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BEATRICE BIRTWELL, BA Hons, MSc

THE EXPERIENCES OF PREGNANCY FOR VULNERABLE WOMEN

Section A: How can we help vulnerable pregnant women, in order to impact positively on aspects of their social and psychological well-being known to affect their unborn babies?

Word Count: 5,477 (plus 34 additional words)

Section B: “Me and My Bump”: The experiences of pregnancy for vulnerable women

Word Count: 7,997 (plus 25 additional words)

Section C: Critical Appraisal

Word Count: 1,997

Overall Word Count: 15,471 (plus 59 additional words)

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

SEPTEMBER 2012

SALOMONS CANTERBURY CHRIST CHURCH UNIVERSITY

Acknowledgements page

I would like to thank the women who agreed to be interviewed for this research. Without you, it would not have been possible. It was such a privilege to meet you and talk to you about your lives. The things you said taught me a lot and will go on to influence my work with other mums, for the rest of my career.

I would like to thank both my supervisors for supporting me to do a project I was really interested in. Thanks to Christine Puckering, for being willing to supervise me, even though we are miles apart. The work you do with Mellow Parenting is really inspiring, and I am looking forward to doing some of it myself! Thanks to Linda Hammond, for being so constantly supportive, thoughtful, thorough and helpful. At times, I felt lost, but you have helped me through and I have learned so much from you.

I would like to thank my family, who have been there and encouraged me throughout this process. It means everything to have your support. Very importantly, I would also like to thank my fiancé Henry Dorman, for being extremely patient, sturdy and very kind. You have always believed in me and taken the best care of me. Without you, I could not have done this.

Finally, I would like to dedicate this thesis to my mum, who never got to complete her degree. This one's for you mum.

Summary of the MRP portfolio

Section A is a literature review focussed on critically evaluating theory and research relating to three variables commonly experienced by vulnerable pregnant women. These pose a 'risk' to unborn babies and include: social exclusion, stress and poor attachment (NICE, 2010). Selected interventions for reducing the known 'risks' are critically evaluated, as well as qualitative studies into the experiences of pregnancy for vulnerable women. Gaps in existing theory and research are discussed, leading to suggestions for future research, including further qualitative study of vulnerable women's experiences of pregnancy.

Section B presents a study into eight vulnerable women's experiences of pregnancy and the Mellow Bumps antenatal intervention. Interpretative Phenomenological Analysis was used to make sense of participants' experiences. The analysis revealed pregnancy was a time of reflection, when participants felt their bodies were being taken over, they felt more emotional than usual, relationships were important, and new identities developed. Pregnancy was a "normalising" experience, which provided an opportunity to build positive representations of the self. Mellow Bumps supported this. Implications for clinical practice and future research are discussed.

Section C is a critical appraisal of the study, organised around the consideration of four questions concerned with research skills, what would be done differently if the study were undertaken again, and the implications for clinical practice and further research. In addition, wider conceptual issues and implications are discussed.

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List of acronyms

NICE - National Institute for Health and Clinical Excellence.

CEMACH - Confidential Enquiry into Maternal and Child Health.

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Section A: Literature review paper

How can we help vulnerable pregnant women, in order to impact positively on aspects of their social and psychological well-being known to affect their unborn babies?

Word Count: 5,477 (plus 34 additional words)

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

September 2012

SALOMONS CANTERBURY CHRIST CHURCH UNIVERSITY

1. Abstract

This paper reviews theory and research relating to three variables commonly experienced by vulnerable pregnant women (National Institute of Health and Clinical Excellence; NICE, 2010). These pose a potential 'risk' to unborn babies and include: social exclusion, stress, and poor attachment. Interventions aimed at addressing risks and qualitative studies of women's experiences of pregnancy are also discussed.

The ASSIA, EBM reviews, British Nursing Index and Archive, Maternity and Infant Care, Ovid, PsychINFO, PsychARTICLES, and Social Policy and Practice databases were searched using a range of terms.

Social deprivation, the late, or lack of, maternity service use, and stress are associated with negative outcomes for the foetus, infant and child. Prenatal attachment also seems important in determining 'risk'. Research is limited by poor concept definitions and measurement tools. Interventions tend to address single risk factors and show small positive results. Qualitative studies broaden the narrative of pregnancy from that of 'risk', to include experiences such as hope, aspiration, and opportunity.

Future research should test theory about the mechanisms by which 'risk' affects the foetus. Interventions addressing multiple risk factors should be evaluated. Developing a further understanding of vulnerable women's pregnancy experiences would be helpful for considering how to provide support.

2. Introduction

Extensive recent policy and guidance relating to health during pregnancy (e.g. National Collaborating Centre for Mental Health, 2007; NICE, 2010) has identified populations of vulnerable women, whose vulnerabilities, including social and psychological difficulties, pose a potential 'risk' to the developing foetus. These populations include women from non-white, and deprived populations, those under the age of 20, with substance misuse problems, mental health problems, experiencing domestic violence, who were sexually abused as children, and with a history of involvement with child protection services (NICE, 2010). Many women have multiple and complex needs, and may have concerns relevant to several of these issues.

Due to space limitations, this review will not discuss each population, but will, instead, focus on research relating to the underlying 'risk' factors purported to be common to all the populations, and the consequences of these 'risks' for the psychological development of the foetus, infant and child. These 'risks' have been suggested to have an organising function in the lives of vulnerable pregnant women (NICE, 2010). They include: social exclusion, psychosocial stress and the reduced capacity for developing a healthy attachment relationship. In order to carry out this review, the ASSIA, EBM reviews, British Nursing Index and Archive, Maternity and Infant Care, Ovid, PsychINFO, PsychARTICLES, and Social Policy and Practice databases were searched using a range of terms (see Appendix 1, for search methodology).

A review of the effectiveness of selected interventions designed to reduce the impact of these 'risks' will be included. This will be followed by a review of selected qualitative research investigating the experiences of pregnancy for vulnerable women (see Appendix 1, for search methodology). An understanding of the breadth of experience for this population of women is essential in order to accurately reflect the diversity and complexity of the narrative of pregnancy for this group. This review will conclude by looking at directions for future research.

3. Underlying risk factor one: social exclusion

Several definitions of social exclusion exist and have been used in UK policy over the last 30 years; however, this concept remains poorly defined (Levitas, 2006). Broadly, it relates to the consequences of having limited access to economic and other resources. Levitas (2006) argues that this leads to exclusion from, or the lack of opportunity to participate in, social, economic, political, and cultural systems within society, which may leave people alienated, polarised, socially differentiated, unequal, and placed in a position of inferiority.

Recent government policy and guidance (NICE, 2010) states that women identified as being vulnerable are more likely to experience social exclusion during pregnancy. However, due to the difficult nature of defining, and hence measuring, the concept of social exclusion, there is no research directly investigating the association between 'social exclusion' and pregnancy outcomes (Appendix 1). The two outcomes used as measures of social exclusion during pregnancy, within government policy documentation, are social deprivation and the late use, or lack of use, of maternity services (Confidential Enquiry into Maternal and Child Health; CEMACH, 2009). Although these two factors will be focused upon, it is acknowledged that they fail to sufficiently encompass the complexity of social exclusion.

The positive association between social deprivation and poor pregnancy outcome including stillbirth, neonatal death, preterm birth and low birthweight is well-established (Weck, Paulose & Flaws, 2008). Mothers from the most deprived quintile of the population are far more likely to experience poor pregnancy outcomes than those from the least deprived quintile (CEMACH, 2009). There is also a positive association between late, or lack of maternity service use, and poor pregnancy outcome (Downe, Finlayson, Walsh & Lavender, 2009); including low birthweight and preterm birth (CEMACH, 2009; NICE, 2010). This suggests social deprivation and the late use, or lack of use of maternity services are likely to place unborn babies at 'risk'.

3.1. Critique of social exclusion research

Research shows consistent positive associations between social deprivation, the late use, or lack of use, of maternity services, and poor pregnancy outcomes. However, this is based on correlational data, and little is understood about causation. Theory

suggests a number of mediators of this relationship, including poor nutrition, negative health behaviours, infection, environmental toxins, adverse life events, poor housing and low levels of education and social support (Kramer et al., 2001). There may also be important mediating variables that are, as yet, unknown. Additionally, there may also be important interactions between variables that are not yet understood. “Evidence suggests that both low birthweight and preterm birth are complex, multifactorial outcomes, deriving from a combination of exposures interacting at different points across the life course” (Hobel, Goldstein & Barrett, 2008 p.346). Until we have sophisticated multifactorial longitudinal research, identifying cause and effect between variables over time, the development of theory about mediators of the impact of social deprivation and service-use on pregnancy outcomes, may well remain limited.

4. Underlying risk factor two: Maternal stress

According to government policy and guidance (NICE, 2010), vulnerable women are also more likely to experience stress during pregnancy, placing their unborn babies ‘at risk’. A review of literature (Appendix 1) investigating the associations between maternal stress and the development of the foetus, infant and child will now be discussed.

‘Maternal stress’ is broadly defined as distress caused by the subjective experience of environmental demands outweighing personal resources (Beydoun & Saftlas, 2008). It is a multidimensional concept including: emotional stress related to maternal mood, mental health and well-being, including anxiety, depression and trauma. Stress related to life experiences including daily hassles, chronic and common life stressors, negative life events, household strain, workload stress, under-nutrition and conflict or violence. As well as contextual stress, such as racism and discrimination (Beydoun & Saftlas, 2008).

