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WOMEN'S EXPERIENCES OF PREGNANCIES THAT WERE NOT PLANNED

Section A

Factors that impact on the risk of experiencing postnatal mental health difficulties for women who had an unplanned pregnancy: A review of the literature.

Word count: 7983 (+107)

Section B

Pregnancies that were not planned: an exploration of the experience from the perspective of women postnatally.

Word count: 7978 (+461)

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

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Summary of the Major Research Project

Section A is a systematic literature review, examining possible factors which may impact on the risk of experiencing postnatal mental health difficulties for women who had an unplanned pregnancy. Sixteen papers were found to be relevant for inclusion in the review. Findings are summarised under six key themes; pre-existing mental health difficulties, sociodemographic factors, mother's perception of the pregnancy, obstetric factors, social factors and paternal factors. Findings are discussed in relation to their clinical relevance, and recommended further research is outlined.

Section B is an empirical study using Interpretative Phenomenological Analysis to explore the experience of a pregnancy that was not planned, for women postnatally. Eight first time mothers who had a baby aged between six and twenty-four months were interviewed. Five subordinate themes, with subthemes, are discussed in the findings. These include unique considerations for women who had a pregnancy that was not planned. Limitations of the study and research and clinical implications are considered.

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Section A: Literature Review

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Abstract

Research suggests that women who experience an unplanned pregnancy (UP) are at higher risk of postnatal mental health difficulties. This review aimed to widen the understanding of this association by examining factors which impact on the risk of women who had an UP experiencing postnatal mental health difficulties. A systematic search of four databases resulted in sixteen papers meeting the inclusion criteria. Findings are organised under six themes: Pre-existing mental health difficulties, sociodemographic factors, mother's perception of the pregnancy, obstetric factors, social factors and paternal factors. There was substantial heterogeneity in the variables examined. Tentatively, it can be suggested that the risk of experiencing a postnatal mental health difficulty may be increased in mothers who (i) experience a mental health difficulty before or during pregnancy; (ii) are younger in age (iii) are unmarried (iv) have less social support and lower relationship quality (v) have a baby where the father is violent or who perceive the pregnancy as being unwanted. Further quantitative research should examine factors more thoroughly, and qualitative data is needed to capture women's experiences of unplanned pregnancies. The findings have clinical relevance for professionals needing to assess and support women at risk of experiencing mental health difficulties.

Key Words: Mothers, unplanned pregnancies, perinatal mental health

Introduction

Perinatal Mental Health

The experience of pregnancy and transition to motherhood can be abundant in positive emotions, although this is not the case for all women. In fact, one in five mothers who are pregnant or in the perinatal period within the United Kingdom (UK) experience a mental health difficulty (National Health Service ['NHS'], n.d.). Mental health difficulties experienced by women during pregnancy or within one year of giving birth are termed as 'perinatal mental health difficulties' and can include antenatal and postnatal depression, anxiety, obsessive-compulsive disorder, post-traumatic stress disorder (PTSD) and postpartum psychosis (Mind, 2020).

Provision of appropriate mental health support within the perinatal period has been recognised to be inadequate in the UK, with the NHS reporting that only 40% of women had access to specialist perinatal mental health support five years ago (NHS, n.d.). The Everyone's Business Campaign led by the Maternal Mental Health Alliance (MMHA, n.d.) has highlighted this insufficient provision and has campaigned for "consistent, accessible and quality care and support" for women across the UK during the perinatal period. Over recent years perinatal mental health has gained traction and the NHS has made commitments to improve the care offered to women and their families. The NHS Mental Health Implementation Plan (NHS, 2019a), details improvements including increasing the provision of specialist perinatal support to mothers with babies up to 24 months old, improved access to psychological therapies for women and their partners, and the establishing of maternity outreach clinics across the country (NHS, 2019b).

Risk factors that may increase the likelihood of women experiencing a perinatal mental health difficulty have been identified; women having a history of mental health difficulties,

having inadequate social support and having an unplanned pregnancy (National Collaborating Centre for Mental Health, 2018). Understanding these risk factors, and the interplay between them, is essential if women are to be offered appropriate support and if associated negative implications are to be reduced. These include an increased risk of maternal suicide, poorer child outcomes and difficulties with mother-baby interactions (Federenko & Wadhwa, 2004; Ohoka et al., 2014).

Pregnancy Intention

Pregnancy intention is a fundamental factor which can affect the experience and transition to parenthood. Within perinatal literature, various terminologies with different definitions are used when describing pregnancy intention. Literature includes definitions of pregnancies described as unplanned or unintended, under which mistimed, unwanted, undesired, or mothers feeling 'ambivalent' are used as further descriptors. There are inconsistencies in how these terms are used, and examples of definitions provided in various literature can be found in Table 1.

Table 1

Pregnancy Intention Definitions

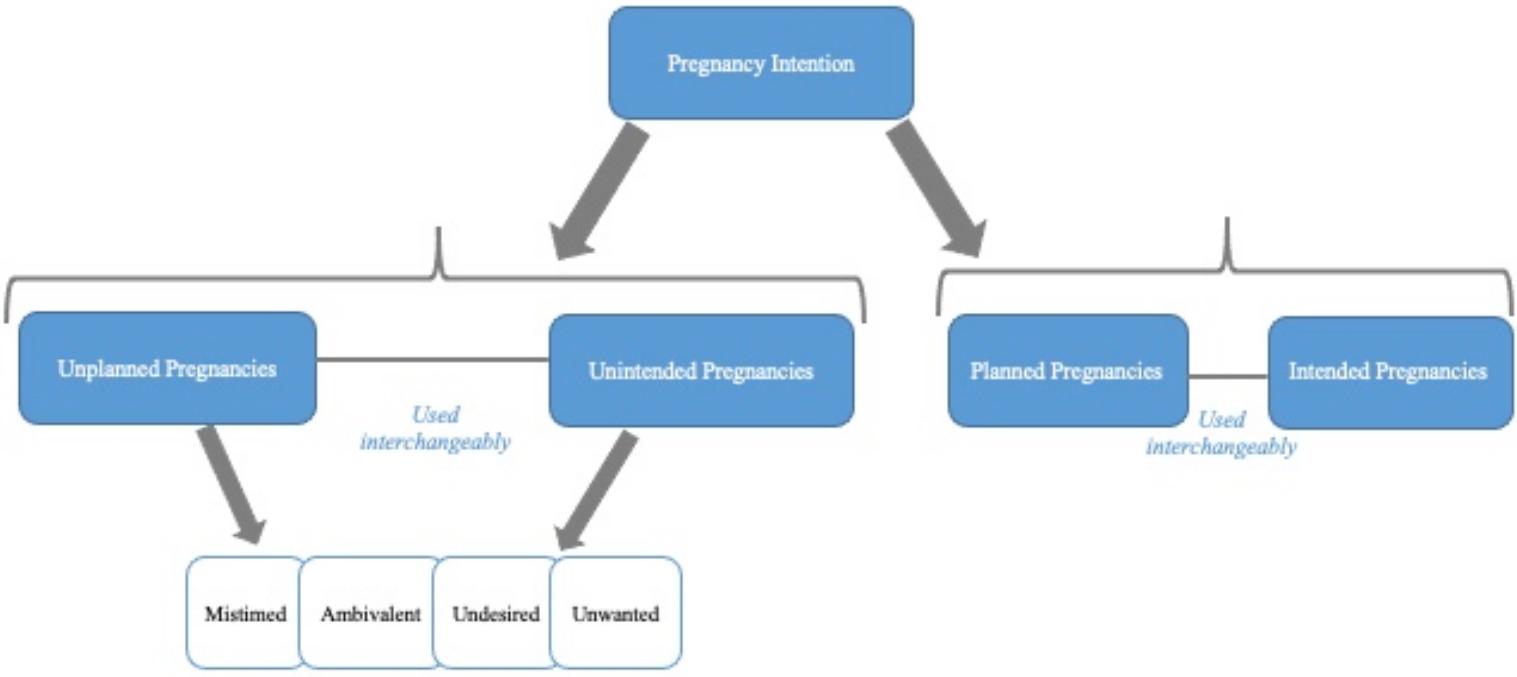
Pregnancy Term	Definition
Unplanned	"Pregnancy just happened, pregnancy was an accident, timing not good, becoming pregnant despite efforts to use birth control, result of 'stupidity' or 'lack of responsibility', pregnancy was something that was not supposed to happen, did not discuss with partner, wanting birth spacing further apart" (Fischer et al., 1999) "The term 'unplanned pregnancy' used in this study refers to mistimed pregnancies and unwanted pregnancies" (Karaçam et al., 2011) "An unplanned pregnancy is defined as pregnancy occurring earlier than the desired time or occurring when no more children are desired at the time of conception." (Yanikkerem et al., 2013)
Unintended	"Unintended pregnancies can be grouped into two categories: those that were not desired at the time the woman became pregnant (mistimed) or those that were not desired then or at any time (unwanted)" (Orr et al., 2000) “In surveys done periodically, a pregnancy was considered unintended if it occurred sooner than desired or if it was not wanted at all” (Bearak et al., 2020) "Unintended (i.e. unwanted or occurring before the woman had intended to become pregnant)" (Dietz et al., 1999)
Mistimed	"If she says that she wanted another pregnancy, but not at that point in time, it is considered mistimed" (Stanford et al., 2000) "A pregnancy is classified as mistimed if the woman did not want it at the time it occurred, but might have wanted it at some time later" (Pulley et al., 2002) "Those that were not desired when the woman became pregnant" (Orr et al., 2000)
Unwanted	"If a woman states that she wanted no more children for the rest of her life, a pregnancy is classified as unwanted" (Stanford et al., 2000) "If a woman reports that a pregnancy was unwanted when it occurred and that she had not ever wanted to have any other children, the pregnancy is classified as unwanted" (Pulley et al., 2002)

	"Those that were not desired then or at any time" (Orr et al., 2000) "Not financially stable or no financial support, lack of other support from partner, being unmarried, impediment to finishing school or maintaining a job, diffidence to having another baby, guilt over being dependent on others for support, perceived inability to cope with the pressure of being a single mother, anxiety over physical changes associated with pregnancy, too young, wanting father's support but not sure he is the right person to commit to, just not happy" (Fischer et al., 1999)
Ambivalent	"Those who neither agreed nor disagreed with at least two statements were classified as having the least defined attitudes toward becoming pregnant (ambivalent)." (Brückner et al., 2004) "The ambivalent are characterized as those who accept being pregnant without any enthusiasm, those who change their negative assessment to be positive or accepting, and those with contradictory feelings." (Faulkner, 2012) "Women who responded “wouldn’t mind getting pregnant,” “wouldn’t mind avoiding pregnancy” or “don’t know” were categorized as being ambivalent." (Kavanaugh & Schwarz, 2009)
Undesired	"We created a binary indicator for undesired pregnancy that flagged a pregnancy as undesired if a woman responded between 0 and 2 on the positive desire to get pregnant (low desire for pregnancy) and between 3 and 5 on the desire to avoid pregnancy scale (high desire to avoid pregnancy)." (Moseson et al., 2018)

The complexity and multi-faceted nature of defining pregnancy intention has been reported (e.g. Santelli et al., 2003). The terms ‘unplanned’ and ‘unintended’ appear in literature as interchangeable and overlapping categorisations of pregnancy intention, used to describe pregnancies that have been defined as mistimed, unwanted or undesired, as demonstrated in Figure 1. Following a review of definitions available for these two terms, no fundamental differences between the two were identified. Therefore, for the purpose of this review, the term ‘unplanned pregnancy’ (UP) is adopted, in line with the terminology adopted by Public Health England. Where other categorisations of pregnancy are needed to accurately report study findings, these are used. The term ‘unintended pregnancies’ is only used when referencing specific studies in the synthesis which adopted this categorisation; differentiated with the use of inverted commas.

Figure 1

Diagram of Intention Terminology



Unplanned Pregnancies

Statistics suggest that 45% of pregnancies in the UK are unplanned, with one third of births resulting from such pregnancies (Public Health England, 2018). Public Health England (2018) outline a number of risks associated with UP including; later access to antenatal care, obstetric complications, postnatal depression and low infant birthweights. Furthermore, there is an abundance of research which shows that an UP is linked with numerous negative implications for a woman and her child. Gipson et al. (2008), found that UP were associated with higher rates of child mortality, maternal depression and lower rates of breastfeeding. Research by Boden et al. (2015) suggested that UP can lead to poorer parent-child relationships, with teenagers resulting from an UP having lower scores on a parental attachment measure and lower scores on measures of parental care, when compared to those who were planned. Goossens et al. (2016) explored health behaviours in women who experienced an UP, finding that women with UP were less likely to take folic acid or vitamins before pregnancy, had a lower number of prenatal visits and were more likely to smoke in pregnancy. The theory of planned behaviour could be used to explain these outcomes (Fishbein & Ajzen, 1975), stating that intention is the best predicator of behaviour. Perhaps for women who have not planned to become pregnant, the intent to engage in antenatal health behaviours is lower.

Interestingly, research by Bouchard et al. (2006) suggests that couples who had an UP experienced improvements in their relationship functioning after the birth of a baby, which was seen to a lesser extent in couples who had planned their pregnancy. Although this study provides one example of a positive outcome relating to UP, the overwhelming majority of studies which examine pregnancy intendedness conclude negative implications for the mother and her child.

Unplanned Pregnancies and Maternal Mental Health

Three relevant reviews have been conducted which synthesise data examining how pregnancy intention impacts on maternal mental health. A review by Gipson et al. (2008) examined the effects of UP pregnancies on multiple aspects of child and parental health. The authors referenced three studies in their conclusions about perinatal mental health; suggesting that mothers with an UP pregnancy had a significantly increased risk of PND and anxiety and had lower levels of psychological wellbeing. They acknowledged that the evidence at the time was limited, and that the results should be interpreted tentatively.

Abajobir et al. (2016) conducted a meta-analysis of studies examining the link between UP and antenatal and postnatal depression. The review concluded that the prevalence of PND in mothers with UP was twice as high than for those mothers who had a planned pregnancy. In their discussion, the authors acknowledged that their analysis was limited and that there may have been other variables which contribute to the relationship which were not explored. A 2020 meta-analysis conducted by Qiu et al. examined the impact of UP on postnatal depression. They concluded that women with an UP were significantly more likely to experience PND compared to women who did plan their pregnancies. Again, Qiu et al. (2020) acknowledged that "the uncertainty of underlying mechanisms between UP and PND deserves further study".

Rationale and Aims

As outlined, three existing reviews have examined the relationship between UP and perinatal mental health difficulties; concluding that women who experience an UP are at higher risk of experiencing a postnatal mental health difficulty. These reviews have focussed on establishing the link between UP and mental health, without examining other variables which may impact on this association. Risk factors for perinatal mental health difficulties have been identified, such as those detailed by Public Health England (2018). However, these have not

been investigated specifically in relation to UP. This review therefore aims to expand the current understanding by examining factors which may impact on the risk of experiencing postnatal mental health difficulties for women who had an UP.

Scope

The review includes papers which have examined the association between pregnancy intention and postnatal mental health. Research that explored mental health in mothers two years postnatally, where intendedness terminology had been reported, were selected for the review. Inclusion of women up to two years postnatally was in line with the move for services to be accessible for this time period (NHS, 2019b), based on evidence provided by the Health and Social Care Committee regarding the cruciality of the first 24 months of a child's life (First 1000 days of life, 2019). Papers that were published in a peer-reviewed journal in English were included, with no specified date range applied to the search in order to be inclusive of all relevant literature.

Method

Systematic Search

A systematic search was conducted on the 12th and 13th November 2020. After an initial scoping of terms through a search engine, terms in Table 2 were used to conduct the search. The following databases were used; PsychInfo, ASSIA, Medline and Web of Science. A manual search of google scholar as well as reference lists was also undertaken. Inclusion and exclusion criteria can be viewed in Table 3.

Table 2

Search Terms

Search terms
unplan* OR unintend* OR unwant* OR mistime* OR undesired* OR intend* or unexpect* OR ambivalen* OR unintent* OR want* OR intent* OR plan* AND pregnan* OR birth* OR childbearing OR conceive OR conception AND mental health* OR wellbeing* OR mental illness* OR mental disorder* OR anxiet* OR depressi* OR distress OR maternal mental health* OR perinatal mental health* OR perinatal mental illness* OR postnatal mental health OR postnatal mental illness*

Table 3

Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
- Research which examines the relationship between UP and maternal mental health, and have found a significant relationship between these variables	- Research where women have experienced an UP who have gone on to have an abortion - Papers which explore mental health of women during the pregnancy, without follow-up data postnatally

- Papers which explore the mental health of women postnatally, where the child was up to 24 months old - Papers which reported findings in relation to at least one additional factor which may influence the relationship between UP and mental health - Qualitative, quantitative or mixed-methods papers - Papers where the measure of mental health or wellbeing is specified	- Papers which examined UP within a teenage population only (18 years or below)

Study Selection and Quality Assessment

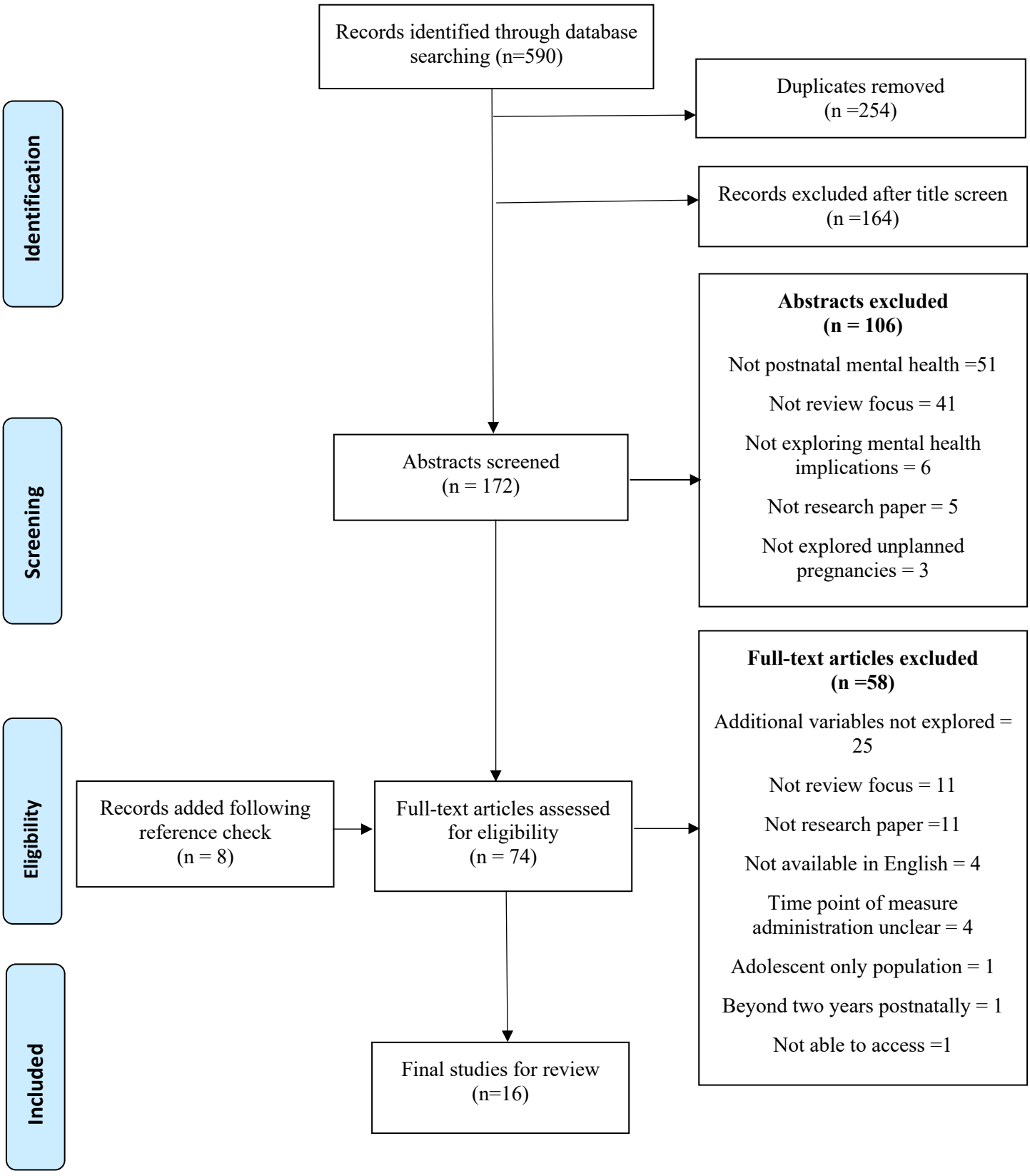
Following the search, papers were exported into RefWorks. Duplicates were removed, following which all titles, then abstracts, were screened. After adding eight relevant papers found from reference lists, 74 papers were read in full. Sixteen papers were then identified as satisfying the inclusion criteria. The process of the search can be viewed in Figure 2.

Papers were assessed for quality using the Critical Appraisal Skills Programme checklist for cohort studies (CASP, 2018) and the Checklist for Analytical Cross-Sectional Studies produced by the Joanna Briggs Institute (2017). These tools can be viewed in Appendices A and B. These quality assessments as applied to the studies can be viewed in

Appendix C and D. Although quality tools can be used to exclude studies, no papers were identified as having fundamental methodological issues following application of the checklists, therefore none were excluded on this basis. The quality tools were utilised to inform the critique of the papers.

Figure 2

PRISMA Diagram Demonstrating the Literature Search and Selection Procedure



Results

Table 4 presents key details and findings from the included papers, as well as methodological critiques. The studies included were from twelve countries: United States of America (n=4), Brazil (n=2), Iran (n=1), Japan (n=1), Holland (n=1), Ghana (n=1), Malawi (n=1), Korea (n=1), England (n=1), Hong Kong (n=1), Australia (n=1) and Bangladesh (n=1). All papers used a quantitative design. Thirteen of the studies used a cohort study design, two used a cross-sectional design and one used a cohort sub-sample from a randomised control trial. Although all studies were quantitative in design the variables examined in the studies, statistical analysis, the time points at which mental health outcomes were administered and definitions of pregnancy intention differed across each paper – meaning the results could not be compared statistically. Therefore, following guidance provided by Booth et al. (2016), a narrative synthesis of the literature is provided. Initially, this process involved summarising the key result of the studies regarding the association between postnatal mental health difficulties and pregnancy intention. Individual papers were then organised within the specific variables they examined, with key findings being summarised. In order to synthesise the results, variables were then clustered into relevant themes. Narrative explanations of the key findings of the papers were then written under each theme. These were made more succinct, resulting in the narrative presented below where specific variables examined in the papers are reviewed under six main themes, with conclusions provided at the end of each section summarising key findings.

Table 4

Study Summaries

Study	Author, year and location	Study Design	Sample description (n=number of women, average age)	Measure of pregnancy intendedness	Mental health variable and outcome measure/s used Extra factors observed	Time point when measures administered	Analysis	Findings	Strengths/Limitations
1	Abbasi, Chuang, Dagher, Zhu & Kjerulff (2013), USA	Longitudinal, prospective cohort study	n=2972, not stated	Question from Pregnancy Risk Assessment Monitoring System (PRAMS). "Thinking back to just before you got pregnant this time, how did you feel about becoming pregnant?" "Women were considered to have an unintended pregnancy if they wanted to be pregnant later or they did not want to be pregnant then or at any time in the future."	Postnatal depression (PND) Edinburgh Postnatal Depression Scale (EPDS) Pre-pregnancy anxiety/depression, sociodemographic variables including age group, race/ethnicity, education, marital status and poverty status	1 month postpartum	Logistic regression	Total number unintended: 952 PND more likely for women with unintended pregnancies compared to women with intended pregnancies. Unintended pregnancy was not independently associated with PND. PND associated with pre-pregnancy depression and certain demographic variables (e.g. age and marital status)	-Dichotomous definition of pregnancy intention -Pre-existing mental health difficulties self-reported based on whether health professional had diagnosed anxiety or depression +Large sample size +Reliable measures of PND utilised

2	Alikamali, Khodabandeh, Motesaddi, Bagheri & Esmaeili (2020), Iran	Cross-sectional study	n=400, not stated	Question from PRAMS. "Women who were not attempting pregnancy at the time of conception, and stated they had not intended a pregnancy at any future time were defined as 'unintended' pregnancy."	PND EPDS Postnatal anxiety Spielberger State-Trait Anxiety Inventory Gestational age, food status, demographic characteristics, type of pregnancy, delivery type, satisfaction with the gender	4 weeks to 6 months postpartum	Logistic regression	Total number unintended: 140 Women with an unintended pregnancy had 2.52 times the odds of experiencing symptoms of PND. Women identified as having an unintended pregnancy as well as having food insecurity (measured using a household food security questionnaire), lower gestational age and lower wealth increased the likelihood of PND. Women with an unintended pregnancy were more likely to experience symptoms of postpartum anxiety.	-Cross-sectional study, increasing chances of recall bias -Unclear exclusion/inclusion criteria -Unclear how confounders were accounted for +Reliable measures of postnatal mental health difficulties +Inclusion of anxiety measures

3	Baba, Kimura, Ikehara, Honjo, Eshak, Sato & Iso (2020), Japan	Cohort study	98,259, not stated	"When you recognized the current pregnancy, how did you feel? Very happy, unintended but happy, unintended and confused, troubled, and no emotion."	PND EPDS Women's age, parity, marital status, smoking habit, education, annual family equivalent income, intimate partner verbal violence at pregnancy, possible mental illness during a month prior to enrolment, history of antidepressant use for the past 1 year, and residential area.	1 month postpartum	Logistic regression	Total number unintended: 30,422 Women who reported an unintended but happy pregnancy, unintended and confused pregnancy or those with no emotion in response to pregnancy had an increased risk of experiencing PPD	- Missing categories on pregnancy questionnaire -Confounding variables not identified +Large sample size
4	Bahk, Yun, Kim & Khang (2015), Korea	Prospective cohort study	2076 women, 31.3 years	"Did you and your husband (or partner) plan the pregnancy or want to have the baby?" Response categories were: 1) only I as the mother of the baby planned or wanted the pregnancy, 2) only my husband (or partner) as the father of the baby planned or wanted the pregnancy, 3)	PND Kessler 6-item Psychological Distress Scales Marital conflict Father's participation in childcare Knowledge of child development	1 and 4 months postpartum, then 1 and 2 years postpartum	Propensity score analysis and inverse probability of treatment weighted	Total number unintended: 525 At the first four time points, women with an unintended pregnancy had a higher prevalence of depression than women with an intended pregnancy, but this difference was no longer present at two	-Dichotomous definition of pregnancy intention -Unclear how confounders were accounted for +Five follow ups +Generalisable sample

				both my husband (or partner) and I planned or wanted the pregnancy, and 4) neither my husband (or partner) nor I planned or wanted the pregnancy.				years postpartum. Overall, the difference of prevalence of depression between the two groups was not statistically significant over the study period. Martial conflict was the strongest mediator in the relationship between pregnancy planning and PND. PND was moderately explained by father's participation in childcare.	
5	Barton, Redshaw, Quigley & Carson (2017), England	Cohort study	12,462, 30.5 years	"Mother's stated pregnancy intention and her self-reported feelings when she found out she was pregnant were combined, to place her into a category of intention status as follows: "Planned";	Maternal psychological distress Rutter Malaise Inventory Relationship quality Perceived social support	9 months postpartum	Multivariable logistic regression	Total number unplanned: 4343 Psychological distress was increased in the unplanned group of mothers. This was highest in mothers who reported	-Only partnered women, lacks generalisablity +Clear accounting for confounding variables +Large sample size

