each associated with higher levels of parenting stress.
3	Durrant (2018), UK	To explore how new parents portray themselves and their infant through SNS, and how they make sense of their photographic self-portrayals	*n* =8 (5 mothers) Infant < 12 mts.	*Intervention design-led methodology:* Use of a standalone display of admixed Facebook portraits to facilitate reflection on Facebook photos *Qualitative daily diary prompts:* 1. "Have you been on Facebook today, what did you do? 2. What do you think about the portrait today? 3. Any thoughts on your social media use today? *Semi-structured interviews*	IPA	-Changes to posting behaviours and changed affiliation to social groups due to transformation during new motherhood. -Posting photos to satisfy a want and need to be relatable during their transition. -Mothers involved themselves in altering their posts with the aim of feeling good, coping, being responsive and responsible. -Expressed concerns about social media image and concerns about their infant's response to Facebook photos of them in the future. -Authors recommend allowing users control over the longevity of their photos. -Authors recommend allowing users control over who sees specific photos.
4	Gibson & Hanson (2013), UK	To explore the role of technology in	*n*= 42 (ethnographic observations),	*Observations:* Ethnographic observations of groups *Semi-structured interviews:*	Grounded theory analysis of field notes	Two core categories: 1. Improving confidence as a mother: looking for advice, parenting technology and connecting with a new community.

		the lives of new mothers	M= 29.3 yrs. (SD= 3.6) n= 6 (interviews), M= 30.5 yrs. (SD= 4) Infant < 1 yrs., M= 23.8 wks. (SD = 9)	Semi-structured interviews explored and contextualised the initial conversations elicited through observation.	and interview transcripts	2. More than "just" a mother: preserving identity, connecting with the outside world.
5	Johnson (2014), Australia	To examine the changing nature of pregnancy and mothering in the context of new forms of social media.	n= 10-12 Infant < 7 mts.	*Semi-structured interviews:* Semi-structured interviews at two time-points (T1= third trimester of pregnancy, T2= 3-7 mts. post-partum)	Discourse analysis	-Facebook and Twitter offer new forms of socialisation as a new mother spending a large amount of time in the home -SNS experienced as an extension of social life, enabling the maintenance of relationships -SNS experienced as convenient, connecting, flexible, efficient, and enabling "tidbitisation" of information -SNS enables and delegates the monitoring of performance and infant development -SNS is a medium where mothers can give and receive support and comfort
6	McDaniel (2012), USA	To examine the association between maternal well-being, and blogging and social networking	n= 157, M= 27 yrs., (SD=5.15) Infant M=7.90 mts., (SD=5.21)	*Quantitative SNS use measures*: 1. Time spent on SNS and frequency of use 2. Motivation for blogging, recorded using a measure (Lenhart & Fox, 2006) involving rating 10 common reasons for blogging (Cronbach's α= .71) *Feeling connected measures:* Rate two items on a four-point scale (Cronbach's α= .70) *Social support measures:* Relationships with other people scale, rate 11 items on a six-point scale (Cronbach's α= .90)	Bivariate correlations between variables Structural equation modelling	-Frequency of blogging positively predicted feelings of connection with extended family and friends. -Mothers felt more connected to outside world when blogging, which was associated with increased well-being. -Social networking was not associated with feeling connected or a sense of social support.

Parenting Stress measures:
Modified Parenting stress index (Abidin, 1983), rate 30 items on a five-point scale (Cronbach's α= .83)

Marital conflict and marital satisfaction measures:
1. Modified RELATE assessment battery, rate the frequency of common problems on a five-point scale (Cronbach's α= .75)
2. Quality of Marriage Index, rate six items using a seven-point scale (Cronbach's α= .96)

Maternal depression measures:
Centre for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977)

7	de Moura Propper (2018), USA,	To examine whether social support plays a mediating role between maternal self-efficacy and social media use	*n*= 202, M= 31.65 yrs. (SD= 4.74) Infant < 1 yrs.	*Online quantitative survey battery:* 1. Post-partum Parental Expectations Survey 2. Multidimensional Scale of Perceived Social Support 3. Questionnaire about SNS use	Correlational analysis Mediation analysis	-No relationship between maternal self-efficacy and SNS use -Higher levels of perceived social support were correlated with higher levels of self-efficacy.
8	Neilson (2015), USA	To examine how active production and passive consumption of SNS impacts experiences of stress and perceptions of social support	*n*= 274, M= 27 yrs. (SD= 4.80) Infant < 1yrs.	*Facebook use measures:* Facebook Intensity scale (Ellison, Steinfield, & Lampe, 2007) Facebook Motives Scale (Papacharissi & Mendelson, 2011) *Parenting stress measure:* Parenting Stress Index- Short Form (PSI-SF; Abidin,1995) *Support measure:*	Pearson's correlations and analysis of fit	-Active production can lead to increased perceptions of support via increased social media-based feedback. -Passive consumption has no impact on mothers' perceptions of social support.

		for new mothers.		Interpersonal Support Evaluation List The Social Provisions Scale		
9	Price (2018), Canada	To examine new mothers social networking practices online and offline	*n*= 19 (focus groups), M= 28 yrs. *n*= 18 (online interviews) M= 31 yrs. Infant < 1 yrs.	*Qualitative methods:* Focus groups Online electronic interviews	Discourse analysis in accordance with Feminist post-structuralism methodology	-Desire for reassurance and validation from social networks online and in person -Connecting with other mums to normalise and feel validated about topics that they found difficult to raise -Desire to provide information and support to other mothers (face to face and online groups e.g., Facebook/blogs -SNS was helpful for quick responses and during the night -Despite the usefulness of connecting with new mothers through SNS, mothers desired face-to-face interactions
10	Schoppe-Sullivan (2017), USA	To examine new mothers experience of using Facebook and the impact on well-being in the first few months of motherhood.	*n*= 127, M= 27.80 (SD=3.77) @ 3,6 and 9 mts. post-partum	*Quantitative Facebook use measures:* -Online Social Networking of New Parents questionnaire (Bartholomew et al., 2012); subsection (22 items) used -Frequency of content management and frequency with which they uploaded photos of their infant, (scale from 1-8) -Mothers perception of any changes in Facebook use at or after transitioning (scale from 1-5), -Time taken for mothers to upload photos of their infant (scale from 1-7) -Whether their infant featured on their profile picture (3 response options) -Reactivity- mothers' emotional responses to users responding to their uploaded photos (scale from 1-7) *Depressive symptoms measures:* Centre for Epidemiologic Studies- Depression scale (CES-D; Bonomi, Kernic, Anderson, Cannon & Slesnick, 2008); four-point scale of five items (Cronbach's α= .70)	Regression analysis Mediation analysis	-Mothers who were concerned with external validation and societies expectations, used Facebook more, had stronger emotional reactions to Facebook commentary and were more likely to have their infant on their profile picture. -These mothers experienced more depressive symptoms via greater Facebook activity. -Higher levels of maternal identity conformation and Societal-oriented parenting perfectionism were associated with: 1) higher Facebook use (controlled for personality and demographics). 2) more intense reactions to people responding/not responding to uploaded photos. -Facebook use mediated higher levels of maternal identity conformation and societal-oriented parenting perfectionism with depression.

Maternal identity confirmation measure:
Maternal Gatekeeping Scale (Allen & Hawkins, 1999), rate four items on a four-point scale (Cronbach's α= .71).

Societal-oriented parenting perfectionism measure:
Four items from the Multidimensional Parenting Perfectionism Questionnaire rated on a five-point scale (Snell, Overby, & Brewer, 2005), (Cronbach's α= .80)

Measure of Neuroticism and Extraversion:
Neuroticism Extraversion Openness Five-Factor Inventory (NEO-FFI; Costa & McCrae, 1992), rate 12 items using a five-point scale

Note: Yrs. = years; mts. = months; SD = Standard deviation; M= mean age; T1= time 1, T2= time 2; IPA= Interpretative phenomenological analysis

Four of the retrieved studies (study no.'s 1, 2, 3 & 10) contributed to answering two or more of the review questions.

In what ways do new mothers use SNS?

This section of the review analyses the literature to address how new mothers use SNS, followed by a synthesis of our current knowledge base.

Schoppe-Sullivan and colleagues (2018) conducted quantitative research in the USA to examine new mothers (n= 127, M= 27.80, SD=3.77) experience of using Facebook and the impact on well-being in the first few months of motherhood (at three, six, and nine months post-partum). They aimed to gain insight into new mothers' characteristics and their use and experiences of using Facebook. Also, this research measured "maternal identity confirmation" and "societal-oriented parenting perfectionism". "Maternal identity confirmation" (Allen & Hawkins, 1999) purports to measure the extent to which mothers require external validation of their new role, and the authors claim that such mothers have strong internalized expectations of mothering identity, which may take precedence over other aspects of their identity. Snell and colleagues (2005) coined the construct "societal-oriented parenting perfectionism," that is, the degree to which a parent believes that society holds high expectations of them. Both constructs were measured using subsections of validated questionnaires. Their regression and mediation analysis concluded that mothers concerned with external validation and societies' expectations engaged in Facebook more and were more likely to have their infant on their profile picture. While this research included numerous measures leading to several conclusions, participants' Facebook use was measured using verbal retrospective accounts rather than measured directly, allowing for human error in the participants' reports. The sample was also highly biased, consisting of highly educated white women, which was not representative of the population of new mothers in the USA, and therefore, its generalisability comes into question.

Bartholomew and colleagues (2012) completed correlational research in the USA to examine relationships between Facebook use and parental well-being. This was one of the first published papers on parents' experiences of SNS and provided useful preliminary information on this topic. The researchers used a non-validated questionnaire to explore mothers' (n= 127, M= 28.18 yrs., SD= 4.05) Facebook use at nine months post-partum. Their research found that new mothers with Facebook accounts were significantly younger than those without accounts (t(150) =−2.61, p<.05). They also reported that 44% of new mothers reported an increase in Facebook use after transitioning to motherhood, while 29% said their use stayed the same and 27% said their use decreased. More than half of new mothers reported visiting their accounts at least once a day (58%) and uploading more photos following their transition (63%). They also reported that most of the new mothers (98%) who participated in the study had uploaded a photo of their infant onto their Facebook account and that most new mothers (93%) reported that it was likely or very likely that they would receive a comment via Facebook about the photo they had uploaded of their infant. When considering the type of friendships these mothers had with their Facebook friends, a large proportion (88%) reported that they communicated with half /less than half of the friends they had on Facebook offline. Results were gathered using detailed online closed questions.

This meant that mothers could access their Facebook accounts to ensure accurate reporting of their Facebook use, although this was not guaranteed to occur. Although these findings provided useful data about how new mothers use SNS, this is correlational research, and therefore caution must be used when concluding from their results, as cross-sectional research does not speak to the direction of effects.

In the UK, Durrant and colleagues (2018) used an intervention design-led methodology to examine how parents interacted with and were affected by photos of themselves or their child (infant< 12 months) on Facebook. The researchers provided

participants with a mobile screen that captured their current Facebook profile and asked them to place the screen in a prominent location in their home to ensure they viewed it multiple times a day. They asked participants to complete a diary every day about their Facebook use to encourage frequent reflections. Following this, the researchers interviewed mothers (*n* =5) about their reflections and responses to viewing a screen containing their Facebook profile picture. Superimposed Facebook photos created their profile picture. Thus, the photos were distorted and, at times, looked more like their infant or like themselves, depending on the photos they uploaded to their Facebook account. Subsequent interviews were analysed using IPA. This study had a sample size of eight people, which is within the range recommended by Smith et al. (2009) when completing IPA. Although the subsequent interviews allowed for reflection on their beliefs and responses to their Facebook photos, the intervention influencing these reflections lacked reality or ecological validity. It may have encouraged responses of a more significant magnitude or different feelings to how the participants experienced their Facebook photos in daily life. Their research revealed changes in how new mothers used SNS, including changing their affiliation to Facebook groups due to transformation during new motherhood.

In Canada, Aston and colleagues (2017) conducted focus groups (*n*= 19, M= 28 yrs.) and online electronic interviews (*n*= 18, M= 31 yrs.) to examine where and how new mothers (infant < 6 mts.) seek support and information in their new role and the language they used when seeking support through SNS. Their discourse analysis revealed that in terms of how new mothers use SNS, mothers' language reflected the use of their agency to critique and compare the information they gained on motherhood and caring for an infant. The way mothers spoke about the information and support received was that if it appeared to lack empathy, it was rejected by new mothers regardless of whether the source was face-to-face, from peers or professionals or online sources, or through SNS. Focus groups enable the

collection of data from multiple people at one time, allowing for the collection of non-verbal data, and group conversations may have prompted sharing within the group, which may not have happened to the same extent as in an individual interview (Powell & Single, 1996). However, it means individuals may not have had the opportunity to express themselves to the same degree as they would in individual interviews, and people may feel pressured to conform to group beliefs and endorse group cohesion. Online interviews using expanding boxes allowed the interviewees to express themselves further, but there may have been missed opportunities for clarification or expansion on an interviewee's responses due to the absence of an interviewer. Although the research was less restrictive than quantitative methods, some results were difficult to position because of how they were reported, whether mothers were talking about SNS or offline support, while at times, this was very clear.