As research relies on broad definitions, a wide range of measures have been used assessing stress. Many measures are used retrospectively and in combination (Charil, Laplante, Vallancourt & King, 2010). These include objective measures of acute and chronic stress and subjective measures of the impact of events, stress perception and mood outcomes. Some physiological biomarkers have been used, including

corticotropin-releasing hormone, adrenocorticotropin hormone and cortisol (Hobel et al., 2008).

The “foetal-origins hypothesis” (Kinsella & Monk, 2009) argues that maternal stress affects foetal growth and development, including brain development, leading to mental health problems across the life span. It is hypothesised that stress affects the foetus through both behaviours (e.g. smoking, alcohol and drug abuse) and physiological mechanisms (e.g. the effect of hormones) (Lazinski, Shea & Steiner, 2008).

The two physiological mechanisms hypothesised to be crucial include the Hypothalamic-Pituitary-Adrenal (HPA) axis and impaired uterine blood flow (Douglas, 2010; Rice, Jones & Thapar, 2007). These two mechanisms are closely interlinked. The maternal HPA axis is activated by stress and results in the secretion of cortisol. This provides the physiological milieu required for an adaptive stress response. The HPA axis is also responsible for terminating the stress response rapidly once the threat has been removed, via a system of negative feedback. It is hypothesised that when a mother is stressed over a period of time, this leads to key areas of the brain being damaged (crucially, those that help cope with stress), placing more strain on the HPA axis. This leads to a heightened secretion of cortisol. Around 10-20% of cortisol secretion passes through the placenta to the foetus and this is hypothesised to significantly affect foetal brain development (Kinsella & Monk, 2009). This may affect the development of the foetal HPA axis, which is partly responsible for regulating behaviour and emotion in childhood and later life, particularly inhibiting inflammatory responses under conditions of stress. Therefore, over activation of the HPA axis in utero, may result in an increased vulnerability to the development of psychopathology in later life (Douglas, 2010). It is hypothesised that maternal stress may also decrease uterine blood flow, which may result in a lack of oxygen reaching the foetus, in turn causing stress to the foetus and constraining foetal growth (Kinsella & Monk, 2009). As yet, little is understood about whether the association between maternal stress and restricted blood flow relates to current or past stressors.

It is hypothesised that there may be a “sensitive period” during pregnancy, when the foetus is more vulnerable to the impact of stress (Lazinski et al., 2008). There are, as yet, no consistent research findings determining this (Lazinski et al., 2008). It is also

hypothesised that “allostatic load”- the cumulative effect of exposure to stressors and the stress response over the life course - may affect pregnancy outcomes (Hobel et al., 2008). As yet, the legitimacy of this hypothesis also remains unknown. However, research supporting the “foetal-origins hypothesis” is reviewed below.

With regards to foetal outcomes, research shows that maternal stress is associated with foetal heart rate and the central nervous system (Kinsella & Monk, 2009). Foetuses of stressed mothers show significantly lower heart rate variability, are more active, spend less time in “quiet” sleep, and are less active in active sleep, than foetuses of non-stressed mothers (Kinsella & Monk, 2009). A small, but reliable, association has been found across studies between maternal stress (including occupational stressors, daily hassles and negative life events) and pregnancy outcome (Talge, Neal & Glover, 2007). Stress is associated with earlier delivery and smaller size at birth (Talge et al., 2007). In terms of infant outcomes, stress has been found to be positively associated with behavioural reactivity and negative affect in novel situations, and negatively associated with measures of motor and cognitive development, including language development (Talge et al., 2007; Lazinski et al., 2008). Maternal stress has also been associated with a number of outcomes in children, including poorer cognitive functioning (including IQ), externalising behavioural problems, psychological distress, difficulties with peers and problem-solving, anxiety disorders and autism (Cannella, 2005; Talge et al., 2007; Lazinski et al., 2008). In adults, it has been associated with an increased lifetime risk of developing psychiatric disorders (Littleton, Bye, Buck & Amacker, 2010). This research provides support for the “foetal-origins hypothesis”.

4.1 Critique of maternal stress research

The majority of research studies have been carried out in the UK, Europe and America, thus limiting generalisability. Most research relies on correlational data. This limits its usefulness, as theory and hypotheses cannot be supported or refuted. As it is unethical to cause stress during pregnancy, stressful life events or circumstances that already exist are often relied upon. This makes it difficult to single out the variables responsible for associations. Furthermore, this research does not help to identify potential third variables (Talge et al., 2007).

The impact of prenatal maternal stress is likely to be complex and involve multiple interacting variables across time. It may be "contingent upon the individual's pre-existing vulnerabilities, the timing and severity of the stressor, and maternal psychosocial characteristics, such as socioeconomic status, social support and personality traits" (Charil et al., 2010 p. 71). This level of complexity makes it difficult to undertake research with sufficient sensitivity, and further develop theory. Overall, although this lends support to the "foetal-origins hypothesis", the pathways of effect could be better understood.

5. Underlying risk factor 3: The attachment relationship

Finally, according to government policy (NICE, 2010), vulnerable women may be compromised in their ability to form a healthy attachment relationship, placing their babies at 'risk'. The importance of postnatal attachment, and its precursor, prenatal attachment, will now be discussed.

The extensively investigated attachment relationship is understood to be one of the most crucial aspects of child development. Attachment security during infancy predicts social, emotional and cognitive development in children (Kochanska, 2001). Bowlby (1969) conceptualised attachment as beginning at birth, with infants being biologically programmed to seek proximity and form a bond with their caregiver, in order to ensure comfort and survival. Later, Ainsworth, Blehar, Waters and Wall (1978) suggested the attachment system was also influenced by important maternal behaviours. These included sensitivity, mutuality, attunement, synchrony and emotional availability (Biringen, 2000; de Wolffe & van Ijzendoorn, 1997). Following this ground-breaking research investigating attachment from a behavioural perspective, the focus turned to the mental representational domain, with a focus on early attachment experiences acting as representational templates for future relationships, including those involving caregiving (Brandon, Pitts, Denton, Stringer & Evans, 2009). These representations are developed from experiences of being 'cared for' as an infant, and will organise the quality, predictability and consistency of the care that can be provided as an adult. These representations may underlie important maternal behaviours that are displayed within the attachment relationship.

As well as internal representations underlying these behaviours, the ability for ‘mentalisation’ is also suggested to play a seminal role (Fonagy & Bateman, 2008). Mentalisation has been described as the “process by which an individual implicitly and explicitly interprets the actions of himself or herself and others as meaningful on the basis of intentional mental states such as personal desires, needs, feelings, beliefs and reasons” (Fonagy & Bateman, 2008, p. 5). Mentalisation will be better developed in caregivers who experienced secure attachments as children (Fonagy & Bateman, 2008). Mentalisation within the context of an attachment relationship, has been called ‘reflective function’ (Sharp & Fonagy, 2008). In parenting an infant, a mother with a capacity for reflective function, who is able to correctly interpret her infant’s actions, would adjust her behaviour towards the infant, so it is contingent with the infant’s mental state. Hence, reflective function is considered to be the crucial “ingredient” underpinning attunement. As a result, in addition to having their needs met, the infant would develop a mental representation of their caregiver as sensitive, attuned and responsive. It is contended that this secure relationship is then generalised to other relationships, and allows for optimal social, emotional and cognitive development (Fonagy, Steele, Steele, Higgitt & Target, 1994).

In addition to developing healthy internal representations of significant others through mentalisation, infants also learn about their own internal experience and develop an internal representation of themselves (Fonagy & Bateman, 2008). It is suggested that the caregiver mirrors, and reflects back, the infant’s experience in a contained way, which allows the infant to learn about their own experience (Bion, 1970). Over time, this process enables the infant to “convert a felt, physical, sensory experience into a contained mental, conscious awareness” (Choi-Kain & Gunderson, 2008 p. 1129). This leads to the development of structures crucial for understanding the self, and for the regulation of affect.

Using the ‘Adult Attachment Interview’ (Main, Kaplan & Cassidy, 1985) designed to gather information about adults’ childhood attachment experiences and how these have affected adult relational functioning, Fonagy, Steele and Steele (1991) found that maternal state of mind with respect to attachment during pregnancy predicted subsequent mother-infant attachment at one year, 75% of the time. This finding

suggests that the mental representations of relationships, which underlie the development of subsequent parent-infant attachment, are already present during pregnancy. This may, therefore, yield a fertile “window” in which to intervene to potentially increase security of post-natal attachment, which has many positive long-term implications.

Many researchers argue the attachment relationship begins pre-birth (e.g. Cranley, 1981; Muller, 1992; Condon & Corkindale, 1997; Doan & Zimmerman, 2003; Brandon et al., 2009). This relationship has been termed prenatal or maternal-foetal attachment (Shieh, Kravitz & Wang, 2001) and is understood to be a theoretically different construct from post-natal attachment, as there are, clearly, fewer opportunities for reciprocal interaction. Literature relating to prenatal attachment (Appendix 1) is discussed below.

As yet, there is no universally agreed single definition of prenatal attachment. Cranley (1981) suggested prenatal attachment is “the extent to which women engage in behaviours that represent an affiliation and interaction with their unborn child” (p. 282). Cranley saw prenatal attachment as a multidimensional concept, and developed the Maternal Foetal Attachment Scale, which measured five elements of prenatal attachment including: differentiation of the self from the foetus, interaction with the foetus, attributing characteristics and intentions to the foetus, giving of the self and maternal role-taking. This measure has shown good internal reliability, however, it’s validity has been questioned (Laxton-Kane & Slade, 2002).