				"unplanned, happy"; "unplanned, ambivalent" and "unplanned, unhappy"	Emotional response to pregnancy			ambivalent or negative feelings about the pregnancy.	
6	Blom, Jansen, Verhulst, Hofman, Raat, Jaddoe, Coolman, Steegers & Tiemeier (2010), Holland	Cohort study	4941, 31.0 years	Unspecified questionnaire. "Women reported whether or not the pregnancy was planned."	PND EPDS Maternal characteristics (including age and educational level), family functioning, psychopathological symptoms during pregnancy	2 months postpartum	Chi-squared, ANOVA and logistic regression	Total number unplanned: 871 In univariate analysis, women with and unplanned pregnancy were more likely to experience PND. After adjusting for psychosocial wellbeing and sociodemographic variables, the relationship between unplanned pregnancies and PND was no longer significant.	-Not stated how pregnancy intention was measured +Prospective measure of pregnancy intention +Generalisable sample

7	Brito, Alves, Ludermir & Barreto de Araujo (2015), Brazil	Prospective cohort study	1056, not stated	"Before you knew you were pregnant, which sentence best described you?: a) I was trying to get pregnant; b) I wanted to get pregnant; c) I wanted to get pregnant, but not then (untimely/mistimed); d) I did not want to get pregnant at all (unwanted); e) it made no difference either way". Women who chose one of the first two alternatives ("a" or "b") were classified as having an intended pregnancy, and those who chose item "c" or "d", as an unintended pregnancy. The "made no difference" answers were reclassified into one of these two categories based on the	PND EPDS Partner's controlling behaviour, social support, and parity	8 months postpartum	Logistic regression	Total unplanned (mistimed or unwanted): 635 Women who reported their pregnancy was unintended were 1.74 times more likely to present PND symptoms, compared with those who wanted to get pregnant. Risk of experiencing PND following an unintended pregnancy reduced when additional factors were added to the analysis, but the association remained significant.	-Unclear how confounding variables were accounted for -Categories of intention collapsed +Pregnancy intention measured prior to birth

				analysis of other variables."					
8	Chan (2019), Hong Kong	Cohort study	1083, 31.3 years	Intention was measured through mothers being asked whether their current pregnancy was intended or not with a "yes/no item"	PND Postnatal anxiety and stress Depression, anxiety and Stress Scale (DASS) Father involvement, Intimate Partner Violence during pregnancy, and social support	4 weeks postpartum	T-tests Logistic regression	Total unintended: 178 Mothers with unintended pregnancies reported significantly higher levels of PND symptoms than mothers with intended pregnancies. Postnatal anxiety was not found to be significantly associated with unintended pregnancies	-No mention of confounding variables -Dichotomous measure of pregnancy intention -Low retention rate +Representative sample +Inclusion of anxiety measure
9	Faisal-Cury, Menezes, Quayle & Matijasevich (2017), Brazil	Prospective cohort study	701, 25 years	'Was this pregnancy planned?' Categorised into either planned or not planned. Planned pregnancy was used for	PND Self-report questionnaire (SRQ-20)	6 to 18 months postpartum	Logistics regressions	Total unplanned: 562 Women with unplanned pregnancies had 2.5 more risk of being depressed	-Dichotomous report of pregnancy intention -Women followed up at varying points up to 18 months postpartum

				women who was attempting pregnancy at the time of conception. Unplanned pregnancy was used for women who were not attempting to get pregnant at the time of conception, even if she intended to become pregnant in the future.	Sociodemographic characteristics and obstetric information			during both assessments (during pregnancy and postpartum) when compared to women with a planned pregnancy. This association was only present if mother's had experienced depression during the pregnancy.	+Pregnancy intention measured prior to birth
10	Gariepy, Lundsberg, Miller, Stanwood & Yonkers (2016), USA	Prospective cohort study	2487, 31 years	Interviewers assessed pregnancy intention by asking women whether their pregnancy was planned ("Was this pregnancy planned? Yes/No"), and whether they thought it was a good time for them to be pregnant ("Do you think this is a good time for you to be pregnant? Yes/No")	PND, anxiety and panic disorder World Mental Health Composite International Diagnostic Interview Timing of the pregnancy	8 weeks postpartum	Multivariable logistic regression	Total unplanned: 987 Planned pregnancies not occurring at a good time, were significantly associated with PND. Pregnancies that were unplanned and poorly timed were significantly associated with PND. Poorly timed pregnancies were associated	-Dichotomous measure of pregnancy intention +Pregnancy intention measured prior to birth +Sample recruited across large number of clinics +Inclusion of anxiety measure

								with Generalised Anxiety Disorder.	
11	Hall, Barrett, Copas, Phiri, Malata & Stephenson (2018), Malawi	Cohort study	3986, 25.1 years	London Measure of Unplanned Pregnancy Pregnancies were categorised as unplanned, ambivalent or planned	PND Self-Reporting Questionnaire (SRQ) Previous episodes of depression, intimate partner violence.	28 days postpartum	Multivariable risk regression	Total unplanned: not stated Increasing levels of pregnancy intention were significantly associated with a reduced risk of high levels of depression. Intimate partner violence and previous episodes of depression increased the risk of higher levels of depression.	-Unclear total number of unplanned pregnancies +Psychometric measure of pregnancy intention used +Prospective study design +Large sample size
12	Leathers & Kelley (2000), USA	Cohort study	124, 30 years	Pregnancy intention was assessed using a modified item from the National Survey of Family Growth. Response categories include I) wanting the pregnancy at that time, 2) not wanting the	PND Center for Epidemiological Studies Depression Scale (CES-D) Relationship distress Social support	3-4.5 months postpartum	Independent t-tests and Pearson's correlation	Total unintended: 41 Unintended pregnancy accounted for a significant pro-portion of the variation in women's post-	-Small sample size from one city -Confidence intervals not reported -Women with past mental health difficulties excluded

				pregnancy at that time, but wanting a pregnancy in the future, 3) not wanting the pregnancy at that time and being undecided about the future, and 4) wanting never to have a pregnancy.	Partner's perception of pregnancy			partum depressive symptoms PND symptoms were significantly associated with their partner's perception that a pregnancy was unintended, even after controlling for depressive symptoms during pregnancy.	-Only cohabiting couples included +Pregnancy intention not dichotomous +Inclusion of father's report of pregnancy wantedness
13	Najman, Morrison, Williams, Anderson & Keeping (1991), Australia	Prospective cohort study	8556, not stated	"How well do the following statements describe how you felt when you found out you were pregnant?" Options were: I felt overjoyed, I would have preferred not to become pregnant, I felt unhappy, I felt it was the worst thing that could have happened to me. Women were also required to choose one of the following: I planned to get	Maternal mental/emotional state Delusions-Symptoms-States Inventory (DSSI) Mothers' age, income, marital status or parity	3-5 days after birth, 6 months post birth	Log linear modelling procedure	Total not wanted: 365 Mothers of unwanted children had higher rates of anxiety and depression than those with wanted children. The magnitude of the mental health differences between the two groups: (a) diminished over the period of the follow-up, (b) may be partly attributable to the	-Emotional reaction to pregnancy not reported in results +Large sample size +Measure of anxiety reported +Two follow ups +Prospective measure of pregnancy intention

				pregnant at this time, I meant to avoid pregnancy at this time, I wanted to get pregnant at this time, my method of family planning failed.				prior poor mental health of women	
14	Suh, Ma, Dunaway & Theall (2015), USA	Secondary, cross-sectional study	5549, not stated	"Thinking back to just before you got pregnant, how did you feel about becoming pregnant?'' The answer scales included (1) ''Wanted to be pregnant sooner''; (2) ''Wanted to be pregnant later''; (3) ''Wanted to be pregnant then''; (4) ''Did not want to be pregnant then or in the future.'' Variables collapsed into three levels: wanted (options 1 and 3), mistimed (option 2) and unwanted pregnancy (option 4).	PND Five options derived from LaPRAMs responses to the question ''In the months after your delivery, would you say that you were...'' were used as indicators to measure self-reported post-partum depressive symptoms (PPDs). Partner's intentions/perceptions of the pregnancy	Up to 9 months postnatally	Multivariate logistic regression, Bivariate analyses and Chi-squared	Total mistimed or unwanted: 2868 Women who had mistimed or unwanted pregnancies were more likely to have severe PND than mothers who wanted to be pregnant. Mothers who wanted the pregnancy but the partner did not were significantly less likely to report severe PNDs, while those who did not want the pregnancy but the partner did were significantly more	-Unstandardised measures of PND used -Not prospective measure of pregnancy intention, increasing chances of recall bias +Not dichotomous measure of pregnancy intention

								likely to report severe PNDs.	
15	Surkan, Strobino, Mehra, Shamim, Rashid, Wu, Ali, Ullah, Labrique, Klemm, West Jr & Christian (2018), Bangladesh	Secondary analysis from randomised community trial	31,422, not stated	"Did you want to become pregnant now?". Options were 'wanted now', 'mistimed' or 'unwanted'	PND Five postnatal questions were used, adapted from the Patient Health Questionnaire (PHQ-9) and the Center for Epidemiologic Studies Depression Scale (CES-D) Husband's perception of the intendedness of pregnancy	Between 5 and 8 months postnatally	Bivariate risk ratios	Total unintended (mistimed and unwanted): 5565 Women reporting unwanted but not mistimed pregnancies were at greater risk for postnatal depressive symptoms. Maternal perceptions of her husband not wanting the pregnancy was associated with a higher risk of PND.	-Partner perception of pregnancy captured by mothers -Partnered women only included, reduced generalisability -Unclear how confounding variables were controlled for +Large sample size
16	Weobong, Asbroek, Soremekun, Danso, Owusu-Agyei, Prince & Kirkwood	Cohort study	13,360, not stated	Not stated. Determined as planned or unplanned	PND PHQ-9 Sociodemographic and socioeconomic information, obstetric history, birth factors (such as place of delivery) and baby	Between 4 and 12 weeks postnatally	Logistic regression	Total unplanned: 6,282 Unplanned pregnancies were a risk factor for experiencing PND. However, unplanned	-Unclear how pregnancy intention was measured -Unclear how confounding variables were accounted for +Large sample size

(2015), Ghana	factors (such as baby's sex)	pregnancy was not associated with PND when added into analysis with factors of marital status and ethnic group.

What is the association between unplanned pregnancies and postnatal mental health difficulties?

Twelve of the papers included a measure for postnatal depression (PND). In all of these studies, there was an association between UP and PND, with women at a higher risk of experiencing PND when they had experienced an UP, or UP accounting for a significant proportion of women's PND symptoms. This association was found at various time points, ranging from four weeks postpartum to two years postpartum. One study (Barton et al., 2017) included a measure of maternal psychological distress defined as; "a state of emotional suffering characterised by symptoms of depression and anxiety" (p.2, Barton et al., 2017), therefore this paper was deemed to be relevant for inclusion. Mothers who experienced an UP had a higher prevalence of psychological distress at nine months postpartum when compared to mothers who had planned their pregnancy. Four of the papers included a measure of postnatal anxiety. In all but one of the papers (Chan, 2019), women who experienced an UP were at higher risk of experiencing postnatal anxiety when compared to mothers who had a planned pregnancy. Chan (2019) was still included in the review as a significant relationship between 'unintended pregnancy' was found with PND.

Which factors impact on the risk of experiencing postnatal mental health difficulties for women who had an unplanned pregnancy?

This section summarises the key findings of the research papers in answer to the main review aim, organised under six themes. The factors included in each paper can be viewed in Appendix E, with the variables distinguished as either having been controlled for as a confounding variable or reported within the analysis results section. It is beyond the limits of the review to comment on every confounding variable included for every study. Confounding variables were included in the main synthesis if included in more than one study.

Pre-existing Mental Health Difficulties

Five of the studies in this review included a mother's previous experience of a mental health difficulty (prior to pregnancy or antenatally) when examining the link between postnatal mental health difficulties and UP.

Abbasi et al. (2013) used secondary data analyses from a cohort study in order to establish whether 'unintended pregnancy' was associated with PND in first-time mothers. In analysis, following pre-pregnancy anxiety and depression being controlled for, authors found that the association between PND and 'unintended pregnancy' was no longer significant. Although women who had an 'unintended pregnancy' were more likely to have PND, this was not independent of mothers having previous mental health difficulties. Similar findings were observed in the study by Faisal-Cury et al. (2017). Using a prospective cohort design, they controlled for a range of variables while examining the relationship between UP and PND. They found that the association between UP and PND was only present if the mother had also had depression during the pregnancy. As discussed by the authors, these results might be explained by the fact that characteristics which increase the likelihood of PND are also linked with increased chances of having an UP.

Hall et al. (2018) also found that previous episodes of depression in mothers who had an UP increased the risk of PND. The study used the London Measure of Unplanned Pregnancy (LMUP) to assess pregnancy intention in a sample of women from Malawi. As part of the analysis, previous episodes of depression were added to multivariable regression model and this factor increased the risk of PND in women with an UP. This study has unique strength in including a psychometric measure of pregnancy intendedness, the LMUP, with the validated Chichewa version being used.

Leathers and Kelley (2000) also controlled for antenatal mental health in analysis. This was inputted as a control variable, reported as the only variable which significantly affected the relationship between pregnancy intention and mental health. No further analysis of this variable is presented, therefore it can only be tentatively suggested that antenatal mental health difficulties had an impact on the relationship in this study. This study had a relatively small sample size (n=124), using participants from one city location, therefore the generalisability of these findings is limited. Finally, Baba et al. (2020) stratified the associations between pregnancy intention and PND by antenatal mental illness. For mothers who had possible antenatal mental illness, there was an increased risk of PND in women who felt their pregnancy was 'unintended' and were confused, though not for other categories of pregnancy intention adopted in the study. Further exploration of these findings are included under the theme 'women's perception of the pregnancy'.

Conclusions. Five papers considered pre-existing mental health difficulties when exploring the relationship between UP and PND. Evidence suggests that a woman having pre-existing mental health difficulty and an UP will put her at greater risk of experiencing PND. This is in line with previous research suggesting that experiencing mental health difficulties prior to pregnancy is as a risk factor for experiencing difficulties postnatally (National Collaborating Centre for Mental Health, 2018). No conclusions regarding the association between UP, anxiety and pre-existing mental health difficulties can be made, due to none of these studies including postnatal anxiety in their analysis.

Sociodemographic Factors

In fifteen of the papers, sociodemographic factors were reported as being 'controlled for' in analysis. Through inclusion as potential confounding factors, the authors acknowledged that they have some influence on the association between UP and mental health (Frank, 2000).

It is difficult to conclude more about the degree of this influence or which sociodemographic factors may increase the likelihood of a mental health difficulty, due to the limits of the results sections of these studies. However, out of the fifteen studies which include sociodemographic factors as a confounder, six of the studies did report the impact of these factors in the results. These studies are discussed in turn below.

Alikamali et al. (2020) reported that women identified as having an 'unintended pregnancy' as well as having food insecurity, lower gestational age and lower wealth had an increased likelihood of experiencing PND. Demographic characteristics were also found to impact on the experiencing of postnatal anxiety in their study, with women with a lower gestational age being significantly more likely to have symptoms of anxiety. Hall et al. (2018) also included sociodemographic factors in their multivariable regression analysis. They stated that with each additional year of maternal education, the risk of experiencing high levels of PND decreased. Age was not added to the model in this study, so it is difficult to conclude whether it was the access to education which decreased the likelihood of PND, or whether a further variable, such as age, may be influencing. This highlights a difficulty with making conclusions regarding demographic characteristics; there are limitations with establishing the underlying mechanism which may be responsible for the difference in association seen.

In the study by Blom et al. (2010), after initially adjusting for prenatal psychosocial wellbeing, the authors additionally adjusted for maternal ethnicity and age, education level of the mother and family income. After these adjustments were made, the risk of PND for those with an UP was no longer significant. The demographic variables were not analysed separately to wellbeing, however, the relationship between UP and PND was less significant than the relationship reported when only wellbeing was adjusted for. This indicates that maternal characteristics appeared to be at least partly responsible for the relationship between UP and PND. The generalisability of these findings is a limitation of this study; women from

disadvantaged groups were acknowledged as being underrepresented in the sample. Given that evidence suggests that women from disadvantaged backgrounds may be at a higher risk of PND (Cooper & Murray, 1998), it could be that the found associations were underestimated.

Weobong et al. (2015) included marital status and ethnic group in the multivariable analysis with pregnancy intention and PND. After the inclusion of these two factors, the association between UP and PND was no longer significant. Being unmarried and being from the non-indigenous ethnic group, increased the risk of PND. Results suggest that these factors were more responsible for PND than the intendedness of the pregnancy. 'Unintended pregnancy' was also no longer significantly associated with PND once demographic variables were controlled for in Abbasi et al. (2013). Being a younger mother and not being married were associated with higher levels of PND. The relationship between the different variables in this study was acknowledged as being complex. Women who were younger and not married were more likely to experience an 'unintended pregnancy', which are identified risk factors of PND, so the authors tentatively suggest that these sociodemographic factors were the reasons for the association, rather than the intendedness of the pregnancy.

Finally, the study by Najman et al. (1991) adjusted for mother's age, income, marital status and parity. After this adjustment, the findings of women having higher levels of anxiety and depression at six months postnatally was not affected, providing contrary evidence to the studies outlined above as these demographic factors did not influence the association between UP and mental health difficulties.

Conclusions. It could be suggested that sociodemographic factors do influence the relationship between UP and postnatal mental health difficulties, acknowledged through the inclusion of sociodemographic factors as confounding variables in all but one of the papers. Considering variables examined in more than one study, there appears to be evidence that being

unmarried and being younger in age when experiencing an UP may increase the likelihood of experiencing postnatal mental health difficulties. It is important to highlight a key difficulty in understanding the direction of the associations, as certain key demographic factors (such as age) may increase the likelihood of having an UP. It therefore becomes impossible to determine whether it is the demographic characteristic, or the UP which causes an increased risk of a postnatal mental health difficulty. However, it can tentatively be suggested that being younger, being unmarried and having an UP will put a woman at a higher risk of PND. Again, limited evidence is provided for how these factors impact on other postnatal mental health difficulties.

Mother's Perception of the Pregnancy

Three papers included a mother's perception of the pregnancy in their study; either through capturing their emotional response to the pregnancy or through measuring a mother's perception of the pregnancy timing.

Baba et al. (2020) used a sample from a nation-wide birth cohort study, aiming to establish the relationship between pregnancy intention, a woman's feeling towards her pregnancy and PND. Women were categorised into one of the following groups in relation to their pregnancy; very happy, 'unintended' but happy, 'unintended' and confused, troubled or no emotion. Results concluded that women in one of the latter three groups were more likely to have PND than those who reported that their pregnancy was intended and were very happy. Women who reported they were troubled were the most likely to have PND. The authors also stratified the associations between feelings towards pregnancy and PND by antenatal mental illness. For mothers who had possible antenatal mental illness, there was an increased risk of PND in women who felt their pregnancy was 'unintended' and were confused, though not for other categories of pregnancy intention adopted. The categories used for mother's responses to pregnancy are a key limitation in this study. Not all combinations of intention and feeling were

available for women to choose; for example, women couldn't select that they were experiencing an 'unintended pregnancy' but were very happy. This means women may have been forced to select a category which did not capture their experience, reducing the reliability of the study. This may also highlight possible researcher bias; with an assumption about women's emotional responses to an UP being made.

Barton et al. (2017) used data from a prospective cohort study to examine whether there was a relationship between pregnancy intention and psychological distress at nine months postpartum. As well as capturing pregnancy intendedness, the study captured women's reactions to finding out they were pregnant. Within the UP group, women were further categorised into having a positive, ambivalent or negative reaction. Prevalence of psychological distress was higher in mothers who had an UP and were ambivalent (21.4% of mothers) and in those with an UP with negative feelings (22.4% of mothers), in comparison to the prevalence of psychological distress for women who experienced a planned pregnancy (9.6%).

Mother's perceptions of the timing of pregnancy was included in the study by Gariepy et al. (2016). Women's perception of the timing of their pregnancy were categorised into either 'well-timed' or 'poorly timed'. Pregnancies that were UP and poorly timed were significantly associated with a major depressive episode. Pregnancy timing was found to be a better predictor of poor maternal psychological distress than pregnancy intention, suggesting a woman's perception of the timing of the pregnancy may be more important to assess. The study highlights the importance of "multi-dimensional assessments of pregnancy planning and timing" (p93, Gariepy et al., 2016).

Conclusions. It seems that understanding a women's perception of her pregnancy, alongside intention, could be an important factor to consider when assessing risk of postnatal

mental health difficulties. However, the current evidence is limited, with a mother's perception of her pregnancy being captured differently across the papers, making it difficult to draw more definite conclusions.

Social Factors

Three papers examined how social factors may relate to the studied association. These factors are further divided into: relationships; social support; and mixed variables.

Relationships. Bahk et al. (2015) examined how three factors (marital conflict, father's participation in childcare and mother's knowledge of infant development), influenced the relationship between UP and maternal mental health difficulties. After adjustment for the three mediators, the likelihood of a woman experiencing PND following an UP decreased. Marital conflict was found to be the strongest mediator, across multiple time points. The longitudinal nature of this study was advantageous in providing data up to two years postnatally.

Barton et al. (2017) examined the role of relationship quality (within a romantic partnership) in the association between UP and mental health. Adjustment for relationship quality reduced the odds of psychological distress experienced by mothers, suggesting its potentially protective role. The Golombok Rust Inventory of Marital State was used to assess relationship quality – a measure found to have good reliability and validity (Rust et al., 2007).

Social Support. Barton et al. (2017) adjusted for perceived social support in their analysis. For women who had an UP and were happy, the association between UP and psychological distress was no longer significant when social support was adjusted for. This provides some evidence of the protective factor of social support for women. However, for women who had an UP and felt ambivalent or unhappy, the association between UP and psychological distress remained even after adjustment for social support. This presents a mixed picture regarding the protective nature of social support; it may be able to reduce negative

outcomes for some, but perhaps cannot compensate for all the difficulties which may be associated with UP. Barton et al. (2017) used partnered women only in their study, so these findings cannot be applied to women who have experienced an UP with a different relationship status.

Mixed Variables. A prospective cohort study by Brito et al. (2015) included the variables 'partner's controlling behaviour', 'social support' and 'parity' in analysis. Less controlling behaviour, more social support and parity reduced the likelihood of a woman experiencing PND. Although the risk of experiencing PND following an 'unintended pregnancy' was reduced when the above variables were included in analysis, the association remained significant. The three variables were not examined separately, so it is not possible to conclude by how much each of these variables reduces the risk of PND, or whether one reduces the risk more than another. This further highlights a study design limitation; when variables are not examined independently, it is not possible to draw conclusions about the degree to which factors contribute.

Conclusions. Tentatively, it can be suggested that social factors do influence the association between UP and postnatal mental health difficulties. It seems that increased social support, as examined in two papers, may have a protective role. Relationships with a partner may also influence; with partnered women in 'higher quality' relationships with less conflict reducing the risk of experiencing a postnatal mental health difficulty.

Paternal Factors

Paternal factors were examined in six papers. These are further divided into participation in childcare, partner violence, and partner's perception of the pregnancy.

Participation in Childcare. Further to examining marital conflict, Bahk et al. (2015) included father's participation in childcare as another possible mediator in the relationship

between pregnancy intention and PND. Four items from a "husband's family role performance questionnaire", were used to assess a father's involvement. Results indicated that maternal depression score was moderately explained by father's participation in childcare. Caution needs to be taken with the interpretation of this finding, as the tool used for measuring father's participation has no identifiable psychometric properties.

Partner Violence. Studies by Hall et al. (2018) and Chan (2019) concluded that Interpersonal Violence (IPV) during pregnancy was significantly associated with PND for women with an UP/'unintended pregnancy'. Within Chan's (2019) study, however, when father involvement was included in the analysis, IPV was no longer a significant impacting factor on the experience of PND. This highlights the potential protective nature of father involvement for mothers who may have an 'unintended pregnancy' and have experienced IPV. Although highlighting a protective role of father involvement, the combination of variables used in this study seem unusual and make the results somewhat confusing to interpret. Furthermore, a retention rate of 62.3% was reported, potentially reducing the validity and generalisability of the study due to a large number of women not partaking in the follow-up.

Partners' Perception of Pregnancy. In Leathers and Kelley (2000) postnatal depressive symptoms were significantly associated with partner's perception that a pregnancy was 'unintended'. Similar findings were reported in the study by Suh et al. (2015), with mothers who perceived their partner to not want the pregnancy being 2.4 times more likely to report severe PND when compared to mothers who perceived their partners to want a baby. The study also reported the impact of discordance between father's perceptions of the pregnancy and the mother's perception. Mothers who did not want the pregnancy but whose partner did were significantly more likely to report severe PND. The inclusion of fathers in the sample of this study is a strength of the paper. Similarly, Surkan et al. (2018) examined parents' perceptions of a pregnancy and potential impact of discordance between maternal and paternal perceptions.

An increased risk of PND was also observed in mothers who did not want the pregnancy but perceived their husbands to want it. Father's perception of the pregnancy was reported by the mother in this study, perhaps reducing the reliability of this factor.

Conclusions. Evidence presented in these six studies would tentatively suggest that paternal factors influence the relationship between UP and postnatal mental health difficulties. Findings suggest that the father's perception of the pregnancy influence the relationship between UP and mental health difficulties, with women who perceive the father to not want the baby, being at an increased risk of PND. An increased risk of PND is also evident for discordance in wantedness between parents. There is limited evidence to suggest that father involvement may serve as a protective factor for women who have an UP, though this is only explored in one paper where the measure used is not validated. Perhaps unsurprisingly, interpersonal violence, appears to increase the risk of PND for those with an UP. No evidence for the association between paternal factors and postnatal anxiety is presented.

Obstetric Factors

Seven studies included an obstetric factor in their analysis (Suh et al., 2015; Gariepy et al., 2016; Barton et al., 2017; Faisal-Cury et al., 2017; Hall et al., 2018 and Alikamali et al., 2020). These factors included: type of delivery, time since last birth, preterm births and birth weight of baby. Six studies controlled for these factors – acknowledging that they are likely to influence the association between UP and postnatal mental health difficulties. Similarly to studies controlling for sociodemographic factors, it is not possible to make further conclusions about how these factors may influence the association, and further research is needed to explore how these factors may increase or decrease the risk. One study (Hall et al., 2018) reported how obstetric factors influenced the association between UP and mental health, finding that the risk of symptoms of PND were increased for mothers who were having their first baby.

Conclusions. Through the inclusion of obstetric factors as control variables, there is an acknowledgement of their possible influence in the association between UP and postnatal mental health difficulties. Given the analyses included the factors as confounders, it is not possible to make any further conclusions about the direction of influence of these factors. One study suggested that being a first-time mother and experiencing an UP puts women at a higher risk of mental health difficulties, however there is not sufficient evidence presented to state this conclusively.

Methodological Critique

Research Design

All of the studies in the review used either a cross-sectional or cohort study design. Prospective cohort studies have particular strengths, allowing for the outcome of interest to be measured at multiple time points. This facilitates the examination of the longer-term impacts of experiencing an UP, as was the case in studies by Bahk et al. (2015) and Najman et al. (1991). Two papers (Alikamali et al., 2020 and Suh et al., 2015) used cross-sectional designs. These studies measure variables at one time point, advantageous for reducing the likelihood of participant dropouts. However, these studies required women to recall their pregnancy intention and other factors retrospectively, potentially introducing recall bias.

The majority of the papers in this review used regression analysis. While useful in looking at the associations between two variables, this analysis does not allow for causal inferences to be established. It is not possible to conclude that variables observed in the studies are the cause of the risk of postnatal mental health difficulties, only that the variables appear to impact on the association. Furthermore, when it is not possible to randomly assign individuals to an experimental group, as is the case in pregnancy studies, individual differences between groups of participants will exist. This increases the chances of results being confounded by

variables that are not of relevance in the studies. Although a limitation, the inability to randomise participants is unavoidable in such non-experimental studies.