In summary, the current evidence base provides us with information relating to how new mothers use SNS. Those concerned with external validation and social expectations used Facebook more and posted more infant photos. New mothers with Facebook accounts tended to be younger than those without accounts, and their use increased following the transition to motherhood. Most mothers upload a photo of their infant onto their Facebook account, and they felt that it was likely/very likely that they would receive a comment via Facebook about the photo they had uploaded of their infant. Qualitative research also revealed a change in mothers' affiliation and interaction with Facebook groups. Mothers critique the information and support they gain from SNS. Mothers dismiss information or support which lacks empathy.

Why do new mothers use SNS in the first year?

This section of the review analyses the literature to address why new mothers use SNS and what motivates them to engage in SNS. This leads to a synthesis of our current knowledge base.

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In the UK, Gibson and Hanson (2013) conducted ethnographic observations of mother and baby groups (n= 42, M= 29.3 yrs., SD= 3.6) and interviews (n= 6, M= 30.5 yrs., SD= 4) with individual mothers to explore their experiences of technology as a new mother (Infant < 1 yrs., M= 23.8 wks., SD = 9), including online mother and baby groups, SNS and websites related to mothering. Data from groups and interviews were analysed using grounded theory. When conducting grounded theory, researchers aim for theoretical saturation when studying a phenomenon. Therefore, the number of people required to achieve this can depend on the research question's scope and the researchers' skills and abilities, plus the sensitivity of the phenomena. Thomson (2011) recommends 25 as an average sample size. This research appeared to have a sufficient sample size. Their research revealed that these mothers used technology to improve their confidence, which involved gaining advice, connecting with their new community, and technology that can support parenting. These mothers also used SNS to preserve their previous identity and to connect with the outside world. In this research, observations made in the mothering groups facilitated interview topics. As the researcher blends in with those being observed and does not influence the data by asking questions, ethnographic observations have high ecological validity (Oliffe, 2005). However, this data collection method requires a high level of observation skills and is subject to memory distortions post-observation. Although group observations were ecologically valid (Abramson et al., 2018), using discussions in this group to frame questions in the interview may have led to narrow interview questions and lacked a deep or wide exploration of these mothers' experiences of using SNS.

In Canada, Price and colleagues (2018) completed focus groups (n= 19, M= 28 yrs.) and online electronic interviews (n= 18, M= 31 yrs.) to examine how new mothers (infant < 1 yrs.) practise social networking both online and offline. Discourse analysis of the data revealed that the language new mothers used about SNS related to a desire for reassurance

and validation from their social networks and to have their experiences normalised without the need for face-to-face interactions. SNS fulfilled a desire to support other new mothers via Facebook or blogs. Participants described SNS as rapid and convenient. While new mothers spoke about SNS in these ways, they expressed an overriding desire to have face-to-face interactions with others. This research provided valuable insight into the language new mothers use when speaking about SNS as a means of seeking support. Although results were reported as separate when considering the impact of online and offline practices, exploring both in a single focus group may have meant that neither means were explored to the depth they could have been had they been examined separately.

In Australia, Johnson (2014) conducted a discourse analysis of interviews (*n*= 12) with pregnant and new mothers (at T1= third trimester of pregnancy, T2= 3-7 months post-partum) as part of a large-scale project. In the larger project, Johnson noted that mothers spoke about technology and SNS more than anticipated, following which it was decided to analyse the data with this in mind, using discourse analysis. The analysis was used to examine how participants spoke about motherhood, in the context of new forms of SNS. Mothers spoke about Facebook and Twitter as new means of socialising when spending large amounts of time caring for their infant. SNS was spoken about as "convenient, connecting, flexible, efficient" (Johnson, 2014, p.337) and enabling the "tidbitisation" of information, which meant receiving information in small, relevant chunks. It was also a means of giving and receiving support and comfort to other mothers. This research paper reported on the impact of several different types of technology on new motherhood experience and Johnson did not report the methodology in enough detail (e.g., omitted information on recruitment strategy and participant demographics). Therefore, the data's credibility is questionable as the sample may have been very biased, and we know nothing of how to situate the sample. The interviews may not have explored the richness of mothers' experiences/language in detail.

In the previously discussed intervention design-led research by Durrant and colleagues (2018) examining how parents interacted with photos of themselves or their child (infant< 12 months) on Facebook using a mobile screen, new mothers ($n=$ 5) reported posting photos of themselves on Facebook to satisfy a want and need to be relatable during their transition to motherhood. This may have enabled mothers to hold on to parts of their old identity and integrate this with parts of their new identity, thereby enabling them to continue to belong to groups.

In the previously discussed research in Canada by Aston and colleagues (2017), discourse analysis of focus groups ($n=$ 19, M= 28 yrs.) and online electronic interviews ($n=$ 18, M= 31 yrs.) reported that new mothers talked about SNS as a means of seeking support in caring for their new infant and their personal needs (e.g., mental health needs), in their new role. They also talked about SNS as a medium to gain reassurance and validation in their new role.

In summary, the current literature base provides several reasons why new mothers are motivated to use SNS when they first enter motherhood. New mothers used SNS to increase their confidence by increasing knowledge and connecting with a mothering community. Some mothers used SNS to preserve their identity and feel connected with people in the "outside world." Mothers were motivated by a desire for reassurance and validation and to have their experiences normalised without the need for face-to-face interactions. SNS provided the opportunity to support other new mothers with information and support and was convenient and flexible, and a means of socialising. For some mothers, their motivation is related to a desire to be relatable and belong to groups.

What impact does SNS use have on new mothers' sense of well-being and identity?

This section of the review analyses the literature to address how SNS affects new mothers' sense of well-being and identity in the first 18 months of motherhood, leading to a synthesis of our current knowledge base.

In the USA, McDaniel et al. (2012) examined whether new mothers' (n= 157, M= 27 yrs., SD=5.15) use of blogging or social networking predicted their sense of well-being (measured by 1. Centre for Epidemiologic Studies Depression Scale, 2. Modified RELATE assessment battery, 3. Quality of Marriage index, 4. Modified Parenting stress index, 5. Relationships with Other People Scale) or sense of connection with extended family or friends (measured by rating two items). The researchers used Structural Equation Modelling to analyse the data. This uses likelihood estimations, thereby minimising biases such as Type 1 errors. This enabled the researchers to include multiple dependent and independent variables in their analysis. Results revealed no association between feeling connected or a sense of social support and SNS use. However, they found that the frequency mothers blogged predicted feelings of connection to extended family and friends. The researcher hypothesised that this related to the participants' motivation for blogging, namely, staying in touch with family and friends (86%). One could hypothesise that the participants' interactions with their mesosystem via blogging impacted their microsystem (Darling, 2007). Thus, feeling supported via blogging and gaining information in one's mesosystem might enable mothers to perceive increased feelings of support. However, this research is correlational, meaning we cannot imply causation. Thus, it may be that mothers feel more connected to family and friends, which affects the extent to which they blog, rather than vice versa. Although based in the USA, this research consisted of educated, white mothers, which was not representative of the general population. The study did not distinguish between different

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reasons/motivations for blogging. For example, mothers may blog to connect with other new mothers or to connect with distant families. This information may have allowed the researchers to understand more about the impact of using SNS. Finally, this research specifically asked about SNS use using computers (PCs). Given the prevalence of smartphones, this information or way of measuring is less relevant today.

In the previously mentioned research in the USA by Bartholomew and colleagues (2012), relationships between Facebook use and maternal (n= 127, M= 28.18 yrs., SD= 4.05) well-being was measured (measured using 1. Motherhood satisfaction scale, 2. Parenting self-efficacy scale, 3. Parenting stress scale). In this research, new mothers who reported that their Facebook friends were mostly relatives, and those whose friends were more likely to comment on their uploaded photos reported greater satisfaction in their role as a parent. They also found that accessing and managing Facebook accounts was associated with higher levels of parenting stress. However, these results do not speak to the direction of effects as correlation does not equal causation. Furthermore, one questionnaire, namely the parenting stress scale, did not reach the minimum internal consistency required having a Cronbach's α= .66. An acceptable value of Cronbach's α is suggested as falling between 0.70 and 0.95 (Tavakol & Dennick, 2011).

Neilson (2015) and De Moura Propper (2018) added further depth to the research produced by Bartholomew et al. (2012) and McDaniel et al. (2012) by examining mediating factors between SNS use and parental well-being. In the USA, Nielson (2015) explored whether SNS increases social support perceptions, thereby decreasing stress in new mums (n= 274, M=27 yrs., SD= 4.80). Neilson expanded previous literature to detect whether how mothers used SNS (measured by 1. Facebook Intensity scale, 2. Facebook Motives Scale) influenced the way it impacted upon them (measured by 1. Parenting Stress Index- Short Form, 2. Interpersonal Support Evaluation List, 3. The Social Provisions Scale). This added

to the previous literature as it measured the influence of active production and passive consumption on perceived social support and stress. Results showed that active production led to increased perception of support due to increased SNS-based feedback. Passive consumption did not influence mothers' perception of levels of support.

In the USA, De Moura Propper (2018) conducted an online survey exploring whether social support plays a mediating role between maternal self-efficacy and their use of SNS. New mothers (n= 202, M= 31.65 yrs., SD= 4.74) completed three questionnaires, including the Post-Partum Parental Expectations Survey, the Multidimensional Scale of Perceived Social Support, and a questionnaire measuring their SNS use. This survey revealed that there was no relationship between maternal self-efficacy and SNS use. However, they found that higher levels of perceived social support were related to higher levels of self-efficacy. The use of an online survey to address their research question meant that they could access many participants. However, it also meant that the results lacked depth which could have been possible had they chosen to add qualitative methodologies.

In the previously mentioned study in the USA, Schoppe-Sullivan, and colleagues (2018), examined new mothers (n= 127, M= 27.80, SD=3.77) experience of using Facebook and the impact on well-being in the first few months of motherhood (at three, six-, and nine-months post-partum). They aimed to examine whether individual differences between mothers placed them at a greater risk of experiencing depressive symptoms (measured by the Centre for Epidemiologic Studies- Depression scale), mediated by their use and experience of Facebook. They found that mothers who were more likely to seek validation in their new role from external sources (Maternal Gatekeeping Scale) and those who were more perfectionistic (Multidimensional Parenting Perfectionism Questionnaire), experienced more depressive symptoms via greater Facebook activity. Their regression and mediation analysis concluded that mothers concerned with external validation and societies' expectations engaged in more

Facebook use, had stronger emotional reactions to Facebook commentary, and were more likely to have their infant on their profile picture. Higher levels of maternal identity confirmation and societal-oriented parenting perfectionism were associated with higher Facebook use (controlling for personality and demographics) more intense reactions to people responding/not responding to uploaded photos.

Finally, in the previously discussed research in the UK by Durrant and colleagues (2018), which used an intervention design-led methodology to examine how parents interacted with and were affected by photos of themselves or their child (infant< 12 months) on Facebook, the results of IPA revealed that mothers were motivated to alter their posts and photos in this study. Their want to feel good, feel they are coping, and being responsive and responsible affected how they interacted with their Facebook account. This intervention design also impacted their feelings of worry and concern, where mothers reported more concern and worry when thinking about how their infant might respond to photos of them on Facebook in the future.

In summary, there are several effects of the use of SNS following the transition to motherhood. The more mothers blog, the more likely they are to feel connected with both family and friends. New mothers whose Facebook friends were mostly relatives and were more likely to comment on their uploaded photos reported greater satisfaction in their role as parents. For new mothers, active production on Facebook led to increased perception of support due to increased SNS-based feedback. Higher levels of perceived social support were related to higher levels of self-efficacy.

This research also showed that accessing and managing Facebook accounts was associated with higher levels of parenting stress. Passive consumption did not influence mothers' perception of levels of support. Research showed that the mothers who were more likely to seek validation in their new role from external sources and those who were more

perfectionistic as mothers engaged in more Facebook use, had stronger emotional reactions to Facebook commentary, and were more likely to have their infant on their profile picture, experienced more depressive symptoms via greater Facebook activity.