Muller (1992) criticised Cranley’s definition, suggesting it was too restricted, as it did not consider mental representations in the form of thoughts or fantasy. Muller suggested that maternal experiences of being parented will lead to the development of internal representations of caregiving, which then influence subsequent attachment relationships, including prenatal attachment. Muller (1990) developed the Prenatal Attachment Inventory, which focuses on the affectional bond between mother and foetus.

Later, Condon and Corkindale (1997) defined prenatal attachment as “the emotional tie or bond, which normally develops between the pregnant parent and her unborn child”

(p. 359), and developed the Maternal Antenatal Attachment Inventory. This measure focuses exclusively on thoughts and feelings about the baby.

These definitions differ in the degree to which they emphasise the distinct dimensions of the attachment construct - emotional, behavioural and cognitive. Doan and Zimmerman (2003) argue this construct is likely to combine all three components simultaneously and that these are unlikely to be independent of each other.

During pregnancy, measures of prenatal attachment have been shown to positively correlate with gestational age, feeling foetal movements, seeing the baby during prenatal screening, and knowledge of foetal gender (Yarcheski, Mahon, Yarcheski, Hanks & Cannella, 2009). Women classified as securely attached, have been shown to have stronger prenatal attachment earlier in pregnancy (Canella, 2005). Prenatal attachment has also been positively associated with maternal well-being and size of social network (Laxton-Kane & Slade, 2002), positive attitude towards childbearing and the maternal role (Canella, 2005), engagement in health practices (Alhusen, 2008), preparation for labour, and intention to breastfeed (Doan & Zimmerman, 2002). Anxiety and depression have been found to be negatively correlated with prenatal attachment (Yarcheski et al., 2009).

In infancy, prenatal attachment has been found to correlate with breastfeeding, maternal positive feelings and sensitivity (Doan & Zimmerman, 2002 & 2003), and importantly, post-natal attachment (Muller, 1996). Prenatal attachment predicted maternal-infant interaction at two-three days postpartum and maternal-infant attachment at one week (Cannella, 2005). Unfortunately, the measures used to assess maternal-infant attachment in this study were not described. Prenatal attachment was reported as being positively related to mutuality in family relationships and infant mood eight to nine months post partum (Cannella, 2005).

5.1 Critique of prenatal attachment research

Prenatal attachment research has been criticised for lacking an agreed operational definition (Alhusen, 2008). Competing frameworks have led to the development of differing measures. Without coherent theory, research has struggled to progress.

Currently, it remains unclear which aspects of prenatal attachment are important and whether it is a single or multidimensional construct.

All available evidence to date is based on correlational studies (Cannella, 2005). Confounding variables cannot be eliminated (Alhusen, 2008) and longitudinal studies are needed to help establish causation. The small sample sizes and homogeneity of participant characteristics (e.g. gestational age) make it difficult to draw conclusions from the data (Laxton-Kane & Slade, 2002; Alhusen, 2008).

The objection to the notion that prenatal attachment theory is related to original attachment theory, is firstly, that attachment is based on the idea of a reciprocal relationship. Some argue, therefore, that as we can only investigate one part of the prenatal attachment system, it is not a valid concept (Brandon et al., 2009). Secondly, there is an objection based on the motivation of the foetus for attachment during pregnancy. In post-natal attachment theory, the infant's goal is survival and security. This cannot be attributed to a foetus. It has been argued, therefore, that prenatal attachment may be a different process to post natal attachment (Brandon et al., 2009).

However, although it is likely that pre- and postnatal attachment may require differentiated conceptual frameworks, extant theory clearly points to convergence between these. Theorists investigating both frameworks pay particular attention to maternal representations of care giving, and the important effects of these on the feelings, thoughts and behaviours displayed. Along these lines, there is a possible convergence between what contributes towards the development of pre- and postnatal attachment. This relationship requires further investigation, ideally using longitudinal cohort studies.

6. Summary of research relating to 'risks'

Taken as a whole, existing research suggests social deprivation and the late use, or lack of use, of maternity services, are positively associated with poor pregnancy outcome, and maternal stress is associated with negative outcomes for the foetus, infant and child. However, theory about the mechanisms linking these variables to outcome cannot be supported or refuted by correlational data. Whilst it can be

concluded that these factors are likely to place babies ‘at risk’, the processes by which risk is transmitted are less well understood. A positive association has been found between pre- and postnatal attachment, and it is postulated that mental representations, present before birth, may be responsible for this association (Fonagy et al., 1991). While the precise relationship between pre- and postnatal attachment remains poorly defined, it seems highly likely that prenatal attachment may be very important in determining ‘risk’ for infant and child development.

Although this review has focused on three common underlying ‘risk’ factors, it is acknowledged that these interact with and are affected by other specific ‘risks’ intrinsic to the characteristics of identified populations (e.g. women with substance misuse or mental health problems), which through their actions also place unborn babies ‘at risk’. Furthermore, it is understood that psychological ‘risks’ are just one important aspect of the pregnancy experience, and these are affected by and operate within a broader context of social, health and economic inequalities (Williams, 1999), which also place unborn babies ‘at risk’. Whilst the discipline of psychology can contribute towards trying to understand the psychological aspects of the pregnancy experience, it is acknowledged that this approach is limited, as many of the important factors contributing to the pregnancy experience, cannot be understood by a psychological approach alone.

7. Examples of interventions during pregnancy

Considering what is known about the potential negative impact of ‘risks’ on foetal, infant and child development, this review will now consider interventions that aim to positively impact during pregnancy.

A number of universal antenatal interventions exist, typically directed towards the physical aspects of pregnancy and delivery. Research suggests vulnerable women tend not to use these (Mabelis & Marryat, 2011). Barriers identified include a lack of finance, transport and childcare, negative attitudes of healthcare professionals, inaccessible language, embarrassment about life circumstances, and fear of potential involvement with social services (NICE, 2010).

Despite the lack of robust theoretical underpinnings, a range of targeted interventions have been developed in an attempt to specifically engage vulnerable women in antenatal care (Beddoe & Lee, 2008). These focus on different aspects of pregnancy, including labour and birth, physical health, mental health, drug and alcohol use, smoking, parenting, stress reduction, social support and mentalisation. There is a developing evidence base concerned with evaluating these interventions (e.g. Milgrom, Schembri, Ericksen, Ros & Gemmill, 2011).

Two recent Cochrane reviews (Hodnett, Fredericks & Weston, 2010; Marc et al., 2011) investigated research relating to social support and mind-body interventions for vulnerable women, and their effect on pregnancy outcomes and maternal anxiety respectively. Hodnett et al. (2010) reviewed research relating to interventions aimed at increasing social support for socially disadvantaged women more likely to give birth preterm or to low birthweight babies. The interventions used mental health professionals or specially trained lay-people to provide emotional support, education, information and advice, and strengthen links with support systems, several times (range four-forty sessions) throughout pregnancy, using a counselling or problem-solving approach. This occurred in groups or individually, either at home, during antenatal clinic visits or by telephone. They found that social support interventions were not associated with reduced incidents of preterm or low birthweight babies being born. They concluded that increasing social support alone, was unlikely to be sufficiently powerful.

Marc et al. (2011) reviewed research evaluating short-term mind-body interventions, such as hypnotherapy, imagery, autogenic training and yoga, for reducing stress during pregnancy. There were insufficient studies for them to conduct a meta-analysis, however, they concluded that these interventions might benefit women during pregnancy, as there was tentative evidence for their effectiveness.

One antenatal intervention that attempts to address multiple risk factors, is the newly developed ‘Mellow Bumps’ programme (Puckering, 2011). This follows on from the successful ‘Mellow Parenting’ and ‘Mellow Babies’ programmes. ‘Mellow Bumps’ is based on attachment, prenatal attachment, and behavioural theories. The 6-week group intervention for women of 20-30 weeks gestation, has a number of aims. Each

week an activity focuses on parental well-being, and on increasing understanding of the importance of interaction with the foetus, and later, the infant. Exercises aim to reduce maternal stress through social and professional support and relaxation, and provide developmental guidance about baby brain development and the interactive capacities of infants, in order to help mothers develop an understanding of the importance of being sensitive, responsive, and 'mentalising' of, their infants' needs. Women are encouraged to consider their own attachment relationships, which may affect the developing relationship, and to consider ways to address their own needs in relation to this (e.g. attending individual psychological therapy). 'Mellow Bumps' also aims to build relationships with families who are likely to experience social exclusion. Transport, refreshments and childcare are provided to facilitate engagement and address some factors that lead to exclusion. Mellow Bumps uses a range of group exercises, including discussion, video, quizzes, craft, worksheets and homework tasks. The effectiveness of Mellow Bumps has yet to be formally evaluated, however, small-scale evaluation showed participation in the group reduced maternal anxiety, depression and irritability, and, importantly, many participants moved on to engage with other supportive services postnatally (Puckering, 2011).

7.1 Critique of interventions research

Neither formally evaluated intervention (Marc et al., 2010; Hodnett et al., 2011) showed especially powerful results. This may be related to problems of study design; however, it may also perhaps be because of the length of interventions, and their components being insufficiently powerful to act protectively. "While current pregnancy interventions tend to address single risk factors, evidence suggests that both low birthweight and preterm birth are complex, multifactorial outcomes, deriving from a combination of exposures interacting at different points" (Hobel et al., 2008, p.346). It seems likely that in order to impact positively on complex outcomes, an intervention needs to address multiple risk factors across time (Schrader MacMillan, Barlow & Redshaw, 2009). A multi-faceted intervention, such as Mellow Bumps, might go some way towards addressing this. Research evaluating its effectiveness is therefore needed.

7.2 Summary of interventions research

Enough is known to suggest that reducing stress and social exclusion, and increasing attachment, may be helpful to vulnerable women and their babies. Pregnancy outcome, engagement with services, and the attachment relationship are all complex outcomes, which may need complex interventions with multiple aims. There is much scope for further research in this area.