The papers included in this review varied in how factors were reported in the results. In some papers it was stated that variables were 'controlled for' as confounding variables, while others reported the way in which a particular factor influenced the association. Within the papers which stated the variables were 'controlled for', it can be assumed that these were included due to previous evidence that they correlated with both the predictor of interest and the outcome (Frank, 2000). In studies where the association between UP and mental health was no longer significant following controlling for particular variables, it can be tentatively suggested that these may influence the association, however, it is not possible to determine whether it was the variable itself leading to the change or another associated factor.

Sample

A strength of many of the papers was the large sample sizes used. Many of studies used data from national birth studies, resulting in data being available from a high number of women (e.g. Weobong et al., 2015; Barton et al., 2017; Baba et al., 2020), increasing the reliability and generalisability of the findings. Furthermore, the generalisability is increased through the data being collected from a range of countries with differing levels of socioeconomic wealth. It is important to note, however, the experiences of UP and mental health may vary substantially across these different countries due to differences in healthcare and other sociocultural factors. Consideration about the country context therefore needs to be taken when applying findings.

Defining Pregnancy Intention

Across the papers, pregnancy intention was defined and measured in a variety of ways. In three of the papers (Najman et al., 1991; Blom et al., 2010; Weobong et al., 2015), the way in which pregnancy intention was established was not stated at all, making it impossible to

examine the reliability of how this was measured. Some studies categorised pregnancies in a dichotomous way; either planned or unplanned (e.g. Blom et al., 2010; Bahk et al. 2015), which could be considered a less reliable way of measuring intention as women were forced to choose between two options which may not represent their experience. Only one study (Hall et al., 2018) used a measure with established psychometric properties. This study used the LMUP, which provides a score of planning/intention ranging from zero to twelve. This could be considered more valid and reliable, rather than requiring women to choose between dichotomous categories. Evidence suggests that rather than a binary distinction between planned or unplanned, women see themselves on a continuum of pregnancy intention (Aiken et al., 2016).

Recall Bias

As well as the discrepancies between how pregnancy intention was measured, the time point at which pregnancy intention was established also differed. In some studies, this was measured during pregnancy (e.g. Baba et al., 2020), while others asked women to recall whether intendedness post birth (e.g. Bahk et al., 2015). It is possible retrospective answers were subject to recall bias, as women often overestimate the intention of their pregnancy following delivery (Joyce et al., 2002).

Outcome Measures

A variety of outcome measures were utilised. In the majority of the studies, measures of postnatal mental health difficulties were validated and reliable. The EPDS was used in five studies, a measure which has been found to have good reliability and validity as a screening tool (Navarro et al., 2007). However, for some of the measures of influencing factors, it is not possible to evaluate the psychometric properties of tools used, as this data is not available. For

example, Bahk et al. (2015) used four items from a "husband's family role performance questionnaire", for which there were no psychometric properties available.

Again, there was variability in the time points at which mental health measures were administered. Measures were administered from four weeks postpartum to 24 months postpartum. While this provides evidence of the impact of UP across the perinatal period, it is more difficult to make comparisons across the papers regarding the association at any given time point. Furthermore, only one paper (Bahk et al., 2015) included a follow-up at two years postpartum, so further evidence is needed in order to conclude the association between UP, mental health difficulties and other factors at this juncture. Finally, it is important to note that the majority of the papers examined the relationship between UP and PND. Only four of the papers included a measure of postnatal anxiety, highlighting the limited evidence available to examine the relationship, and influencing factors between UP and anxiety, or any other mental health difficulty.

Limitations of the Review

This review included studies which examined postnatal mental health difficulties up to the age of two years postnatally. Although this age range is in line with UK guidance of the time length in which perinatal services are offered to women, based on the 'First 1000 days' report (Health and Social Care Committee, 2019) the review has not examined literature beyond this time period. Pregnancy intention categories were considered within the umbrella term 'unplanned'. The helpfulness of examining different categories of intention separately has been highlighted (Baird et al., 2018), however, there is currently not sufficient literature to examine such sub-categories separately.

Furthermore, for the purpose of this review, the term 'unplanned' was chosen in order to be in keeping with language used by the Public Health England, observed to be

interchangeable with the word ‘unintended’. It’s possible, however, that these words may have nuanced differences. While this could be considered a limitation of this review, it also highlights a fundamental issue with pregnancy intention literature, as terms vary greatly across studies. Finally, only one researcher conducted the systematic search and quality tools in this review, therefore there is likely to be a higher level of subjectivity in how the papers were included and reviewed, than if more than one researcher had been involved.

Discussion

Previous review papers have provided evidence that UPs lead to poorer mental health outcomes for women postnatally, however, the possible factors which impact on this relationship had not previously been explored. The aim of this review was to examine these factors, to expand the understanding of the complex relationship between pregnancy intention and postnatal maternal mental health. The key findings are first discussed under the main review aim and are regarded in relation to key psychological theory and research. Clinical and research implications are then examined. It is important to acknowledge that there is a potential complex interplay between pregnancy intention, postnatal mental health difficulties and other factors, which cannot be simplified and summarised concisely. This should be kept in mind throughout the reading of this section.

Which factors impact on the risk of experiencing postnatal mental health difficulties for women who had an unplanned pregnancy?

Women having experienced a mental health difficulty either before or during pregnancy appeared to be one of the key factors influencing the experiencing of mental health difficulties postnatally, with five papers evidencing this. This has previously been highlighted as a risk factor for women during the perinatal period (Royal College of Obstetricians and

Gynaecologists, 2017), therefore it is not unexpected that this combined with experiencing an UP, women are at even higher risk of experiencing a mental health difficulty.

Sociodemographic factors were included in all but one of the studies. Although only six of these reported how this factor influenced the experiencing of postnatal mental health difficulties, the inclusion as confounding variables across the studies is indicative of their relevance. Of the six studies which reported how they influenced the association between UP and mental health difficulties, women's age and marital status seemed to influence the relationship. This is in line with previous research suggesting that younger age is deemed to be a risk factor for PND (e.g. Redshaw & Henderson, 2013). This is suggested to relate to younger women being more likely to experience social challenges, such as being in more unstable relationships or having less financial resource (Swift et al., 2020).

The importance of not only assessing pregnancy planning, but also a mother's emotional response or perception of pregnancy timing was suggested in three studies. Each of these studies measured a woman's perception differently, so conclusive evidence about how this may influence the association is not currently available.

It can be tentatively suggested that increased social support and having a higher quality partner relationship can be protective for women who experience an UP. It is perhaps understandable that women with this higher level of social support would be less likely to have postnatal mental health difficulties, due to relationships being a source of emotional safety, positive affect and reassurance (Thoits, 1995; Rini et al., 2006). Hobfoll's theory of conservation of resources (1989) is relevant to consider in relation to these factors, suggesting that individuals who have more social resources fair better in stressful situations. Mothers who have a protective relationship or more support may be at lower risk of postnatal mental health difficulties than those without this resource.

Evidence presented about paternal factors highlights their importance. Unsurprisingly, experiencing intimate partner violence increased the likelihood of experiencing PND, which is in line with research suggesting domestic violence is a risk factor for mental health difficulties (National Collaborating Centre for Mental Health, 2018). Findings from three studies which included father's perceptions of the pregnancy suggests that this factor may have an influence. In circumstances where the father viewed the pregnancy to be unwanted, or where there was a discordance between the parental perceptions of the pregnancy, there was an increased risk of postnatal mental health difficulties. There is some evidence to suggest that a father's participation in childcare is a protective factor for the experiencing of PND, though further research would be needed to implicate this further.

Obstetric factors, similarly to sociodemographic factors, were controlled for in several studies. Again, including them as confounding variables suggests that these factors do have an influence on the association between UP and postnatal mental health difficulties, though it is difficult to draw conclusions about their underlying mechanisms. Hall et al. (2018) did report on one obstetric factor specifically in their results section, suggesting that first time mothers are at a higher risk of experiencing PND.

Overall, findings indicate that the relationship between UP and PND is more complex than perhaps suggested by previous reviews which have determined that experiencing an UP increases the risk of postnatal mental health difficulties. There does not appear to be a straightforward cause-and-effect relationship between UP and mental health difficulties; rather other related factors may be associated. The way in which these different factors have been examined varies greatly across the papers, making it difficult to conclude with certainty the degree to which factors increase or decrease the risk. Further exploration of the applicability and relevance of the findings is provided under clinical and research implications.

Clinical Implications

Despite the complexities of the association between UP and mental health difficulties, the findings have potentially significant implications for those working with women perinatally. When risk screening, it is essential that considerations beyond pregnancy intention are explored. Evidence suggests that women with pre-existing mental health difficulties are at particularly high risk which could be further elevated through a woman becoming pregnant at a time that was not planned. Furthermore, women of a younger age or those who are not married, also appear to be at higher risk. Alongside these factors, it could be important to assess women's response to being pregnant, the father's perception of the pregnancy and the social support available to the mother. Through identifying women at high risk, more timely and appropriate support could be offered. Those delivering services should be mindful of specific support needs for women and fathers experiencing an UP. For example, it may be relevant for women deemed to be at higher risk to be referred to services which offer social support, while men should have the opportunity to explore the impact of becoming a father unexpectedly. Clinical psychologists may have a role to play in offering support to parents in the perinatal period, and understanding specific needs is important in ensuring support is appropriate and person-centred.

It is important to note that only one study included in this review used a sample from the UK. Although findings from other countries are of importance, there may be some key economic, social and health differences between the countries. These findings may not be of the same relevance to services within the UK and therefore need to be applied taking into consideration contextual issues.

Research Implications

Many of the studies in this review included collecting data with women up to one year postpartum with only two studies including data beyond this time period. Further research is needed to determine the association up to two years postnatally and beyond. The majority of the literature examining the association between UP and mental health examine PND, with fewer studies including postnatal difficulties such as anxiety, and no papers including other difficulties such postpartum psychosis or PTSD. Research is needed to establish the association with other mental health difficulties.

Although this review did not intend to exclude qualitative or mixed-methods design, no suitable papers with these methodological designs were identified. Quantitative designs have strengths in their ability to include large sample sizes, objective measures, and associated generalisability (Queirós et al., 2017). However, qualitative research is concerned with "deepening the understanding of a given problem" (p.370; Queirós et al., 2017), aiming to explore the aspects of a particular experience which cannot be quantified. The voice of women's experience is lost within the studies included in this review, with the meanings, understandings and perceptions mothers make of the experience not being captured. There is still an imbalance in the number of qualitative and quantitative papers published in journals, with the latter being more likely to be published in top tier journals (Twining et al., 2017). This imbalance appeared evident through the conducting of this review, with the understanding of a woman's experience of an UP being limited.

Conclusions

Previously, reviews have concluded that experiencing an UP increases the risk of experiencing postnatal mental health difficulties, without exploring how other variables may influence this association. This review has provided a synthesis of the findings from sixteen

papers, exploring a range of factors which may influence the relationship between UP and postnatal mental health. It is essential that health care professionals take into consideration factors beyond pregnancy intention when identifying women who may be at higher risk of experiencing a postnatal mental health difficulty. It may be particularly important to consider a woman's past experience of mental health difficulties, her age, marital status, the social support she has available and paternal factors. As outlined in the NHS Mental Health Implementation Plan (NHSa, 2019), improving services offered to women within the postnatal period is essential in reducing the likelihood of poorer outcomes for women, families and children, and this review is relevant to these proposed improvements. Further research could examine the factors further, and qualitative studies should aim to capture the lived experience of women who have had an UP.

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Section B: Empirical Paper

Pregnancies that were not planned: an exploration of the experience from the perspective of women postnatally

Word Count: 7978 (+461)

A thesis submitted in partial fulfilment of the requirements of Canterbury Christ Church University for the degree of Doctor of Clinical Psychology and prepared for submission to the journal 'Birth: Issues in Perinatal Care'

May 2021

Abstract

Background: There is a substantial body of literature which outlines the negative implications of experiencing a pregnancy that was not planned, for women and their children. Existing research is primarily quantitative and therefore fails to represent the lived experience of women. This study aimed to address the gap in the literature, to explore how women make sense of the self, the experience and the transition to motherhood, following a pregnancy they did not plan.

Method: Interpretative Phenomenological Analysis was used in the study. Eight women participated in individual semi-structured interviews. All women were first-time mothers, with children aged between six months and two years.

Results: Five superordinate themes, with several subordinate themes each, emerged from the data. These superordinate themes are; 'A new reality', 'I wanted to plan it', 'From a woman to a mother', 'Others' perspectives' and 'Wouldn't change it for the world'. These are discussed in the results section.

Discussion: Findings suggest a number of dimensions to women making sense of their experience and self following a pregnancy that was not planned. Women made sense of their experiences being different to planned, as a new reality dawned. The perspectives of others seemingly linked to women integrating the new role of 'mother'. The acceptance of the journey was demonstrated through women speaking about their gratitude in relation to the experience and the joy gained through motherhood. Future research could capture the experiences of a wider group of women as well as fathers' experiences of pregnancies that were not planned.

Key Words: Mother, pregnancies not planned, transition to motherhood, identity

Terminology

Terminology used in the study was considered at length. A review of terms in pregnancy planning literature informed the decision that a word which may be presumptive of a woman's experience or perception of her pregnancy (such as 'unplanned' or 'unwanted') would not be used. The phrase 'pregnancies that were not planned' is instead utilised, to be inclusive of pregnancies which may be mistimed, unplanned, unintended, unwanted, ambivalent or any other associated term. The word 'planned' is in line with terminology adopted by Public Health England (2018) for describing such pregnancies. When describing research which has used other terminology, this is used to accurately reflect the study.

Introduction

Pregnancies That Were Not Planned

The experience of a pregnancy and transition to motherhood is an individual, varied and personal time in a woman's life. For some, this experience may have been anticipated for weeks, months or years, planned and considered before conception. For others, the experience may have been associated with feelings of ambivalence, perhaps not planned but also not prevented. For some women, a pregnancy and the transition to motherhood may be an unexpected life event happening without prior planning. An estimated 45% of pregnancies in the United Kingdom (UK) fall into these latter two descriptions, with one third of births resulting from an unplanned or ambivalent pregnancy (Public Health England, 2018).

There is a breadth of literature which examines the outcomes for women who experience a pregnancy that was not planned, which has informed Public Health England's guidance to 'support people to prevent unplanned pregnancies' (2018). This research includes examining how the pregnancy may impact on a mother's health behaviours (e.g. Gipson et al., 2008), her mental health (e.g. Grussu et al., 2005) and infant outcomes (e.g. Goossens et al., 2016). The

research identifies significant negative impacts on women experiencing a pregnancy that was not planned. For example, findings from a review by Gipson et al. (2008) suggest that women who experience a pregnancy that was not planned are less likely to attend antenatal health appointments and may struggle with bonding with their baby. Furthermore, a review by Qiu et al. (2020) concluded that women who experienced an unintended pregnancy were at a higher risk of postnatal depression.

Although the majority of literature regarding pregnancies that were not planned has been quantitative, two studies have explored the phenomena qualitatively. Gray (2015) explored the narratives of unplanned pregnancies within college aged women. The study compared the experiences of women who continued their pregnancy with those who chose to have a termination, using responses to an online survey to explore themes arising from the narratives given. Women who terminated their pregnancy had more pronounced narratives regarding the appraisal of the experience, with there being a notable element of 'secrecy' about their decision making. Results suggested that across both groups there were unique stressors for women who had unplanned pregnancies, identified as: physical discomfort, lack of control over important things in one's life and emotional disturbances. Although the research highlighted some unique aspects of a woman's journey with an unplanned pregnancy, this study did not provide an in-depth exploration of a woman's experience of the pregnancy and motherhood, and its ability to capture a richness of a woman's story was limited by the data collection method.

Mohammadi et al. (2018) also explored women's experiences of 'dealing with an unplanned pregnancy', using content analysis to analyse interviews conducted in Iran. The sample included women who had aborted their pregnancy, as well as those who had delivered their baby within the previous six months. Both first time mothers and multiparous mothers were included. This study also focussed on woman's decision-making process in relation to proceeding with the pregnancy or terminating. Four themes were discussed in the findings:

disbelief and negative affective responses, fragile justification (included rationalisation of a termination decision), perceived supports and post-decision dissonance. Although providing some insight into the experience, the sample included both women who continued with their pregnancy and those who chose to terminate; the study was primarily focussed on the decision-making process women can face following an unplanned pregnancy.

Positive Implications

Although limited, there is some literature to suggest positive aspects of experiencing a pregnancy that was not planned. Bouchard et al. (2006) suggested that couples who experienced an unplanned pregnancy had higher levels of functioning in their relationship post-birth, when compared to couples who had a planned pregnancy. The study reported that parents who had an unplanned pregnancy had more accurate, negative predictions of parenthood, which led to a more positive adjustment after their baby was born.

Examining literature about the positive growth which can occur following a stressful life event is perhaps relevant when considering pregnancy. On the Holmes and Rahe (1967) Social Adjustment Scale, pregnancy is considered to be within one of the top 15 most stressful life events. Updegraff and Taylor (2000) explored the ways in which life can be positively impacted following such stressful events, including positive benefits for self-concept, relationships with social networks, personal growth and life priorities. These domains may indeed be relevant to women experiencing a pregnancy that was not planned.

Transitioning to Motherhood

Originally described by anthropologist Raphael in 1975, ‘matrescence’ presents a theory about the transitionary period women go through when becoming a mother. Termed as such to be similar to the word ‘adolescent’, it recognises the significant physical, emotional and social changes a woman goes through antenatally and postnatally. This is acknowledged as a

universal period experienced by women as they make sense of a new identity while managing the multi-faceted impact of becoming a mother. Such transitionary theories are important to consider in the context of women not planning their pregnancy, as alongside universal aspects of motherhood, women are also making sense of this transition at an unexpected time. Mercer's (2004) four-stage model of transitioning to motherhood is also helpful to consider. The first stage is described as 'commitment, attachment and preparation' – taking place during and also before a pregnancy. Mercer discusses how a mother's transition to parenthood involves an 'intense commitment and active involvement' (p. 231) as a woman begins to prepare for her future role. With it being normal for women to be trying to conceive for up to a year when planning a pregnancy (NHS, 2018), it is interesting to consider the length of time women would perhaps be preparing for motherhood according to the first stage of Mercer's model. For a woman who has not planned her pregnancy, this preparatory period and opportunity to begin the transition to motherhood is likely to be substantially shorter.

Furthermore, research by Hopkins et al. (2014) suggests that maternal representations are activated in women upon deciding to plan a pregnancy. Maternal representations are considered to be the inner working model mothers have of their children, including her expectations of the relationship she will have with her baby. Maternal representations have been associated with the later quality of mother-child interactions (Zeanah & Benoit, 1995). Again, for women who have not planned their pregnancy, there is likely to be a shorter period of time where these maternal representations are activated.

Rationale

Although there is a body of literature exploring a woman's transition to motherhood in various contexts (e.g. Haynes, 2008; Hennekam et al., 2019; Bailey, 2000), there is little exploration about a first-time mother's experience of pregnancy and transition to motherhood,

when their pregnancy was not planned. Existing research examining a woman's experience of a pregnancy that was not planned has focussed on the decision-making process women may experience when considering a termination, and does not provide an understanding of how women make sense of the pregnancy or transition to motherhood when they have chosen to keep their baby. Quantitative data highlights the risks of negative outcomes following a pregnancy that was not planned, without capturing the women's voice within these experiences.

Aims

To explore women's sense of self, experiences and perceptions of motherhood following a pregnancy that was not planned.

Research questions:

1. How do women who have experienced a pregnancy that was not planned make sense of their self during the experience?
2. How do women make sense of the not planned nature of their pregnancy, in the postnatal period?

Method

Interpretative Phenomenological Analysis

Interpretative phenomenological analysis (IPA) is concerned with making sense of people's lived experiences of major life events (Smith et al., 2009). It employs an interpretative approach and takes a double hermeneutic position; the researcher seeks to understand and interpret a participant making sense of their experience (Smith et al., 2009). It assumes that "through careful and explicit interpretative methodology, it becomes possible to access an individual's cognitive inner world" (Biggerstaff & Thompson, 2008, p.4). Whilst other methods were considered for this project, IPA was considered to be the most fitting to meet the

aim to gain an in-depth understanding about women's lived experiences. Epistemologically, a critical realist position was adopted for the study – accepting that a phenomenon (in this case, pregnancy) exists irrespectively of it being conceptually examined, though individuals attribute different meanings to this given reality (Willig, 2016).

Design

Semi-structured interviews were used to gather data. The interview schedule (Appendix F) was constructed through consideration of the research aims, while following guidance by Smith et al. (2009) to be consistent with IPA methodology. During the schedule development, the researcher consulted with a midwife to establish what is commonly asked of pregnant women regarding pregnancy planning in antenatal appointments, informing Section C of the schedule.

Participants

In line with IPA guidelines, a purposive sampling strategy was utilised to seek a homogenous group (Alase, 2017). Homogeneity is sought to limit the variability of demographic factors in order for the psychological variability within the group to be examined more closely (Smith et al., 2009). Recommendations outline that "studies usually benefit from a concentrated focus on a small number of cases" (p.51, Smith et al., 2009); a sample size of n=8 was used. To reduce heterogeneity, women who were not first-time mothers were excluded, in recognition that the experience of pregnancy is likely to be different for those with more than one child. Further inclusion and exclusion criteria can be viewed in Table 1.

Women who self-identified as having experienced a pregnancy that was not planned were included. Participants were aged between 25 and 35 years old, with the age of their babies ranging from six months to two years old. Initially, the intention was to interview women whose baby was aged between the age of six and 12 months, aiming for as homogeneous

sample as possible. Due to initial difficulties with recruitment, the age range was amended. This was in line with literature emphasising the importance of the first 1000[1] days of a child's life (e.g. Leadsom et al., 2014). Full characteristics of the participants can be viewed in Table 2.

Table 1

Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
• Women aged over 18 years • First time mothers who self-identified with having experienced a pregnancy that was not planned • Women whose infant was aged between 6-24 months old. This lower age limit was included in recognition of the significant adjustment period that can follow post birth for a woman, with the intention of minimising the possibility of the interview having any adverse effects	• Women currently pregnant • Women who were not first-time mothers • Women who experienced a pregnancy that was not planned, following which they experienced a miscarriage or termination • Women who experienced a pregnancy that was not planned following being raped • Women who were currently accessing mental health support for postnatal mental health difficulties. These women were excluded in order to reduce the likelihood of the interview causing significant distress to those already experiencing difficulties, therefore ensuring the interview was in line with ethical guidelines • Women who were subject to current social care input related to parenting or child safeguarding

[1] Includes prenatal period

Table 2

Participant Characteristics

Pseudonym	Age at interview	Ethnicity	Marital Status	Employment status pre-pregnancy	Employment status post-pregnancy	Baby's age at interview	LMUP Score
Lara	33 yrs	White British	Partnered	Full-time	Unemployed	13 months	6
Claudia	30 yrs	White British	Partnered	Full-time	Part-time	7 months	5
Rosie	32 yrs	White British	Married	Full-time	Part-time	8 months	6
Cara	27 yrs	White Irish	Co-habiting	Full-time	Full-time	12 months	5
Anna	35 yrs	Asian British	Married	Full-time	Full-time	11 months	9
Sarah	26 yrs	White British	Co-habiting	Full-time	Full-time	6 months	3
Zoe	27 yrs	White British	Single	Full-time	Student	24 months	1
Olivia	25 yrs	White British	Married	Full-time	Part-time	13 months	4

Prior to the interview, women completed the London Measure of Unplanned Pregnancy (LMUP; Barrett et al., 2004). The LMUP is a measure of pregnancy intention which has been validated for use in the UK and is recommended by Public Health England (2018) as a tool to establish pregnancy intendedness. Guidance provided by Barrett et al. (2004) regarding the interpretation of scores suggests they can be divided into categories as outlined in Table 3. These categories can be further collapsed into a score of 0-9 being 'unplanned' and a score of 10 or above 'planned' (Hall et al., 2017). The scores were used to describe the sample, giving a crude indication of the participant's pregnancy intendedness. It was not adopted as an exclusion measure, however, no participant scored above nine on the measure.

Table 3

LMUP Scores and Associated Categories of Pregnancy

LMUP Score	Category of pregnancy
0-3	Unplanned
4-9	Ambivalent
10-12	Planned

Procedure

Ethical Considerations

Ethical approval was granted from the Canterbury Christ Church University ethical committee (Appendix H). Informed consent from each participant was obtained prior to the interview. Participants were reminded of the confidentiality of the data prior to interview commencement, which was stored on an encrypted memory stick and anonymised following transcription. Consent forms will be stored securely by Canterbury Christ Church University

for a year following the completion of the project before being destroyed. Raw data will be retained electronically for ten years, following which it too will be destroyed.

The possibility of the study invoking strong emotional reactions was considered and outlined in the participant information sheet (Appendix J). In the case of the interview invoking distress for a participant, the researcher would have firstly offered a debrief. If further support was deemed necessary beyond this, participants would have been given the contact information for one of the supervisors of the project[2]. Every participant was emailed a debrief sheet following the completion of the interview, containing details of further support organisations (Appendix K).

Participant Recruitment

Initially, recruiting women within a small geographical area was deemed preferable in order for interviews to be conducted face-to-face. This strategy was amended within six weeks of commencing recruitment following the lockdown announcements as a result of the Covid-19 pandemic and the consequent need for interviews to be conducted online. With this change in context, the inclusion criteria changed to include women from across the UK.

Participants were primarily recruited through social media. The study advert (see Appendix L) was posted on a total of 24 Facebook pages, selected through searching key words such as ‘mothers’, ‘mums’ and ‘mummy and baby’. If groups had been active within two months of the search, permitted posting of adverts as reviewed through page ‘group rules’ and had more than 200 members, a message was sent to the ‘admin’ of the page, requesting consent to post the research advert. If permission was granted, the advert was posted. A Twitter account was also created. Tweets advertising the study were posted throughout the recruitment months. An Instagram page was created for the same purpose. A ‘snowball’ recruitment approach was

[2] No participants needed this debrief support

also adopted; the advert was shared beyond the original social media group to increase the reach.

Those interested in taking part were invited to contact the researcher via email. In response, the information sheet was sent to participants. If participants replied stating they were willing to take part and fitted the inclusion criteria, the LMUP, demographic sheet (Appendix N) and consent form (Appendix O) were emailed. Participants were offered a £10 voucher as a thank you gesture for taking part, as well as being entered into a prize draw with the possibility of winning one of two £25 vouchers. Two participants were picked at random to receive the vouchers after completion of the interviews.

Interviews

Interviews took place individually via Zoom, a video call service, and lasted between 48 and 80 minutes. A semi-structured interview approach was used so that the researcher could ask questions flexibly throughout the interview and to allow for particular accounts or themes to be followed (Smith et al., 2009). Interviews were recorded via a Dictaphone and transcribed verbatim.

Data Analysis

Analysis followed IPA guidelines outlined by Smith et al. (2009). Firstly, transcripts were read multiple times to facilitate familiarity with the data. Exploratory comments were used to denote descriptive, linguistic and conceptual elements of the transcript. Following this, emergent themes were noted (using the words of participants to stay 'close' to the data). Connections between the different emergent themes were then sought – in order to cluster those with similarities into potential superordinate themes (Pietkiewicz & Smith, 2014). This process was repeated for each transcript. After each interview was individually analysed, patterns

across participants were identified. This led to the final superordinate and sub-themes identified in Figure 1.

Quality Assurance

Yardley's (2000) principles for conducting high quality qualitative research were referred to throughout. These are: sensitivity to context, commitment and rigour, transparency and coherence, impact and importance. Prior to interviewing, the researcher partook in bracketing interviews with a trainee clinical psychologist (Appendix P). This gave the opportunity for the researcher to reflect on their own biases, perceptions and expectations; helping the researcher to become consciously aware of what they may be bringing to the process (Sargeant, 2012). The researcher did not have personal experience of being a parent; though had assumptions about this being a challenging, but often positive experience through knowing others who had babies. Through assumptions about this experience, the researcher predicted that mothers were likely to reflect positively on some aspects of the experience if they were willing to come forward to participate in the study. Due to making assumptions about this experience rather than having been through it themselves, it's possible that the researcher may have missed asking particular questions which would have been thought about had they been a mother themselves. Utilising the supervision space allowed for these potential 'blindspots' to be identified. A benefit to the researcher not being a parent themselves meant they were able to be curious about aspects of the experiences being described without judgement or pre-conceptions that may have occurred were they a mother. In analysis stage, they were not looking at the findings through their own lens of motherhood, a potential benefit to ensuring the findings were driven by the data. The researcher's full self-reflection statement can be viewed in Appendix Q. The researcher also conducted a diary throughout the study (Appendix R), providing a further space for reflectivity and captured the immediate responses, thoughts and emotions experienced following an interview (Pietkiewicz & Smith, 2014).