Discussion

This systematic review summarises and synthesises the current literature base concerning new mothers' use of SNS following the transition to motherhood. It differed from previous reviews of the literature, which reported both parents' use of SNS, the use of Facebook specifically, or online activity, which included visiting websites or reading and writing emails.

Overall, the quantitative studies' results were informative and a good starting position when beginning to explore this specific research topic. However, they reported correlational results and, therefore, failed to address the complexity of the processes involved. The more recent quantitative research appears to explore mediating factors involved, which is a promising direction as it may provide more depth to our knowledge. Overall, the qualitative studies appear to address multiple questions within each study. Future studies may wish to address questions in separate studies (e.g., exploring parents' experiences of all forms of media). As a result, the results related to SNS specifically were very brief and limited. The qualitative studies also appeared to lack depth due to the methods used. Researchers used electronic interviews with expanding text boxes, which may have limited the breadth and depth of responses.

Overall, the quantitative studies used reasonable sample sizes, which were neither too small to prevent generalising the results nor too big, resulting in a study that consumed a lot of time and energy (McLeod, 2019). Most of the quantitative studies used well-validated questionnaires when measuring well-being or satisfaction. The existing literature rarely

mention attrition rates, except for one intervention design-led study (Durrant et al., 2018). Zhou and Fishbach (2016) noted that not attending to attrition rates can lead to very misleading, biased results. In effect, those who drop out of research may have provided a very different response to research questions.

Implications for future research

The limited existing literature included quantitative and qualitative research designs, thus proving a somewhat varied range of knowledge related to first-time mothers' SNS use. Quantitative research enables the researcher to examine patterns and correlations between variables and gain an overview of the prevalence of certain activities or attributes. The reviewed literature provided insight into relationships between age, gender, SNS use and tendency to seek external validation, tendency to have perfectionistic expectations, perceived social support, perceived self-efficacy, perceived parental overload, stress, depression, and feeling of connected. This provides an interesting overview of SNS in new mothers' lives but needs to be interpreted with caution as correlation does not provide insight into causation. In line with De Moura Propper (2018) and Neilson (2015), future quantitative research may wish to focus on mediating factors between SNS and well-being to provide a richer insight into possible processes involved in the interaction between SNS and the well-being of new mothers.

In contrast, qualitative research typically provides rich accounts of peoples' opinions, lived experiences, language choices, and ways of relating to a phenomenon. The reviewed literature base uses qualitative methodologies to increase our understanding of SNS and new mothers. It shows that some new mothers use SNS to preserve their old identity, give and receive support, increase their confidence and knowledge, and reassure and validate other new mothers. This research helps us understand, from the perspectives of new mothers, why

they use SNS and its impact on their daily lives. However, there remains a gap in this literature relating to how new mothers navigate and negotiate SNS and its impact. Given the varied conclusions from the current literature base, it feels essential for future research to address this gap and further develop our understanding of these experiences.

Implications for practise

This review confirms that new mothers' use of SNS appears to increase following the transition to motherhood. It demonstrates that SNS can positively and negatively affect new mothers, which is concerning given that motherhood is a life stage when there is an increased likelihood of experiencing mental health difficulties (Nomaguchi & Milkie, 2003). It feels important to include questions about SNS use and its impact during assessments with new mothers as healthcare professionals. Following this, information about, or referrals to, multiple forms of support should be provided for new mothers to ensure they have a choice when considering how they would like to be supported during this transition. This is in line with the National Collaborating Centre for Mental Health in the UK (2015, updated April 2018), which recommends that home visitors assist mothers by "helping women improve their physical and mental health by facilitating access to appropriate community services."

Conclusion

In summary, the current literature base relating to new mothers' use of SNS and its' impact is informative but limited, and gaps in our knowledge remain. Given the challenges involved in this life stage and the increased likelihood of experiencing mental health difficulties after becoming a mother, it feels imperative to increase our understanding of their experiences of SNS as it becomes more of a part of daily life. Although quantitative and qualitative research exists, there appears to be a gap in the literature related to exploring new mothers' experiences of SNS in-depth and understanding how they navigate and negotiate

SNS and its impact. Future research could focus on new mothers' perspectives on their use of

SNS, how it affects their sense of identity and their relationships with other people.

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Section B: Empirical paper

How do social networking sites affect people's sense of identity and relationships?

Experiences of first-time mothers

Word count: 8199 (7998 & 201)

MAJOR RESEARCH PROJECT

A thesis submitted in partial fulfilment of the requirements of Canterbury Christ Church University for the degree of Doctor of Clinical Psychology

Abstract

The transition to motherhood involves profound physical, social, and emotional change, which mothers can experience as rewarding and challenging. During this transition, the use of social networking sites (SNS) increases. Existing literature on the impact of SNS use on new mothers is limited. This research aimed to explore new mothers' perspectives on their experience of using SNS, its influence on their sense of identity, and their relationships. The researcher conducted ten individual semi-structured interviews with purposively sampled self-identified first-time mothers with experience in using SNS. The interview transcripts were analysed using interpretative phenomenological analysis (IPA). Analysis resulted in five overarching themes: feeling connected, experiencing pain, creating a safe space, lack of trust, and unable to disconnect. Mothers' perspectives were nuanced, and mothers navigated SNS in ways that were most helpful to them. This research highlights the importance of facilitating conversations with first-time mothers before and after the transition to parenthood to support their reflection on the impact SNS has on their sense of identity and their meaningful relationships.

Keywords: first-time mothers, social networking sites, identity, significant relationships

Introduction

Social Media

The invention of the internet, and the subsequent development of social networking sites (SNS), has created a new context within which people relate to one another, access support, and exchange information (Ruthven et al., 2018). SNS allow users to create personal profiles and connect with other people by granting access to their profiles or by establishing a private or shared messaging system between people. There were 44 million active SNS users in 2018 (66% of the population) in the UK. Of those, 38 million were active *mobile* SNS users (57% of the population; Statista, 2020). Numerous research studies have examined the impact of online relationships on mental health (e.g., McDaniel et al., 2012). A recent critical review of empirical studies examining the association between SNS use and subjective well-being suggests that passive use (e.g., scrolling) decreases subjective well-being and is mediated by increased social comparison. At the same time, active interactions (e.g., posting) are associated with enhanced well-being due to increased social capital and connectedness feelings (Verduyn et al., 2017). Compared with men, women are more inclined to use SNS to maintain social connectedness with distant contacts (Hether et al., 2014), and SNS use is shown to increase during the transition into motherhood (Bartholomew et al., 2012).

Transition to motherhood

Conflicting institutional and social discourses simultaneously describe and present stereotypical images of mothering as "natural" and blissful, as well as assuming first-time mothers possess little knowledge and require lots of information and support (Bobel, 2002; Johnston & Swanson, 2003). LeMasters (1957) was the first to publish research on the challenges associated with adjusting to the family systems reorganization. While transitioning to parenthood can be experienced as rewarding, fun, and full of affection and togetherness (Petch & Halford, 2008), the transition to motherhood involves profound change, which can

include enormous "realizing," "working it out," and feelings of loss, isolation, and exhaustion (Barclay et al., 1997). Low self-esteem and low social support are risk factors for postnatal depression and anxiety (Leigh & Milgrom, 2008; Raine et al, 2019), which can harm family functioning and child development (Dennis et al., 2009).

Traditionally, mothers have accessed post-partum information and support through female family members, friends, the local community, and healthcare professionals (Price et al., 2018). A grounded theory approach to in-depth interviews with mothers shows that individual (Wilkins, 2006) or group (Strange et al., 2014) face-to-face interactions with other mothers are experienced as essential to the well-being of new mothers, improving infant and self-care. While the benefits of face-to-face support are well described, mothers also report isolating themselves as they embark on their new practices and new identity for fear of being exposed by others as not 'doing it right' and being judged by other mothers whom they experience as 'expert' (Wilkins, 2006; Johnson, 2015). Mothers in marginalized social groups with less access to financial resources report feeling judged and stigmatized in mother and baby groups (Aston et al., 2017).

Attachment styles influence the extent to which an individual seeks or provides support in their relationships. According to Bowlby (1980), two dimensions determine adult attachment, beginning to develop in early childhood. One dimension, known as avoidance, represents the degree to which an individual desires limited emotional intimacy with others or partners. The second dimension, known as anxiety/ambivalence, represents the degree to which an individual worries whether their partner truly loves them and the extent to which they can rely on their support when needed. A secure attachment style is positioned between these two dimensions and represents an individual who feels comfortable being intimate, without the fear of abandonment, and holds positive expectations about receiving support. Individuals with avoidant attachment styles experience pessimistic/cynical expectations,

while those with anxious or ambivalent attachment styles tend to mistrust the support offered or provided (Wallace & Vaux, 1994).

Attachment styles are known to change during significant life events, such as the transition to motherhood (Bowlby, 1980). Using scales measuring attachment styles, perceptions of themselves, their partner and their relationship, before and after having their first child, Simpson et al. (2003) reported that women become more ambivalent in their attachment style if, during the transition to motherhood, they perceive their partner as less supportive. Mothers who seek less support and whose partners are more avoidant can become more avoidant during the transition to motherhood.

Parents' use of SNS

With the increasing access to SNS, mothers are becoming *"networked individuals"* (Rainie & Wellman, 2012) and create or assimilate into virtual social networks. Online surveys show that mothers are more inclined to use SNS when seeking or providing support compared with fathers (Duggan & Lehnhart, 2015), while interviews with parents and online surveys reveal Facebook as the most popular form of SNS used by parents (Ammari & Schoenebeck, 2015; Duggan & Lehnhart, 2015; Gibson & Hanson 2013).

Parents use SNS, such as Facebook, to inform people of their pregnancy, the birth and to provide updates on their children (Ammari & Schoenebeck, 2015; Bartholomew et al., 2012). Online survey results show that parents use SNS to stay in touch with family members and share meaningful experiences with others (Duggan & Lehnhart, 2015). A survey of 2000 parents in the UK reported that by the time their child is five years old, the average parent posts 1000 photos of their child on Facebook (Knowthenet, 2015). A Russian study used visual narrative analysis of Instagram and reported that expectant mothers used Instagram to share and celebrate their pregnant bodies (Tiidenberg, 2015), while others post breastfeeding photos to normalise the experience and challenge dominant discourses on idealised

motherhood (Boon & Pentney, 2015). First-time mothers report using SNS to gain information or feel supported by others during the transition to parenthood (McDaniel et al., 2012).

  Impact of SNS on parents

   Grounded theory analysis of mothering group field notes and interviews report the benefits of using Facebook mothering groups to reduce isolation and boredom by connecting with local mothers (Gibson & Hanson, 2013). Online surveys and interviews with mothers of toddlers exploring privacy concerns related to SNS revealed that as mothers are often not geographically near immediate family and friends, SNS provides a medium to connect and reduce a sense of isolation that can come with child-rearing (Anderson & Chalklen, 2017). Parents of children with additional needs also report these benefits (Ammari & Schoenebeck, 2015) and LGBT parents who report that, without such groups, they are more at risk of feeling stigmatized and marginalized (Ammari & Schoenebeck, 2015; Blackwell et al., 2016). Discourse analysis of focus groups and electronic interviews with mothers of infants under one year reported that the unique benefit of connecting with other mothers online is the ability to connect at any time of the day, particularly during the night (Price et al., 2018), while focus groups with mothers of children from birth to four years described SNS as a unique space in which they can discuss topics perceived as less socially acceptable (Archer & Kao, 2018). First-time mothers highlight the disparity in access to support and information when transitioning from pregnancy to the extended post-partum period (Christie et al., 2017) and have reported online communities as a safe space to test out their new identity (Johnson, 2015) and to gain information and support (Strekalova, 2016; Valtchanov et al., 2014).

   Correlational research suggests that SNS use is associated with higher levels of perceived parental role overload, depression in mothers, and conflict over SNS use (Coyne et al., 2017). Strange et al. (2014) asked parents with at least one child under five years of age

whether online communication helped them. A descriptive content analysis revealed that their participants experienced SNS as informational and a means of creating connections, and conflicting, judgmental, isolating and can facilitate negative social comparison. Content analysis of popular Instagram users and interviews with mothers of children under six-years-old concluded that some mothers experience pressure to maintain an image on SNS, particularly mothers with lower self-esteem (Djafarova & Trofimenko, 2017). Madge and O'Conner (2006) posit that SNS can enable mothers to feel supported and empowered, and it can create a context of repression, facilitate the setting of high standards and create competitiveness, which can harm maternal mental health.