Research attempting to identify useful interventions could be criticised for putting the "cart before the horse" – when robust theory is yet to be developed to guide practice. However, it is hoped that by finding helpful interventions, this may feed back into theory development. If certain interventions prove helpful, these may suggest which variables may be the most potent within these complex relationships. In addition, these women and babies are in urgent need of services, and to wait for theory to "catch up" is, arguably, unethical.

8. Qualitative research into women's experiences of pregnancy

Alongside the narrative of risk during pregnancy drawn from theory and professional discourse, personal accounts of pregnancy given by vulnerable women themselves, speak of a different reality (e.g. Chase, Warwick, Knight & Aggleton, 2009). This research adds another dimension to our understanding of the social and psychological experiences of pregnancy. It may also help us understand how to support these women during pregnancy. These personal stories are important because they privilege personal narrative over professional discourse. This may inform and direct theory and practice. To date, qualitative research into the experiences of pregnancy is relatively meagre (Lundgren & Wahlberg, 1999; Smith, 1999). Selected studies (Appendix 1) are summarised below.

Women who grew up in care (Chase et al., 2009) described pregnancy as bringing hope and aspiration to their lives. Some reported feeling more responsible and wanting to take more care of themselves. They were both excited and anxious about their ability to fulfil their new role. Contrastingly, women suffering from depression (O'Mahen et al., 2011) reported pregnancy as a time of worry and rumination. Pregnancy placed physical limits upon them, and some reported feeling isolated from social support. Some saw pregnancy as an opportunity for change, to act differently and adopt a

different lifestyle, and some thought having a baby might make them happier. Women who had experienced past sexual trauma (Schwerdtfeger & Wampler, 2009) reported this trauma had little effect on their pregnancy. Many women described the passage of time between the trauma and pregnancy as protecting the maternity experience. Women described pregnancy as representing a new life, beginning, direction and hope. Some felt proud about carrying their partner's child. Women using illicit drugs (Lewis, Klee & Jackson, 1995) reported wanting to reduce or withdraw from drugs. Some had managed this, whilst others had not. This resulted in strong feelings of guilt. Women felt resigned to, or happy and excited about being pregnant. Many felt anxious about how they would cope with motherhood.

8.1 Critique of qualitative research

Yardley's (2008) principles for evaluating the validity of qualitative research (Appendix 2) were used to assess the quality of studies. Although Chase et al. (2009) used a large sample, including young people who had grown up in care, and professionals involved in their care, which added a breadth and depth to this topic, there was not sufficient transparency about how they developed themes from the data, limiting the trustworthiness of their approach. O'Mahen et al. (2011) ensured rigor in their analysis by using professionals from varying backgrounds (e.g. psychologists, social workers, and a social scientist), to compare independently coded transcripts and reach a group consensus about themes. They reached a high percentage of agreement (81%) suggesting validity in their findings. Schwerdtfeger and Wampler (2009) followed phenomenological analysis procedures, used bracketing and reflexive journals to avoid researcher bias, and used credibility checks to validate themes with respondents and internal and external auditors, also suggesting a good level of trustworthiness in their study. Lewis et al. (1995) did not provide any description of how they ensured the validity of their findings. This suggests variation in the trustworthiness of the findings of these studies.

Qualitative studies are also limited by the use of small samples, and their reliance on self-report, which may be influenced by interviewees' wishes to give socially desirable responses. Self-report also only captures interviewees' conscious narratives. For example, women may report conscious intentions of parenting differently from their own

mothers (e.g. corrective scripts, Byng-Hall, 1995); however, it has been argued that even with this intention, in situations of heightened emotion, unconscious scripts of parenting are likely to emerge (Byng-Hall, 2008). Self-report does not capture the narratives of unconscious process (Clark & Hoggett, 2009).

8.2 Summary of qualitative research

Although some studies do not sufficiently account for the validity of their findings, and all studies use small samples and self-report, the findings from qualitative research enable us to engage more fully with the diversity of experiences for vulnerable women during pregnancy. These stories amplify and broaden the narrative of pregnancy to include conscious discourses around change, hope, aspiration and opportunity.

9. Summary of review and directions for future research

Although much of the research included in this review is limited by design, it seems that social deprivation, the late use, or lack of use, of maternity services, maternal stress and poor attachment pose a 'risk' to unborn babies. Although three common underlying 'risks' have been focussed upon, it is acknowledged that there is a complex and reciprocal interplay between these 'risks' and other specific 'risks' intrinsic to the characteristics of vulnerable populations of women. These risks may be mutually influencing and corrosive, and set up cycles of risk and adversity for mothers and babies. In addition to this narrative of 'risk', qualitative studies with vulnerable women suggest pregnancy is also experienced as a time of hope, aspiration, and greater opportunity.

A number of interventions have been developed which aim to reduce risk during pregnancy. Evidence for the effectiveness of these interventions is limited. It seems likely that interventions will need to address the complexity of multiple risk factors across time. Future research needs to continue to develop and test theory about the mechanisms by which risk factors affect the foetus, in order to target interventions more accurately. Interventions addressing multiple risk factors should also be evaluated. This may feed back into the development of theory and clinical practice.

A qualitative understanding of the experiences of pregnancy for vulnerable women is essential in order to amplify and broaden the dominant professional narrative. It may also help clinicians tailor interventions more sensitively to women's needs. Further qualitative research with vulnerable women would be helpful for understanding how best these women could be supported on their journey through pregnancy. This would also allow for the "fit" between existing theory relating to 'risk' during pregnancy, and women's experiences of pregnancy, to be examined. Examining this "fit", and identifying discrepancies, may facilitate the further development of theory.

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Appendices

Appendix 1

Databases searched:
Applied Social Sciences Index and Abstracts, EBM Reviews (Cochrane Database of Systematic Reviews, ACP Journal Club, Database of Abstracts of Reviews of Effects, Cochrane Central Register of Controlled Trials, Cochrane Methodology Register, Health Technology Assessment, NHS (Economic Evaluation)), British Nursing Index and Archive, Maternity and Infant Care, Ovid MEDLINE(R), PsycINFO, Books@Ovid, Ovid Full Text, PsycARTICLES Full Text, & Social Policy and Practice.

All research included was published in peer-reviewed journals, suggesting it meets standards of quality and validity acceptable to reviewers (White & Schmidt, 2005).

Reviews that were both narrative and provided meta-analyses were included.

See figure 1 below for flow diagram outlining the process.

1. Social exclusion and pregnancy outcomes
Search date, October 2011.
Search terms, in keywords: “social exclusion” + “social disadvantage”, “social inequality” + “pregnancy” + “impact” or “outcome” or “effect”.
This search returned no directly relevant papers.
On this basis, the focus of the review changed, to the impact of social deprivation and maternity service use on pregnancy outcome. Government policy (National Corroborating Centre for Mental Health, 2007; NICE, 2010) was consulted in order to find relevant papers (through cross referencing) to discuss these topics.

This search produced 4 articles for inclusion.

2. Maternal stress
Search date, September 2011.
Search terms, in keywords: “stress” + “pregnancy” + “impact” or “outcome” or “effect”.
Limited to the last five years (due to desire to access the most up to date research).
This search identified 4,687 papers

Limited to review papers.

Reviews were included that:
Measured maternal stress.
Measured outcomes of maternal stress for the foetus/infant/child.
Were written in English.
Reviews were excluded that:
Were limited to a very specific sample or stressful event.
Focussed on pregnancies that were not completed.

This search produced 9 reviews for inclusion.

3. Prenatal attachment

Search date, November 2011
Search terms, in keywords: “Maternal” + “foetal” + “attachment” or “prenatal” + “attachment”. These were the two terms identified in the literature for describing attachment during the antenatal period (Shieh et al., 2001).
No date limit.
This search identified 144 papers.

Limited to review papers.

Reviews were included that:
Were written in English
Reviews were excluded where:
It was relevant to only very specific populations, e.g. women who experienced: birth complications, foetal disease, twins, pregnancy loss/complications.