Throughout the analysis process, excerpts of transcripts and draft themes were discussed with the research supervisors, giving space to explore possible interpretations of the data.

Results

Five superordinate themes with a total of fourteen subthemes resulted from the data (Figure 1). Where possible, theme titles use participants' words. Table 4 summarises the themes with demonstrative quotes.

Figure 1

Superordinate Themes and Sub-Themes

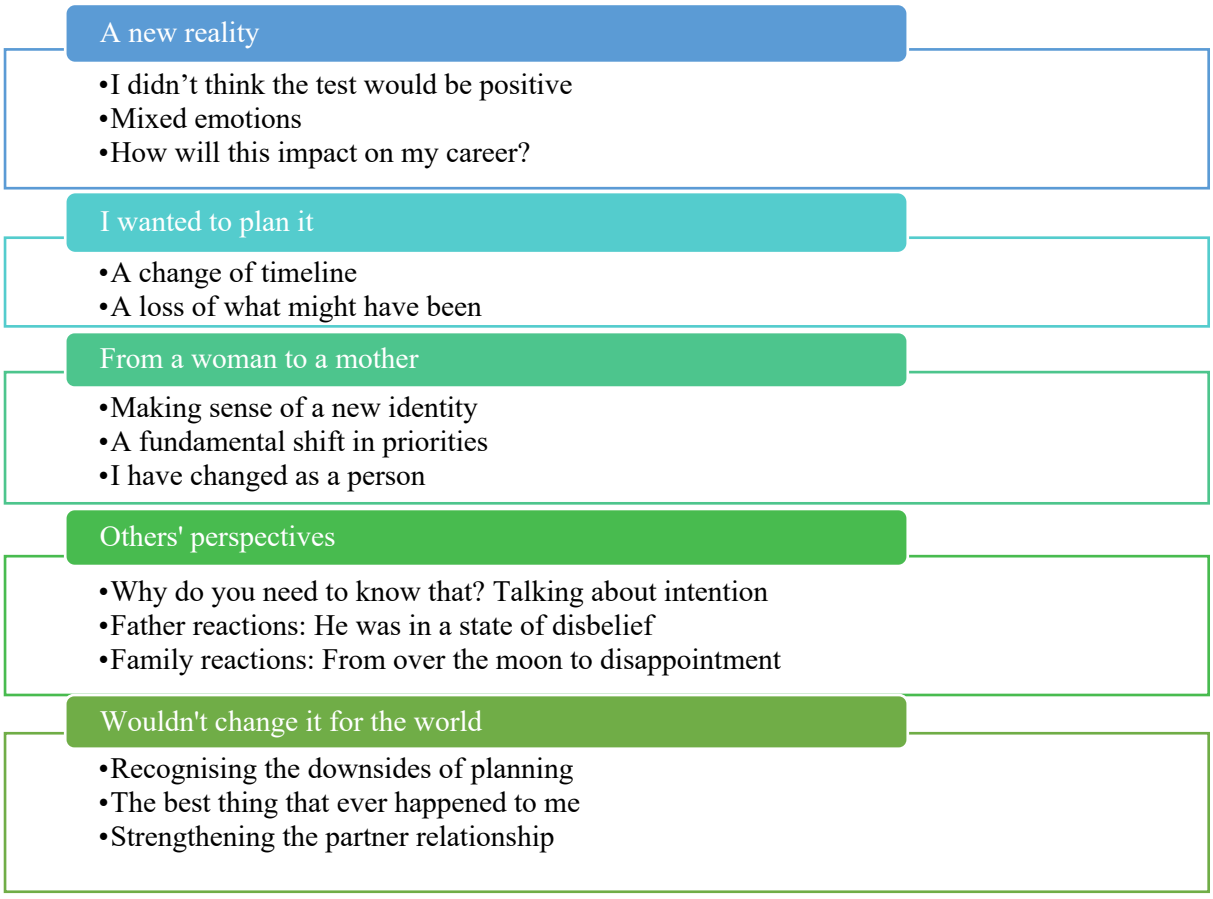


Table 4

Superordinate Themes with Subthemes and Example Participant Quotes

Superordinate theme	Subtheme	Participant Quotes	Number of participants contributing to the subtheme
A new reality	I didn't think the test would be positive	"And then…I don't know why you never think that it's, you're going, you know people get pregnant but you never think that you're going to be pregnant I don't know why. That was a surprise to me." (Cara) "…he knew I was taking one and he thought I was going to wait for him but I didn't cos I actually genuinely didn't think it was going to be positive." (Rosie)	Eight
	Mixed emotions	"Erm so I did it and it was positive and for me, a part of me was…I was like quite happy erm but at the same time I was really scared" (Lara) "Erm my first thoughts and feelings were er….'oh fuck' more than anything else. I was just, I was shocked." (Sarah) "Er so when I found out last January that I was pregnant erm I think both of us were quite scared erm I was excited but scared, so a bit ambivalent er sort of flitting back and forth I think with those feelings initially." (Anna)	Eight
	How will this impact on my career?	"I wasn't worried about my ability to be a good mum or to successfully raise a child, I was more worried about how it would impact on my career basically" (Cara) "Erm and be able to commute there…I can't just pick up and go oh I'm going to move up North with my son. Erm that point he'll be in primary school and I can't just take him away…and also that would then lead to potentially like y'know having to agree to like a court order for contact with his dad and things like that so that's kind of limiting erm and I think my position at the moment just	Eight

		kind of seeing where it goes but I know that it is going to be a lot more limiting than a typical student.” (Zoe)	
I wanted to plan it	A change of timeline	"Erm so I had no issues with thinking of being an older mum but for me it always felt like I… I wanted to get stuff out of the way first and I’d like wasted so long just working instead of thinking about like a future career that for me I just imagined doing the stuff that I want to do…and meeting someone and then there maybe like just sitting there and saying ‘do you want to have a child?’ and it being like a discussion like okay well we have…we have the money to have a child, relationship’s good er and stable and has been for a long time. Erm and y’know we've done everything else that we want to do solo…now there's stuff you want to do or that you would be happy to do with a child there as well." (Zoe) "yeah it was work because I really would have liked to be further down the line, to have felt a bit more established…and a bit like I…I didn't have such…looking at such a mountain…" (Claudia) "So timeline wise we…it was kind of…when we first got married and things and, so like a couple of years before pregnant we thought like oh late twenties like we, we thought oh it would be quite good to own a house before we got pregnant…" (Olivia)	Eight
	A loss of what might have been	"I was…for the first couple of weeks I think I was sort of grieving for the life I thought I was leaving behind." (Rosie) "Erm…*(pause)* I feel like…not, not regret cause obviously I’ve got *(baby)* and I love him kind of thing. But erm…I feel a little bit kind of disheartened when I think back when it came when it did still, just because of how it’s going to impact on the rest of my kind of training. Erm…yeah. And kind of going back to what I was saying about that that independence erm that I had before, again I just…regret not having those opportunities before becoming pregnant." (Sarah) "But I think my fear was even though I knew that it was more that I wanted people to understand that there may be a loss for me in terms of just even having	Seven

		um committed to this idea that I would finish and then do it sort of one after the other and that even though I know things don't happen like that there's something about honouring that and validating that I think." (Anna)	
From a woman to a mother	Making sense of a different identity	"So I'm quite looking forward to going back to work where y'know, as much as I'll miss him, I don't have him and I'll be seen as Claudia a bit more again. I think that might be quite nice." (Claudia) "They've found like they lost their identity a bit and they were desperate to get it back and it was a negative part of the experience whereas I'm finding it the opposite." (Rosie) "…because you don't, you can't just slot back in because everything's different so you now need to work round childcare, you need to kind of manage your work hours and stuff like…whereas he just said it because in his head like he doesn't have to be pregnant and then he takes two weeks off paternity leave and then he goes back to work and everything just carries on and I'm just on maternity leave so I'm at home dealing with it." (Cara)	Eight
	A fundamental shift in priorities	"So obviously he's my priority. So he comes before everything else." (Lara) "She's, she's my priority in every minute of every day so y'know my work went out the window.." (Rosie) "...and I have to erm think about my future as well because I can't just sit around and do nothing and I can't just go back to my old job because he needs childcare and he needs someone to look after him so I have to think about a future career that I can balance around him being in school…at least for the next sort of y'know ten years until he's in secondary school." (Zoe)	Seven
	I have changed as a person	"I think I've just got a bit of perspective in terms of what matters and doesn't matter a bit more and hopefully get a little less stressed about kind of unimportant things." (Claudia)	Six

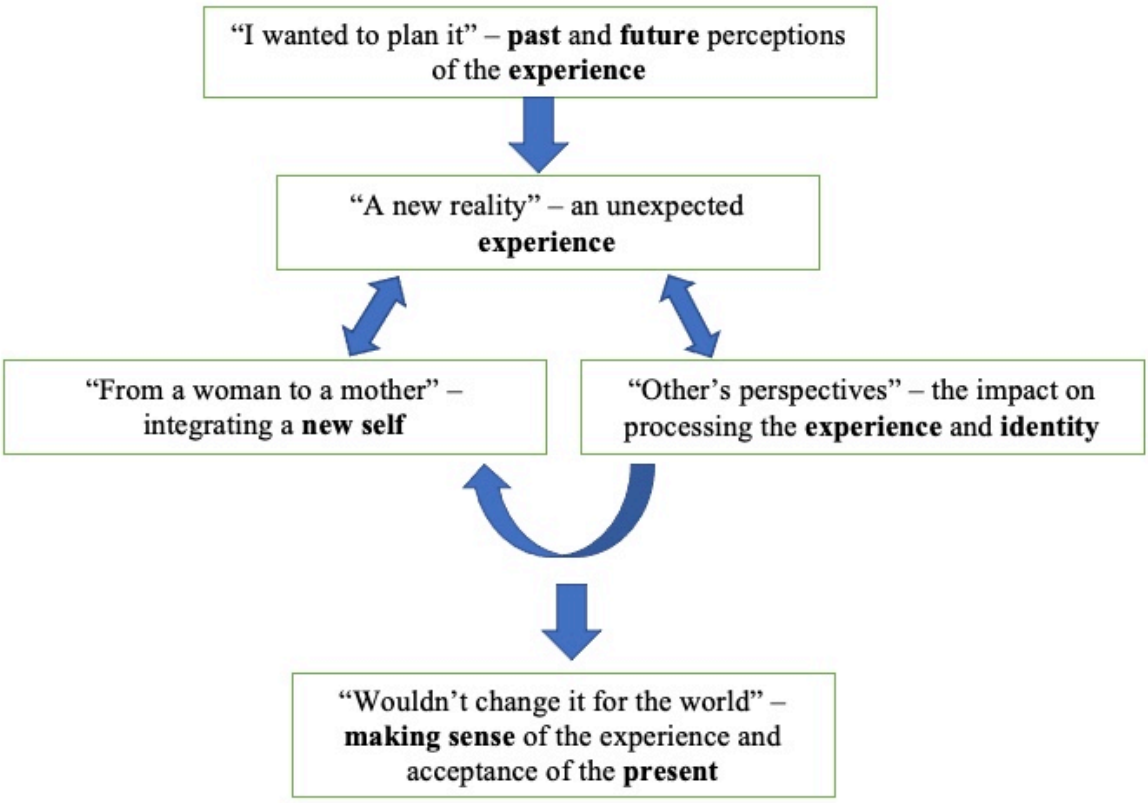
		"Definitely more flexible person. I definitely…I think I used to be the type of person that would try and plan things and then I was very rigid in…if things didn't go to plan it would really stress me out and I felt like I needed…I felt like I needed a lot of control over my life..." (Cara)	
Others' perspectives	Why do you need to know that? Talking about intention	*[when asked by a health professional]* "Erm (pause) a part of you is probably a bit like why do you need to know that? And a part, I, I suppose if like if if she asked me if it was planned and I said no, and then she kind of delved into it a bit more and maybe asked me how I was feeling and stuff like that then maybe that would be relevant but I think to ask it and then there not be any relevance to it is kind of irrelevant." (Lara) "Erm…(pause)…Kind of but I think it's still…people don't really admit to unplanned pregnancy that much so I wouldn't know like if someone did have an unplanned pregnancy I wouldn't know...like I, I think for me before I never really thought about it like never really thought about unplanned pregnancies in any way because no one ever talks about it…like no one ever says this baby was unplanned." (Zoe)	Eight
	Father reactions: He was in a state of disbelief	"But the only way I could prove it was when I got a scan and I sent him a picture of the scan and even then he said that because I work in a hospital I probably asked them to fake it which is like absolute…like the amount of people like people would lose their jobs over that. That sort of waste of like medical equipment and time erm and falsifying medical records people would lose their jobs so I was like that's ridiculous but that was like the only way I could prove that I was pregnant yeah." (Zoe) "...he was, he was in a state of disbelief, he was shocked um but with a big smile on his face and I don't know whether the smile was to sort of temper it a bit for me but I remember I was reassuring him and saying it'll be fine, it's be fine…" (Anna)	Three
	Family reactions: from over the moon to disappointment	"…she wasn't disappointed that he was having a baby with me, I think it was more that she was disappointed that we hadn't got married first" (Lara)	Eight

		"Um my mum was over the moon. Um I mean I'm 32 now so I mean my mum had been hoping that I would start a family for a while so my mum was over the moon." (Rosie)	
Wouldn't change it for the world	The downsides of planning	"But then I suppose again like even when you plan it I've had lots of friends that have planned their pregnancies and I's been a really, really stressful time for them." (Lara) "I feel really positive about the fact that we never had to go through trying and like the stress that I've seen in lots of other people of going through months and months and a couple of years of trying to get pregnant…" (Claudia)	Four
	The best thing that ever happened to me	"But overall he's just the biggest joy. He's just the best thing in my life hands down. He's just great." (Claudia) "Um as it happens, I prefer my life now. So looking back I feel awful for feeling like that because she's the best thing that ever happened to me and I wouldn't change it for the world now." (Rosie)	Seven
	Strengthening the partner relationship	"Erm she's definitely shifted it in that like…when before we had her we were together but we had out like separate families now whereas now if someone asked me to draw my family I would draw me him and her." (Cara) "Like I feel less…I feel like it would take a lot more to break us up because y'know I feel like we work harder at our problems." (Claudia)	Six

Results suggest a multi-dimensional way in which women made sense of themselves, their experience of pregnancy and transition to motherhood. The model in Figure 2 demonstrates how the superordinate themes appeared to interact. Different aspects of women's experiences appeared to have a multi-directional relationship, which contributed to the overall sense women made of pregnancy and motherhood. A narrative discussion of the results follows.

Figure 2

Interaction Between the Superordinate Themes



A New Reality.

This superordinate theme represents the experience of participants discovering their pregnancy and the processing of a new reality.

I Didn't Think the Test Would be Positive

All eight participants spoke about the unexpected outcome of the pregnancy tests they took. There was disbelief about the pregnancy test being positive:

"So I took the pregnancy test in the morning, completely expecting it to be negative. Erm but then obviously it wasn't. So…I then went back to the shop, bought like three more, they were all positive obviously." (Claudia)

Seven participants spoke about taking a pregnancy test alone. This seemed to further demonstrate the unexpected nature of the test outcome; seemingly the women assumed they would get a negative test and therefore had not predicted that it would be such a life-changing moment. Rosie recalled the experience:

"…he knew I was taking one and he thought I was going to wait for him but I didn't cos I actually genuinely didn't think it was going to be positive." (Rosie)

Mixed Emotions

Participants described experiencing a range of emotions at the point of discovering their pregnancy. The use of the term 'flitting between emotions' by Anna suggests an oscillation between different feelings as the outcome of the pregnancy test was processed.

"So when I found out last January that I was pregnant erm, I think both of us were quite scared erm I was excited but scared, so a bit ambivalent er, sort of flitting back and forth I think with those feelings initially." (Anna)

A number of participants spoke about feelings of fear or shock.

"..my first thoughts and feelings were er….'oh fuck' more than anything else. I was just, I was shocked." (Sarah)

How Will this Impact on my Career?

All women spoke about considerations for their working life. Thoughts about the future and adjustments which needed to be made to their jobs or working life seemed to arise after the positive pregnancy test:

"I wasn't worried about my ability to be a good mum or to successfully raise a child, I was more worried about how it would impact on my career basically" (Cara)

Since the birth of their babies, women changed their work paths in order to be at home more or to work around childcare. Olivia speaks here about her career change:

"… I mean I'm leaving, I am abandoning my career and all the progress I've made in order to be with him all the time." (Olivia)

As part of the transition to becoming a mother, Sarah, Cara and Zoe spoke about juggling work commitments.

"…I think to be honest with you it's some of my kind of concerns still at the moment. How everything's going to juggle when I go back from mat leave…Yeah some of my kind of concerns at the moment about how it's all going to manage." (Sarah)

I Wanted to Plan It

This second superordinate theme captures participants' responses to their pregnancies not being planned. Women's imagined life timelines were brought into question through the discovery of the pregnancy and they described how this may have been different had the pregnancy been planned.

A Change of Timeline

All eight participants spoke about the timelines they had imagined for their life before having a baby. They spoke about this in relation to their careers, relationships and home situations. For some, these appeared to relate to milestones which may have been stereotypically associated with starting a family, such as needing to be married before having a child.

"We kind of said that we wanted to get married before we had children…" (Lara)

While for Cara, her and her partner's careers and living situation were important.

"I think I had in my head I was gunna have been…I didn't really have a view about whether we'd be married or not but we would have been in our house, we would have been in the careers that we wanted to be in…" (Cara)

For Zoe, she had thoughts about both her position with a partner and her work. As Zoe was the only unpartnered woman in the study, she was the only one who identified as being 'alone' throughout the experience. She had imagined life differently:

"I think for me I always imagined… I like my, my plans in life were like y'know get some work experience, go to University which I put off too long but, go to University, have a career and meet someone that does share things with you that you know…not necessarily get married, I don't really care about the whole marriage part but erm, what when if you do end up pregnant, whether it's an accident or whether it's by planning they're really happy about it, like they're really really happy and you know want to take care of you and…probably a little bit misogynistic but y'know they want to treat you a bit like a Princess because you know you're having a baby, you're bringing a life into the world that's like half theirs. But I never had that, I was all completely alone so yeah I think…yeah." (Zoe)

For Rosie, Anna and Sarah, there was a sense of sadness as they reflected on their 'before' pregnancy life, as they processed how having a baby would impact on their future. For Sarah,

not having the chance to do things for the last time before becoming pregnant seemed linked to experiencing the pregnancy at a time that was not planned.

" And kind of going back to what I was saying about that that independence erm that I had before, again I just…regret not having those opportunities before becoming pregnant." (Sarah)

A Loss of What Might Have Been

Seven participants spoke about how their experience of pregnancy or becoming a mother may have felt had their pregnancy been planned, highlighting the losses of what might have been. Women spoke about how the journey may have differed on an emotional level; imagining different feelings of excitement or happiness being present had it been planned, with an absence of more difficult feelings.

"...yeah but I think if I'd…if it had been a planned pregnancy like [partner] and I were speaking about kind of after the [career course] I think I, it would have been more naturally kind of…less guilty, happier…erm yeah be a bit more excited about it maybe in the beginning." (Sarah)

Alongside the different emotions, participants spoke about how particular events in the journey may have been different.

"So maybe we would have done the pregnancy test together, maybe we would've gone to the scan and it had been exciting or like maybe it wouldn't have been such a almost like a fight to get him to accept it." (Lara)

When speaking about future pregnancies, five participants talked about not wanting a pregnancy that wasn't planned in the future.

" ...it must have bothered me more than I thought it did because we always joke and say our next baby definitely will not be unplanned, they'll definitely be planned so there must feel like there was a stress associated with the fact that it wasn't planned..." (Cara)

From a Woman to a Mother

This superordinate theme encompasses woman's transition to motherhood as she considered her identity, priorities and perspectives on life.

Making Sense of a Different Identity

All participants spoke about adjusting to their new identity as a mother. For Cara, the change in becoming a mother at a time when it was not planned brought into question characteristics she had previously identified with.

"I think…I think when I got pregnant it…I have always been like very sensible like made lots of sensible decisions and done what I've supposed to do and I think in my group of friends they would all do things and I was like that's not the right thing to do. So I think in my head that wasn't something that was supposed to happen to me so it made me feel…it made me feel uncomfortable because it made me feel like that wasn't part of who I identified with or who I felt like I was as a person." (Cara)

Women differed in how they had integrated the identity of mother into their life. For Rosie, she spoke positively about moving away from her previous identity.

[describing other mother's transition to parenthood] "They've found like they lost their identity a bit and they were desperate to get it back and it was a negative part of the experience whereas I'm finding it the opposite." (Rosie)

Whilst Claudia expressed looking forward to connecting back to her pre-baby self, seeing work as an opportunity for this.

"So I'm quite looking forward to going back to work where y'know, as much as I'll miss him, I don't have him and I'll be seen as Claudia a bit more again. I think that might be quite nice." (Claudia)

Three participants described a feeling of imbalance with their partners following having a baby. They spoke about perceiving there to be a bigger shift in their lives than for their partners.

"And then there was this sudden change in balance where I was at home looking after the baby and he was sort of carrying on with our old life more." (Claudia)

A Fundamental Shift in Priorities

Seven of the women noted differences in their priorities since becoming mothers.

"I think my plan…I think my priorities have totally changed. So work used to be the thing that was most important to me and the thing I made decisions around. Whereas that has totally now shifted. So now she is obviously the most important thing to me" (Cara)

A number of participants spoke about these different priorities in terms of their careers.

"...and I have to erm, think about my future as well because I can't just sit around and do nothing and I can't just go back to my old job because he needs childcare and he needs someone to look after him so I have to think about a future career that I can balance around him being in school…" (Zoe)

I Have Changed as a Person

Seven participants reflected on changes they noticed in themselves since becoming mothers. Women spoke about being more relaxed, feeling pride and having different perspectives. Anna speaks here about the pride she has for herself:

".. I feel really proud of myself for the way I handled some of the challenges thrown at me and I feel really…I think I've taken a lot from being able to stick to with some of those decisions, that really surprised me…erm that's huge for me." (Anna)

Rosie's use of metaphor of being a 'sergeant major' when describing how she was prior to becoming a mother suggests a shift from being an authoritative, perhaps rigid person to being more relaxed:

"I'm a bit calmer than I used to be. I used to be very…a bit of a sergeant major, I liked everything done a certain way and if it wasn't then I didn't like it. I'm not…I'm a bit more chilled out now." (Rosie)

A number of participants also spoke about being less judgmental since becoming a mother:

"Less judgmental of other mothers. Um or sort of less opinionated, well I am still opinionated but less wedded to my opinions I think about parenting." (Anna)

Others' Perspectives

This theme describes the responses from other people in participants' lives, including the fathers of their babies, family and health professionals.

Why Do You Need to Know That? Talking About Intention

Participants described various reactions to being asked about their pregnancy intention. For some, it felt that being asked was irrelevant or invasive:

[in response to being asked by a friend] "Initially it made me feel a bit sort of unsure. I felt a bit like it was an invasive er…not invasive…was er, was er…wasn't any of their business." (Anna)

[in response to being asked by a midwife] "Erm (pause) a part of you is probably a bit like why do you need to know that? And a part, I, I suppose if like if if she asked me if it was planned and I said no, and then she kind of delved into it a bit more and maybe asked me how I was feeling and stuff like that then maybe that would be relevant but I think to ask it and then there not be any relevance to it is kind of irrelevant." (Lara)

Similarly to Lara, Sarah felt that it might have felt more relevant to be asked about what she was feeling in relation to the pregnancy rather than just asking about intention, when her midwife asked:

"I think it was more helpful when they asked me kind of more how I was feeling about the pregnancy now because almost by that point you've made a decision about whether or not you're keeping the pregnancy or not, going ahead with the pregnancy. So, I felt like asking about how it is now when I was pregnant was more relevant than asking me whether it was planned or not." (Sarah)

For Olivia, her GP made an assumption that she would want an abortion because the pregnancy was not planned, suggesting potential associations others make about pregnancies not being planned.

"Yeah so, the GP immediately asked, oh was it planned? And I said no, I was on the pill. And she was like oh ok well this is like what you need to do if you want to get an abortion, I was like oh no I don't..." (Olivia)

Father Reactions: He Was in a State of Disbelief

Four participants described reactions of disbelief and shock when their baby's father found out about the pregnancy; seeming to mirror some of the women's emotional experiences following the positive pregnancy test. The father of Zoe's baby sought proof that she was pregnant:

"But the only way I could prove it was when I got a scan and I sent him a picture of the scan and even then he said that because I work in a hospital I probably asked them to fake it…" (Zoe)

Anna described her husband being disbelieving and shocked:

"...he was, he was in a state of disbelief, he was shocked um but with a big smile on his face and I don't know whether the smile was to sort of temper it a bit for me but I remember I was reassuring him and saying it'll be fine, it's be fine…" (Anna)

Lara spoke about her partner's negative reaction at length in her interview, explaining how this had been an ongoing difficulty throughout her pregnancy as he continued to be negative about becoming a father. Lara's use of a metaphor captures the shock and unhappiness felt:

"…it was literally like I had punched him in the face and ruined his whole life" (Lara)

Family Reactions: From Over the Moon to Disappointment

All participants talked about the reactions from their and their partner's family members. These reactions varied from woman to woman, as well as varying between family members. For some women, family members were concerned or disappointed about the stage at which they were having a baby:

[speaking about partners' mother's reaction] "…she wasn't disappointed that he was having a baby with me, I think it was more that she was disappointed that we hadn't got married first" (Lara)

While others spoke about the happiness and excitement their families had when they found out about the pregnancy. Two participants used the metaphor 'over the moon' to describe this feeling, suggesting the delight felt.

“My mum was over the moon. Um I mean I'm 32 now so I mean my mum had been hoping that I would start a family for a while so my mum was over the moon.” (Rosie)

Wouldn’t Change it for the World

This final theme captures how women recognised the more positive aspects of their experience as they processed their pregnancy. This seemed to represent an ongoing journey of acceptance.

Recognising the Downsides of Planning

Four participants reflected on the negative aspects of planning a pregnancy. Women compared their experiences to friends or family members who had planned their pregnancies, reflecting on the stress and anxiety that had been experienced. Quotes from Claudia and Lara illustrate this sub-theme:

"I feel really positive about the fact that we never had to go through trying and like the stress that I've seen in lots of other people of going through months and months and a couple of years of trying to get pregnant…" (Claudia)

"But then I suppose again like even when you plan it, I've had lots of friends that have planned their pregnancies and it's been a really, really stressful time for them." (Lara)

The Best Thing That Ever Happened to Me

Seven participants spoke about their experiences as something they now wouldn’t change, recognising the positives of the timing of becoming a mother and speaking about the joy and love their baby had brought.

"But overall he’s just the biggest joy. He’s just the best thing in my life hands down. He’s just great." (Claudia)

Cara described the timing as being perfect:

"Well I'm really glad I had her when I did, and I think actually she just came when we were meant to have her, and she came at the exact right time erm so I wouldn't change a thing about it. Yeah, it's perfect timing." (Cara)

Finally, Zoe speaks about never wanting to go back to a life without her son:

"But then erm, by the time I thought about it, it was like I dunno…it was just sort of like I'd never go back. I'd never go back to before he was there." (Zoe)

Strengthening the Partner Relationship

Six of the participants, all of whom were in relationships with their baby's father, spoke about how the pregnancy and transition to parenthood had strengthened their partnership.