Research rationale and research questions

Maternal and infant well-being is a global priority advocated by the World Health Organization (WHO, 2013, 2015). Conversely, in the current economic climate where cost-effective services are a priority, both in the UK and across the globe (e.g., Canada), health services often hope that mothers, particularly those who are considered low risk or "less vulnerable," manage their well-being by using personal agency to access support through online resources (Price et al., 2018). The limited existing literature posits that the impact of SNS use varies. There is a paucity of research detailing the use or experience of SNS and mobile devices for first-time mothers. No studies exist that elucidate the processes that occur when first-time mothers interact with SNS during the first year, the perceived impact, or how mothers respond to or negotiate these effects.

This research aims to explore how first-time mothers experience the use of SNS to provide insight to mothers, health practitioners, and academics on the benefits and unintended consequences of engaging with SNS and ways in which some mothers negotiate these effects. This research will employ qualitative research methodology (Bryman, 2015) to perform a detailed exploration of first-time mothers' experiences of using SNS. This research is unique

in exploring this with first-time mothers in the first year using a phenomenological methodology. The specific research questions of interest include:

1. How do first-time mothers experience the use of SNS?

2. How do first-time mothers describe the impact of SNS on their sense of self or identity?

3. How do first-time mothers describe the impact of SNS on important relationships?

Method

Design

The research design involved an interpretative phenomenological analysis (IPA) of individual semi-structured interviews conducted with purposively sampled self-identified first-time mothers with experience in using SNS. The researcher used IPA (Smith et al., 2009) to analyse the data. This method of analysis is well suited to an in-depth and personal discussion. IPA aims to offer insights into how a person, in a context, makes sense of their experience or a phenomenon. It is concerned with a focus on personal meaning and sense-making; thus, it is well suited to exploring how new mothers make sense of their SNS use and its impact on their sense of self and relationships.

The researcher used qualitative methods to answer the research questions as quantitative methods use predefined categories to quantify experiences. Semi-structured interviews invited participants to offer a rich and detailed account of their lived experience, with an intimate focus on their personal experience (Smith et al., 2009, p. 61). This process elicited the participants' stories, thoughts, and experiences of interacting with SNS. As IPA requires rich data, detailed engagement and reflections are necessary (Smith et al., 2009). Semi-structured interviews invited participants to speak freely and reflectively, express their concerns and develop their ideas about SNS through the interview process (Smith et al.,

2009, p. 58). When looking to use IPA, semi-structured interviews are the preferred means of eliciting rich data (Reid et al., 2005) as they also provide the participants with space and time to think about a phenomenon.

While this research is committed to understanding the participants' perspective, the researcher does not assume that in doing so, a "true" account or "the truth" is uncovered (Smith et al., 2009, p.67). The interviews are a snapshot of how the participants make sense of their experiences at a moment in time. Furthermore, during data analysis, the researcher was engaged in the process of double hermeneutics, that is, they were making sense of, or interpreting, the participants' sense-making (Smith, 2004, p.40). Therefore, their thoughts, beliefs, and assumptions about the topic, the interviews, and the participants influence the researchers' second-order sense-making.

Ethical Considerations

Ethical approval was sought from and granted by Salomons Centre for Applied Psychology Ethics panel (Appendix A). Before conducting the interviews each participant provided written informed consent. All interviews were recorded using a Dictaphone and transferred to a password-protected computer which was only accessible to the author. Following transcription of the interviews, a unique identifier number was used to label the transcripts. All identifying information was changed to maintain participant anonymity. All personal information collected from or about participants, for example, demographic details, were stored securely and labelled with participants' unique identifier numbers. Participants were free to withdraw from the research up to seven days after the interview without reason. The researcher informed participants that they might experience distress when speaking about previous difficult experiences. To reduce the risk of this happening, the interviewer offered breaks during the interview, and the interview was paused if the participants became

distressed, and the researcher asked the participant if they would like to move on to another topic, or whether it would be best to end the interview. The information sheet provided contact details for additional support.

Participants

Smith et al. (2009) propose the use of purposive sampling, rather than probability sampling, when seeking to research people's experiences to allow for the exploration of a perspective "rather than a population" (p. 50). Inclusion criteria were that all participants self-identified as a first-time mother with a child under the age of 12 months, the experience of using SNS and English as a first language. None of the participants were experiencing acute distress at the time of the interviews. As recommended when using IPA at a professional doctoral level (Smith et al., 2009, p.53), the researcher recruited 10 participants for this research. The researcher ensured a homogeneous sample by collecting participant demographics. This also allowed the ensuing results to be situated. Smith et al. (2009) encourage conducting IPA with groups that are as uniform as possible, as determined by, for example, social factors relevant to the research (p.51). This enables the examination of psychological convergence and divergence within a group in detail (p.9). The average age of the 10 new mothers was between 29 and 43 years (avg.=35.3 years), with a child aged between 2 and 11 months (avg.=6.2 months). On average, the mothers used SNS for 73 minutes a day (range=30-120 minutes). Table 1 details participant demographics and their SNS use (frequency of use and time spent using).

Table 1

Participant demographics and SNS use

Participant	Age (years)	Ethnicity*	Child's age (months) & gender	Daily time spent on SNS (approx. minutes)	Relationship Status	Highest level of education	Employment status & months spent on maternity leave
Sarah	36	White British	5.5, Male	120	Partner	Bachelor's Degree	FT, 6
Lisa	29	Black British	3, Female	60	Partner	Bachelor's Degree	FT, 3
Marie	43	White British	10, Male	30	Single	Bachelor's Degree	FT, 10
Katie	33	White British	2, Male	90	Married	Bachelor's Degree	FT, 2.5
Mel	32	White British	7, Female	120	Married	Bachelor's Degree	FT, 8
Laura	29	White British	6, Female	90	Married	Bachelor's Degree	FT, 6
Michelle	36	White British	2.5, Female	60	Married	Doctorate	FT, 3
Sasha	42	White British	11, Female	40	Partner	A level	FT, 11
Christina	36	White British	8, Male	30	Married	Bachelor's Degree	FT, 8
Grace	37	White British	7, Female	90	Partner	Bachelor's Degree	FT, 8

*Classification of ethnicity currently used in the NHS (based on the 2001 UK Census Classification)

Procedure

Recruitment

In this research, purposive sampling was used, which involved recruiting participants through SNS using a research poster (Appendix B). Interested mothers who met the inclusion criteria were provided with information sheets and consent forms (Appendix C and D). The researcher asked interested mothers to complete screening questions. The researcher scheduled interviews with 10 mothers, a minimum of 48-hours after they received the research information sheet. The researcher made an effort to ensure interviews took place in the participants' preferred location (face-to-face/telephone/Skype). All interviews took place

using Skype at a time that was convenient for the participant. Recruitment stopped at 10 participants as 10 interviews resulted in a rich data set including sufficient data to determine pattern-based meanings without losing the idiographic focus or being overwhelmed by the data (Smith et al., 2009, p.52).

Data Collection

The data collected were in the form of dialogue during semi-structured interviews. The researcher produced an interview schedule to enable the researcher to think explicitly about the areas to cover in the interview, consider ways to phrase questions that were accessible to the participant, predict sensitive issues, and consider ways of asking questions non-judgementally (Appendix E). The intention was to hold the schedule flexibly during the interview while also being prepared for more reserved participants whose position could be supported with more questions. Guidance was taken from Smith et al. (2009), resulting in intentionally open and balanced questions. The interview schedule explored participants' experience of using SNS, their perspectives on the interaction between SNS, and their sense of identity and relationships.

The schedule was used flexibly in practice. The researcher used key probe questions throughout the interviews (Appendix E). The interview process involved following up on areas of importance to the participant. This enabled the exploration of areas the researcher did not anticipate. This process of creating in-vivo questions was iterative and thus evolved from feedback and through the interview process. This enabled the researcher to become an engaged and attentive listener and to be flexible and responsive in questioning. The researcher was, in effect, an active co-participant.

The researcher consulted a first-time mother with a child under 12 months to review the research poster, information sheet, and consent form before recruitment. The researcher

completed a pilot interview and discussed the interview schedule concerning its appropriateness, gaps, and areas not covered by the questions.

All interviews were completed before data analysis and lasted between 42 and 65 minutes (average=52 minutes). Interviews were audio-recorded and transcribed.

Data Analysis

The researcher analysed the interview transcripts using IPA. Although there is no one prescribed method for doing this, there is a commonly used set of processes. The analytic process used in this research was largely influenced by Smith et al.'s (2009) detailed guidance on the process. Table 2 details the analytic process used to analyse the data, which consisted of an iterative and inductive cycle (Smith, 2007).

Table 2

The analytic process

Stage	Process	Description
1	Immersing oneself in the data	Audio-recordings were listened to while reading the transcript. Transcripts were read multiple times. Initial, striking observations relating to the content and process of interview were bracketed, to enable the researcher to focus on the data.
2	Initial comments	The semantic content and language in the transcripts were examined to examine the way in which the participant thought about, understand, and spoke about topics. Three types of comments were made. 1. *Descriptive comments*: focused on the content and the subject, with a phenomenological focus, and stayed close to the participants language; 2. *Linguistic*

		comments: noted their use of language; 3. *Conceptual comments*: engaged with the data at an interpretive and conceptual level (e.g., Appendix I.).
3	Developing emergent themes	The exploratory comments were analysed to create concise phrases which captured the essence of the participants sense making. This involved being influenced by the particular and the whole transcript; also having a more central role in the process of interpretation, which was intimately connected to the participants' reflections.
4	Generating connections across emergent themes	Chronological themes were mapped or organised in relation to meaning, establishing clusters. Abstraction, subsumption, polarisation, contextualisation, and numeration were often used to create clusters. While holding the research questions in mind, some themes were "discarded".
5	Repeating the process	Each transcript was analysed using steps 1-4, and attempts were made to ensure that analysis of each transcript did not influence the analysis of subsequent transcripts.
6	Eliciting patterns across participants	Each table of super-ordinate themes and their associated themes were examined for connections and unique idiosyncratic occurrences and an overall table of themes was created.

Quality Assurance and reflexivity

The researcher conducted a bracketing interview before conducting the interviews and again before data analysis to bracket the researchers' pre-existing thoughts, concerns, and

theories (Tufford & Newman, 2012). This facilitated the putting to one side of the researchers taken-for-granted world to allow the researcher to concentrate on that which was shared in the interviews. This setting aside of "simple absoluteness" supported the creation of space to hear and connect with the interviewees' perceptions (Smith et al., 2009, p.17). This facilitated the construction of a positioning statement (Appendix F). The researcher wrote a reflective diary during the data collection and data analysis stages (Appendix G). Validity was assessed using guidance by Smith et al. (2009, chapter 11), in addition to Yardley's four principles, including 1) sensitivity to context, 2) commitment and rigour, 3) transparency and coherence, 4) impact and importance to ensure quality in qualitative research (Yardley, 2000, p. 219). The researcher discussed codes and emerging themes of three separate transcripts with research supervisors during analysis. The researcher wrote case-based memos during the analysis of each data set to provide a transparent account of the analytic process (Appendix H). The researcher recorded an overview of links between emerging themes and quotes (Appendix I; Appendix J). The researcher sent an end of study form (Appendix K) to the participants.

Results

The analysis resulted in five superordinate themes, including feeling connected, experiencing pain, navigating SNS to create safety, lack of trust, and unable to disconnect. Table 3 details the superordinate and subordinate themes resulting from the analysis of all interviews.

Table 3

Super-ordinate themes and themes of participants experience using SNS

Super-ordinate themes	Themes
A. Feeling connected	1. Connecting with mothers with shared experience
	2. Support and information
B. Experiencing pain	3. Emotional pain
	4. Idealised version of motherhood and self-criticism
C. Creating a safe space	5. Limiting access
	6. Boundaried sharing
	7. Dismissing aspects of SNS
D. Lack of trust	8. Protect my child
	9. It's not real
E. Unable to disconnect	10. Addictive/compulsive

Feeling Connected

This theme captured first-time mothers' experience of feeling connected with others who shared their experience through their use of SNS. This was important as they adapted to their new identity. Belonging to an online community was an opportunity for participants to have their experiences normalised and validated, their practices approved, or to receive advice and information when feeling uncertain in their new role.

Connecting with mothers with shared experience

Communicating with mothers via Facebook about shared mothering experiences was experienced as comforting:

"There are little nuggets that you see that you think, actually, we've all found it tough…it's comforting and reassuring to know that other people are actually finding it tough as well"(Sarah).

This sense of connection seemed helpful for mothers during the night when they were more likely to feel isolated:

"When you're on the 13th night feed and just going like: "is this normal"...then you

get a dozen messages saying: "oh I totally remember this...you've got this""(Laura).