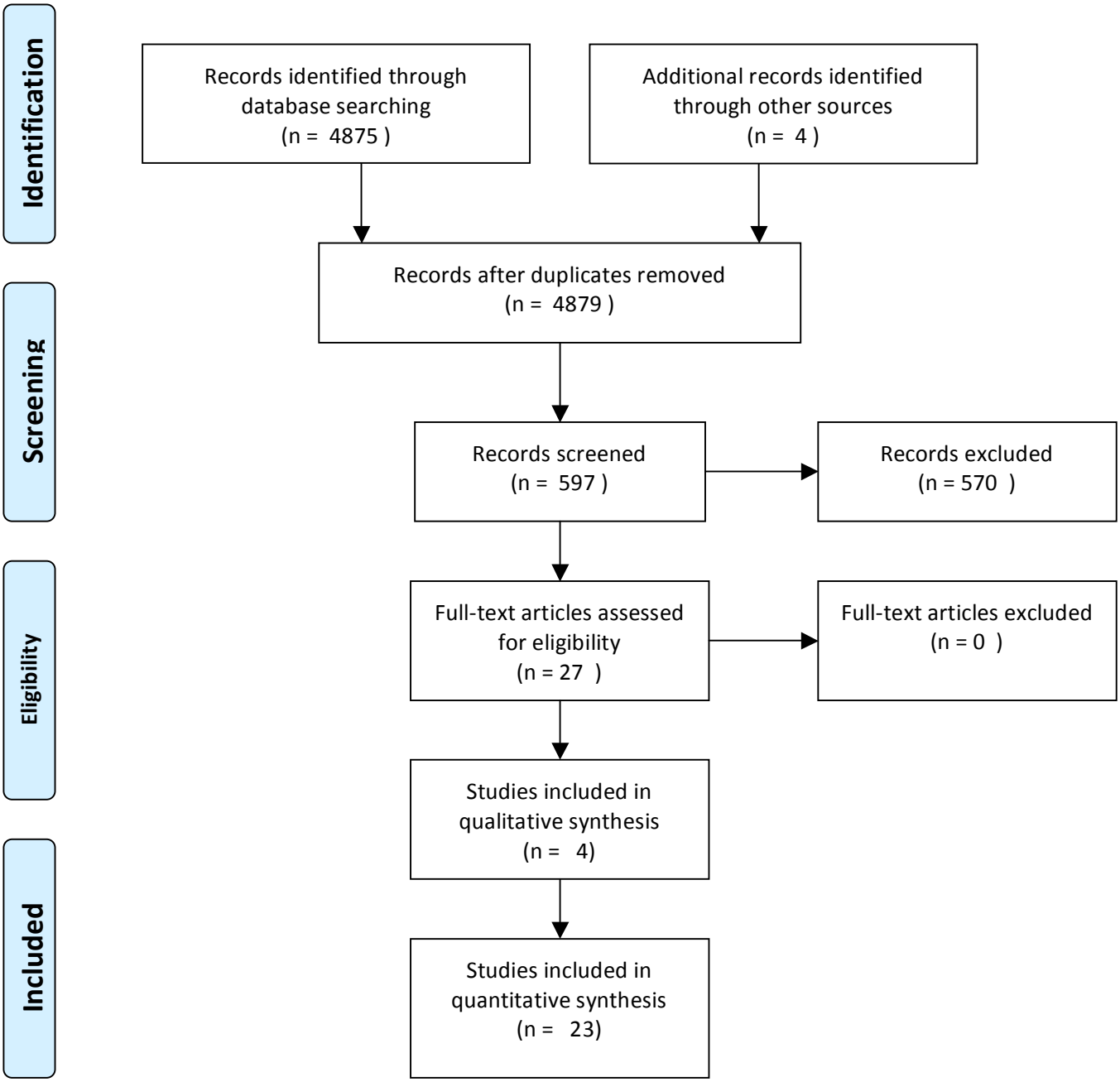
This search produced 10 reviews for inclusion.

4. Qualitative research into experiences of pregnancy
Search date, November 2011
Search terms: “Experiences of pregnancy” and “Experiences” + “of” + “pregnancy” in keywords.
No limits by date.
Limited to research employing a qualitative methodology.
This search identified 44 papers.

Relevant papers were selected from the identified 44 papers, according to the populations of interest identified by recent policy and guidance (e.g. National Collaborating Centre for Mental Health, 2007; NICE 2010), rather than quality or validity of studies (e.g. Yardley, 2000). This was to illuminate aspects of the pregnancy experience for vulnerable groups of women.

During selection 4 relevant papers were identified.

Figure 1. Flowchart outlining the selection process of included studies (PRISMA, 2009). This illustrates the number of studies identified and eliminated at each stage.



Appendix 2

Yardley's (2008) core principles for evaluating the validity of qualitative studies:

1) Sensitivity to context:

- Relevant theoretical and empirical literature
- Socio-cultural setting
- Participants' perspectives
- Ethical Issues
- Empirical data

2) Commitment and rigour:

- Thorough data collection
- Depth/breadth of analysis
- Methodological competence/skill
- In-depth engagement with topic

3) Coherence and transparency:

- Clarity and power of your argument
- Fit between theory and method
- Transparent methods and data presentation
- Reflexivity

4) Impact and importance:

- Practical/applied
- Theoretical
- Socio-cultural. (p. 243-244)

Section B: Journal paper[1]

"Me and My Bump": The experiences of pregnancy for vulnerable women

Word count: 7,997 (plus 25 additional words)

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

September 2012

SALOMONS
CANTERBURY CHRIST CHURCH UNIVERSITY

All names and other identifying information have been altered or removed to protect participant confidentiality

[1] This manuscript is intended for submission to Clinical Child Psychology and Psychiatry. Where possible, Authors' guidelines (Appendix A) have been followed.

Abstract

There is a paucity of research into vulnerable women's experiences of pregnancy. Eight vulnerable women, who had completed the 'Mellow Bumps' antenatal intervention, participated in semi-structured interviews regarding their experiences of pregnancy and Mellow Bumps. Interview transcripts were explored using Interpretative Phenomenological Analysis (Smith, Flowers & Larkin, 2009). The analysis revealed five super-ordinate themes which were: pregnancy is a time of reflection, 'my body is being taken over', pregnancy is an emotional rollercoaster, relationships are important, and separating identities. Mellow Bumps was seen as helpful. Amongst a range of relevant perspectives, pre- and post-natal attachment theory were found to be helpful in interpreting the data. Findings suggest pregnancy is "normalising" and provides an opportunity for building more positive representations of the self. Mellow Bumps supported this. Some implications for clinical practice are considered, as well as directions for future research.

Key words

Pregnancy, experiences, Mellow Bumps, vulnerable mothers, qualitative

Introduction

Three experiences common to populations of vulnerable pregnant women, which pose a 'risk' to unborn babies, are: social inequality, maternal stress, and the reduced capacity for developing a healthy attachment relationship (National Institute of Health and Clinical Excellence; NICE, 2010). These risks and their impact on the developing foetus, infant and child, will be discussed below. This will be followed by a discussion of some interventions aimed at addressing risks, qualitative research into the experiences of pregnancy, and gaps in knowledge and understanding.

The UK is arguably one of the most socially unequal societies (Williams, 1999; Wilkinson & Pickett, 2010). Gross social and health inequality is associated with poor pregnancy outcomes, including stillbirth, neonatal death, preterm birth and low birthweight (Confidential Enquiry into Maternal and Child Health; CEMACH, 2009; Wilkinson & Pickett, 2010). Socially deprived women are less likely to use maternity services (Schrader MacMillan, Barlow & Redshaw, 2009). Barriers identified include a lack of finance, transport and childcare, negative attitudes of healthcare professionals, inaccessible language, embarrassment about life circumstances, and fear of involvement with social services (NICE, 2010). There is a positive association between the late, or lack of use, of maternity services and poor pregnancy outcomes (Downe, Finlayson, Walsh & Lavender, 2009). It seems, therefore, that social inequality places unborn babies at significant risk.

A number of potential mediators for this relationship have been hypothesised including poor nutrition, negative health behaviours, infection, environmental toxins, adverse life events, poor housing and low levels of education and social support (Kramer et al., 2001). However, most studies are correlational, and without sophisticated, multifactorial, longitudinal research, the development of coherent theory remains limited. It has been hypothesised that stress may also be an important mediator. Possible causes of stress during pregnancy include domestic violence, poor housing, homelessness, poverty, unemployment, divorce and separation (Braveman et al., 2010), which are, arguably, experiences more likely to occur in deprived populations (Williams, 1999; Wilkinson & Pickett, 2010).

The “foetal-origins hypothesis” (Kinsella & Monk, 2009) argues that stress directly affects foetal growth and development. Correlational studies provide some support for this, establishing a small but reliable association between maternal stress (including daily hassles, occupational stress and negative life events) and pregnancy outcomes (Talge, Neale & Glover, 2007). Stress during pregnancy is positively associated with behavioural reactivity and negative affect in novel situations, and negatively associated with motor and cognitive development in infants (Talge et al., 2007; Lazinski, Shea & Steiner, 2008). It is also associated with poorer cognitive functioning, externalising behavioural problems, psychological distress, difficulties with peers and problem-solving, and anxiety disorders, in childhood (O’Connor, Heron, Golding, Beveridge, Glover, 2002; Talge et al., 2007; Lazinski et al., 2008). Although this research is largely based on correlational data, and potential third variables cannot be ruled out, it suggests stress places unborn babies at significant risk.

Vulnerable mothers may also be at risk of not developing a healthy attachment during pregnancy (NICE, 2010). This relationship is known as prenatal attachment (Shieh, Kravitz & Wang, 2001). This has been found to correlate positively with postnatal attachment (Muller, 1996), which is crucial for the development of healthy relationships (Solomon & George, 1996) and optimal social, emotional and cognitive development (Van Ijzendoorn, Schuengel & Bakermans-Kranenburg, 1999; Fonagy, Gergely & Target, 2007). Therefore, it is likely that poor prenatal attachment places unborn babies at risk.

A number of conceptual frameworks for prenatal attachment exist (e.g. Cranley, 1981; Muller, 1990; Condon and Corkindale, 1997; Doan and Zimmerman, 2003). These vary according to the emphasis they place on the emotional, cognitive and behavioural aspects of this relationship. The absence of a single coherent framework has hindered research. It remains unknown which aspects of prenatal attachment are most important. This is in contrast to the well-established theory around postnatal attachment (Brandon, Pitts, Denton, Stringer & Evans, 2009). Extant theory does, however, suggest there may be convergence between what contributes to the development of pre- and postnatal attachment (Brandon et al., 2009). For example, both conceptual frameworks pay attention to maternal representations of care-giving and the important

effects of these on feelings and behaviour (Solomon & George, 1996). The relationship between pre- and postnatal attachment merits further investigation.