"So um I would say if anything it has made our relationship stronger and better and healthier and um…yeah better all round really." (Rosie)

Olivia described the love she feels for her husband, as she has witnessed him in the parent role:

"...I think that we are both impressed with each other more.. I think at the birth [partner] was amazing. I couldn't fault him, he was great, erm, yeah I think we're like more in love, but also, yeah more in love than before but like in a less gooey way, more in like a wow you are really…you are really for this family, you are really doing all you can do. Erm yeah, working for each other." (Olivia)

Discussion

This study aimed to explore women's experiences of a pregnancy that was not planned and their transition to motherhood. To summarise, women made sense of the nature of their pregnancy and the impact on self in a multi-dimensional way, with an interplay of key factors contributing to how the experience was integrated. These are discussed below, in reference to extant research and psychological theory. A review of the limitations and recommendations for future research follows, concluding with clinical implications.

A new reality for women began as their pregnancy was confirmed with a positive pregnancy test. Feelings of disbelief, shock and fear arose for women, similar to those described by Mohammadi et al. (2018) in their study exploring unplanned pregnancies. As participants processed the new reality, considerations for their careers were prevalent. Research suggests that women's personal goals change as they transition to parenthood, with women becoming less interested in achievement related goals and family related issues becoming a higher priority (Salmela-Aro et al., 2000). This seemed to be the case for participants in this study, with women reducing their work hours, changing career or resigning from their workplace following having a baby.

The new reality seemed to be processed within participants' past expectations of pregnancy and timelines they had foreseen their life following. Women did not have the same opportunity to prepare for pregnancy as they might have had it been planned, and were therefore making sense of not being married, not having a stable home or being at a different place in their career while pregnant. It's perhaps relevant to refer back to Mercer's (2004) first 'preparatory' stage of transitioning to motherhood when considering this, which seemed substantially shorter for women in this study. Alongside managing the universal demands of

the antenatal period, participants had to also make decisions and process a changed timeline, at an unexpected time.

Participants differed in how the identity of 'mother' was integrated. For some, this new identity took the place of former held perceptions of the self, while for others it was important that previous identities were maintained. This seemed similar to previously reported findings about women in the postnatal period (irrespective of pregnancy intention). Identity research suggests women navigate a process of 'losing' then 'regaining' themselves as they become mothers (Laney et al., 2015). Participants in this study seemed at different stages of this process, describing different levels of connection to their pre-baby selves. This process is also suggested within the theory of matrescence (Raphael, 1975) described earlier in this paper, with women being in a significant transitionary period as they integrate a different sense of self.

Some participants noticed an imbalance between the life changes made as a mother compared to fathers. This seemingly related to participants' pregnancy timing, as they noticed how their partners continued to live their life as 'normal' while women had to make more immediate, unplanned changes to their lifestyle. Differences in the experience of the pregnancy are physically fundamental between mothers and fathers, though psychological involvement of the father can differ too. Widarsson et al. (2015) suggested that father's involvement in a pregnancy is often below a mother's expectation, partly explained by fathers reporting that the pregnancy felt 'less real' for them. Perhaps this difference between mothers and fathers is exaggerated for those who experience a pregnancy that was not planned, with an even greater disconnection between the idea and the reality of the baby for the unexpected father.

Being asked about intention during pregnancy invoked strong reactions in participants. It's possible this question may have raised fears of being judged or not being good enough, an

anxiety which is common for new mothers (Loudon et al., 2016), which may have been amplified for women in this study who may have anticipated further judgement regarding the pregnancy conception. Participants experienced a variety of reactions from different family members. Carter and McGoldrick's (1988) family life cycle model is relevant when considering these responses. Stages one and two of the cycle represent the time where an individual becomes responsible and independent, before there is then a coupling with another person and a new unit created. Perhaps for family members who deemed women to not yet have gone through these stages, welcoming a new baby (stage three) seemed out of synchronisation of an assumed timeline. This seemed to mirror mother's perceptions of the unexpected timeline.

As the interviews came to a close, women ended with reflections about the joy and love felt about their babies. This is perhaps particularly notable in the context of previous research highlighting negative implications of the experience. Babies were described as being the best thing that happened – a silver lining to an experience which had brought various challenges. While these feelings may be common reflections of mothers speaking about babies, in the context of this study, recognising the positives seemed to aid women accepting the unexpected. Taylor's theory of cognitive adaptation (1983) suggests that, following a challenging life event, individuals seek meaning in their experiences in order to restore psychological equilibrium – perhaps this can explain what happened for participants, as they noticed the positives of their pregnancy. It's also interesting to consider the psychological process which might have occurred when women considered the downsides of planning a pregnancy. Taylor and Lobel's (1989) model of social comparison suggests that by making comparisons to others viewed as less fortunate, one sees the self in a more positive light. Perhaps through comparing to women who found it stressful conceiving, women were able to see their experience of a pregnancy in a more positive way, feeling grateful for their pregnancy journey.

It is important to acknowledge that certain aspects of participants' experiences reflected existing findings regarding a first-time mother's experience of parenthood which may occur irrespective of pregnancy intention. These included: making sense of a new identity, career changes and feelings of love towards their baby. Several unique aspects of the experience for women who had a pregnancy that was not planned have also been captured – a strength of the research in the context of extant literature not reporting these. These are summarised below.

The critical moment of women discovering their pregnancy was one of disbelief and shock, followed by women instantly needing to make adjustments to their life which they were not prepared for. For some, this invoked a sense of loss; for the life being unexpectedly left behind, and a sense of loss about the pregnancy they had hoped to experience. Alongside navigating the internal processing, women faced the reactions and emotions of others. While this may be something other new mothers experience, particular reactions seemingly linked with the pregnancy not being planned, as the unexpected timeline was reiterated by others. Furthermore, for some women, the father of their baby experienced negative emotions in response to the pregnancy being unexpected, leaving women to make sense of this alongside other demands. Finally, unique reflections about the benefits of having a pregnancy that was not planned arose, giving space for a previously unspoken account of these experiences.

Limitations and Research Recommendations

The limitations of the sample required within an IPA approach resulted in a small number of women being included. This (and most participants being White British) reduced the generalisability of the findings for women from different cultural backgrounds and those who had varied pregnancy circumstances. IPA does not seek to recruit a generalisable sample, instead aiming to provide findings which could be interpreted and applied by the reader (Smith et al., 2009). This does still, however, result in the findings being less applicable and future

research could include women with other experiences who were excluded through this study's criteria (e.g. those with multiple children). It is also important to note that six of the participants scored within the 'ambivalent' range on the LMUP score and future research may be needed to explore the experiences of women with a wider range of scores. The LMUP score is one way to conceptualise the intention of a pregnancy, but it's important to note that completing this retrospectively may mean the scores were subject to recall bias. It's possible that had mothers completed this measure prior to having their baby, they would have scored differently. Future research could interview women at multiple time points; perhaps capturing women's sense-making of the experience during pregnancy as well as postnatally. This could provide helpful insight into how mothers may take time to process such an unexpected life event and what aids or hinders this process.

The experiences of mothers only have been explored in this study. Participants spoke about the reactions of the pregnancy on the baby's fathers; future research could examine this further, through interviewing men.

At the end of one interview, a participant reflected that she had been willing to take part because she perceived herself as having had a positive experience. It's possible that this represents a limitation of the self-selecting sample. Women who had more challenging experiences may not have come forward, in order to protect against speaking about something upsetting or due to fear of being judged. It is possible this was compounded by the researcher being a trainee clinical psychologist, where women may have associated the role with the existence of difficulty.

Limitations of this research meant that women who experienced postnatal mental health difficulties were excluded, potentially reducing the clinical application of the findings. Research suggests that mothers who experience an unplanned pregnancy are more likely to

have such difficulties, therefore a crucial next step in this research field is to interview this group of mothers. This could provide invaluable insight into how their experiences may differ to the ones included in this study and could highlight possible care implications for this group of women. Future research could also examine which elements of women's experiences may be protective against experiencing mental health difficulties, perhaps through identifying differences in social support, personal circumstances or personality traits across groups. Previous research has indicated that women from a lower socioeconomic background find the adjustment to parenthood more difficult than others; this data was not collected in this study so future research could collect this in order to assess how such factors may relate to women's experience of pregnancy and motherhood following a pregnancy that was not planned. Finally, the nature of IPA means that the researcher is making sense of an individual making sense of their experience, and therefore the analysis presented provides just one way of understanding the phenomena and other interpretations are possible.

Clinical Implications

A number of participants reflected on the usefulness of being asked about pregnancy intention; suggesting that being asked about feelings about their pregnancy and discussing support available may have been helpful. This is similar to recommendations made by Gariepy et al. (2016), who suggested that simply asking whether a pregnancy is planned is reductionist. Professionals working within the perinatal period need to go beyond simply determining intention. Women could benefit from questions regarding their emotional reaction to the pregnancy, father's responses and the impact of the timing. Furthermore, women finding the perinatal period more challenging could benefit from a space beyond antenatal appointments, perhaps with professionals within wellbeing services.

This study highlighted that managing the non-planned nature of pregnancy, and associated emotions and considerations, may contribute to an already demanding period for women. In line with NHS values, it is important staff working within health settings are committed to offering care for these women who may be managing a multitude of stressors. One way of supporting these women, suggested by a participant, could be a peer support group for mothers who had a pregnancy that was not planned, giving space for unique experiences to be discussed and supported.

Finally, it is notable that participants reflected on several positive aspects of their experience. While identifying women at risk of postnatal difficulties is essential, it is also important that professionals working in perinatal services remain curious about an individual's response to discovering a pregnancy that was not planned. Women may fear the assumptions made by health professionals, which could be in conflict with their felt experience; the possibility of this should be minimised in order for women to feel comfortable to speak openly about their pregnancies. This could give the opportunity for subjugated narratives to be thickened through women telling their stories of strength, love and positive change.

Conclusion

There has been limited exploration of the experience of a pregnancy that was not planned for women postnatally. The IPA approach in this study enabled an in-depth exploration of the feelings, thoughts and perceptions women had with regards to their experience and their transition to motherhood. Findings suggest that women made sense of their experience of pregnancy and self through consideration of their new role of 'mother', adapting to a change in timeline and processing the views of others. This study expands previous understandings about pregnancies that were not planned. Through going beyond the reporting of quantitative implications to provide a deeper understanding of the experience, women had an opportunity

to speak about the unique considerations, challenges and positives of their experience. Future research is needed to explore the experience of a pregnancy that was not planned for a wider group of women, as well as for men who transition to parenthood unexpectedly.

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Section C: Appendices of supporting material

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

May 2021

Appendix A

Critical Appraisal Skills Programme Checklist for Cohort Studies

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Appendix B

Checklist for Analytical Cross-Sectional Studies

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Appendix C

Table C. Quality assessment of papers using CASP

Study	Did the study address a clearly focused issue?	Was the cohort recruited in an acceptable way?	Was the exposure accurately measured to minimise bias?	Was the outcome accurately measured to minimise bias?	Have the authors identified all important confounding factors?	Have they taken account of the confounding factors in the design and/or analysis?	Was the follow up of subjects complete enough?
Abbasi et al. (2013)	Yes.	Yes.	Yes partly. Pregnancy intention separated into two categories.	Yes.	Yes. Confounders included: age groups, race/ethnicity, education, marital status and poverty status.	Yes.	One follow up at 4 weeks.
Baba et al. (2020)	Yes.	Yes.	Yes.	Yes.	No. Mentioned but not identified.	Yes. Stated that confounders were adjusted for.	One follow up 4 weeks postpartum.
Bahk et al. (2015)	Yes.	Yes.	Yes partly. Pregnancy intention separated into two categories.	Yes.	No. Unclear which confounding variables were included.	No. Unclear whether this was done.	Five follow ups: post birth, 1 month, 4 months, 1 year and 2 years postpartum.
Barton et al. (2017)	Yes.	Yes.	Yes.	Yes.	Yes. Confounding variables identified: sociodemographic variables (such as maternal age and education level),	Yes.	One follow up at 9 months postpartum.

Study	Did the study address a clearly focused issue?	Was the cohort recruited in an acceptable way?	Was the exposure accurately measured to minimise bias?	Was the outcome accurately measured to minimise bias?	Have the authors identified all important confounding factors?	Have they taken account of the confounding factors in the design and/or analysis?	Was the follow up of subjects complete enough?
					pregnancy related variables (such as smoking during pregnancy and delivery method), relationship quality and social support.		
Blom et al. (2010)	Yes.	Yes.	No. Unable to determine how this was measured as not stated.	Yes.	Yes. Confounding variables identified: family functioning, psychopathological symptoms of mother, sociodemographic factors.	Yes. Outlined in detail.	One follow up two months postpartum
Brito et al. (2015)	Yes.	Yes.	Yes. Though categorised into two categories despite their being five possible answers.	Yes.	Yes. Confounding variables identified: age, race/skin colour, education, housing status, working status, personal income, marital status, dependents and personal history of mental health difficulties.	No. Unclear how these were taken into account.	One follow up, on average 8 months after giving birth.

Study	Did the study address a clearly focused issue?	Was the cohort recruited in an acceptable way?	Was the exposure accurately measured to minimise bias?	Was the outcome accurately measured to minimise bias?	Have the authors identified all important confounding factors?	Have they taken account of the confounding factors in the design and/or analysis?	Was the follow up of subjects complete enough?
Chan (2019)	Yes.	Yes.	Yes partly. Pregnancy intention separated into two categories.	Yes.	No. No explicit mention of confounding variables.	No. Unclear if this was done.	One follow up 4 weeks postpartum.
Faisal-Cury et al. (2017)	Yes.	Yes.	Yes.	Yes.	Yes. Confounders: Socioeconomic variables, maternal support, obstetric factors	Yes.	One follow up on average at 11 month postpartum.
Gariepy et al. (2016)	Yes	Yes	Yes partly. Pregnancy intention separated into two categories.	Yes.	Yes. Confounders: Mother's age, education, race, marital status, history of sexual abuse, use of tobacco, alcohol/drug use, depression before pregnancy, panic disorder, benzodiazepine and stress	Yes.	One follow up 8 weeks postpartum.
Hall et al. (2018)	Yes.	Yes.	Yes. Standardised measure of	Yes.	Yes. Confounders included: episodes of depression, sexual	Yes.	One follow up at 1 month postpartum.

Study	Did the study address a clearly focused issue?	Was the cohort recruited in an acceptable way?	Was the exposure accurately measured to minimise bias?	Was the outcome accurately measured to minimise bias?	Have the authors identified all important confounding factors?	Have they taken account of the confounding factors in the design and/or analysis?	Was the follow up of subjects complete enough?
			pregnancy intention used.		abuse, maternal education and abuse in the last year		
Leathers & Kelly (2000)	Yes	Yes	Yes.	Yes	Partly. Confounders included: Race, household income, length of couple relationship	Yes	One follow-up at 4 months postpartum Unclear what the attrition rate was.
Najman et al. (1991)	Yes.	Yes.	No. Unclear how this was measured or categorised	Yes	Yes. Confounders included: mothers' age, income, marital status and parity	Yes	Two follow ups: one 3-5 days postpartum and one 6 months postpartum
Surkan et al. (2018)	Yes.	Yes.	Yes.	Yes.	No. Confounders mentioned but not specified.	No.	One follow up at 6 months postpartum.
Weobong et al. (2015)	Yes.	Yes.	No. Unclear how this was measured or categorised.	Yes.	No. Not specified.	No.	One follow up.

Study	Was the follow up of subjects long enough?	How precise are the results?	Do you believe the results?	Can the results be applied to the local population?	Do the results of this study fit with other available evidence?	What are the implications of this study for practice?
Abbasi et al. (2013)	Yes partly. One follow up at 4 weeks. Retention rate not reported.	95% confidence intervals used.	Yes. Large sample size.	Yes to the geographical area which was recruited from. More difficult to apply to a wider population.	Yes.	Recommendations for the screening of postpartum depression.
Baba et al. (2020)	Yes partly. One follow up 4 weeks postpartum.	95% confidence intervals used.	Yes partly. Though not all combinations of pregnancy questionnaire answers were included. Large sample size used.	Yes.	Yes.	The need to target 'high-risk' women was highlighted, in order for early detection and prevention of post-natal depression.
Bahk et al. (2015)	Yes. Five follow ups done.	95% confidence intervals used.	Yes.	Yes. Sample recruited from 30 hospitals across the country.	Yes.	Recommendations for increased father participation in childcare and decreased marital conflict could improve maternal mental health.
Barton et al. (2017)	Yes partly. One follow up 9 months postpartum.	95% confidence intervals used.	Yes. Large sample size.	Partly. Large sample size, however limited to partnered women.	Yes.	Benefits of further post-natal follow up highlighted for women who experience an unplanned pregnancy.
Blom et al. (2010)	Yes partly. One follow up two months postpartum.	95% confidence intervals used.	Yes. Prospective measurements used so avoiding possible recall bias.	Yes. Inclusive of all women in city over four year time period.	Partly. Analysis suggests MH and UP relationship is explained by other variables, which is not replicated in all studies.	Importance of detecting and treating PND highlighted. Healthcare workers need to be attentive for depressive symptoms in women who experience multiple perinatal complications.
Brito et al. (2015)	Yes partly. One follow-up on	95% confidence intervals used.	Yes. Though unclear how confounding	No. Identified that the sample was made up of	Yes.	Highlights need for providing contraception for

Study	Was the follow up of subjects long enough?	How precise are the results?	Do you believe the results?	Can the results be applied to the local population?	Do the results of this study fit with other available evidence?	What are the implications of this study for practice?
	average 8 months postpartum. 95.2% retention rate.		variables were controlled for.	'mainly low-income families' so therefore may not be generalisable to other socio-demographic populations.		women and men, in order to prevent unwanted pregnancies.
Chan (2019)	Yes partly. One follow up 4 weeks postpartum. Retention rate of 62.3%	95% confidence intervals used.	Yes.	Yes. Recruited from various hospitals across Hong Kong.	Limited research available which assesses specific variables in this study.	Importance of father involvement for the benefit of maternal mental health. Promotion of father involvement in different stages of pregnancy, childbirth and child care is suggested.
Faisal-Cury et al. (2017)	Yes partly. Follow up once on average 11 months postpartum. 84.6% follow up data attrition.	Confidence intervals not reported.	Yes.	Yes.	Yes.	Importance of screening and interventions for maternal depression highlighted.
Gariepy et al. (2016)	Yes partly. One follow up 8 weeks postpartum. 94% attrition rate	95% Confidence Intervals	Yes. Large study. However, unable to determine whether their findings would be applicable over a longer time	Yes. Recruited across 137 obstetrical practices	Yes.	Screening and provide appropriate treatment for depression and anxiety at least once during the perinatal period
Hall et al. (2018)	Yes partly. One follow up at 1 month postpartum.	95% confidence intervals used.	Yes. Use of validated measures, prospective design, large sample size.	Yes. Applicable for low-income countries in particular.	Yes.	Suggests implementation of the LMUP to identify those who may be at a higher risk of PND.

Study	Was the follow up of subjects long enough?	How precise are the results?	Do you believe the results?	Can the results be applied to the local population?	Do the results of this study fit with other available evidence?	What are the implications of this study for practice?
Leathers & Kelly (2000)	Yes partly. One follow up 4 months postpartum	Confidence intervals not reported	Small study design using participants in one city	Yes in the local population	Yes	Availability of preconceptual care highlighted
Najman et al. (1991)	Yes partly. Two follow ups: 3-5 days and 6 month follow up.	95% Confidence Intervals reported.	Yes. Large study size.	Partly. Excluded women with previous mental health difficulties so difficult to apply to that population	Yes	Importance of screening women for postnatal mental health difficulties
Surkan et al. (2018)	Yes partly. One follow up 6 months postnatally.	95% Confidence Intervals reported.	Yes. Large sample size.	Yes, large sample size across many different areas. However, women included had to be living with a husband, therefore excluding a potential subset of mothers.	Yes.	Importance of better infrastructure and funding for developing countries highlighted. Integration of family planning highlighted.
Weobong et al. (2015)	Yes partly. One follow up between 4 and 12 weeks postpartum.	95% confidence intervals reported.	Yes. Though confounding variables not identified.	Yes. Large sample size.	Partly. UP often found to be independently associated with PND and wasn't in this study.	Importance of optimising treatment for antenatal depression highlighted, as well as the need for support to address chronic social and economic disadvantage.

Appendix D

Table D. Quality assessment of papers using Analytical Cross-Sectional Studies

Study	Were the criteria for inclusion in the sample clearly defined?	Were the study subjects and the setting described in detail?	Was the exposure measured in a valid and reliable way?	Were objective, standard criteria used for measurement of the condition?	Were confounding factors identified?	Were strategies to deal with confounding factors stated?	Were the outcomes measured in a valid and reliable way?	Was appropriate statistical analysis used?
Alikamali et al. (2020)	Partially. Inclusion and exclusion criteria mentioned though these do not seem complete.	Yes.	Yes. Though 'modified' version of the question, with no indication what this modification was.	Yes.	No.	Stated that they were adjusted for but not how this was done.	Yes.	Yes.
Suh et al. (2015)	Yes.	Yes.	Yes.	No. Own questions used for the measure of PND – not standardised measure.	Yes.	Yes.	No. Not validated outcome measure.	Yes.

Appendix E

Table E. Factors examined in each study as a confounding variable or reported in results

✓ – included as a confounding variable

✓✓– reported in results

	Pre-existing mental health difficulties	Sociodemographic factors	Mother's perception of the pregnancy	Obstetric factors	Social support	Relationships	Paternal factors	Other
Abbasi et al.	✓	✓✓						
Alikamali et al.		✓✓		✓✓ – caesarean delivery				✓ - sex, age, weight, energy intake, physical activity
Baba et al.	✓✓	✓	✓✓ – feelings towards pregnancy					
Bahk et al.		✓				✓✓ – marital conflict	✓✓ – father's participation in childcare	✓✓ – mother's knowledge of infant development
Barton et al.		✓	✓✓ – feelings on discovery of pregnancy	✓ - Firstborn child, smoked during pregnancy, gestation at which pregnancy was confirmed, preterm birth,	✓✓	✓✓ – relationship quality		

	Pre-existing mental health difficulties	Sociodemographic factors	Mother's perception of the pregnancy	Obstetric factors	Social support	Relationships	Paternal factors	Other
				delivery method, multiple birth				
Blom et al.	✓	✓✓						✓✓ – psychosocial wellbeing
Brito et al.		✓			✓✓	✓✓ – partner's controlling behaviour		
Chan					✓✓	✓✓ – IPV in pregnancy	✓✓ – father involvement	✓✓ – fear from IPV
Faisal-Cury et al.	✓✓	✓		✓ – previous miscarriages, number of pregnancies, newborn characteristics				
Gariepy et al.	✓	✓	✓✓ – perception of time of pregnancy	✓ – pregnancy history				✓ – alcohol, tobacco and medication use
Hall et al.	✓✓ – previous episodes of depression	✓ ✓✓ – maternal education level		✓ – time since last birth ✓✓ – first baby		✓✓ - IPV		

	Pre-existing mental health difficulties	Sociodemographic factors	Mother's perception of the pregnancy	Obstetric factors	Social support	Relationships	Paternal factors	Other
Leathers and Kelley	✓✓ – depression during pregnancy controlled for	✓				✓ – length of relationship	✓✓ – father's perception of the pregnancy	
Najman et al		✓✓						
Suh et al		✓	✓✓ – maternal report of partner's pregnancy intention	✓ – birth outcome		✓ – physical abuse from husband	✓✓ – partner discordance on pregnancy intention	✓ – smoking and drinking behaviours
Surkan et al		✓	✓✓ – maternal report of partner's pregnancy intention	✓ - maternal nutritional status during pregnancy, anaemia in the first trimester and infection in the first trimester				
Weobong et al		✓ ✓✓ – marital status and ethnic group						

Appendix F

Interview Schedule

Interview Schedule - 2020

- *Acknowledgement of current covid context, as relevant dependent on the situation at the time of the interview. Questions such as 'how have you been finding it over the last few weeks?' might be asked before revisiting the formal research documents*
- *Participant information sheet revisited*
- *Time for questions then consent form completed if not already done via email*
- *Inform participant that the interview will be recorded using a Dictaphone*

The following questions are being asked in relation to the pregnancy which you identify as having not been planned.

1. Introductory questions

Could you tell me a bit about your life at the moment?

- How old is your baby?
- Who do you live with?
- What is your relationship to your baby's father?
- Do you work? What is your occupation?

2. Exploring the pregnancy

We are going to speak now more specifically about your experience of the pregnancy. I am interested in hearing about your thoughts, feelings and perceptions of your pregnancy. There are no right or wrong ways to answer the questions, please just answer as honestly as possible.

A) Context

Thinking about your pregnancy, can you tell me a bit about what your life was like at the time?

- Did you work?
- What did you do as a job?
- What did you enjoy doing?
- Were you in a relationship?

B) Experience of the pregnancy

Can you tell me about your experiences of finding out you were pregnant?

Prompts

- What were your thoughts or hopes about parenthood before becoming pregnant?
- Did you have any thoughts about when you might become pregnant before your pregnancy? How did that compare to when you did become pregnant?
- Who did you tell that you were pregnant? What were their reactions? What was that like for you? Do you think that is a common experience for mothers finding out they are pregnant?

Can you tell me about your experiences of being pregnant?

Prompts

- Looking back, can you tell me what it was about the time you were pregnant that meant it was not planned?

C) Experiences of health professionals

Can you tell me a bit about your experience with health professionals during your pregnancy?

Prompts

- How do you think that compares to other women who are pregnant?
- Were you asked by a health professional at any point in your pregnancy about whether it was planned or not?
- How did you respond to be asked?
- Who asked? When? How did this make you feel?

D) Identity and self

Can you tell me how your experience of the pregnancy relates to how you see yourself?

Prompts

- Do you think you have changed during this experience?
- How have you developed?
- What have you learnt?
- How have you adjusted since having your baby at the point you did?
- What do you perceive your roles to be? Have these changed since becoming a mother at the point you have?
- How do you identify as a mother? Do you think that's different to other mothers?
- Which other identities do you relate to?
- How would you describe your relationship to your baby? To your partner?
- Do you think anything has changed with your perceptions of the pregnancy since having the baby? Do you think this is similar to how other mothers perceive their pregnancy?
- At this point in time, how do you feel about experiencing pregnancy at the time you did?

Is there anything else relating to the experience which we haven't discussed yet?

General Prompts (to be used throughout as necessary)

- What was that like for you?
- How did you make sense of that?
- Can you tell me a bit more about that?
- How did that make you feel?
- What were you thinking at that time?
- Can you tell me what you mean by that?

Specific Prompts (to be used throughout as necessary)

- How do you think that compares to other mothers?
- How do you think this relates to the unplanned nature of your pregnancy?
- How does this compare to the pregnancy you thought you would have?

3. Debrief (to be used as appropriate)

- Is there anything else you'd like to cover that we haven't talked about?
- How did you find the interview?
- How are you feeling now?
- Were there any parts of the interview which were more difficult?
- Were there any parts which were easier?
- It can sometimes be difficult talking about events which bring up emotions, how was that for you? How are you feeling now we've finished?

Appendix G

London Measure of Unplanned Pregnancy

The LMUP is freely available to use, accessible on the associated website (lmup.com)

London Measure of Unplanned Pregnancy

CIRCUMSTANCES OF PREGNANCY

Below are some questions that ask about your circumstances and feelings around the time you became pregnant. Please think of your current (or most recent) pregnancy when answering the questions below.

1) In the month that I became pregnant.....

(Please tick the statement which <u>most</u> applies to you):

☐ I/we were not using contraception
☐ I/we were using contraception, but not on every occasion
☐ I/we always used contraception, but knew that the method had failed (i.e. broke, moved, came off, came out, not worked etc) at least once
☐ I/we always used contraception

2) In terms of becoming a mother *(first time or again)*, I feel that my pregnancy happened at the.....