Laura seemed to describe how connecting with others also helped to normalise experiences

and reassure her in her new role. Although participants spoke about feeling supported by

friends, two mothers felt they might be a burden to others, which led them to minimise

talking about their mothering experiences, despite wanting/needing to share with others.

Connecting with mothers through SNS provided a space in which they could talk, without

self-judgment, and with mothers who were at a similar stage of motherhood:

"You can't always talk to your friends about it because no-one's in the same position

as you, at that stage...and obviously you don't want to be a bore to people"(Katie).

For Katie, Facebook was a "lifeline" during pregnancy. She worried about conceiving and

was then distressed throughout pregnancy as she believed that she would not carry to term.

Connecting with women who had a similar health condition enabled her to feel inspired and

supported and was described as the most positive Facebook element for her. When Katie

became a new mother, she contributed to the Facebook page:

"I thought I might be infertile...[seeing] other people that had gone through the

process before me and been able to fight it...it's so comforting…feeling like you're not

alone"(Katie).

It seemed important for Katie to provide that comfort and connection to other expectant

mothers when she became a mother. Jane described how SNS allowed her to feel connected

throughout the day, including times when she was not actively using SNS, as she felt held on

the mind of the other:

"I might have been in the house all day by myself and with my baby, but someone's

just thought about me and I've got a message"(Jane).

The sense of feeling connected extended beyond mothering groups to connecting with like-minded people who held similar values. This was important to participants when feeling isolated or bored. Connecting may have enabled them to connect with non-mothering aspects of their identity. When talking about a recycling group Michelle commented:

> *"They kind of built a sense of community…there's quite a nice atmosphere on there of people who are all quite like-minded and who are like very supportive of each other"*(Michelle).

Using SNS to connect with family members who were distant was also experienced as valuable. When talking about her mother, Michelle shared:

> "S*he's very alone...I'm trying to send at least a daily photo or video to her"*(Michelle).

Support and information

Mothers described the beginning of motherhood as the time of most need when a lack of confidence and experience motivated mothers to seek out advice and information. Some participants used SNS to fulfil this need:

> *"I was quite heavily reliant on the mum group early on…when it was all so new and I just didn't really know what I was doing. Then as time's gone on, I didn't use it very much anymore"*(Laura).

Although these participants acknowledged that they could have accessed information from other sources, one described the benefit of feeling an immediate sense of support rather than waiting for the next visit from the health visitor. Mothers experienced this instant reassurance as comforting and highlights the anxiety and uncertainty surrounding their new role as mothers. Participants talked about this need reducing as time progressed, perhaps as their confidence grew. They moved to a position of reduced need, became expert, and enjoyed providing support to others:

"I found [a] Facebook group [called] Breastfeeding Support UK…I'm contributing on a regular basis to that to try and help other people"(Sarah).

Experiencing pain

This theme captured the painful experiences discussed by participants. At times, painful feelings resulted from seeing idealised/perfect accounts on SNS and mothers judging themselves as falling short, not being the perfect mother, or not having the perfect baby. Other painful feelings appeared to stem from how other SNS users responded to what participants posted, particularly a lack of response, a lack of being seen/heard, not being borne in mind or empathised with.

Emotional Pain

Mel felt very unhappy seeing other people with babies on SNS while she struggled to conceive. She reflected on the importance of noticing increased pain resulting from SNS use:

"If you are obviously going through a tough time, well you shouldn't really be going on it as much if you're going to feel bad if you're friend posts a happy photo...when I was trying to for a baby, I hated seeing pictures of my other friends having babies"(Mel).

This experience meant that when Mel had her child, although she wanted to share her joy on Facebook, she did not as she was very aware of the impact this may have on other people.

When seeking support, the functionality of SNS created challenges for some participants. Marie described sharing painful experiences on SNS about separating from her child's father due to abuse and failing to receive support from those she shared with. Marie had considered numerous ways of protecting herself before this, such as carefully choosing whom to share this information with. Despite this, she was left with very difficult feelings:

"With WhatsApp...you can see that the person has read your text, but they are ignoring you...I'd rather not know…because it's quite upsetting...[it] makes me really angry...I wish I'd never told you...It was quite a sensitive matter which I decided to, you know, to open up...I felt like an idiot as well...quite sad...with the lack of empathy…there's no compassion"(Marie).

Although Marie had withdrawn from various SNS forms due to previous painful experiences, her caution did not prevent the ensuing pain resulting from the experience she described.

Michelle experienced a sense of powerlessness when using SNS. Scrolling through newsfeeds on Facebook amplified her feelings of anger, felt voyeuristic and left her experiencing Facebook as polarising, resulting in her taking regular breaks from it:

"I'd scroll through the newsfeed thing and there would be stuff, just loads of stuff, people angry about Brexit and then you'd like click through to the news articles, again, angry about Brexit...and you just kind of sit there like silently ranting…a couple of [my] friends clearly had voted for Brexit as well......the conflict that that has created…[Even when it was the] same opinion as me [it] just made me even more angry"(Michelle).

Jane's experience of a family member uploading a family photo without her in it appeared to leave her feeling as though she did not matter. Jane went on to describe her resulting pain as "irrational" and a result of hormonal changes:

"I was really upset about that…I'm the family now...the irrational side of me was very hurt by it because the world could see, couldn't they?"(Jane)

Jane touched on an idea that many mothers referred to, that is, SNS as a public platform. Feeling rejected by a family member appeared to foster feelings of pain. However, there was

an added element of this rejection occurring in public, perhaps leaving her wondering what others thought about her, her relationship with her new family, and her new identity.

Idealised version of motherhood and self-criticism

Several mothers also discussed tensions around how they use their mobile device and their beliefs about what mothering should look like. This self-evaluation of their mobile SNS often led to self-criticism:

> *"I don't want to…not be present with him...there have been times where, maybe he's been stirring a bit and I've been on my phone messaging someone back and prioritised getting a message back to someone...then thinking actually I should be with him"*(Katie).

Michelle managed these challenging feelings relating to her phone use by comparing the impact of her use on her child with the likely impact on other infants of a similar age:

> *"Instead of actually looking at her and paying attention to her whilst she's feeding...I'm just like plunking her on and then my attention is focused elsewhere, on my phone…[I] wonder if that will have an effect…but it's having an effect on everybody else her age group"*(Michelle).

These ideas about what motherhood "should" look like left these mothers questioning their practices, and they felt guilty that they could not live up to their ideals and the impact that might have on their infant. Mel experienced guilt about not feeling guilty, which seemed to conflict with beliefs she had about the ideal mother:

> *"I should feel worse by going on it as much as do, but I don't feel that bad about it. I'm not, like, lying there at night thinking: "Oh, I've been on my phone too much". It's just, like, the norm now"(Mel).*

Lisa began "following" people who felt more "real" to her. She did this to protect herself from setting herself unrealistic standards:

> *"I know my stomach isn't what it was, pre-pregnancy...I don't want to feed my mind with: "oh shit like, my stomach's not like that, like how can I get my stomach like that again"...I'm conscious not to put that pressure on myself"*(Lisa).

Laura experienced pressure to be a perfect mother and with a perfect home because of her SNS use. She was more likely to hold this thought when she felt low or tired. She acknowledged her belief that photos on SNS were unrealistic, and she could connect with this belief when feeling good about herself and her abilities. However, at times this was more challenging for her, and she felt like she was failing in her new role:

> *"I'd say probably 90% of the time, I'm pretty rational. I know that it isn't true to real life...but then [when I'm] just feeling a bit low anyway, it compounds it...it can be quite a lot of pressure to sort of have the Insta perfect baby, life, house, everything. Everybody knows that it's just a time stamp, that isn't real life. But it's how to remember that"*(Laura).

Laura often felt low for a couple of days before noticing the impact SNS had on her mood.

Creating a safe space

This theme captured how participants navigated SNS in specific ways to protect their sense of self while also benefiting from SNS. New mothers limited access, limited sharing, and dismissed that which conflicted with their needs/beliefs to protect themselves. This involved being very cautious when considering where to seek support on SNS, while others withheld more vulnerable parts of the self or dismissed elements of SNS which they anticipated would create pain.

Limiting access

SNS group ethos, such as that of mothering groups, was discussed by several participants as necessary and one which mothers carefully considered when accessing groups:

> *"It's all moderated and they have rules…you're supposed to be very respectable of others and: "we're not here to judge, we're here to support""*(Sarah).

Michelle completely ignored certain aspects of Facebook which typically had a negative impact on her:

> *"I try not to scroll through my feeds because I think, so that's how you get really sucked in"*(Michelle).

There was a sense that as a new mother adjusting to the new role, the need for support and information on childrearing tended to fluctuate. When the need decreased, Michelle explained that the balance between receiving support and navigating the negative aspects of SNS meant that it could be helpful to disconnect from certain forms of SNS completely:

> *"People would go on there with problems and I didn't really always want to just be reading other people's problems…after maybe the first month, I stopped really reading those"*(Michelle).

Christina completely disconnected from both Facebook and Instagram when she became a mother. This was partly due to not wishing to access spaces that felt polarising, and not trusting the companies behind SNS. This seemed to have become more important to her now that she was a mother:

> *"I had reduced my activity anyway, but then...seeing the arguments, the shaming that was going on, on Facebook and Instagram. I used to add to it, like I would encourage people to respect the environment, but now everyone is doing that…so, we decided to completely disconnect"(Christina).*

Participants recognised that there were other spaces where they could make connections with new mothers and withdrew from SNS to avoid painful experiences:

"I've heard there is a sort of mum network on Facebook, everyone talks about it in a positive way...and so sometimes I regret not being on Facebook...but there's other ways these days...you can join mum groups outside of Facebook"(Marie).

Boundaried Sharing

Participants managed painful responses during active use by restricting what they shared about their lives on SNS. Lisa talked about not sharing photos of her child as she anticipated feeling devastated if an SNS user were to pass judgment on her child:

"I've been a sharer on social media, [but my child] is obviously the closest thing to my heart, so sharing that would be a big deal to me....if someone was to say something or to think something about her, I'd be devastated"(Lisa).

This limited sharing appeared to enable mothers to protect the self and their child. However, it was also experienced as an internal conflict as proud new mothers wished to share their experiences with others:

"On one hand you want to be because you want to share photos of them, because you think they're lovely. And then on the other hand you think…not everyone else is as enamoured with my baby as I am…because I remember seeing other parents' photos and just being like: "oh my god, all their photos were just of their bloody children""(Michelle).

Two participants shared a part of themselves that was authentic but was a very small part of their identity. This enabled them to engage with SNS while feeling they could manage any resulting negative experiences:

"My Instagram is not a reflection of me. It's not my whole persona...I've done that consciously because I didn't want, you know, my vulnerable goofy side, or...wacky side to be shown. Because that really is me and if someone was to attack that...I would feel devastated"(Lisa).

Dismissing aspects of SNS

Participants dismissed or minimised aspects or opinions they did not agree with:

"*Personally, I take it with a pinch of salt because it's a public group...if I were to actually interact with a post it would be one that I agree with...I just ignore the others*"(Sarah).

"*I just scroll past it, you know, I don't take that much notice of it*"(Jane).

Lisa began ignoring people she no longer felt a connection with and started following people who felt more "real" to her:

"*I'm conscious not to put that pressure on myself....Because I already put pressure on myself....let me follow some realness*"(Lisa).

Lack of Trust

This theme captured a lack of trust, which included not trusting the intentions of the companies who owned the SNS sites, and a sense that they did not trust all internet users. Participants felt responsible for their child's safety and wanted to protect them from the various adverse effects of SNS.

Protect my child

Two participants worried that their child would be targeted by advertising companies, which one mother wanted to avoid, although she recognised that it was unlikely to affect her child at such a young age:

"*It's a bit scary I think...want to protect her from being tracked, being advertised at, being...you don't know what they could do with information about people*"(Michelle).

This strong desire to protect their child meant that several mothers did not share photos of their child on SNS as they had no control over what happened to the photos once they were online:

> *"My issue is her image being sort of public...not really having control over who gets to see the image"*(Laura).

This lack of control was felt by several mothers, while one mother feared photos of her child would be accessed by a "paedo gang":

> *"I personally don't post photos of [my child]. I suppose I don't really trust Facebook…what happens to these photos, you know, I don't want them to be accidentally accessed by some, I don't know, paedo gang"*(Sarah).

Feeling a lack of trust and a desire to protect her child, Christina completely disconnected from most forms of SNS:

> "*Because I used to work for an online global company, I know how much information they have on people...I don't want my family's information to be that out there, that open to being manipulated or used...*"(Christina).