Whilst the discipline of psychology may be able to contribute towards understanding, and intervening with, certain risks during pregnancy, the effectiveness of this approach will be limited as many of the important contributing factors (e.g. social and health inequalities) cannot be tackled by psychological approaches alone. Whilst acknowledging this limitation, a range of interventions have been developed which aim to reduce some of the known risks (e.g. Hodnett, Fredericks & Weston, 2010; Marc et al., 2011). One such intervention is the newly developed 'Mellow Bumps' (Puckering, 2011). This is based on attachment, prenatal attachment and behavioural theories. It has a number of aims, including increasing parental well-being and understanding of the importance of interaction with the baby during pregnancy and infancy. In order to help women access this service and address issues relating to social exclusion, transport, childcare and refreshments are provided. Exercises aim to reduce maternal stress through social and professional support and relaxation, to provide developmental guidance about baby brain development and the interactive capacities of infants, and to help mothers develop an understanding of the importance of being sensitive and responsive to their infants' needs. Mellow Bumps also aims to build relationships with families. The effectiveness of Mellow Bumps has yet to be formally assessed. However preliminary evaluation suggested it reduced maternal anxiety, depression and irritability, and, furthermore, many participants moved on to engage with other supportive services (Puckering, 2011).

Alongside the narrative of risk during pregnancy, drawn largely from professional discourse, personal accounts of pregnancy given by vulnerable women speak of a different reality. Women who grew up in care (Chase, Warwick, Knight & Aggleton, 2009; Maxwell, Proctor & Hammond, 2011) described pregnancy as bringing, amongst other things, hope and aspiration to their lives. Some reported feeling more responsible and wanting to take more care of themselves. They were excited and anxious about their ability to fulfil their new role. Contrastingly, women suffering from depression (O'Mahen et al., 2011) reported pregnancy as a time of worry and rumination. Pregnancy was seen as physically limiting, and some reported feeling isolated. Some saw pregnancy as an opportunity for change, to act differently, adopt a different

lifestyle, and be happier. Women who had experienced past sexual trauma (Schwerdtfeger & Wampler, 2009) reported this trauma had little effect on their pregnancy. Pregnancy represented a new life, beginning, direction and hope. They felt proud about carrying their partner's child. Women using illicit drugs (Lewis, Klee & Jackson, 1995) reported wanting to reduce or withdraw from drugs. They felt resigned to, or happy and excited about, being pregnant. However, they also felt anxious about how they would cope with motherhood. These studies varied in the attention they paid to addressing issues of validity, including rigor, transparency, and credibility (Yardley, 2008). The results of Lewis et al. study (1995) should be interpreted with caution, as they did not account for the validity of their findings.

Qualitative research findings enrich our understanding of the social and psychological experiences of pregnancy by privileging personal narrative over professional discourse. They also suggest ways forward in supporting vulnerable women. Further qualitative research would be helpful for considering the "fit" or otherwise between theory relating to risk during pregnancy and vulnerable women's narratives of their experiences. This in turn may facilitate the further development of theory.

Research questions

Several authors have commented on the paucity of research into vulnerable women's experiences of pregnancy (e.g. Smith 1999; Furber, Garrod, Maloney, Lovell & McGowan, 2009). This study aimed to contribute to the literature by illuminating the pregnancy experience of vulnerable women who had participated in Mellow Bumps, including their experience of attending this programme. It was hoped that examination of these issues would enable the "fit" between existing theory and research and the subjective experiences of pregnancy to be appraised (Smith et al., 2009).

The two research questions were:

- How do a group of vulnerable women, who participated in Mellow Bumps, understand and make sense of their experiences of pregnancy?
- How do a group of vulnerable women, who participated in Mellow Bumps, understand and make sense of their experience of this programme?

Method

Participants

A purposive sample of eight participants, who had completed Mellow Bumps[2], took part. These participants were drawn from deprived cities with high rates of deprivation and social problems. Participants were aged between 17 and 37. Five participants were White Scottish, two White British and one Mixed White/Black Caribbean. Participants were between 14 and 40 weeks gestation at interview. Five participants had previous children[3]. Five participants attended six sessions of Mellow Bumps. The sample size was consistent with recommendations by Smith et al. (2009).

Procedure

Potential participants were given an 'information sheet' by one of the facilitators during week three of Mellow Bumps (Appendix D) explaining the purpose of the study, the practicalities of participation, confidentiality, informed consent and the right to withdraw. During week four participants were asked to consent to researcher contact (Appendix E), and complete a diary recording thoughts and feelings about pregnancy (Appendix F). They were contacted by telephone one to two weeks after the end of Mellow Bumps. A choice of interview location was offered and all participants chose to be interviewed at home.

Before the interview commenced, ethical information was repeated and participants were asked to give consent (Appendix G) and provide the researcher with their diary. Interviews were recorded (ranging from 49 to 86 minutes). Participants were given an opportunity to reflect on the interview experience.

Interview

A semi-structured interview schedule was developed (Appendix H), which followed the research aims and reflected existing literature (Appendix I). Questions explored how

[2] For more detailed information about Mellow Bumps, see Appendix B
[3] For more detailed demographic data, see Appendix C

participants made sense of their experiences of pregnancy and Mellow Bumps. The interview was piloted on one participant who had completed Mellow Bumps and spoken at a conference about her experiences. The piloting process was helpful in developing the interview.

Analysis

Interviews were transcribed and analysed using Interpretative Phenomenological Analysis (IPA; Smith et al., 2009). IPA was selected because it focuses on subjective meaning and the sense people make of their experiences (Smith et al., 2009). IPA is interpretative because, in addition to exploring the participants sense-making, it also explores the "double-hermeneutic" (Smith, 2011) of the researcher trying to make sense of this (Smith & Osborn, 2003). It is phenomenological as it examines participants' experiences in detail (Smith & Osborn, 2003), inductive as it allows for unanticipated themes to emerge from the data (Smith et al., 2009) and idiographic as it attempts to uncover diversity in individual experiences. Research findings from IPA studies can be compared with claims made by the existing literature, and used to contribute to, or challenge these, thus illuminating gaps in theoretical understandings.

Each transcript was read several times. Notes were made about questions, meanings, understandings and the sense made by the participant and researcher. Relevant text was coded, and re-examined using the interpretative lens of the researcher (Appendix J). All eight transcripts were coded, then codes were clustered and finally emergent themes were considered. Names for master themes were created adjusted and merged until they reflected the researcher's interpretation. Master themes were grouped into super-ordinate themes, which reflected the experiences of pregnancy.

Quality assurance checks

Yardley's (2000, 2008) principles for demonstrating the validity of qualitative studies were adhered to (see Appendix K for example of coded transcript). For example, in order to demonstrate 'coherence and transparency', an independent audit of codes was carried out by a trainee clinical psychologist with experience in IPA. This aimed to ensure that themes were grounded in the data (Yardley, 2008). Two clinical

psychologists also checked codes (Elliott, Fischer & Rennie, 1999). Reflexivity was assessed by the researcher being interviewed using the interview schedule in order to gain information about preconceptions of interviewee responses. This allowed these to be made explicit. A reflective journal was also kept (Appendix L) and reflective discussions with supervisors followed interviews. In terms of 'commitment and rigour', established guidelines for carrying out IPA (Smith et al., 2009) were followed. Examples of 'good' IPA studies were consulted (Smith, 2011). A 'paper trail' was kept showing all stages of the analysis.

Ethics

Ethical approval was received from the Department of Applied Psychology Ethics Panel, Canterbury Christ Church University (see Appendix M). The BPS Code of Ethics and Conduct (2009) was adhered to throughout.

Results

Participants did not use the diaries provided. Hence all data was derived from the interviews. Five super-ordinate and 14 master themes were identified (Table 1). The super-ordinate themes represent broad aspects of shared experience. Each master theme is broken down into multiple sub-themes. These sub-themes do not always represent independent concepts.

Table 1. Overview of themes.

Super-ordinate Themes	Master themes	Themes	Number of participants
1. A time of reflection	1.1 The past affecting feelings about the future	Difficult life experiences have made me stronger	2
		Anxiety about managing motherhood	3
	1.2 Pregnancy as an opportunity	Continuing to make positive change	1
		Being different and repairing the past	4
		Recreating experiences from the past	3
2. My body being taken over	2.1 Pregnancy as a physical process	Pregnancy is physically demanding	4
		Experiences are out of control	3
		The impact on attractiveness	2
		Feeling restricted	2

		Feeling relieved	1
	2.2 Feeling uncertain	Uncertainty about pregnancy	2
		Uncertainty about labour	2
	2.3 Being responsible	My ability to carry the baby safely	2
		Taking better care of myself	5
3. Pregnancy is an emotional rollercoaster	3.1 Adjustment	Emotions involved in adjusting	8
	3.2 Heightened emotions	Feeling less in control	3
		Wanting to be more in control	2
		Feeling more tuned in	1
4. Relationships are important	4.1 Forming new relationships	My relationship with the baby	7
		Giving my partner a baby	3
		The sibling relationship	4
		Friendships	2
	4.2 Solidifying relationships	The baby will make us stronger	4
		Creation or completion of our 'family'	3
	4.3 Impact on relationships	Impact on other children	2
	4.4 A need for support and sharing	Valuing family support	5
		Valuing sharing my experiences	8
5. Separating identities	5.1 Developing an identity as a mother	Valuing the identity of 'mother'	5
		Letting go of other identities	2
		Am I good enough?	3
		Acknowledging the responsibility	4
		Valuing the responsibility	3
		Finding motherhood hard	2
	5.2 The baby becoming real	The baby becoming real	8
		How will the baby look?	5
		Hopes for the baby	4
		Predicting feeling empty	1
	5.3 Separating from others	Separating from the father	3
		Separating from friends	1

In this section, verbatim quotes will be used to illustrate master themes (see Appendix N for additional examples), following which they will be synthesised in order to describe super-ordinate themes.