(Please tick the statement which <u>most</u> applies to you):

☐ right time
☐ ok, but not quite right time
☐ wrong time

3) Just <u>before</u> I became pregnant.....

(Please tick the statement which <u>most</u> applies to you):

☐ I intended to get pregnant
☐ my intentions kept changing
☐ I did not intend to get pregnant

4) Just <u>before</u> I became pregnant....

(Please tick the statement which <u>most</u> applies to you)

☐ I wanted to have a baby
☐ I had mixed feelings about having a baby
☐ I did not want to have a baby

In the next question, we ask about your partner - this might be (or have been) your husband, a partner you live with, a boyfriend, or someone you've had sex with once or twice.

5) <u>Before</u> I became pregnant....

(Please tick the statement which <u>most</u> applies to you)

☐ My partner and I had agreed that we would like me to be pregnant

☐ My partner and I had discussed having children together, but hadn't agreed for me to get pregnant
☐ We never discussed having children together

6) Before you became pregnant, did you do anything to improve your health in preparation for pregnancy?

(Please tick all that apply)

☐ took folic acid
☐ stopped or cut down smoking
☐ stopped or cut down drinking alcohol
☐ ate more healthily
☐ sought medical/health advice
☐ took some other action, please describe

or

☐ I did not do any of the above before my pregnancy

Appendix H

Ethical Approval from Salomons Ethics Committee

This has been removed from electronic copy

Appendix I

Email Confirming Ethics Amendments – June 2020

This has been removed from electronic copy

Appendix J

Participant Information Sheet

Information sheet – A study exploring pregnancies that were not planned Version 4 - 03/2020

Hello. My name is Mia Waters and I am a trainee clinical psychologist at Canterbury Christ Church University. I would like to invite you to take part in a research study. The research study is being supervised by two supervisors, Dr Kat Alcock and Dr Rachel Whatmough. Dr Kat Alcock is a clinical psychologist and principal tutor at University College London. Dr Rachel Whatmough is a clinical psychologist and academic tutor at Canterbury Christchurch University.
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.

Please feel free to talk to others about the study if you'd like to, before deciding to take part.

(Part 1 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 how the study will be conducted).

Part 1

1) **Research Project Title**
   Pregnancies that were not planned: an exploration of the experience from the perspective of women postnatally

2) **Invitation**

   I am carrying out a research study as part of my Clinical Psychology Doctorate, which I am completing at the Salomons Institute for Applied Psychology, Canterbury Christchurch University. The information on the following sheets relate to the study I am carrying out.
   Before you decide whether you'd like to take part or not, please take some time to read this information sheet which outlines details of the study and what is required of you should you wish to participate. If there is any other information you would like about the study or if you have any questions then please let me know. You are under no obligation to take part following reading this information sheet.

3) **What is the purpose of the study?**

   This research study is aiming to explore the experience of pregnancies that are not planned, from the perspective of women who identify as having experienced one.

4) **Why am I eligible to take part?**

   As part of the study, I will be interviewing women about their experience of a pregnancy that was not planned. You are eligible to take part in the study because you have identified that you have experienced a pregnancy that was not planned and have a child aged between 6 and 24 months old.

5) **Do I have to take part?**

   No, taking part in this study is completely voluntary. If you do agree to take part, you will need to sign a consent form which confirms you have read this information sheet and that you understand what the study involves. You can withdraw at any time during your participation in the study and you do not have to provide a reason for choosing to do this.

6) **What does taking part involve?**

Firstly, you will be asked to complete a measure called the 'London Measure of Unplanned Pregnancy', which is a short questionnaire compromising six questions about your pregnancy. A score will be calculated from the measure which will gives me an initial indication about the pregnancy you identify as being not planned. You will also be asked to give some brief information about yourself (such as your employment status) on the demographic information sheet, before completing the interview. This will be sent to you via email to complete. The questions are asked for the purpose of being able to accurately report the sample used in the study in the write up of the research.

Following the completion of the measure and the demographic information, we will arrange a time for me to interview you. I will be asking you questions about your experience of having a pregnancy that was not planned. The interview is likely to last between 60 and 90 minutes, though it might be shorter than this. There are a few options for how these interviews can take place, either: face to face in your home, face to face at the Salomons Institute for Applied Psychology in Tunbridge Wells, or via Skype or Zoom. If taking place via Skype or Zoom, a consent form will be emailed to you before the interview, for you to complete and send back to confirm you're happy to take part. The interview will be audio recorded and then transcribed. Following the transcription of your interview, you will be offered the opportunity to read your transcript and check for accuracy.

7) What are the possible disadvantages and risks of taking part?

I do not anticipate there being any disadvantages of taking part, though there is the potential that talking about your experiences may lead you to feel emotional, which is common when reflecting on past events. The potential of distress or psychological distress is anticipated as being the same as those experienced in everyday life.

8) What are the possible benefits of taking part?

Although there are no predicted immediate benefits for those participating in the research, it is hoped that the findings of the research will contribute to existing research regarding the impact of pregnancy on women. This has potential implications for the care which is offered to women during and after a pregnancy. If you would like to receive the findings from the study, please tick the option on the consent form indicating this. You will be contacted following the completion of the project in order to receive a summary of the findings.

9) Will I receive expenses or payment for taking part?

If you need to travel in order to attend your interview, up to £10 can be reimbursed to you to help cover this cost. As a thank you for taking part in the research, you will receive a £10 voucher. Your email address will be sent securely to the University finance team in order for this to be issued. Your details will not be used for any other purpose. You will also be entered into a prize draw with the potential to win a £25 voucher.

10) What happens if something goes wrong?

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.

11) Will the information collected be kept confidential?

Yes. We will follow ethical and legal practice and 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

12) What will happen if I don't want to continue participating in the study?

You are free to withdraw at any point in your involvement with the study. If you wish to withdraw from the study 14 days after you have been interviewed, your data can be destroyed and will no longer be used in the research. However, if the analysis stage of the project has already been completed, it may not be possible to remove all of the data you have provided. This is because there are points at the analysis stage of the study where your data might have helped with the forming of key concepts or themes. At that point, it is difficult to remove all data if it has had an influence over how conclusions or other interviews are being interpreted. If you did want to withdraw at that stage in the process, I would discuss with you if and how your data could be removed.

13) Will I be recorded, and how will the recorded media be used?

If you agree to taking part in the study, you are agreeing to be audio recorded. The recording of the interview will be transcribed by the researcher or member of the research team, in order to be analysed. The transcription of the interview will be securely stored electronically.

14) Will information from or about me from taking part in the study be kept confidential?

Yes, all the information collected in the study will be kept strictly confidential. All data will be anonymised and you will not be identifiable in the write up of the study. Pseudonyms will be allocated so that you are not identifiable. You have the right to check whether the information I have collected is accurate.
During the project being completed, any data we collect about you will be kept on password protected computers, in password protected files. Other people might ask to look at the data in an anonymised format. This may include my supervisors; Dr Kat Alcock and Dr Rachel Whatmough. If this were necessary, they would only view anonymised versions of the transcripts. After completion of the project, data will be kept on a password protected CD and will be stored in a locked cabinet for 10 years before then being destroyed.
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.

15) What will happen to the results of the research project?

Results from the research will be written up in the format of a doctoral thesis. This will be marked by internal examiners at Canterbury Christ Church University, as well as by an external examiner/s, arranged by the University. Results of the research may also be published in a research journal. You will not be identifiable in either the doctoral thesis or publication. There is the potential that there will be verbatim quotes of your interview included in the write-up of the project, but these will anonymised using the pseudonym allocated.
You will also be offered the opportunity to receive feedback about the findings of the study. If you would like to receive the findings, you will be asked to provide an email address which you would be happy to be contacted on. A summary of the key findings would then be emailed to you upon the completion of the study.

16) Who is sponsoring and funding the research?

The research is being funded as part of the Clinical Psychology Doctorate Programme, Canterbury Christchurch University.
The main organiser of the research is myself, Mia Waters, trainee clinical psychologist at the Salomons Institute for Applied Psychology. I will be conducting the interviews as well as analysing, writing up and disseminating the findings of the study.

Mia's email address: m.x.waters628@canterbury.ac.uk

I am supervised by the following members of staff:

- Dr Kat Alcock: Clinical Psychologist and Principal Clinical Tutor at University College London. Her contact email address is: k.alcock@ucl.ac.uk
- Dr Rachel Whatmough: Clinical and Academic Tutor at Canterbury Christchurch University. Her contact email address is: rachel.whatmough@ucl.ac.uk

Other contacts:

Research department at Salomons Institute for Applied Psychology contact number: **01227 927110**
Address: Salomons Institute for Applied Psychology, One Meadow Road, Tunbridge Wells, Kent, TN1 2YG

17) Who has reviewed the study?

This study has been reviewed and approved by The Salomons Ethics Panel, Salomons Institute for Applied Psychology, Canterbury Christ Church University.

18) What if I have a complaint?

If you have a concern at any point in participation in the study, in the first instance please let me know. If following this you don't feel your concern has been adequately resolved, you can make a formal complaint through contacting the Research Director, Dr Fergal Jones, at the Salomons Institute for Applied Psychology. He can be contacted at the following address:

Dr Fergal Jones, Salomons Institute for Applied Psychology, One Meadow Road, Tunbridge Wells, Kent, TN1 2YG

Thank you for taking time to read this information sheet. If you have any questions or if you'd like any clarification about anything then please let me know.

Appendix K

Participant Debrief Sheet

Debrief Information

Thank you for taking part in the study. We hope through interviewing women about their experience of a pregnancy that was not planned, the understanding gained will benefit organisations which support women before, during and after becoming pregnant.

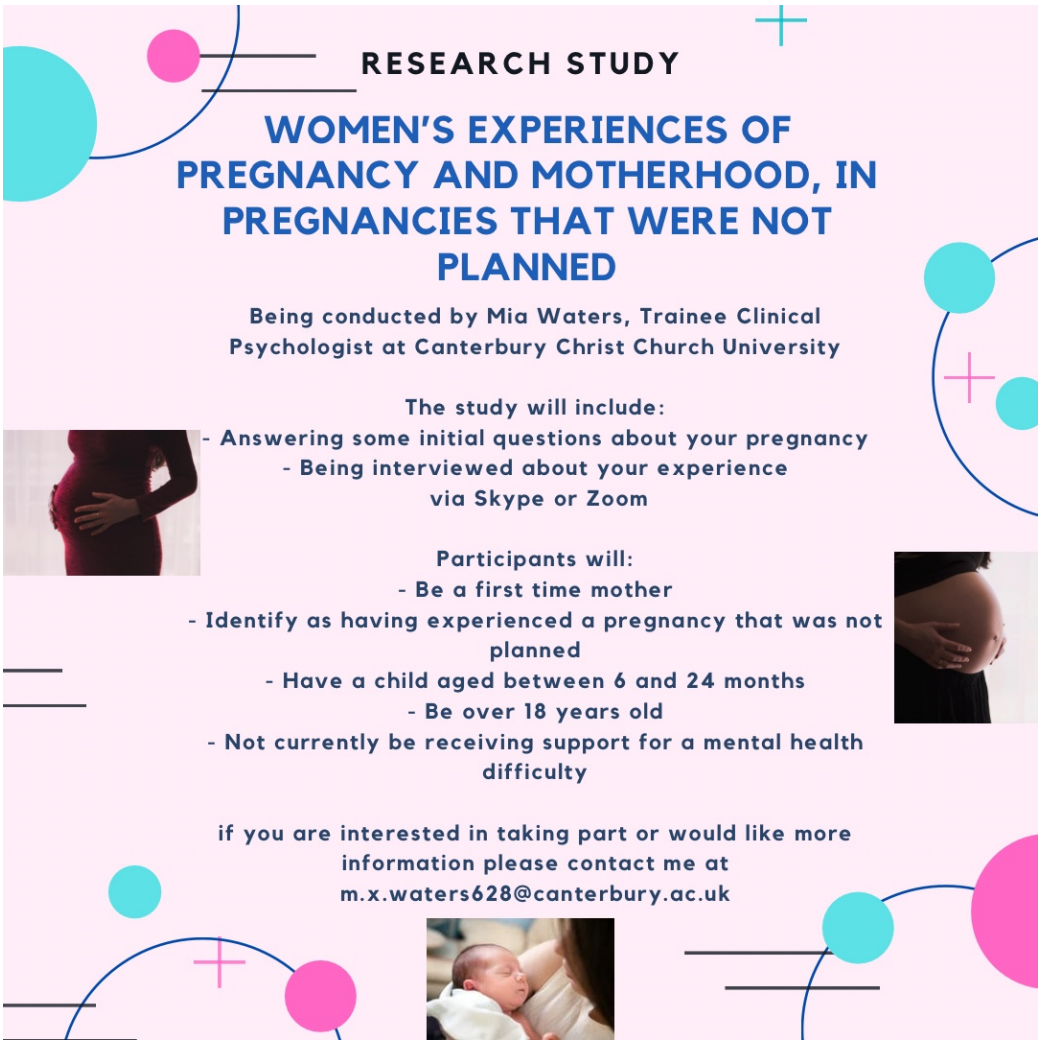
We hope that following taking part in the research you are not experiencing an increase in difficult feelings and any questions or concerns you might have had have been answered.
If you think or feel that you need some support following speaking about your experiences, below are a list of organisations who might be helpful to contact.

- Your health visitor
- Your GP
- Your local IAPT (which stands for Improving Access to Psychological Therapies) service – they provide talking therapies for people who might be having difficulties such as low mood or anxiety. Some IAPT services accept self-referrals, while others are accessed through a referral from your GP
- Specific mental health organisations supporting parents postnatally:
    - Association for Postnatal Illness - https://apni.org/ They run a helpline as well as a service to pair parents up with a volunteer
    - Pandas – pandasfoundation.org.uk They're a charity supporting those experiencing a mental health difficulty during or after pregnancy
    - National Childbirth Trust - https://www.nct.org.uk/ The UK's largest parent charity, supporting parents throughout pregnancy, birth and postnatally

If you'd like further information about the research, please contact Mia Waters (Trainee Clinical Psychologist) at m.x.waters628@canterbury.ac.uk

Appendix L

Participant Recruitment Advert and Accompanying Message

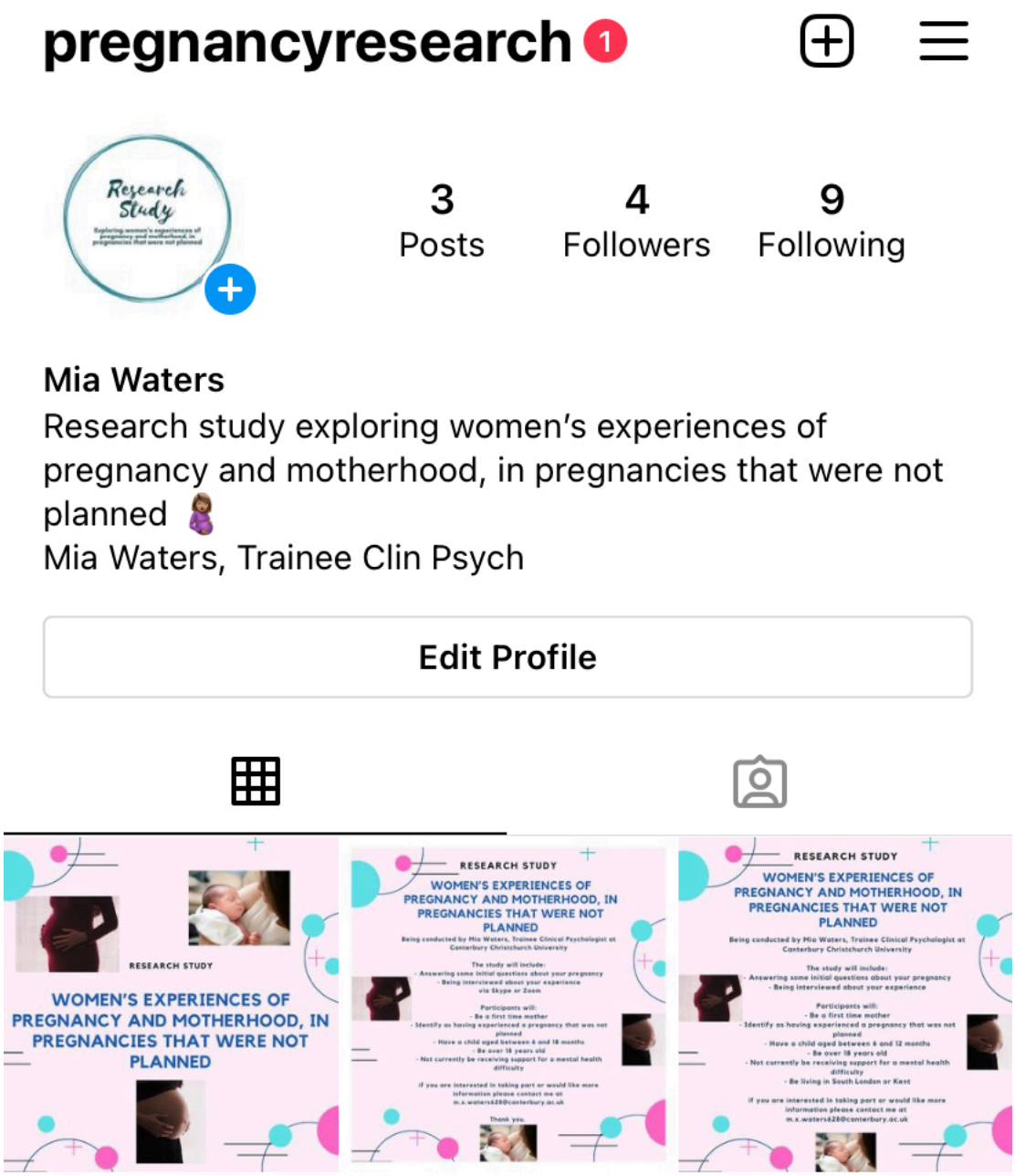


Message accompanying advert:

Hi All,
I am recruiting for my research project, exploring women's experience of motherhood following a pregnancy that wasn't planned. Women who take part will be entered into a prize draw with a 1/5 chance of winning a £25 Amazon voucher as well as receiving a £10 thank you for their time. Please email me on m.x.waters628@canterbury.ac.uk if interested! I'd also be really grateful if anyone could share my poster with friends/family/colleagues who might be interested in taking part.
Thanks, Mia
(Permission has been given from admin of the group to post)

Appendix M

Twitter and Instagram Pages



Edit profile

Pregnancy Research Study

@PregResearch

Research study exploring women's experiences of pregnancy and motherhood, in pregnancies that were not planned. Conducted by Mia Waters, Trainee Clin Psych

Joined February 2020

29 Following **21** Followers

Tweets | Tweets & replies | Media | Likes

Pregnancy Research Study · 14/01/2021

In the final month of recruiting now ⭐ Please share with anyone who might be interested in taking part. Looking to reach first time mothers who have experienced a pregnancy at a time that wasn't planned 🤱 please see photo for more detail! #postnatal #newmum #motherhood

Appendix N

Demographic Information Sheet

A study exploring pregnancies that were not planned

Demographic information

Please complete the below information, which will be used to describe the sample of women we have interviewed in the write up of the project. We will not be identifying women individually in the write up, so the information you give us will be anonymised.

Your date of birth……..

Marital status (please highlight)

Single Married Separated Divorced Widowed Co-habiting Partnered

Prefer not to answer

Ethnicity (please highlight)

White British White Other Black or Black British Asian or Asian British

Mixed Prefer not to answer Other (please specify)……..

Sexual Orientation (please highlight)

Heterosexual Homosexual Bisexual Prefer not to answer

Your child's date of birth

Employment status prior to becoming a mother (please highlight)

Full-time Part-time Unemployed Student Retired Prefer not to answer

Employment status since becoming a mother (please highlight)

Full-time Part-time Unemployed Student Retired Prefer not to answer

Appendix O

Participant Consent Form

Consent form

A study exploring pregnancies that were not planned

Name of Researcher: Mia Waters

Please initial each box

1. I confirm that I have read and understood the information sheet dated 03/2020 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 my data up to 14 days following my interview without giving any reason. I understand that following 14 days after being interviewed, it might not be possible to remove all of my data from the study. ☐

3. I understand that data collected during the study may be looked at by project supervisors: Dr Kat Alcock and Dr Rachel Whatmough. I give permission for these individuals to have access to my data. ☐

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

5. I agree to take part in the above study. ☐

Name of Participant_____ Date_____

Signature _____

I would like to be contacted once the project is completed, with a summary of the study findings ☐

The email address I would like the summary to be sent to is: _____

Name of Person taking consent _____ Date_____

Signature _____

Appendix P

Bracketing Interview Questions

- Why this topic? What triggered your interest?
- Do you have any expectations about what might come out of the interviews?
- What's your personal experience of the topic?
- Do you have any hopes about what you mind find? What do you think the impact is of you not finding this?
- How might your views on the topic influence your interviews?
- What might be your blind spots?
- What might you struggle to ask in the interview? Is there anything you predict maybe shying away from?
- What are the potential costs or benefits to you of undertaking the interviews?
- Have you had thoughts about being someone who has not experienced a pregnancy and researching in this area?
- What do you think it will be like acting as a researcher rather than a therapist in the interviews?

Appendix Q

Research self-positioning statement

I am a white British, female trainee clinical psychologist who does not yet have personal experience of pregnancy or motherhood, though my hopes for the future include starting my own family. I have a longstanding interest in maternal mental health and have experience of working with mothers who have experienced postnatal mental health difficulties. I have been interested in the meaning women make of their experiences of pregnancy, finding attachment-based literature around the antenatal bonding particularly fascinating. This project also partly developed through a growing interest in the timing and intendedness of pregnancies as I became increasingly aware of the pressures that women appear to be under in modern society, with the expectation of women to simultaneously hold multiple significant roles. This has perhaps become more prevalent in my mind as I think about future motherhood myself. I am interested in how women manage the expectations to be both a mother and to have a career in often fulltime positions and how these expectations may impact on a woman's wellbeing. I am aware that my views on this topic are influenced by the culture in which I have lived for the duration of my life. I have lived within a society where it is mainly accepted that women can have multiple roles and that although there are still inequalities in the UK about women's support to hold these different positions, this is something which is culturally accepted.

Appendix R

Excerpts from reflective diary

14th June 2019 (After submitting research proposal)

Feelings of excitement! Really helpful meeting with Rachel and Kat which really clarified why the project is useful/relevant to the profession. Re-iterated how interesting it is that only half of pregnancies in the UK are planned and lack of understanding about what the impact is on women in the other half of cases.

18th December 2019

Ethics confirmed in principle – woop!! A few amendments to make but nothing major. Questioning the number of people to be included so need to think about that. Excited that it has been agreed.

Read up on IPA a bit more and that's helped with clarity about the process. Including being wider around terminology. Gone from 'unplanned pregnancies' to 'pregnancies that were not planned' in all documentation. Feels less stigmatising and helpful.

March 2020

Started working through local pages and posted advert on Facebook pages. Not much response in terms of liking or comments from people. No-one got in touch showing interest in taking part.

COVID HIT and we went into lockdown….

Huge questions over everything related to the course and research. Really struggling with motivation to post advert when it feels like no one will be interested during this time. I can't imagine doing interviews during this time. Too many balls to juggle with the same expectation to be continuing 'as normal'. Needing to speak to Kat and Rachel in order to decide what to do next.

17th April 2020

Zoom meeting with Kat and Rachel. Realised how stressed out I have been this last week about the situations in the world and how poorly [friend] is. Had a cry about the stresses of the situation. Said about recruitment being on hold potentially. Rachel said that wasn't the message she had received about the situation so for me to continue. Decided to expand the criteria – widen the age of the child and go national at this stage. Relief to be able to open it up and conduct via video. Also feels a bit sad to have lost some of the face-to-face nature of the project which I was looking forward to, but good to feel there is a way I can continue. Kat noticing 'practical tasks' feeling more feasible at the moment rather than more intellectual elements of the course – really helpful! Agreed to push recruitment for the next 2-3 weeks and then review where we are. Scheduled a meeting for May 7th.

5th May 2020

Post bracketing interview.

Key themes:

- My expectations of what might emerge: positive aspects of having a baby no matter the non-planned nature of the pregnancy. This might not be the case. I have hopes that these positives might emerge throughout, though also to hear about challenges
- Thinking about the sample I will recruit and thinking it will lean more towards women who have had positive experiences in pregnancy and motherhood, both in terms of those who are willing to talk about their experiences and through not including women with a mental health difficulty
- Therapist/psychologist hat vs researcher: awareness that I might slip into 'clinical' mode and the need to remain objective and non-emotional. I perhaps perceive people as more fragile or vulnerable than they are, when actually people are resilient and able. Remembering I'm not going to be interviewing a clinical population
- Remember to say pregnancy that was not planned rather than unplanned! The connotations which come with unplanned could potentially stop the objectivity of the interview
- Awareness of the stage of life I'm at with wanting children/family myself in next few years. My interest in the subject perhaps overlapping with personal interests
- Genuinely interested and excited to hear about experiences of women, and to have the chance to listen and not be a psychologist trying to offer help
- Future area of interest for clinical work so I'm excited to have the opportunity to work in this area in a different capacity
- Wondering whether protective factors could emerge which could then be applied to women who might find the experience of a pregnancy that was not planned more difficult
- The more difficult aspects of the pregnancy might be in relation to work/practicalities rather than the baby in itself – perhaps easier to discuss and less stigmatising

8th May 2020

It's the day after my first interview. I was nervous before, though perhaps not as nervous as I might have been if I was meeting someone face to face. It felt quite natural sitting in my study and speaking to her while she was in the comfort of her own home too. It was a really enjoyable experience, perhaps more enjoyable than I thought it was going to be. The conversation flowed easily, she was very talkative which helped the process and allowed for lots of interesting reflections to arise. There were a couple of points where I felt I interrupted the flow a little while trying to ask a question from the schedule, though this didn't feel disastrous to the flow of the interview. She spoke a lot more openly than perhaps I was expecting – she went into quite a lot of detail but it was refreshing and helpful to hear her so readily share her views.

- Any unexpected themes: I think the impact of the pregnancy on the relationship was more than I had predicted it would be. She spoke very openly about how it impacted

on the relationship and the negative feelings that her partner had towards her having the baby. This seemed to be a big theme of the conversation and her experience of the pregnancy. Then also the reflection she made that had she not had the baby, maybe the relationship would have not lasted.

- Expected: the positives of having a baby. The embracing of the pregnancy once she knew she was pregnant. That the social situation that she was in influenced her decision making about keeping the baby and making it work.

20th July 2020

I've now completed four interviews. I have really enjoyed the process of interviewing – more than I thought I would. I love having moments of 'oo that's really interesting' as I listen to women and their journeys. It is a step away from clinical work which I am enjoying – I don't need to be their therapist or find solutions or answer concerns. I get to actively listen and follow where they want to go.

Recruitment has been a bit tougher than I thought though at the same time I feel on track with it. I thought the pushes of posts I did would maybe have led to more participants, but it's proven difficult to find women who fit within my inclusion criteria in terms of ages of children. If I had a wider age range I would have had 10+ participants by now. This is reassuring in some ways because it means that women are interested in my study, but on the other hand it is frustrating that I can't include them.

Other thoughts:

Why is there such a negative discourse around pregnancies which are not planned? Why is it the most amazing thing if a pregnancy is planned? Then a negative event when not planned? Is it society associating the pregnancies not being planned as a result of something destructive or unhealthy? Is it the expectation that babies should be wanted and therefore there is an association between not being planned and not being wanted? Is it tied up in people's thoughts about abortion and the ending of pregnancy?

13th October 2020

Beginning to search for Part A question.