It's not real

> Participants also spoke about not trusting that what they viewed on SNS was a real representation of the lives of others:

> *"I would never feel :"Oh my god, how does she have such a perfect family?" because you know that that's just a photo taken for social media"*(Mel).

At times Laura viewed SNS as not real, but she struggled to connect with that belief when she was feeling low:

> "*I think the majority of time, I'd say probably 90% of the time, I'm pretty rational. I know that it isn't true to real life"*(Laura).

Lisa believed that people created posts for the "world" to see which did not represent their reality:

> "*This isn't true, this isn't a true reflection of how you really feel...and I thought: "why are you doing that and who is it for?""*(Lisa).

Several participants described Facebook as a public platform. Mel reported holding in mind the ability of others to access her account whenever she used SNS:

> *"A friend hacked onto my account and saw messages that I was sending to other*
> *people...So, I would never ever put anything that I didn't want to be repeated on*
> *it...don't ever write something that you don't want to be on a headline or*
> *whatever"*(Mel).

Unable to disconnect

Despite participants sharing challenging experiences using SNS, most of these new mothers continued to access these sites. At times, some mothers took time out from SNS, but most participants reported being unable to disconnect from SNS completely. This compulsion appeared to relate to their daily routine as a mother, such as experiencing boredom, isolation, or being stuck on the spot when breastfeeding. For others, experiencing validation or anticipating loss kept them connected to SNS.

Addictive/compulsive

Mel experienced Instagram as addictive. She attributed this to Instagram being tailored to her interests:

> *"I am on it quite a lot and it's more just like addictive, scrolling, like my husband's*
> *like: "what the hell are you doing on it all the time?" I'm like: "I don't know""*(Mel).

Michelle felt "sucked in" by the newsfeeds feature on Facebook and explained that at times she felt unable to stop scrolling and as though losing time without awareness:

> *"I try not to scroll through my feeds because…that's how you get really sucked*
> *in…you kind of scroll through and you read one thing and you read another…then*
> *you find that you've spent 4 hours or something just scrolling through"*(Michelle).

Laura wanted to leave SNS but felt unable to due to the benefits of belonging to two different groups. She anticipated missing out if she left these groups:

"I toyed with the idea of leaving it on several occasions, but I would miss those sorts of groups, particularly for work, [they]are quite a good support network...I fear missing out on something "(Laura).

At times, Laura deleted specific apps to see if she could "survive" without them. She reflected that the reason she reconnected with SNS was due to boredom while on maternity leave, perhaps meaning that new mothers are particularly vulnerable to the unintended consequences of connecting with SNS:

"There's still a lot of doing nothing, being at home on maternity leave, which I'm not used to, so I do end up inevitably re-downloading them, just probably out of boredom more than anything else"(Laura).

Michelle experienced her emotions as amplified when reading "feeds" on Facebook, so she deleted the Facebook app several times. Despite this, she found herself using SNS at particular times of day, when, she reflected that, it was difficult to engage in other activities:

"You find yourself with a lot of time on your hands where you're just stuck to one spot...particularly if it's the middle of the night and you're tired and you don't really have much mental resources to do anything else"(Michelle).

Lisa uploaded photos because she felt good when people provided positive feedback:

"I guess what was enjoyable was the feedback I'd get...the enjoyable side of it was the comments: "oh where are you? This looks nice""(Lisa).

Discussion

This research performed a detailed exploration of first-time mothers' experiences of using SNS, the perceived impact of SNS on their sense of identity, and family relationships, in the first year of motherhood. It explored this using a phenomenological methodology to gain insight into their lived experiences. The researcher completed this research intending to share a deeper understanding of the potentially damaging nature of SNS on maternal mental

health. This research aimed to highlight this relatively new context within which people relate to one another, which may be overlooked by professionals when considering the influence of particular contexts and relationships on service users in perinatal services. The researcher anticipated that participants would share experiences such as SNS creating a competitive context or facilitating worry or stress in mothers. The researcher was curious about how new mothers manage this new context while undergoing a significant, and at times challenging, transition. The researcher was aware that this was probably an overly simplistic view of SNS in new mothers' lives, especially given that mothers survive this new context. The bracketing interview helped the researcher develop an awareness of these biases, and the researcher aimed to create balanced interview questions and analyse the results in a balanced way. The results were more varied, mixed, and nuanced than anticipated, demonstrating that there were both positive and negative experiences for these mothers and that their relationship with SNS varied, with mothers using it more or less depending upon its impact at any given time. Analysis resulted in five super-ordinate themes, including feeling connected, experiencing pain, creating a safe space, lack of trust, and unable to disconnect.

Links with the existing literature

The process model of adjustment to parenthood or the determinants of parenting identified by Belsky include "social network" as an essential contributing factor (Belsky, 1984). These mothers' reflections highlighted their need to feel connected and supported, in line with this model of adjustment. These mothers' thoughts and ideas extended beyond this, touching on what French et al. (1974) described as the "goodness-of-fit" between the desired support from a social network and that which is received. SNS appeared to fulfil participants' need for a social network, and its convenience may have meant that this need could be met more readily or filled gaps left by offline relationships.

This research supported intensive mothering ideologies as mothers spoke about self-judgement in their new role and feeling as though they did not live up to societies expectations (e.g., "*it can be quite a lot of pressure to sort of have the Insta perfect baby, life, house, everything*"). In this research, these ideologies appeared closely linked with social comparison theories that posit that people compare others' information with the self, leading to positive or negative self-evaluations (Festinger, 1954; Wheeler, 1991). Mothers shared experiences of viewing other mothers on SNS and judging themselves, with negative results. This is likely to happen as people who share on SNS typically present their "best selves" (Lee, 2014). New mothers may be more vulnerable to negative self-evaluations in the contemporary context of easy access to other new mothers' practices via SNS.

New mothers engage in the process of assessing the risks and rewards offered by SNS. They adjust their behaviour and beliefs towards SNS as they learn from both passive and active experiences of using SNS, and they alter their relationship with SNS in response to this. These processes are in line with learning theories such as Bandura's (1977) social learning theory and Skinner's (1938) operant conditioning theory.

Identity theory posits that individuals have multiple identities (Stryker, 1980) expressed through self-presentation. These theories were supported by the mothers' reflection's, as mothers spoke about sharing a "part" of the self, both because they felt the part they shared would be assessed positively by others and due to a wish to avoid negative evaluations from others. This is in line with previous empirical studies, which claim that people share a limited part of their identity (Lee, 2014).

A "privacy paradox" is used to describe situations where people share personal information about the self on SNS despite privacy concerns (e.g., Taddicken, 2013). The privacy-protecting behaviours and ethical tensions described by these mothers may be more present due to how recently they transitioned to their new roles. Negative social comparisons

and lowered well-being are more likely to occur when using SNS passively (Verduyn et al., 2017). The complex interplay of concerns with privacy and the resulting passive SNS use may explain why new mothers described SNS as having a negative impact on their well-being.

Limitations

This study is the first to explore first-time mothers' perspectives on the impact of SNS on their sense of identity and relationships. This research's limitations included that most of the participants were highly educated, white, and living with partners or married. Although the researcher sought a homogenous sample in this IPA research (Smith et al., 2009), the high level of homogeneity of participants need to be held in mind when reading the results. As with all research using IPA, immediate claims are bounded by the group of participants studied and cannot be generalised to a larger population. However, the reader can theoretically generalise from the researcher (Smith et al., 2009). The recruitment strategy required interested mothers to contact the researcher. This self-selection bias may have attracted mothers with firm beliefs about SNS or who experienced significant responses when using SNS. The harmful and beneficial effects of SNS use can be challenging to identify. Although the interviews were structured to facilitate reflections, conducting further interviews with these participants may have provided them with the time between interviews to further reflect on their relationship with SNS. The research interviews were conducted during an international pandemic, meaning that these mothers were more isolated and lacked face-to-face support. This may have affected how they related to or spoke about SNS.

Clinical implications

Mothers' accounts of their experiences highlight the sense of connection that SNS brings to them. It also highlights that using SNS can create emotional pain. This research also shows an understandable dilemma in the lives of new mothers, whereby they seem to have to

weigh up the costs and benefits of accessing different aspects of SNS and adopt various strategies to manage this.

These results suggest that it may be useful for healthcare professionals to ask about SNS use when completing assessments with new mothers, as maternal and infant well-being is a global priority advocated by the World Health Organization (WHO, 2013, 2015). Previous research has shown that new mothers may isolate themselves for fear of being exposed by others as not 'doing it right' (Wilkins, 2006), and this research highlights how SNS can lead to comparisons with others, which may affect the mental health of new mothers. Low self-esteem and low social support are risk factors for postnatal depression and anxiety (Leigh & Milgrom, 2008; Raine et al., 2009), and this research sheds light on how viewing SNS can affect a mothers' sense of identity, can be linked to emotional pain and can affect relationships. The National Collaborating Centre for Mental Health in the UK (2015, updated April 2018) recommends that home visitors assist mothers by "helping women improve their physical and mental health by facilitating access to appropriate community services." The results of this research suggest that for some mothers, supporting them to connect with people via SNS may be very beneficial, while for others, supporting them to engage more in support outside the home while reducing SNS use may be more helpful.

Research implications

This research adds to the limited published research related to first-time mothers' experiences of SNS. Future research could further expand our understanding of these experiences to include the perspectives of first-time mothers who have chosen to disconnect from all forms of SNS completely. Alternatively, a longitudinal approach to this research could be enlightening as mothering experiences evolve throughout the first year, and relationships with SNS may also evolve. Much of the published research on SNS use following the transition to parenthood examines and explores both parents' experiences.

Future research exploring the perspectives of first-time fathers in the first year could also be very insightful.

Conclusion

The extant literature examining first-time mothers' use and experience of SNS is limited. This research provides insight into first-time mothers' experiences in the first year using an interpretative phenomenological methodology. Analysis of their sense-making resulted in five superordinate themes, including feeling connected, experiencing pain, navigating SNS to create safety, lack of trust, and unable to disconnect. Mothers' perspectives were nuanced, and mothers navigated SNS in ways that were most helpful to them. As the transition to motherhood is one of profound physical, social, and emotional change, it seems necessary to ask after SNS use and its impact during healthcare appointments.

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Section C: Appendices of supporting material

A thesis submitted in partial fulfilment of the requirements of Canterbury Christ Church University for the degree of Doctor of Clinical Psychology

Appendix A. Ethical Approval

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Psychology Research on New Mothers and Social Media

Are you a mother for the first time?

Is your child under one year of age?

Is English your first language?

Do you currently use social networking sites such as

Facebook | Instagram | WhatsApp | Twitter | Blogs

If so, I am interested in speaking with you about research I am conducting, in order to improve our understanding of new mother's experiences of using social networking sites. This research is part of my Doctorate in Clinical Psychology, at Canterbury Christ Church University.

Your participation will involve having a conversation with me about your experiences (by phone, Skype or face-to-face).

If you would like to find out more, please drop me an email d.okeeffe157@canterbury.ac.uk or phone 01227 927070, we can chat and I will send you an information sheet with more details.

I look forward to hearing from you.
    Best Wishes
    DeeO'Keeffe
    Trainee Clinical Psychologist

Canterbury
Christ Church
University

Information about the research

Study title: Social networking sites and support: What are the experiences of first-time mothers?

Hello. My name is Dee O'Keeffe and I am a trainee clinical psychologist at Canterbury Christ Church University, supervised by Dr. Tamara Leeuwerik (Senior Lecturer Research) and Professor Margie Callanan (Programme Director of Clinical Psychology Doctorate). I would like to invite you to take part in a research study. Before you decide whether to take part, it is important that you understand why the research is being done and what it would involve for you.

Talk to others about the study if you wish. If you have any questions about the study, please contact me by leaving a message on the 24-hour voicemail phone number 01227 927070. Please leave a contact number and say that the message is for me, Dee O'Keeffe, and I will get back to you as soon as possible. Alternatively, please email me with any questions you would like answered. email: d.okeeffe157@canterbury.ac.uk

(Part 1 of the information sheet tells you the purpose of this study and what will happen to you if you take part. Part 2 gives you more detailed information about the conduct of the study).

Part 1 of the information sheet

What is the purpose of the study?
The purpose of this study is to explore first-time mothers experience of using social networking sites (SNS) such as Instagram, Facebook, Twitter, WhatsApp or Bloggs. Further to this, the aim is to explore the perspectives of first-time mother on the interaction between SNS and their sense of self or identity. Finally, we aim to explore the perspectives of first-time mothers on how their interactions with SNS impact on relationships with family and friends/important relationships. Although you are likely to access regulated sites, such as those provided by the NHS, this research is interested in your experiences of accessing social networking sites only.