Super-ordinate theme 1: A time of reflection

The majority of participants were reflective about their past in considering the meaning of their pregnancy.

Master theme 1.1: The past affecting feelings about the future. Two participants described seeing difficult life experiences as beneficial for motherhood, as these made them stronger.

> *"I mean it was a bit of a rough time, at the time, but I've come through the other end and it's made me stronger. It's also made me stronger for the weans*[4] *as well"* (Marie).

Three participants expressed fears about managing the challenges of motherhood based on difficulties in the past. Danielle talked about difficult financial experiences and how these made her worry about motherhood.

> *"When I found out I was pregnant, I was worried about how we were going to survive, because for your second you don't get any help, you know, like loans and so on, so for your second kid you've got to worry about everything, how to get everything in"*.

Master theme 1.2: Pregnancy as an opportunity. Two participants saw pregnancy as an opportunity to continue making positive changes. Danielle described her experience of moving from a life of substance misuse, towards a "family life". Pregnancy seemed to motivate her to stay away from drug use.

> *"We absolutely love it, we really like it, so we have never turned back, you know, we're just loving family life".*

Four participants saw pregnancy as an opportunity to repair negative experiences they had as children (Cara) or parents (Jemma).

> *"I will do a lot more than what my mum did for me, you know? And I won't have... cause my mum and my dad got divorced...And I wasn't a family, like a proper family...Yeah, like not a strong family...Eh, I want to be a better person than my mum"* (Cara).

[4] "wean" – Scottish word for "child".

Jemma described being given another chance to learn from the past and to change.

> *"I think it means a lot to me, like I've kind of been given another chance...like a chance to learn from my mistakes maybe and to do things differently"* (Jemma).

Three participants saw pregnancy as an opportunity to recreate valued experiences from the past, for their children.

> *"I think it's a good space between the both of them because it means he'll be in school when his wee brother goes into school and he'll be able to watch after his wee brother. Like the way I was in school with my wee sisters"* (Faye).

Summary of super-ordinate theme 1

Participants reflected how past experiences made them feel both more positive and more anxious about managing motherhood. Participants talked about pregnancy as an opportunity to move away from, or be different to, negative experiences from the past and continue to make positive changes. For some, pregnancy seemed to motivate them to stay away from risk. Pregnancy was viewed by a few, as a 'clean slate'. Participants were looking for reparation of difficult relationships with caregivers or of their view of themselves as a caregiver.

Super-ordinate theme 2: 'My body being taken over'

All participants talked about the physical experiences of pregnancy taking over their bodies.

Master theme 2.1: Pregnancy as a physical process. For four participants, pregnancy was experienced as physically demanding.

> *"I was exhausted, I actually stayed in bed for about three days, I only got out of bed to pee!"* (Lana).

However, for one participant, it provided relief from her health problems.

> *"To me it was like, putting all my illnesses into remission for a wee while, you know? And just focusing on the pregnancy"* (Marie).

Three participants described the physical experiences of pregnancy as out of their control.

> *"Your body's changing constantly and you can't really say anything about it, you've got no say in it, it just goes!"* (Jemma).

For two participants, this was experienced as challenging. They worried about the impact of pregnancy on their attractiveness, which left them feeling vulnerable.

> *"I didn't think he would fancy me as much now, like with this pregnancy I thought I'm going to get even bigger and that's what I said to him, the minute I found out I was pregnant, I said "You ken[5] I'm going to get fatter""* (Danielle).

For two of the younger participants, pregnancy was restricting, and this was experienced as frustrating,

> *"I wanted to get back into my normal routine and doing the things I was doing before, but I couldn't because I was pregnant"* (Lana).

and caused resentment

> *"But I'm not saying I never felt that, because I did, that's what I said to my mum, I was like "Oh, if my pals go out, I'm going to miss it""* (Danielle).

Master theme 2.2: Feeling uncertain. For three participants, there was uncertainty about how pregnancy should feel.

> *"I thought that you could feel more pregnant earlier"* (Lana).

[5] "ken" - Scottish word for "know"

For two participants, there was uncertainty about labour.

> *"I am nervous about giving birth again, because that is really scary!"* (Jemma).

Seven participants talked about how helpful it was to ask questions and seek advice at Mellow Bumps and the impact this had on their feelings of 'uncertainty'.

> *"It just makes you feel better talking to somebody else, getting different advice from different people instead of like always speaking to the same people"* (Danielle).

Master theme 2.3: Being responsible. Five participants spoke of the huge responsibility of pregnancy.

> *"I'm looking after another person inside of me, which is very important"* (Jemma).

Two participants felt anxious about this. Marie had been told there was an elevated chance of her baby having Downs Syndrome:

> *"I kept thinking, is that because of my health problems? Is it because of my anaemia? My haemoglobin went so low, would it affect the wean?"*

Five participants described how pregnancy meant focussing on, and taking better care of themselves.

> *"It kind of gave me permission to invest the time I've always needed to in myself"* (Angela).

Two participants described how Mellow Bumps helped them do this.

> *"Mellow Bumps has been really good at influencing, confirming, giving me permission to do all the things I feel is right"* (Angela).

Summary of super-ordinate theme 2

The experience of the body being taken over by pregnancy had a range of meanings for participants. It was physically demanding, and for some, this felt out of control and challenging. Pregnancy impacted upon how attractive some participants felt, leading to feelings of vulnerability. Two participants saw pregnancy as restricting and this led to frustration and resentment. Uncertainty about the physical process of pregnancy and labour, and the huge responsibility this involved, made some participants feel anxious. Mellow Bumps was seen as helpful for sharing anxieties.

There were also benefits of this. One participant felt pregnancy relieved her health problems and the majority talked about how the responsibility helped them take better care of themselves. Pregnancy appeared to legitimise women's wishes to prioritise their own needs, when in ordinary circumstances, they might have found this difficult. Mellow Bumps also encouraged this.

Super-ordinate Theme 3: Pregnancy is an emotional rollercoaster

All participants described pregnancy as a powerful emotional experience.

Master theme 3.1: Adjustment. All participants experienced a number of emotions during the adjustment to pregnancy.

> *"Em – mixed emotions, like happy, and a bit scared... even though you plan it, it's still a shock because then it's like oh, it's actually happening now"* (Jemma).

Master theme 3.2: Heightened emotions. Three participants described feeling more emotional than usual. This was experienced as out of control and left them feeling vulnerable.

> *"I cry about everything and anything or can get really upset about the littlest little thing"* (Jemma).

One participant described how she wanted to stay in control of her emotions, in order to protect the baby.

> *"I've been trying to – well, deal with, get rid of anger – not get rid of it, but deal with anger and dealing with things that you've had going on...well dealing with, especially with stress and things like that, to try and not influence a natural creation badly"* (Angela).

One participant described how she found herself more emotionally attuned to mother-infant relations during pregnancy.

> *"There was this baby crying the other day – and this mum went up to it and said "Shut up or I'll give you something to cry for!" and I was just so angry and I just wanted to go over and say "How dare you talk to your child like that?" And then, and when the baby started crying, I started crying, I couldn't help it, I just started crying, it just made me feel so sad"* (Jemma).

Four participants talked about Mellow Bumps as helpful for talking about the emotional experiences of pregnancy. Danielle found it helpful to talk about her worries and feeling isolated:

> *"Just like my worries, like about obviously money and like missing out with my pals and just somebody to talk to about the way I was feeling".*

> *"I thought I was like the only one".*

Three participants appreciated spending time practicing relaxation at Mellow Bumps. They referred to the benefits of this, not just for themselves.

> *"And do you know the amazing thing about it, during the relaxation thing, it was as if the weans just slept as well. They just calmed right down as well"* (Marie).

Summary of super-ordinate theme 3

Participants referred to a range of emotional experiences. Some felt they were more emotional than normal, which left them feeling out of control, vulnerable and concerned about the impact on the baby. Participants found Mellow Bumps helpful for sharing these experiences. They also appreciated having a space to practice relaxation to help contain their anxiety. One participant described being particularly attuned to a baby's emotional experience during an interaction, which she felt was abusive. This may have been particularly poignant for a mother who was taken into care as a teenager and who had three children who were not in her care. Her desire to be a different mother to her own and different to herself in the past may have been powerful as she contemplated this.

Super-ordinate theme 4: Relationships are important

All participants referred to the importance of relationships, including those with the baby, partners, friends and family.

Master theme 4.1: Forming new relationships. For most participants, pregnancy meant the formation of new valued relationships.

Seven participants described pregnancy as an opportunity to develop a mother-baby relationship. Jemma described this relationship as:

> *"A chance to kind of love and get loved back, from another little human being"*.

Five participants talked about Mellow Bumps helping them with this.

> *"Well, that was the good thing about Mellow Bumps. I felt that I had already built a relationship with her, you know? I already had time to bond with her and stuff like that, so I had built up that bond and built up that relationship"* (Marie).

Three participants talked about pregnancy as a way of giving their partners a relationship they desired.

> *"He thinks it's going to be another wee boy, he said "If it's another wee boy, I'll have my two wee boys!""* (Danielle).

This gave participants a sense of pride and worth.

> *"I'm just so happy to give him his own baby"* (Faye).

The four participants with children (in their care) saw pregnancy as an opportunity for a sibling relationship.

> *"So it'll be good I think to have a wee brother or sister. He will have to learn to communicate, and it's somebody to look after"* (Danielle).

For two participants, Mellow Bumps provided a valued opportunity to make new friends.

> *"We all stayed friends afterwards and that's been a bonus to us"* (Marie).