Surprised again at how negative the narrative is around women who have a pregnancy that was not planned. What does it mean to have an unplanned pregnancy? Why is it so stigmatised? Wanting to put the positive experiences I've heard so far out there – needing to stay with data rather than a 'top down' approach though. It does seem from interviews so far that positives have come out though.

Aware that I might be capturing the views of women where the experience of a pregnancy that wasn't planned was more positive that many others. Still important to capture those perceptions and may lead to future research.

25th January 2021

Data collection is finished! I've had two more interviews since I last wrote, meaning I have now reached the minimum number I needed to get for my sample, according to my ethics. My

seventh one was an interesting one. It was the only one I've done where it was a single mother and not someone married or co-habiting. It was quite a long one and lots of interesting things came up. Quite a different experience and wondering how to integrate with other experiences. Feels like I could do a full thesis about just one person!

29th January 2021

What I think might emerge from the analysis (to 'bracket'):

- A sense of what pregnancy would have been like if it were planned
- The finding out process – this being very unexpected, leading to feelings of shock
- The processing of the pregnancy
- The thoughts/feelings of family members/partner/friends
- The acceptance
- Mixed feelings about the timedness of the pregnancy
- The arrival of the baby and this putting aside the previous ambivalence about a baby
- The impact on career – the expectations on women to do it all
- Connecting to values
- Re-evaluating life

Excited for the analysis stage, I really want to be able to make sense of all the data I have collected.

4th February 2021

So I've nearly finished the analysis of my first two interviews. It's a much longer and time-consuming process than I imagined it to be so feeling a bit exhausted from doing so much of it today. The integration of the identity of a mother has been something which has stuck in my mind from today's analysis. Also the feeling of responsibility a women experiences as soon as she becomes pregnant. It's been interesting to read the differences between men and women's adjustments following a pregnancy. One woman felt like she appreciated the importance of holding on to her previous sense of self, and felt like she was 'adding' to her identity by becoming a mother. The other seemed to have lost some of her identity throughout the process – particularly with others perceiving her as 'the pregnant one'.

The two women I've read the transcripts of today felt like they had to instantly change particular habits such as drinking, eating and smoking. Whereas for the fathers they could continue going on holiday, no change to work etc. This added a sense of responsibility for women that partners did not have to experience. The prioritisation of the family above career/work is another thing that is particularly interesting. Women facing the complex emotions of returning to work and how they manage this with a baby.

20th February 2021

I finished Cara's interview today. Some really interesting things that came out in hers. One thing that is sticking with me is the dissonance between how she saw herself and experiencing an unplanned pregnancy. She saw herself as someone who planned and thought about

everything and made ‘sensible’ decisions. She felt like having an unplanned pregnancy was not in keeping with how she viewed herself. She has been able to integrate the identity of herself as a mother well, which I think has helped with the transition.

Career choices and timelines were really important to her, and it was interesting hearing her speak about these no longer being her priorities now – these have shifted to being about her little girl.

6th March 2021

Really grappling with where to put career in my analysis – under which theme does this come? It seems to overlap in several different places. It’s really difficult to know whether to keep in a subtheme from a certain interview, when it only occurs in one of the interviews. Really want to do justice to the data, it’s quite a lot harder than I thought at this stage. I’ve now been through all eight interviews for analysis which feels good.

13th March 2021

Finding it difficult to say goodbye to particular themes/subthemes as they feel important but may only capture one person’s experience. I have so many quotes it’s quite overwhelming to fit everything in. In particular, Zoe’s experience is quite different and has brought up different sub-themes that don’t come up in others. I want to remember to integrate her reflections about there needing to be different support offered to women who have pregnancies that were not planned. She spoke about not fitting in with other women who experienced pregnancies – perhaps this could come into the grappling with identity section? Or it could come under the ‘a lot of assumptions’ theme.

21st March 2021

Working on my results section of Part B and struggling with doing it justice. There is so much data and I really want to get it right. I’ve renamed a few subthemes/themes today to ensure I’m using the words of participants as much as I can which has felt productive, but trying to get it into a coherent narrative which fits within the word count is really difficulty.

Feel like I’ve hit a bit of a wall tonight – I just want it finish but I’m losing brain energy quickly. Wanted to send a draft of part B to Rachel tonight but it doesn’t seem possible. It’s not where it needs to be before being read by her I don’t think.

Appendix S

Concluding reflections on completion of the project

I have thoroughly enjoying conducting this research and feel privileged to have had the opportunity to speak to women about such personal, life-changing experiences. A few of the women reflected that they've not previously had the space to stop and think about their transition to motherhood and their pregnancy journeys and were grateful that the interview had been an opportunity to do this. It seems that the interview experience had benefits for the contribution to the research field and for the women individually, which was positive to hear.

I do wonder whether there were women who saw my research advert and felt concerned about taking part due to fear of judgement or concerns about how they would be perceived if they were to speak about their baby not being planned. It seems unplanned pregnancies can often be associated with negative outcomes as well as perhaps there being assumptions that women who do not plan their pregnancy are reckless, irresponsible and perhaps not as good a parent as those who plan their pregnancy. I wonder whether there is more I could have done on my research advert to emphasise that the intention was to hear about women's experiences from their perspective, with some reassurance that there would be no judgment.

It has been demanding carrying out the project during the Covid-19 pandemic – it has been emotionally exhausting at times to balance elements of the thesis alongside the personal aspects of the situation. I have been grateful that my project transformed relatively easily into one I could do during the pandemic, and I think there were even benefits to it being pushed online, as I reached women who wouldn't have originally been reached because of the geographical inclusion criteria. Perhaps women also felt they had more time to partake in research during the pandemic, as more people were forced to be at home.

I have been aware that I've perceived there to be an 'untold' story of mothers with pregnancies that weren't planned and I've wanted to do justice to women's experiences through this study. It has been more difficult than I imagined to feel as if I have achieved this as fully as I would have liked to, as I feel I could write many more words than the thesis word count allows for. Making sense of eight different women's experiences is complex and time consuming and unfortunately doesn't leave room for every women's journey to be talked about in full detail. This has made me reflect on the recommended sample sizes for IPA; I can fully now see why guidance for conducting an IPA project is such, as the richness of the data I have collected would allow for a detailed analysis with fewer participants. That being said, it has been thought-provoking and enjoyable having the opportunity to speak to as many women as I have and I have enjoyed hearing the experiences of each women who took part.

Connecting back to why I was drawn to this area of research in the first instance, I have once again been struck by the multiple pressures and demands which women have in modern society and the strength of the women I spoke to. The way women from various career paths navigated becoming a mother at a time that wasn't planned (and all that involves physically, mentally, emotionally and socially), while balancing friendships, romantic relationships, work and a sense of self is not only impressive but inspiring. It makes me think of this quote by Michelle Obama, on which I shall finish these reflections:

"There is no limit to what we, as women, can accomplish"

Appendix T

Example Coded Interview Transcript

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Appendix U

Example Development of Themes with Associated Quotes for Claudia

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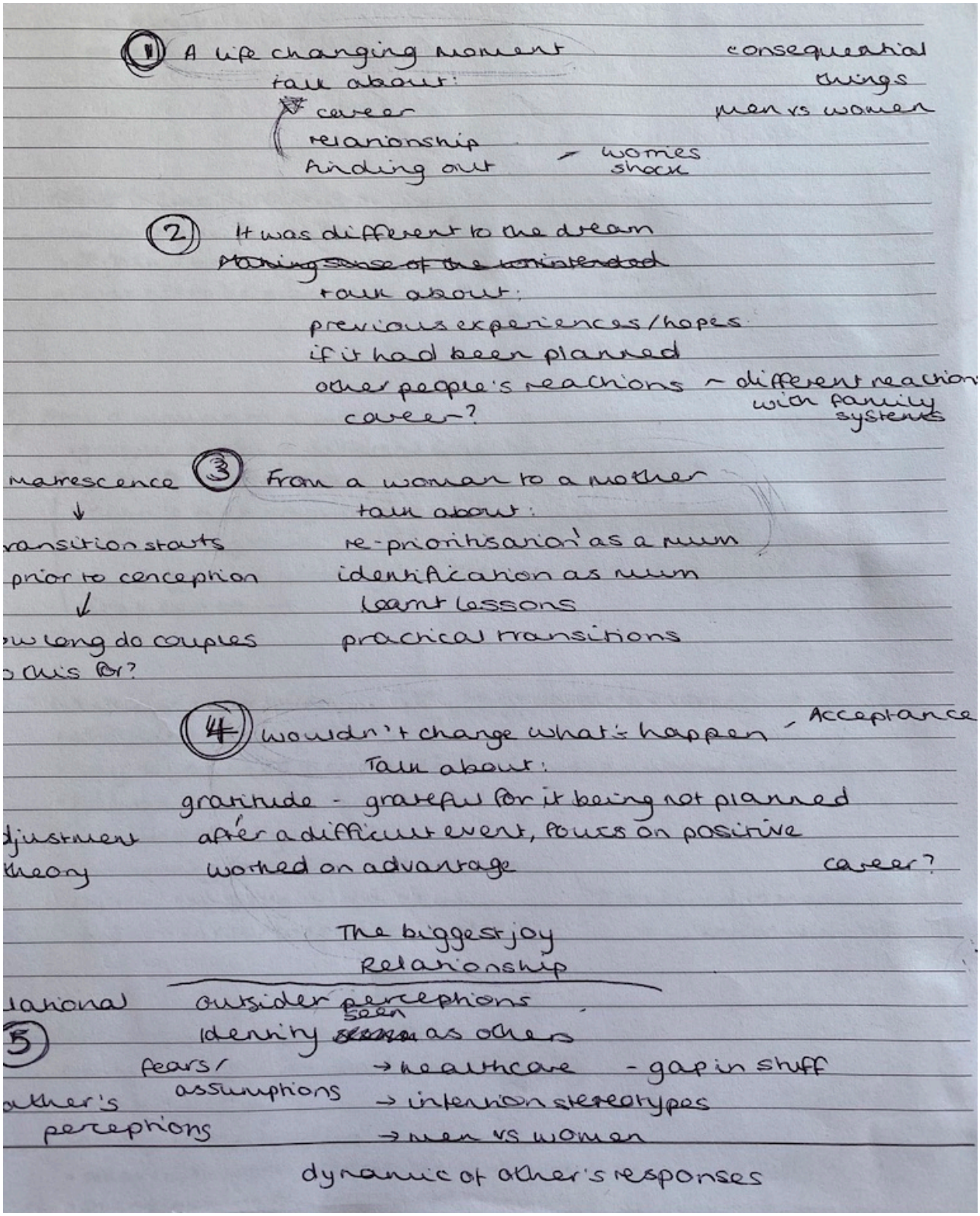
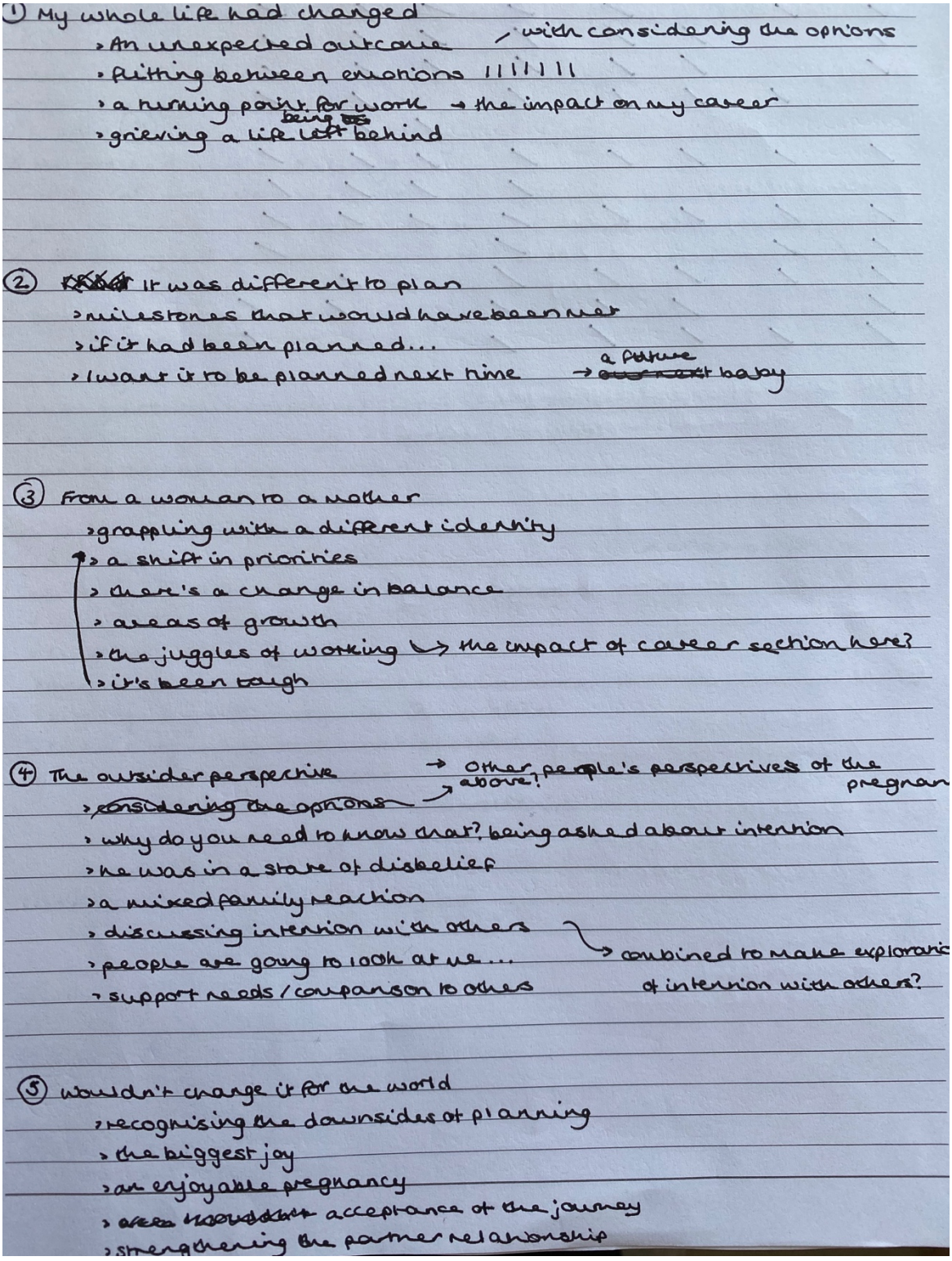
Appendix V

Group Theme Development




① My whole life had changed
» An unexpected outcome
» flitting between emotions
» a turning point for work → the impact on my career
» grieving a life being left behind
with considering the options
② It was different to plan
» milestones that would have been met
» if it had been planned...
» I want it to be planned next time → a future baby
③ From a woman to a mother
» grappling with a different identity
» a shift in priorities
» there's a change in balance
» areas of growth
» the juggles of working → the impact of career section here?
» it's been tough
④ The outsider perspective
» considering the options → other people's perspectives of the above? pregnan
» why do you need to know that? being asked about intention
» he was in a state of disbelief
» a mixed family reaction
» discussing intention with others
» people are going to look at us...
» support needs / comparison to others
combined to make explorati of intention with others?
⑤ Wouldn't change it for the world
» recognising the downsides of planning
» the biggest joy
» an enjoyable pregnancy
» acceptance of the journey
» strengthening the partner relationship

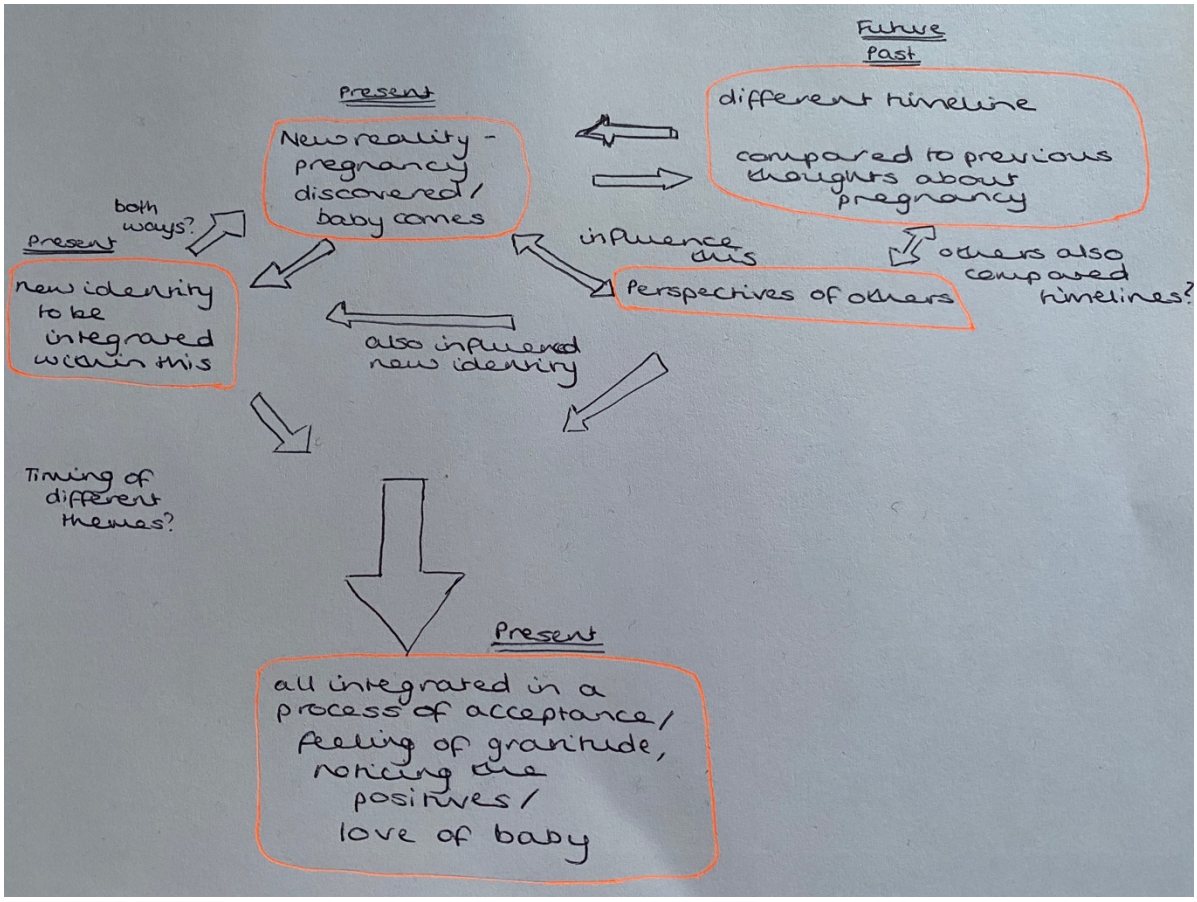


Figure R1. Theme development process notes. The first picture illustrates the notes taken through meetings with a research supervisor, discussing the sub-themes and superordinate themes developing through the data. The second illustrates another stage in refinement of the superordinate themes. The third captures the development of the interacting superordinate themes diagram.

Appendix W

Development of Themes Table

Superordinate	Sub-theme	Emergent theme	Participants with sub-theme
A new reality.	I didn't think the test would be positive	Expected it to be negative Denial/disbelief about a positive test Finding out alone	Eight
	Mixed emotions	Shock/surprise Sad Scared Happy Excited Ambivalence Guilt Mix of feelings	Eight
	How will this impact on my career?	Being left behind Juggling work with baby/making work fit Going part time It's a huge pay cut	Eight
I wanted to plan it.	A change of timeline	It wasn't the right time/we weren't ready It was earlier than planned We're not married Wanted financial stability I wanted to get stuff out of the way We'll buy a house first Lost opportunities	Eight

	A loss of what might have been	It would have been nicer/more enjoyable Never get your first pregnancy again Everyone would have been happy We wanted to adopt Would have been more prepared/could have prioritised better Next baby will be planned	Eight
From a woman to a mother	Making sense of a different identity	Identity changes Mother is part of who I am now Dissonance with sense of self I'm a gentle mum Different roles in relationship A big responsibility	Eight
	A fundamental shift in priorities	Baby as priority Baby comes before everything It's given me a purpose I'd rather be with *[baby]* My plans have changed	Seven
	I have changed as a person	Becoming more flexible Different perspective Less judgmental More anxious More understanding More environmentally conscious Less independent	Six
Others' perspectives	Why do you need to know that? Talking about intention.	Others asking is insensitive/annoying	Eight

		Intention isn't relevant Others will jump to conclusions/there are connotations Do you want an abortion? Support from health professionals	
	Father reactions: He was in a state of disbelief	Shock He didn't believe it He wasn't happy	Three
	Family reactions: from over the moon to disappointment	Over the moon Shock Worry You're not married Excitement They were thrilled Are you sure you can take this on?	Eight
Wouldn't change it for the world	The downsides of planning	Planning is stressful/difficult/constructed People are more anxious if planned Timetabled sex	Four
	The best thing that ever happened to me	Happiness baby has brought Prefer life now Love for baby The most important person to me It was the right time We're really close Positive re-frame	Seven
	Strengthening the partner relationship	Baby connects for life Relationship is stronger We are closer	Six

Appendix X

Extended Table of Themes and Participant Quotes

Superordinate theme	Subtheme	Participant Quotes	Number of participants contributing to the theme
A new reality. I'm pregnant.	I didn't think the test would be positive.	"I was almost a bit like oh no I can't possibly be pregnant and it was a negative feeling at the time." (Rosie) "It was a Friday and I was off work and *[partner]* was at work and completely, I've done it so many times before, and I just thought I'm just going to take a pregnancy test just to make sure so that I don't, cos it had been playing on my mind and I'd been thinking about it and I'm going to be drinking this weekend so I don't want to, I just wanna be 100% sure. So I took the pregnancy test in the morning, completely expecting it to be negative. Erm but then obviously it wasn't. So…I then went back to the shop, bought like three more, they were all positive obviously." (Claudia) "And then…I don't know why you never think that it's, you're going, you know people get pregnant but you never think that you're going to be pregnant I don't know why. That was a surprise to me." (Cara) "…he knew I was taking one and he thought I was going to wait for him but I didn't cos I actually genuinely didn't think it was going to be positive." (Rosie)	Eight
	Mixed emotions	"Erm so I did it and it was positive and for me, a part of me was…I was like quite happy erm but at the same time I was really scared" (Lara) "Erm my first thoughts and feelings were er….'oh fuck' more than anything else. I was just, I was shocked." (Sarah)	Eight

	"Er so when I found out last January that I was pregnant erm I think both of us were quite scared erm I was excited but scared, so a bit ambivalent er sort of flitting back and forth I think with those feelings initially." (Anna) "Erm I was like…I didn't feel anything. I didn't feel happy or sad. I was like this is a fact now. I'm pregnant this is it. Erm yeah didn't feel happy or sad. To be honest I just felt really sick." (Olivia)	
How will this impact on my career?	"Yeah totally, so, I mean I'm leaving, I am abandoning my career and all the progress I've made in order to be with him all the time. Erm and so we made some like financial decisions before he was born which means I couldn't afford to just be at home, not earning. [But yeah have managed to find a job, find a job which means I can be with B all the time and still earn. So, yeah that, yeah completely]." (Olivia) "I wasn't worried about my ability to be a good mum or to successfully raise a child, I was more worried about how it would impact on my career basically" (Cara) "Erm…I think to be honest with you it's some of my kind of concerns still at the moment. How everything's going to juggle when I go back from mat leave… (*pause while attending to baby*) Yeah some of my kind of concerns at the moment about how it's all going to manage." (Sarah) "Erm and be able to commute there…I can't just pick up and go oh I'm going to move up North with my son. Erm that point he'll be in primary school and I can't just take him away…and also that would then lead to potentially like y'know having to agree to like a court order for contact with his dad and things like that so that's kind of limiting erm and I think my position at the moment just kind of seeing where it goes but I know that it is going to be a lot more limiting than a typical student. But I'm still feeling kind of positive about it (laughter)…hopefully." (Zoe)	Eight

I wanted to plan it.	A change of timeline	"We kind of said that we wanted to get married before we had children…" (Lara) "I think I had in my head I was gunna have been…I didn't really have a view about whether we'd be married or not but we would have been in our house, we would have been in the careers that we wanted to be in…" (Cara) "Erm so I had no issues with thinking of being an older mum but for me it always felt like I… I wanted to get stuff out of the way first and I'd like wasted so long just working instead of thinking about like a future career that for me I just imagined doing the stuff that I want to do…and meeting someone and then there maybe like just sitting there and saying 'do you want to have a child?' and it being like a discussion like okay well we have…we have the money to have a child, relationship's good er and stable and has been for a long time. Erm and y'know we've done everything else that we want to do solo…now there's stuff you want to do or that you would be happy to do with a child there as well." (Zoe) "yeah it was work because I really would have liked to be further down the line, to have felt a bit more established…and a bit like I…I didn't have such…looking at such a mountain…" (Claudia) "So timeline wise we…it was kind of…when we first got married and things and, so like a couple of years before pregnant we thought like oh late twenties like we, we thought oh it would be quite good to own a house before we got pregnant…" (Olivia)	Eight
	A loss of what might have been	"I was…for the first couple of weeks I think I was sort of grieving for the life I thought I was leaving behind." (Rosie) "Erm…(pause) I feel like…not, not regret cause obviously I've got [baby] and I love him kind of thing. But erm…I feel a little bit kind of disheartened when I think back when it came when it did still, just because of how it's going to impact on the rest of my kind of training. Erm…yeah. And kind of going back to what I was saying about that that independence erm that I had before, again I just…regret not having those opportunities before becoming pregnant." (Sarah)	Seven

"I just always thought…it was interesting because erm a close friend, still a close friend but is a mum erm was very sort of erm, in a supportive way wanted to reassure me by sort of saying….when I expressed my fears that er you know the priority is a life, is a child and the course isn't everything erm and that you can always pick up and sort of complete it. But I think my fear was even though I knew that it was more that I wanted people to understand that there may be a loss for me in terms of just even having um committed to this idea that I would finish and then do it sort of one after the other and that even though I know things don't happen like that there's something about honouring that and validating that I think." (Anna)

"…yeah but I think if I'd…if it had been a planned pregnancy like (partner) and I were speaking about kind of after the [course] I think I, it would have been more naturally kind of…less guilty, happier…erm yeah be a bit more excited about it maybe in the beginning." (Sarah)

"Erm I didn't have people send me anything when he was born. It's only family members I think by the time he was maybe a month old that people started to send like cards and some stuff. But erm…. which kind of made it a bit more sad I think erm looking back that's kind of sad because everyone expects like when you do have a baby, when you have a healthy baby, everyone's going to be happy about it but when you don't tell people and no-one knows, no one's there to be happy about it but I think it was because it was unplanned. I think if there was… if it was planned then it was like obviously so so wanted like the pregnancy was really wanted and everyone would be really happy." (Zoe)

"So maybe we would have done the pregnancy test together, maybe we would've gone to the scan and it had been exciting or like maybe it wouldn't have been such a almost like a fight to get him to accept it." (Lara)

"…I'd quite like to have another baby next year and I was us to go into that together and not it be an accident." (Lara)

"But it was definitely slightly different to what I anticipated it to be like. And, and I do…it must have bothered me more than I thought it did because we always joke and say our next baby definitely will not be unplanned, they'll

		definitely be planned so there must feel like there was a stress associated with the fact that it wasn't planned..." (Cara)	
From a woman to a mother	Making sense of a different identity	"So I'm quite looking forward to going back to work where y'know, as much as I'll miss him, I don't have him and I'll be seen as Claudia a bit more again. I think that might be quite nice." (Claudia) "They've found like they lost their identity a bit and they were desperate to get it back and it was a negative part of the experience whereas I'm finding it the opposite." (Rosie) "I think…I think when I got pregnant it…I have always been like very sensible like made lots of sensible decisions and done what I've supposed to do and I think in my group of friends they would all do things and I was like that's not the right thing to do. So I think in my head that wasn't something that was supposed to happen to me so it made me feel…it made me feel uncomfortable because it made me feel like that wasn't part of who I identified with or who I felt like I was as a person. So it made me…it was very out of character and that made me question the type of person that I was I guess…a little bit." (Cara) "And then there was this sudden change in balance where I was at home looking after the baby and he was sort of carrying on with our old life more." (Claudia) "…because you don't, you can't just slot back in because everything's different so you now need to work round childcare, you need to kind of manage your work hours and stuff like…whereas he just said it because in his head like he doesn't have to be pregnant and then he takes two weeks off paternity leave and then he goes back to work and everything just carries on and I'm just on maternity leave so I'm at home dealing with it." (Cara) "Er it helped to have a husband who was excited but also understood er that you know a baby is important but it doesn't take away from my identity of wanting to be…you know my work identity as well so we were able to have conversations, balanced conversations like that which helped I think." (Anna)	Eight