Why have I been invited?
You have been invited to take part in this research as you meet the eligibility criteria detailed in the research poster/flyer/online advert. More specifically, you self-identify as a first-time mother, with a child under the age of 12 months, with current experience of using SNS. Between 8 and 10 first-time mothers will be invited to take part in this research.

Do I have to take part?
It is up to you to decide whether to join the study. If you agree to take part, I will then ask you to sign a consent form. A minimum of 48 hours after you receive the information sheet should elapse before you sign the consent form. This is done to ensure you have time to think about whether you would like to take part. You are free to withdraw up to 7 days after the interview, without giving a reason.

What will happen to me if I take part?
If you decide to take part in this study this will involve taking part in a one-to-one interview with me, either face-to-face, by telephone or via Skype. This interview will last between 30-60 minutes.

Expenses and payments
Unfortunately, we are unable to provide payment for taking part in this study. Travel expenses will be reimbursed if travel receipts are provided.

What are the possible disadvantages and risks of taking part?
Taking part in this study is unlikely to cause you disadvantages. However, one possible disadvantage may be that you find the interview tiring. Another possible risk of taking part in this research include, experiencing distress when speaking about previous difficult experiences. To minimise the risk of this happening, you will be offered breaks during the interview, we will pause the interview and consider whether you would like to continue, whether you would like to move on to another topic, or whether it would be best to end the interview. You are welcome to withdraw from the research up to 7 days after the interview takes place. You are encouraged to contact
- your GP
- your health visitor
- the NHS (phone: 111)
- the Samaritan's (phone: 116 123; email: jo@samaritans.org) or
- MIND (phone: 0300 123 3393; email: info@mind.org.uk ; text: 86463)

if you would like support for your distress. If you feel you are at risk of harm, I will encourage you to visit your local A&E department. If I feel that you, or anybody else is at risk of harm, I will contact your GP or health visitor to inform them, so that they can provide support to you. If this is necessary, I will discuss this with you before taking these steps.

What are the possible benefits of taking part?
This research may not benefit you directly, however, you may find that the experience of discussing your experiences of using SNS, may provide you with further insight into the impact of SNS on your sense of self and family relationships. Information you provide may help other new mothers by contributing to our understanding of the relationship between using SNS and new mothers sense of identity and relationships with others.

What if there is a problem?
Any complaint about the way you have been dealt with during the study or any possible harm you might suffer will be addressed. The detailed information on this is given in Part 2.

Will information from or about me from taking part in the study be kept confidential?
Yes. All information about you will be handled in confidence. There are some rare situations in which information would have to be shared with others. The details are included in Part 2.

This completes part 1. If the information in Part 1 has interested you and you are considering participation, please read the additional information in Part 2 before making any decision.

Part 2 of the information sheet

What will happen if I don't want to carry on with the study?
You are welcome to withdraw your data from this research up 7 days after your interview has taken place. After this time has elapsed, I will retain the data already collected for use in this research. If you withdraw your data from this research, your data will not be used in any future research.

Interviews over Skype
I will use an encrypted Dictaphone to record our conversation, with both parties captured in the recording. This will enable me to transcribe our discussion before the analysis phase. Please note that in this form of interview, the interaction is mediated using technology which is owned by third parties (i.e. Skype). As with all Skype conversations, our discussions online could be accessed and stored by governments or organisations.

Interviews via skype raise the issue of lack of control over confidentiality if you chose to do this in a public space or in the presence of others. When I conduct the interview with you, I will be in a private office, only occupied by me. I recommend that you also choose a private space for the interview. Should I become aware that there are other people in the room in which you are completing the interview, I will pause the interview and ask you whether you wish to continue. The presence of other people in the room with you may make it more difficult for you to provide open and honest answers to the questions I ask.

What if there is a problem?
All complaints will be taken seriously and investigated by the research team.

Complaints
If you have a concern about any aspect of this study, you should ask to speak to me, and I will do my best to address your concerns. You can contact me by leaving a message on the 24-hour voicemail phone number 01227 927070. Please leave a contact number and say that the message is for me, Dee O'Keeffe, and I will get back to you as soon as possible. Alternatively, you can email me on d.okeeffe157@canterbury.ac.uk. If you remain unhappy and wish to complain formally, you can do this by contacting Dr. Fergal Jones, Research Director, Salomons Centre for Applied Psychology – fergal.jones@canterbury.ac.uk tel: 01227 927110.

Will information from or about me taking part in the study be kept confidential?
All information which is collected from or about you during the course of the research will be kept strictly confidential, and your information will not be shared with anyone else apart from the researchers carrying out this study.

You retain the right to check the accuracy of data held about you and correct any errors.

Your information/data will be collected from you, face-to-face, via telephone or via Skype. All electronic data will be stored in a password protected document or folder (including your signed consent form). If you chose to sign a paper consent form, this paper will be stored securely in a locked cabinet.

Regulatory organisations may wish to look at your research data to check the accuracy of the research study. In this instance, the people who analyse the information will not be able to identify you and will not be able to find out your name or contact details. Only I will have access to data which includes your identity.

All data collected will be retained for 10 years as required by the Medical Research Council.

The only time when I would be obliged to pass on information from you to a third party would be if, as a result of something you told me, I were to become concerned about your safety or the safety of someone else. I would endeavour to discuss this with you in the first instance.

What will happen to the results of the research study?
The results of this study will be published in a thesis for a doctorate in clinical psychology, which will also be published on the Canterbury Christ Church University website. They will also be published in a peer reviewed journal. All results will be anonymised so that it will not be possible for readers to identify you in any published documents. Anonymised quotes from your interview may be published in both the thesis and peer reviewed papers.

Who is organising and funding the research?
This research is being organised and funded by Canterbury Christ Church University.

Who has reviewed the study?
All research at Canterbury Christ Church University is looked at by an independent group of people, called a Research Ethics Committee, to protect your interests. This study has been reviewed and given approval by Salomon Research Ethics Committee.

If you would like to speak to me and find out more about the study of have questions about it answered, you can leave a message for me on a 24-hour voicemail phone line at 01227 927070. Please say that the message is for me, Dee O'Keeffe, and leave a contact number so that I can get back to you. Alternatively, you can email me on d.okeeffe157@canterbury.ac.uk to discuss this further.

Appendix D. Consent form

Canterbury
Christ Church
University

Salomons Institute for Applied Psychology
Canterbury Christ Church University
1 Meadow Road
Tunbridge Wells
TN1 2YG
Participant Identification Number for this study:

CONSENT FORM

Title of Project: Social networking sites and support: What are the experiences of first-time mothers?

Name of Researcher: Dee O'Keeffe

Please initial box

1. I confirm that I have read and understand the information sheet dated.................... (version............) for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily.

2. I understand that my participation is voluntary and that I am free to withdraw up to 7 days after the interview without giving any reason.

3. I confirm that I am a first-time mother, with a child under the age of 12 months, who currently uses social networking sites, who speaks English as a first language and who is able to take part in (up to) an hour-long interview. I confirm that I am not currently experiencing acute distress.

4. I agree that my interview can be audio-recorded and that anonymous quotes from my interview and other anonymous data may be used in published reports of the study findings.

5. I understand that data collected during the study may be looked at by regulatory authorities where it is relevant to my taking part in this research. I give permission for these individuals to have access to my data.

6. I understand that in the event that I disclose information which may indicate a risk to myself or others, the researcher will be obliged to follow university risk procedures that may require release of my personal data. I understand the researcher would speak to me about this first.

7. I agree for my anonymous data to be used in further research studies with collaborating researchers, for a similar purpose.

8. I agree to take part in the above study.

Name of Participant_____   Date_____

Signature _____

Name of Person taking consent _____   Date_____

Signature _____

Interview Schedule

1. Can you tell me how you started using social networking sites (such as Facebook, Instagram, WhatsApp groups, twitter, or blogging)? *Possible prompts*: how long ago? What do you think brought this about? Can you describe how you felt about social networking sites at that time?

2. Can you tell me what place social networking sites have in your life at the moment? *Possible prompts*: When do you access them? Why do you access them?

3. A) Can you tell me about a time, if any, when you used social networking sites when it felt like a positive experience? *Possible prompts*: what happened? How did you feel? How do you make sense of that?

   B) Can you tell me about a time, if any, when you used social networking sites when it felt like a more challenging experience? *Possible prompts*: what happened? How did you feel? How do you make sense of that?

4. During the transition into parenthood, have you changed the ways you use social networking sites over time? *Possible prompts*: In what ways? Does anything make it better? Does anything make it worse? How do you feel about these changes?

5. Do social networking sites change the way you think or feel about yourself as a new mum? *Possible prompts*: does it change the way you would describe yourself as a person? do you see yourself differently when you use social networking sites? In what ways? How do you make sense of that?

6. Can you describe whether using social networking sites has affected your relationships or interactions with others? *Possible prompts*: with your partner, infant, family, or important others? How you think or feel about this experience? How do you make sense of that?

7. How do you see your relationship with social networking sites in the future? *Possible prompts*: how might you negotiate or manage any challenges you may experience when using social networking sites?

8. Is there anything else you would like to add, which you think is relevant to our discussion, that I have not asked about or that you feel you have not had the chance to express?

Appendix F. Positioning Statement

Reflexivity: The researchers position in relation to the research topic was reflected upon during a bracketing interview.

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Appendix G. Extracts from reflective research diary

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Appendix H. Extract from case-based Memo

<u>30th March & 4th August- Case based memo: Lisa</u>

What did I learn from interviewing Lisa?

-Lisa was very passionate in the way she spoke about SNS. She seemed to have some very strong beliefs about how detrimental it can be to people's mental health. Towards the end of the interview, she talked about experiencing depression in her teenage years and attributing her experience of being bullied at this time to her being and sharing her true self. I think this has made her reflect more on the impact SNS has on her when compared with other participants I interviewed.

-I learned that SNS seem to be unavoidable as Lisa chose not to have any access to SNS until her late 20's and then felt she was really missing out and struggled in social conversations as people spoke about things related to SNS.

-Mothers put a lot of pressure on themselves to be fantastic in their role, despite it being very new to them...and despite living in a pandemic!!

What were my impressions of her experiences?

- My impression is that she is a reluctant user of SNS ("*Yes, do you know what, I was totally against social media up until I was about, I was twenty...but peer pressure, my girlfriends were like oh you're missing this, you're missing that...So, I thought, oh, what the hell, let me just join it no harm")* She says "its no harm" but later describes some painful experiences when using it... I wonder if a defence is at play here as she is clearly affected by SNS, although she seems really skilled in altering the way she uses it depending on how it is affecting her- she is ***boundaried*** in the way that she shares"

- Lisa talks about seeing other mothers on SNS and thinking, this cant be real- this makes me think about what beliefs she has about being a good mother and whether she has an ***idealised*** version that leads to ***self-criticism*** when she views other mothers doing motherhood. I

wonder what it would be like for her if we were not in lockdown and if she could see more mothers doing motherhood in real life!!

What connections can I make to interviews/analyses with other participants?

-Idealised version of motherhood and self-criticism: This seems to be coming through in a few of the interviews and transcripts- mothers have talked about what they "should" be doing (e.g., ""*I should feel worse by going on it as much as do, but I don't feel that bad about it"*) and feeling they have when they think they don't live up to that. This makes me this about the theme of being connected with other mothers and the huge benefit mothers experience from connecting with others via SNS....but, what comes to mind is whether this being connected is linked to this idealised version of motherhood- as in is it experienced as beneficial because it reassures mothers that they are living up to unrealistic expectations?? Feels like a complex interplay of influences/themes.

-Being boundaried: When Lisa described being boundaried and only sharing a part of herself it reminded me of what other mothers have said- being boundaried about the groups they access on SNS, being boundaried about who they share photos with. I wonder if this boundaried behaviour was around for mothers before they transitioned or whether their sense of needing to protect is heightened?

What process is at issue here?

-There is a defensive feeling during the interview which might mirror the way Lisa uses SNS. She is passionate about not using it in particular ways (e.g., for validation) but then as the interview progressed (and the relationship developed) she says she likes the validation. I wonder if this is linked to her reluctance to use it. I also wonder if some of her defence is about talking to a psychologist about it and wanting to show she was reflective?? Some of the strategies she talks about using to manage responses to SNS are ones that seem defensive e.g., dismissing impact of seeing post-pregnancy bodies online.

<u>5th April & 17th August- Case based memo: Sarah</u>

What did I learn from interviewing Sarah?