	"I feel like there are certain people in my life who have children who are very comfortable with the fact that they are mum and that is the majority of their identity. I feel like my identity is more…a mix of everything, mix of being mum and my career, relationships and everything else. I feel like it's part of me but not all of me if that makes sense." (Sarah)	Seven
A fundamental shift in priorities	"So obviously he's my priority. So he comes before everything else." (Lara) "She's, she's my priority in every minute of every day so y'know my work went out the window.." (Rosie) "I really like *[current training]* but if it becomes too difficult when I go back I'm quite happy to change and do [*different training]* or something that's a bit more easy for a family life." (Claudia) "I think my plan…I think my priorities have totally changed. So work used to be the thing that was most important to me and the thing I made decisions around. Whereas that has totally now shifted. So now she is obviously the most important thing to me" (Cara) "...and I have to erm think about my future as well because I can't just sit around and do nothing and I can't just go back to my old job because he needs childcare and he needs someone to look after him so I have to think about a future career that I can balance around him being in school…at least for the next sort of y'know ten years until he's in secondary school." (Zoe)	Six
I have changed as a person	"Um I'm a bit calmer than I used to be. I used to be very…a bit of a sergeant major, I liked everything done a certain way and if it wasn't then I didn't like it. I'm not…I'm a bit more chilled out now." (Rosie) "Erm and I feel really proud of myself for the way I handled some of the challenges thrown at me and I feel really…I think I've taken a lot from being able to stick to with some of those decisions, that really surprised me…erm that's huge for me." (Anna)	

		"I think I've just got a bit of perspective in terms of what matters and doesn't matter a bit more and hopefully get a little less stressed about kind of unimportant things." (Claudia) "Definitely more flexible person. I definitely…I think I used to be the type of person that would try and plan things and then I was very rigid in…if things didn't go to plan it would really stress me out and I felt like I needed…I felt like I needed a lot of control over my life..." (Cara) "Less judgmental of other mothers. Um or sort less opinionated, well I am still opinionated but less wedded to my opinions I think about parenting." (Anna)	
Others' perspectives	Why do you need to know that? Talking about intention	*[when asked by a health professional]* "Erm (pause) a part of you is probably a bit like why do you need to know that? And a part, I, I suppose if like if if she asked me if it was planned and I said no, and then she kind of delved into it a bit more and maybe asked me how I was feeling and stuff like that then maybe that would be relevant but I think to ask it and then there not be any relevance to it is kind of irrelevant." (Lara) *[when asked by a friend]* "Um initially it made me feel a bit sort of unsure. I felt a bit like it was an invasive er…not invasive…was er, was er…wasn't any of their business. I felt a bit irritated um but then I think immediately I thought well why am I feeling irritated?" (Anna) "Erm…(pause)…Kind of but I think it's still…people don't really admit to unplanned pregnancy that much so I wouldn't know like if someone did have an unplanned pregnancy I wouldn't know...like I, I think for me before I never really thought about it like never really thought about unplanned pregnancies in any way because no one ever talks about it…like no one ever says this baby was unplanned." (Zoe) *[when asked by a friend]* "Erm and I think I just didn't think really it was a relevant point to be honest because I was like at the end of the day, we're having a baby it is what it is and whether it was planned or not doesn't really matter because it is the case so it's not…it's kind of like a...by the by really." (Cara) *[when asked by a friend]* "I was a bit like even if it wasn't planned or even if it was, it's not a) not really your business and b) it's quite insensitive because it…in my head it insinuates that you assume that it wasn't planned and then I think there's	Eight

	lots of pre-conceived notions that come with having an unplanned pregnancy." (Cara) "Umm…I think….(pause) erm I think with me…so I'm 26 erm so I'm quite young erm but I'm but I feel like er there's an incredible pressure on women at the moment in particular in society about A) if they want children, pressure to have children and B) to have them either young or to wait until after their career and have them when they're older. And there's not this in between middle ground where you can do both. Erm so I feel like from a lot of people there was a lot of assumptions made about yeah my age and er where I am in my career, if it was like a smart decision or not almost." (Sarah)	
Father reactions: He was in a state of disbelief	"But the only way I could prove it was when I got a scan and I sent him a picture of the scan and even then he said that because I work in a hospital I probably asked them to fake it which is like absolute…like the amount of people like people would lose their jobs over that. That sort of waste of like medical equipment and time erm and falsifying medical records people would lose their jobs so I was like that's ridiculous but that was like the only way I could prove that I was pregnant yeah." (Zoe) "...he was, he was in a state of disbelief, he was shocked um but with a big smile on his face and I don't know whether the smile was to sort of temper it a bit for me but I remember I was reassuring him and saying it'll be fine, it's be fine…" (Anna) "Erm…I think (pause)…erm…I think for him as well it's just been a big kind of…the whole thing has been quite a big shock, a big readjustment because he's had a child before, he's got a fifteen year old erm so it's been quite a considerable amount of practice, he's been around a baby and things, but it's been quite hard for him." (Sarah)	Three

	Family reactions: from over the moon to disappointment	"…she wasn't disappointed that he was having a baby with me, I think it was more that she was disappointed that we hadn't got married first" (Lara) "Um my mum was over the moon. Um I mean I'm 32 now so I mean my mum had been hoping that I would start a family for a while so my mum was over the moon." (Rosie) "Erm, extremely happy and excited. They, they'd been sort of almost I think pressurising us. Not really sort of…understandably in some ways were not really understanding the balance and that we can have an identity outside of being a parent at a certain age. So having quite...those traditional ideas. So very excited and sort of almost had that undertone of you've got your priorities right now." (Anna) "I definitely think not being married played an issue with his family a little bit like that seemed to be a bit of a narrative that like ran through…slightly unsaid." (Cara)	Eight
Wouldn't change it for the world	The downsides of planning	"But then I suppose again like even when you plan it I've had lots of friends that have planned their pregnancies and I's been a really, really stressful time for them." (Lara) "I feel really positive about the fact that we never had to go through trying and like the stress that I've seen in lots of other people of going through months and months and a couple of years of trying to get pregnant…" (Claudia) "I just assumed that it would be really difficult and that you'd be like taking like all these supplements and be like timetabling when you have sex, and yeah I assumed that would be for us. Erm but…yeah, I mean obviously it doesn't always, isn't always stressful. But yeah I thought that it would be." (Olivia) "And I definitely have curbed, curbed myself in terms of holding back a bit because you then realise that friend that I've been talking to has been trying for two years to get pregnant and you suddenly feel a bit guilty about the fact that you, we had it so easy." (Claudia)	Four

The best thing that ever happened to me	"But overall he's just the biggest joy. He's just the best thing in my life hands down. He's just great." (Claudia) "…she's the best thing that ever happened to me and I wouldn't change it for the world now." (Rosie) "just knowing that you're like growing another human I just found that like magical" (Lara) "Erm the 20-week scan, erm, I think once I knew he was a boy that was when I realised, oh wow, my body really knows what it's doing, how can my body grow boys? Like it can't even replace some of its own cells, how can it know what to do?" (Olivia) "Um as it happens, I prefer my life now. So looking back I feel awful for feeling like that because she's the best thing that ever happened to me and I wouldn't change it for the world now." (Rosie) "Well I'm really glad I had her when I did and I think actually she just came when we were meant to have her and she came at the exact right time erm so I wouldn't change a thing about it. Yeah, it's perfect timing." (Cara) "But then erm by the time I thought about it, it was like I dunno…it was just sort of like I'd never go back. I'd never go back to before he was there." (Zoe)	Seven
Strengthening the partner relationship	"Erm she's definitely shifted it in that like…when before we had her we were together but we had out like separate families now whereas now if someone asked me to draw my family I would draw me him and her." (Cara) "Erm yeah it felt during pregnancy it felt like we got a lot closer." (Anna) "Like I feel less…I feel like it would take a lot more to break us up because y'know I feel like we work harder at our problems." (Claudia) "So um I would say if anything it has made our relationship stronger and better and healthier and um…yeah better all round really." (Rosie)	Six

Appendix Y

End of Study Letter to Salomons Ethics Panel

Dear Ethics Panel,

Re: Pregnancies that were not planned: an exploration of the experience postnatally

I am writing to inform you that I have now completed the above study and a thesis has been submitted in partial fulfilment of the Doctor of Clinical Psychology at Canterbury Christ Church University. Please find below a brief summary of the research.

Objective

There is an abundance of existing literature which explores the negative implications of experiencing a pregnancy that was not planned for women and children. These implications include women being at a higher risk of having postnatal depression (Qui et al., 2020), a higher risk of children being born a lower birth weight and women being less likely to attend antenatal appointments (Gipson et al., 2008). The majority of this research has been quantitative, and while it goes some way in examining pregnancies that were not planned, existing literature does not capture the woman's voice within the experience.

The study therefore aimed to address the identified gap in the literature; to explore women's experiences, thoughts, feelings and perceptions of a pregnancy that was not planned, and the transition to motherhood.

Research questions:

3. How do women who have experienced a pregnancy that is not planned make sense of their self during the experience?
4. How do postnatal women make sense of the not planned nature of their pregnancy?

Method

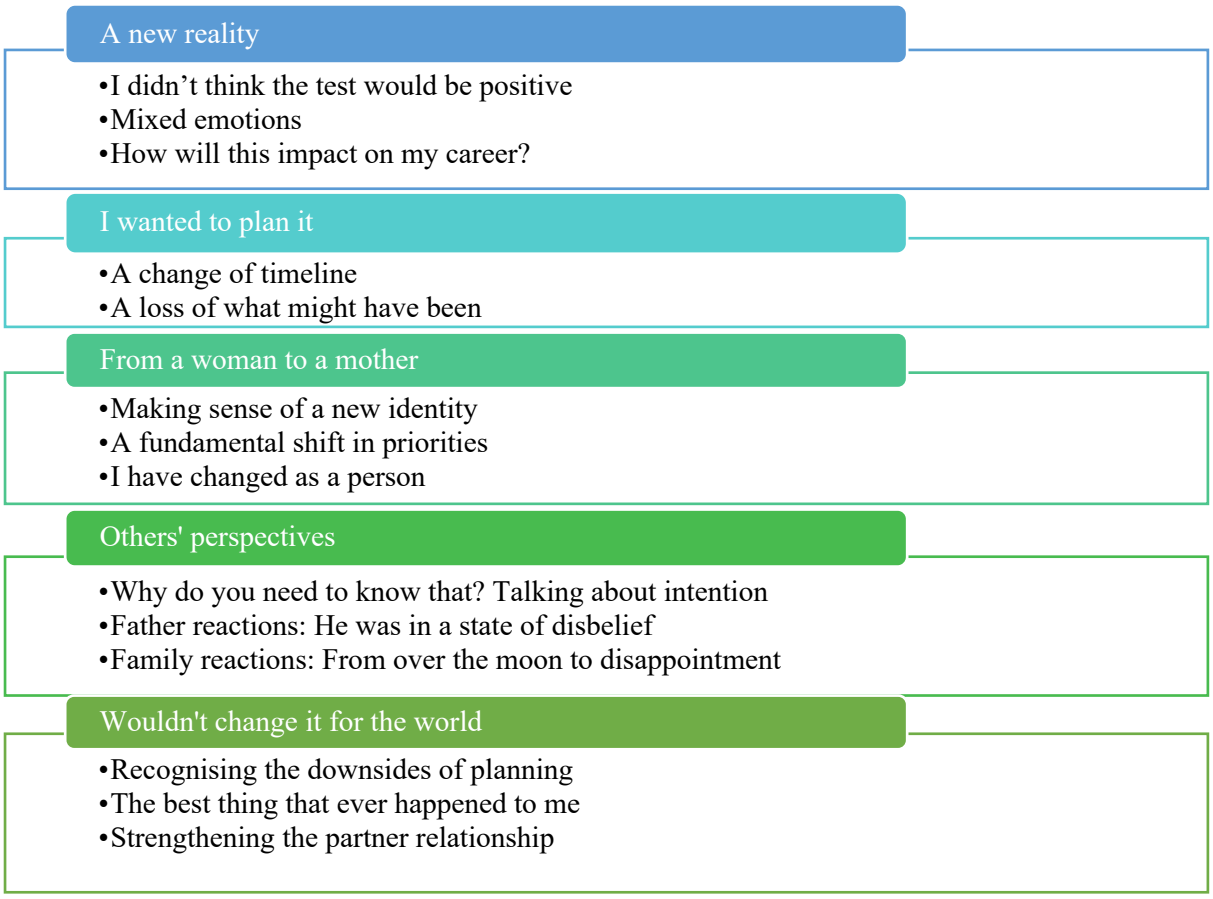
Interpretative Phenomenological Analysis (IPA) methodology was adopted for the study. Eight women participated; all were first time mothers and had a baby aged between six and two years of age. Individual interviews were conducted, which took place via Zoom due to the context of the pandemic and ongoing associated restrictions. Participants were recruited through social

media as well as through a 'snowballing' approach. IPA was used to analyse the interview data, following guidance provided by Smith et al. (2009).

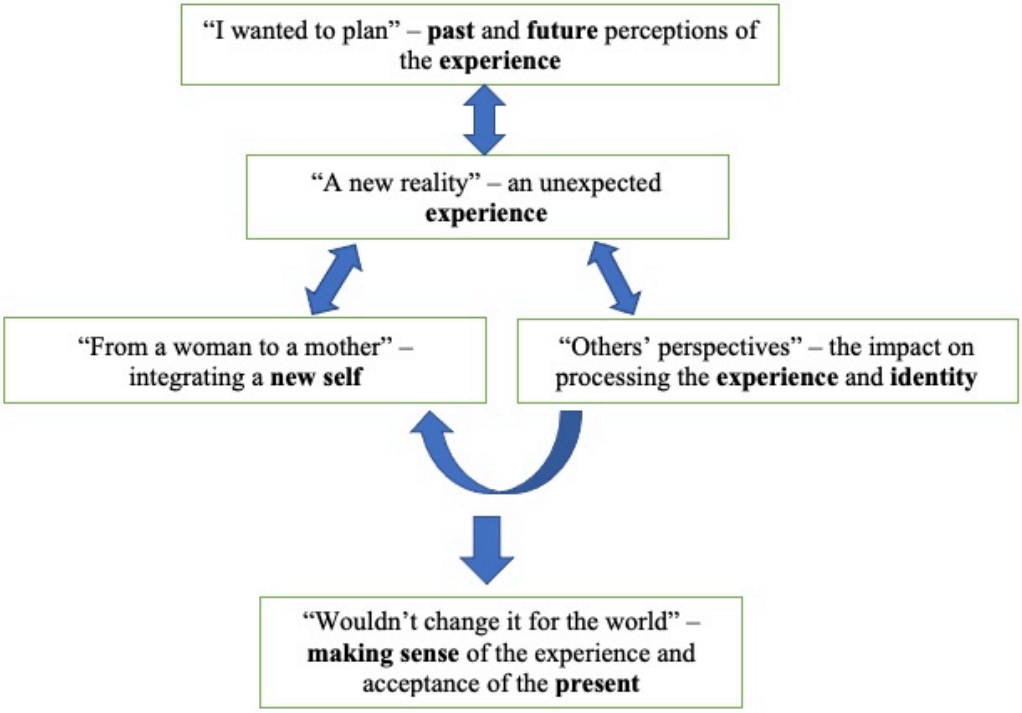
Findings

Through the analysis process five superordinate themes, with fourteen subthemes, were determined from the data.

These can be viewed in the diagram below.



Findings suggest a number of dimensions to women making sense of their experience and self following a pregnancy that was not planned. Women made sense of their experiences being different to planned, as a new reality dawned and they processed experiencing a pregnancy at a time which was not within originally anticipated timelines. The perspectives of others seemingly linked to women integrating the new role of 'mother', as they processed the reactions of health professionals, family members and their baby's fathers. The acceptance of the journey was demonstrated through women speaking about their gratitude in relation to the experience and the joy gained through motherhood. A model was developed to demonstrate the interplay between the superordinate themes, which can be viewed below.



Implications

Possible clinical implications include health professional facilitating more in-depth exploratory conversations about women's experiences and feelings about their pregnancy. The findings suggest a number of unique stressors which may be present for women experiencing a pregnancy that was not planned, including; balancing of a career with being a mother unexpectedly, managing family's mixed reactions, an unexpected change of lifestyle and a change of a previously imagined timeline. It is important that health professionals working in the perinatal field are thoughtful about supporting women who may be managing these aspects of an already demanding time. Peer support groups for women who have not planned their pregnancy could support mothers with the unique challenges and considerations of this experience.

Research implications were also identified. Women spoke about fathers' reactions to finding out about the pregnancy and suggested that they too experienced various emotions and stresses. Future research could include exploring the experience from father's perspectives, to better understand this phenomenon. Secondly, further research could include a wider sample, in order for women with multiple children, older children and those from different cultural

backgrounds. It is also important that future research explores the experience of a pregnancy that wasn't planned from women who went on to experience a mental health difficulty.

Dissemination

A written summary will be sent to the participants. The study will also be submitted for publication to the journal Birth: Issues in Perinatal Care.

Please do get in touch if you have any questions about the study.

Yours sincerely,
Mia Waters

Appendix Z

Study Summary for Participants

Pregnancies that were not planned: an exploration of the experience postnatally

Dear [participant],

I am getting in touch to thank you again for taking part in my research which explored women's experiences of a pregnancy that was not planned, and to share the findings from the study with you. The research has now been completed and I have included a summary of the study with this email.

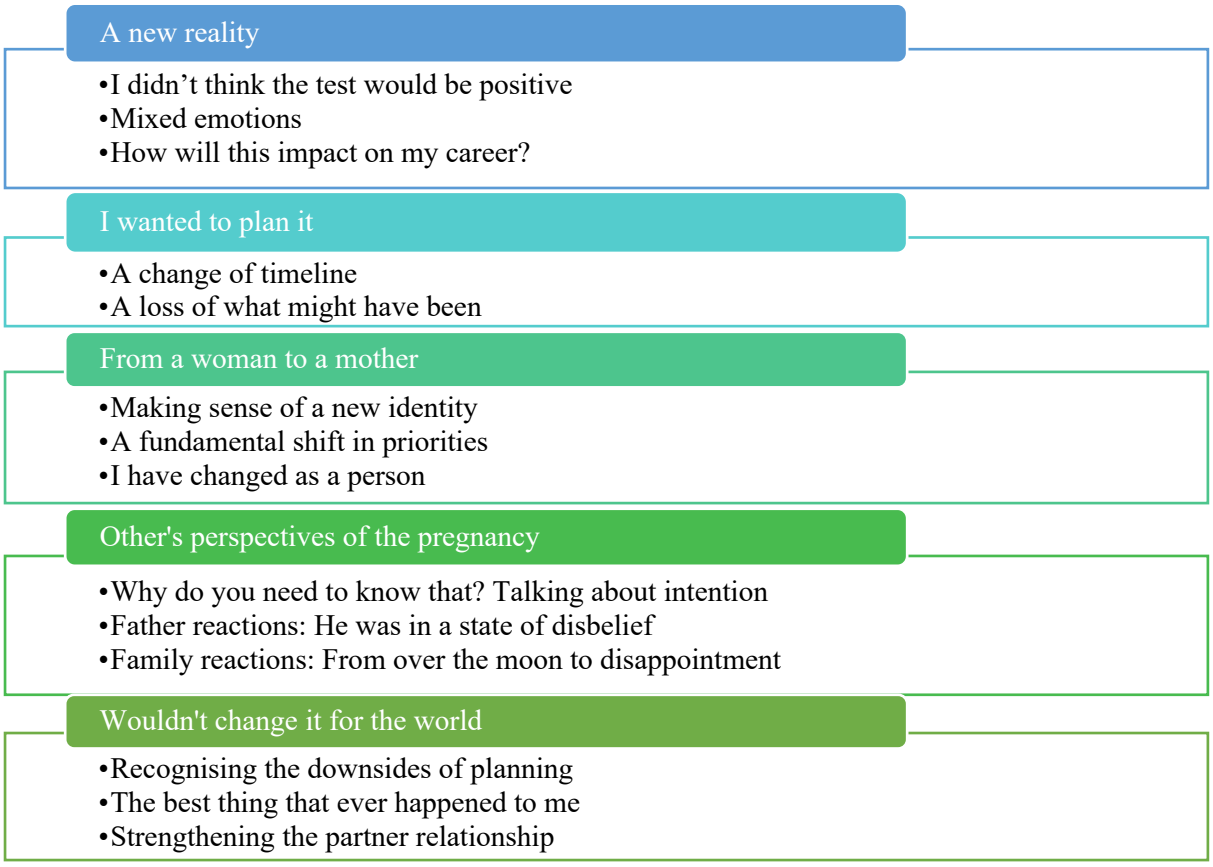
The study

The aim of the research was to explore a women's experience of a pregnancy that was not planned and her transition to motherhood. No previous studies had explored this experience from a woman's perspective postnatally, so the study aimed to address this gap in the literature.

I interviewed eight women, all of whom had a baby aged between six months and two years of age. I transcribed each interview and then analysed the data using Interpretative Phenomenological Analysis (IPA). IPA is a methodology which aims to explore how an individual has made sense of a significant life event, through hearing their thoughts, perceptions and feelings about something in their world. It is considered a dynamic methodology, as the researcher has a key role in the analysis process. IPA is considered to be a two-part process, with a participant first making sense of their experience through the interview, then the researcher trying to make sense of the participant making sense of the event experienced. Because of this, the findings are unique to me as a researcher, and are just one way that the experiences can be understood.

The findings

Five superordinate themes, with fourteen subthemes, emerged from the data. These can be seen in the diagram and are discussed in turn in more detail below.



A new reality.

This theme captured women's experience of finding out about their pregnancy, the emotions that arose following finding out and the processing of what the pregnancy meant for their careers. Women spoke about how unexpected it was that the pregnancy test was a positive one, and this came with a mix of feelings (including happiness, fear and shock). Participants spoke about how they considered their careers alongside the news of being pregnant, including making decisions to change their career path, reduce working hours or to resign from their jobs.

I wanted to plan it.

Participants spoke about how the timelines they had imagined for their of their prior to having a baby. Women had ideas about potentially being married, being settled in a house or being at a certain points in their careers before having a baby – these ideas for their timelines were then changed through the pregnancy happening at a time that wasn't planned. Women also spoke about how they thought the pregnancy and becoming a mother had been different to how it would have been if planned. Women spoke about how it might have felt different emotionally

(such as feeling less fear or feeling happier) and how it might have looked differently practically (such as doing the pregnancy test with a partner).

From a woman to a mother.

This theme encompassed women's thoughts, perceptions and feelings about their role as a mother and developing a new identity. Women differed in how they integrated their new role, with some participants enjoying that 'mother' was their main identity, while others wanted to hold on to their individual sense of self. All women spoke about feeling there had been a shift in priorities since becoming a mother, with their baby and family coming before other aspects of their lives. Participants also spoke about the new perspectives they'd gained since having a baby, including noticing what felt important in the world, being more flexible and being less judgmental of others.

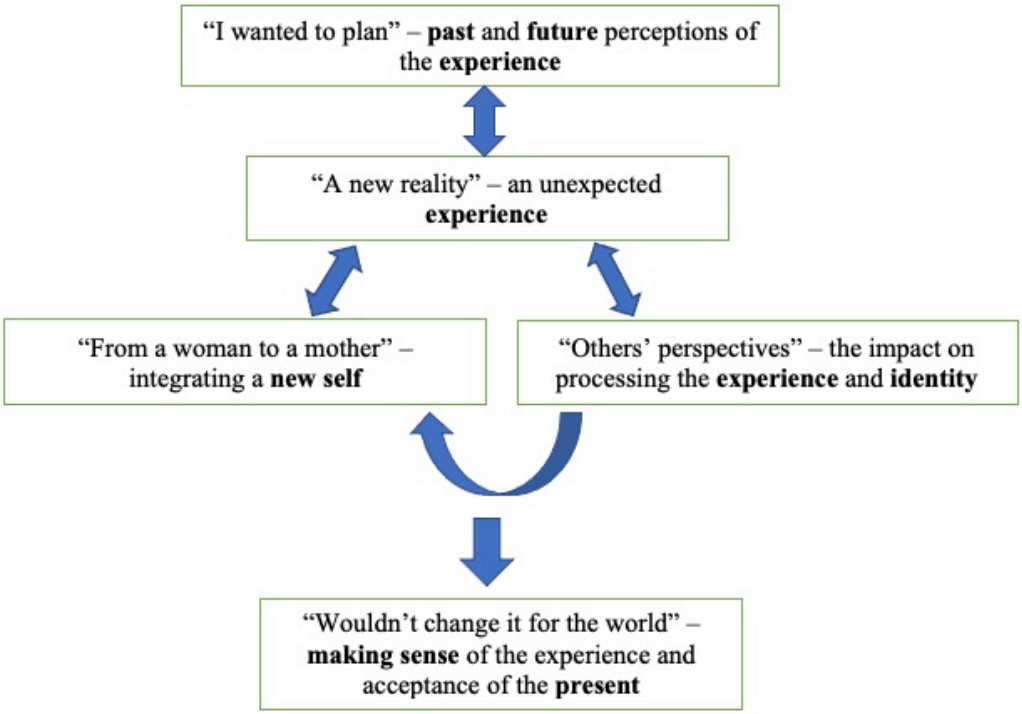
Others' perspectives.

Participants spoke about a range of responses they had from others during their pregnancy, including from health professionals, family members and the fathers of their babies. For some, it felt quite personal being asked about whether the pregnancy was planned and some participants were worried that the question came with judgements. Some of the women spoke about how the fathers of their baby were also shocked when they found out about the pregnancy – seeming to mirror some of the disbelief women felt. Women also spoke about a range of reactions from family members – some were over the moon, while others seemed disappointed or had some concerns about the stage of life women were at when they were pregnant (e.g. not being married or not having a permanent home).

Wouldn't change it for the world.

This theme represents the love, joy and acceptance women felt about their experience of their pregnancy and becoming a mother. Women recognised that not planning a pregnancy came with benefits and they felt lucky for not having had to go through the challenges which can be associated with trying to conceive. Participants spoke about the joy that their babies had brought to their lives, reflecting that it was the best thing that had happened to them. Some of the women also spoke about how the experience had strengthened the relationship they had with their partner.

A model of how the themes described above was devised, indicating how the interaction between different aspects of the experience.



What next

The hope is that the research will be published in a journal. This will mean the findings would be available to those working in perinatal services (such as midwifes, obstetricians, health visitors, GPs and mental health workers). It is hoped that this will help services to better understand and support women that experience of pregnancies that were not planned. Ideas for how this could be done include: offering further support to those who may be finding their pregnancy experience challenging, facilitating supportive conversations about the pregnancy intention and potentially developing ways in which women could be supported by other women who had experienced a pregnancy that was not planned (e.g. through peer support groups). A future direction for the research might include exploring the lived experience for men who become fathers at a time that wasn't planned, as well as including women from a wider range of backgrounds to capture the experiences from mothers in different circumstances.

Thank you again for taking part and for sharing your experiences – without your contribution the study would not have been possible. If you have any questions then please feel free to get in touch.

Best wishes,
Mia Waters

Appendix AA

Submission Guidelines for Selected Journal

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