-Not all new mothers have very painful experiences of using SNS- before interviewing Sarah each mother talked about very challenging experiences. During the interview the thought entered my mind that she was not being truthful/honest with me/herself- I noticed this thought which allowed it to not take over as much I guess. But when I think about the interview overall, she did talk about mixed experiences, it was just that she had useful ways of managing difficulties, so the benefits appeared to outweigh the challenges!!

-Mothers can easily navigate that which conflicts with their belief system, so it has less impact on them.

What were my impressions of her experiences?

-My impression is that Sarah really values SNS to meet some of her needs, in particular feeling reassured and validated –(*"There are little nuggets that you see that you think, actually, we've all found it tough…it's comforting and reassuring to know that other people are actually finding it tough as well"*)...but that she also has a realistic sense of what she can gain from SNS and what other resources to draw on. My impression is that she has become more confident as a Mum as time has passed- her infant is nearly 6 months- I wonder if this affects her responses.

-I also get the impression that she doesn't trust that SNS is a true reflection of peoples experiences ("*Personally, I take it with a pinch of salt because it's a public group)* which might protect her from any negative comparisons.....

What connections can I make to interviews/analyses with other participants
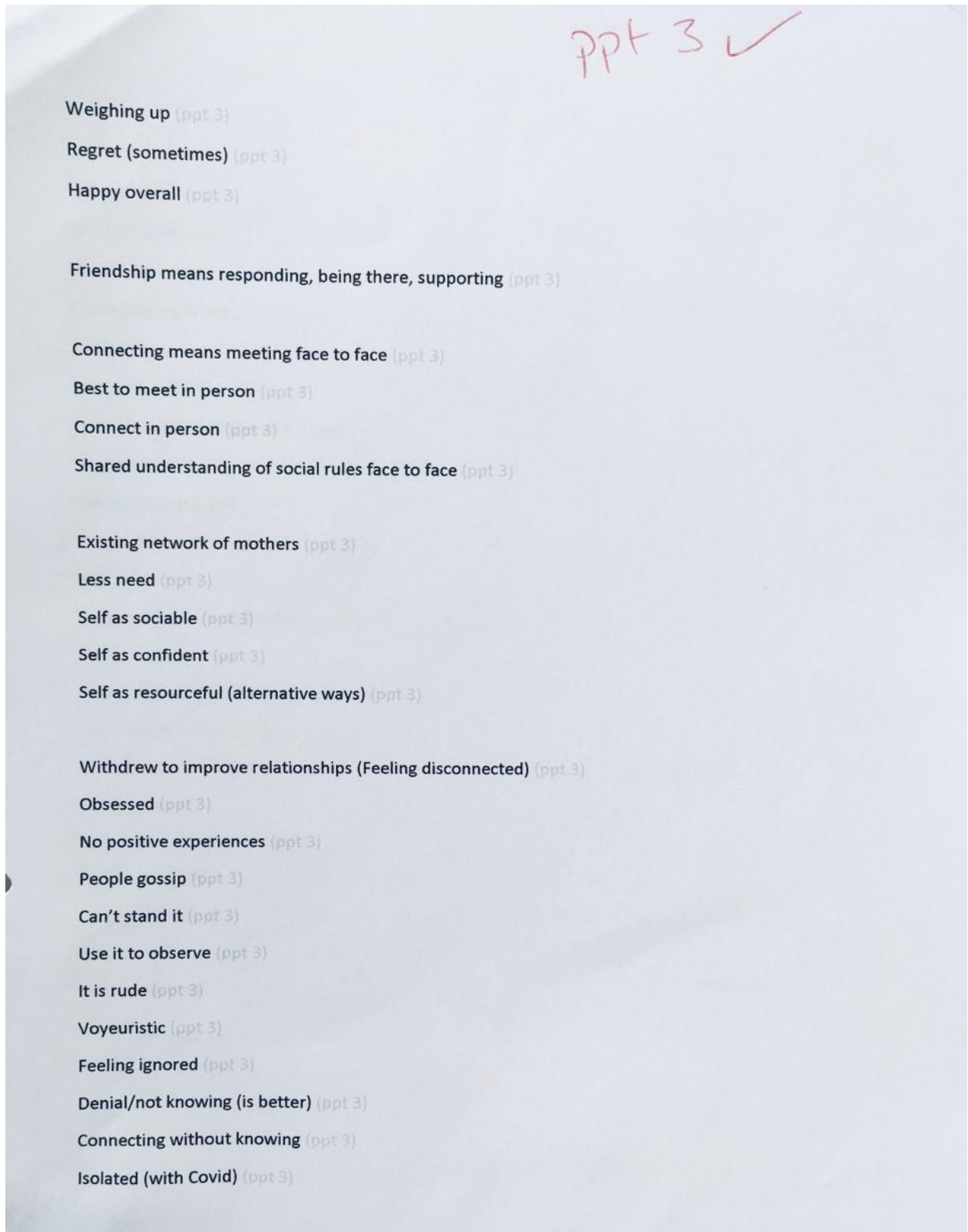
-Sarah's experience of SNS being supportive and a safe space is one that connects with what others have said in interviews *("It's all moderated and they have rules…you're supposed to be very respectable of others and: "we're not here to judge, we're here to support""*). In fact, this sense of connection seems to be the biggest draw for these new mothers....perhaps amplified by lockdown (!)

- Sarah also talked about ignoring/**dismissin**g that which she didn't agree with ("*...if I were to actually interact with a post it would be one that I agree with...I just ignore the others"*). This reminds me of the way other mothers reflect on managing and **navigating SNS**- at times this requires dismissing what one reads, at times it requires only accessing groups or elements of SNS that feels **safe**.

Appendix I. Abridged transcript with initial comments and emerging themes

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Appendix J. Example of clustering emergent themes and generating subthemes from analysis of a transcript

ppt 3 ✓

Weighing up (ppt 3)

Regret (sometimes) (ppt 3)

Happy overall (ppt 3)

Friendship means responding, being there, supporting (ppt 3)

Connecting means meeting face to face (ppt 3)

Best to meet in person (ppt 3)

Connect in person (ppt 3)

Shared understanding of social rules face to face (ppt 3)

Existing network of mothers (ppt 3)

Less need (ppt 3)

Self as sociable (ppt 3)

Self as confident (ppt 3)

Self as resourceful (alternative ways) (ppt 3)

Withdrew to improve relationships (Feeling disconnected) (ppt 3)

Obsessed (ppt 3)

No positive experiences (ppt 3)

People gossip (ppt 3)

Can't stand it (ppt 3)

Use it to observe (ppt 3)

It is rude (ppt 3)

Voyeuristic (ppt 3)

Feeling ignored (ppt 3)

Denial/not knowing (is better) (ppt 3)

Connecting without knowing (ppt 3)

Isolated (with Covid) (ppt 3)

Pain (ppt 3)

Feeling upset (ppt 3)

Feeling frustrated (ppt 3)

Completely ignored (ppt 3)

Really angry (ppt 3)

Regret (ppt 3)

The vulnerable self (Sensitive topic) (ppt 3)

Trusted (ppt 3)

The questioning self (ppt 3)

Questioning motivation (ppt 3)

Ignored (ppt 3)

Expected support and understanding (ppt 3)

Feeling like an idiot (for trusting) (ppt 3)

Experienced as sickening (ppt 3)

Feeling disgusted (ppt 3)

Feeling sad (ppt 3)

Lack of compassion (ppt 3)

Lack of empathy (ppt 3)

Trusted them (ppt 3)

A wall (ppt 3)

Not pleasant (ppt 3)

Not nice (ppt 3)

Not fair (ppt 3)

Avoid pain (ppt 3)

Self-protection (ppt 3)

More control (ppt 3)

Instagram more private (ppt 3)

Less voyeuristic (ppt 3)

Posts infrequently (ppt 3)

Posted about child (ppt 3)

Photo sharing (ppt 3)

Receive prompts, more protected (Desire to connect locally) (ppt 3)

1. Pain / Emotional experience.

2. Relational theme

3. Resolution

4. Feeling rubbish as a Mum.

Dear participant,

I am writing to you because you took part in my research study exploring first-time mothers' experiences of using social networking sites (SNS). Thank you again for agreeing to participate in this study and for being so open and thoughtful during the interview. I hope to publish the research findings in a peer-reviewed journal to increase parents, healthcare professionals, and researchers' understanding of how new mothers negotiate the effects of SNS.

The study:

I interviewed ten new mothers about their experience of using SNS. I used a research method called Interpretative Phenomenological Analysis (IPA) to analyse the interview transcripts. I hoped this type of analysis would add to the currently limited literature on this topic by sharing the meanings new mothers make of their SNS experiences.

The results:

The results of this research are my interpretation of conversations during interviews. A different researcher may have drawn different conclusions from the interviews. The results do not apply to everyone interviewed, but the overall themes may be relatable to more participants. The analysis resulted in five superordinate themes, including feeling connected, experiencing pain, navigating SNS to create safety, lack of trust, and unable to disconnect.

Table of themes:

Super-ordinate themes	Themes
F. Feeling connected	11. Connecting with mothers with shared experience
	12. Support and information
G. Experiencing pain	13. Emotional pain
	14. Idealised version of motherhood and self-criticism
H. Creating a safe space	15. Limiting access
	16. Boundaried sharing
	17. Dismissing aspects of SNS
I. Lack of trust	18. Protect my child
	19. It's not real
J. Unable to disconnect	20. Addictive/compulsive

A. Feeling Connected

This theme captured first-time mothers' experience of feeling connected with others who shared their experience through their use of SNS. This was important as they adapted to their new identity. Belonging to an online community was an opportunity for participants to have their experiences normalised and validated, their practices approved, or to receive advice and information when feeling uncertain in their new role.

> *"There are little nuggets that you see that you think, actually, we've all found it tough…it's comforting and reassuring to know that other people are actually finding it tough as well."*

> "*When you're on the 13th night feed and just going like: "is this normal"...then you get a dozen messages saying: "oh I totally remember this...you've got this.""*

B. Experiencing pain

This theme captured the painful experiences discussed by participants. At times, painful feelings resulted from seeing idealised/perfect accounts on SNS and mothers judging themselves as falling short, not being the perfect mother, or not having the perfect baby. Other painful feelings appeared to stem from how other SNS users responded to what participants posted, particularly a lack of response, a lack of being seen/heard, not being borne in mind or empathised with.

> *"With WhatsApp...you can see that the person has read your text, but they are ignoring you...I'd rather not know…because it's quite upsetting...[it] makes me really angry...I wish I'd never told you...It was quite a sensitive matter which I decided to, you know, to open up...I felt like an idiot as well...quite sad...with the lack of empathy…there's no compassion"*(Marie).

C. Creating a safe space

This theme captured how participants navigated SNS in specific ways to protect their sense of self while also benefiting from SNS. New mothers limited access, limited sharing, and dismissed that which conflicted with their needs/beliefs to protect themselves. This involved being very cautious when considering where to seek support on SNS, while others withheld more vulnerable parts of the self or dismissed elements of SNS which they anticipated would create pain.

"I've been a sharer on social media, [but my child] is obviously the closest thing to my heart, so sharing that would be a big deal to me....if someone was to say something or to think something about her, I'd be devastated"(Lisa).

D. Lack of Trust

This theme captured a lack of trust, which included not trusting the intentions of the companies who owned the SNS sites, and a sense that they did not trust all internet users. Participants felt responsible for their child's safety and wanted to protect them from the various adverse effects of SNS.

"It's a bit scary I think...want to protect her from being tracked, being advertised at, being...you don't know what they could do with information about people"(Michelle).
"I personally don't post photos of [my child]. I suppose I don't really trust Facebook...what happens to these photos, you know, I don't want them to be accidentally accessed by some, I don't know, paedo gang"(Sarah).

E. Unable to disconnect

Despite participants sharing challenging experiences using SNS, most of these new mothers continued to access these sites. At times, some mothers took time out from SNS, but most participants reported being unable to disconnect from SNS completely. This compulsion appeared to relate to their daily routine as a mother, such as experiencing boredom, isolation, or being stuck on the spot when breastfeeding. For others, experiencing validation or anticipating loss kept them connected to SNS.

"I am on it quite a lot and it's more just like addictive, scrolling, like my husband's like: "what the hell are you doing on it all the time?" I'm like: "I don't know""(Mel).
"I toyed with the idea of leaving it on several occasions, but I would miss those sorts of groups, particularly for work, [they]are quite a good support network...I fear missing out on something "(Laura).

I hope that some of these results fit with what you wanted to share during your interview. Thank you once again for kindly taking part in this research. I wish you and your family all the best in the future.

Yours Sincerely,
Deirdre O'Keeffe