Master theme 4.2: Solidifying relationships. For four participants, pregnancy was seen as a way of solidifying their relationship with the baby's father.

> *"I do think that once I do have the baby – I think that our relationship will get stronger"* (Jemma).

Three participants saw pregnancy as an opportunity to form, or complete, a desired, and perhaps idealised 'family', imbued with hopes for the future.

> *"I thought "Oh, this is going to be our wee family, complete". And I could see us at Christmas, like me making the Christmas dinner and my two bairns[6] running about, I always look at it like that, it makes me happy"* (Danielle).

Master theme 4.3: Impact on relationships. Two participants feared the impact of pregnancy on their other children.

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[6] "bairn" - Scottish word for "child"

> *"Yeah, because like – because they're so young, I worry about how they might feel left out and stuff like that, because that would not be good"* (Jemma).

Master theme: 4.4 A need for support and sharing. The need for support was raised by all participants.

> *"As long as I've got family and friends to support me then… my wee brother's come over every day or else I go to my mum's every day. If it wasn't for my mum, I don't know what I'd do"* (Tammy).

All participants described sharing their experiences and hearing about others at Mellow Bumps, as supportive.

> *"It was dead good, like, meeting other pregnant lassies and hearing them talking about what their pregnancies were like"* (Faye).

This seemed to be helpful in providing reassurance to those who felt anxious,

> *"You just want to speak to people with that experience, and they're all different and you know, you kind of go "oh well if they did it" – huh! – it's just helpful"* (Angela).

and those who felt isolated.

> *"I didn't have really any female people around me that I felt I could talk to. None that I could say, oh I feel like this today, I feel like shit basically or whatever"* (Marie).

However, for Jemma, the age difference between her (age 25) and others in her group (17 year olds) hindered her sharing her feelings, as she feared she would not be understood.

> *"I just didn't feel very comfortable in telling my private stuff to them. Like if...somebody might like kind of understand a little bit on my level, but they were not on my level"*.

Summary of super-ordinate theme 4

Participants talked about their developing relationship with the baby as positive and a source of pride. Many felt Mellow Bumps helped with this. Some saw this as an opportunity to feel loved, perhaps suggesting a hope of receiving affirmation from the baby. For some, giving babies to their partners provided feelings of pride and worth. For women where opportunities to feel loved, proud and worthwhile may have been lacking, the development of these new relationships was experienced as positive.

Having positive feelings, such as this, in relation to themselves and the pregnancy, may have enabled some participants to share their experiences with others and make new friends. Participants talked about needing support and Mellow Bumps was seen as a place where they could access this.

Some participants saw pregnancy as an opportunity for valued sibling relationships to develop, however, for two participants, the impact of pregnancy on other children led to feelings of anxiety and guilt. Some participants saw pregnancy as strengthening already existing relationships, or important in the formation of their family. This represented security and safety.

Super-ordinate theme 5: Separating identities

All of the participants talked about identities developing or changing during pregnancy.

Master theme 5.1: Developing an identity as a mother. Five participants talked about the valued and positive identity of a 'mother' developing during pregnancy.

> *"I love being a mother. I wouldn't change it for the world"* (Marie).

For participants who had experienced other negative identities, becoming a mother appeared to be an opportunity to experience a valued identity. For Danielle, becoming a mother made her feel proud, not only of her baby, but also of herself.

> *"It's just dead excitement about being a mum because it's like seeing the wee baby and to see its first smile and – it makes you feel proud, you always feel proud"*.

However, for two participants, pregnancy meant giving up a valued identity.

> *"Yeah, so having to give up my A levels really did suck"* (Lana).

For Lana, giving up her studies because of becoming pregnant seems to feel as though she is losing something precious to her sense of self and her future.

Three participants questioned their capacity to be 'good enough' mothers.

> *"I was like "What am I going to be like with two kids? Will I be able to cope?"..."Is it fair to bring another bairn into – " and that was my first question "Is it fair to, like, to bring another kid into my life right now?"* (Danielle)

Four participants referred to the responsibility of becoming a mother, which was seen as highly valued.

> *"To have a responsibility for someone, another life, it is a very big thing, it's not something you take lightly but I think it means a lot to me"* (Jemma).

Cara described how the responsibility felt more onerous as a mother than it did caring for babies as a nursery nurse.

> *"It's scary like as a first time mum, like you haven't got any help. You haven't got a supervisor telling you what to do, and like, if the baby is poorly, then you've got to know what to do".*

Two participants acknowledged just how difficult they found motherhood.

> *“Because like motherhood's hard, and any lassie who sits and says it's like a piece of - that's absolute bull, it's really hard!”* (Danielle)

Six participants suggested Mellow Bumps was helpful for thinking about how they might manage motherhood. Hearing how others managed seemed particularly helpful.

> *“Well, you get to hear their experiences and stuff, and how they dealt with it and how they like overcame, or what they're planning to do, to see if like you can apply what you did to their life, or what they did to your life, sort of thing”* (Lana).

Master theme 5.2: The baby becoming real. All participants talked about the baby becoming a real individual, separate to them. This seemed to occur particularly at the ultrasound scans, and when movements were felt.

Jemma described her 12-week scan

> *“That was like - "This is a real human being inside of me!"”*

Five participants described activities they completed during Mellow Bumps also helping them to see the baby as real.

> *“We've got this bell and a little torch and we got told to...told to ring it and see if the baby reacts, and I've done it, but I noticed that noises, that the baby hears and it generally will be like me and my partner talking, or the TV, but the baby will react more to that than anything”* (Jemma).

Five participants talked about looking forward to seeing what the baby looked like.

> *“I just can’t wait to see actually what he looks like”* (Faye).

Four participants talked about hopes they had for the baby.

> *"It's going to be like me! Lively, bubbly, sort of energetic, sort of a happy person – yeah, smart – I don't know – funny"* (Lana).

Cara talked about enjoying having a baby inside her, as this alleviated feelings of loneliness.

> *"I just know that when he's out, I'm going to feel empty"*.

Master theme 5.3: Separating from others. For three participants, pregnancy meant separating from partners and friends.

Lana talked about realising her baby's father was not someone she wanted to have around.

> *"Obviously I'm not going to stop him from seeing his child but he's not the type of person that I would actually want to have around my child...he is not responsible enough, I'm not depending on him at all."*

Faye talked about men not experiencing pregnancy, and this creating a divide in understanding between her and her partner.

> *"Cause obviously women feel it all and they feel everything inside…I've always said, men should be able to feel what it feels like to feel every kick and every move and everything else".*

Lana described the separation she felt from friends.

> *"I guess I do worry that I've seen the majority of my friends, I have seen them a lot less. It's quite horrible".*

Four participants talked about Mellow Bumps helping this feel less difficult.

> *“I think meeting up with any mums at this stage, particularly because a lot of your friends might be, you know, still enjoying going to the pub or whatever so you're kind of like, in a way "Oh let's have a cake!"”* (Angela)

Summary of super-ordinate theme 5

Pregnancy was seen by many as an opportunity to build a valued identity. For participants who had past identities perhaps associated with harm and damage, who may have experienced marginalisation by society, this appeared to be a means by which they could reconnect with the ‘normal’, ordinary and responsible within themselves, helping some participants build a new and alternative mental representation of themselves, and then make connections with others on this basis.

For others, pregnancy meant giving up valued parts of their identity. Some participants questioned their capacity to be mothers and acknowledged how hard motherhood is. For some, the development of an identity as a mother meant separating from those with less responsible identities, including friends and partners. Participants suggested that Mellow Bumps was helpful for thinking about how to manage motherhood and sharing experiences with others was helpful for seeing the many different ways of doing this. Over the course of pregnancy, the baby became more real. This involved imagining the baby and thinking about its future. Once again Mellow Bumps was experienced as helpful for this.

Discussion

Research Question One

In order to consider the first research question, participants’ experiences of pregnancy will be discussed in relation to the literature. Firstly, in relation to research drawn from ‘ordinary’ populations of pregnant women. Then, in relation to research drawn from vulnerable populations of pregnant women.

There was significant overlap in findings between participants’ experiences of pregnancy and ordinary women’s experiences (examples of studies with similar

findings are given in brackets). Participants' experienced their bodies being taken over (e.g. Armstrong & Pooley, 2005; Darvill, Skirton, & Farrand, 2010). This meant feeling out of control, restricted, uncertain and responsible, which caused feelings of anxiety, vulnerability, stress and resentment (e.g. Lundgren & Wahlberg, 1999). Participants also described feeling more emotional and less in control of their emotions than usual (e.g. Armstrong & Pooley, 2005; Darvill et al., 2010).

Participants saw pregnancy in a context of important relationships (e.g. Lundgren & Wahlberg, 1999). They expressed hope in relation to new relationships, solidification of existing relationships and the formation of a 'family' (e.g. Darvill et al., 2010). They also placed an emphasis on their developing relationship with the baby (e.g. Armstrong & Pooley, 2005; Darvill et al., 2010). Participants described the baby becoming more real at ultrasound scans and with foetal movements (e.g. Armstrong & Pooley, 2005; Yarcheski, Mahon, Yarcheski, Hanks & Cannella, 2009). Consistent with Cranley's (1981) definition of prenatal attachment, participants talked about behavioural aspects of their relationship, e.g. interacting with the baby. Consistent with Muller's (1993) definition, participants talked about mental representations of themselves as caregivers, e.g. as a mother to that baby. Consistent with Condon and Corkindale's (1997) definition, participants talked about emotions they felt towards the baby, e.g. love and pride. These findings support the hypothesis that prenatal attachment is a multidimensional relationship (Doan & Zimmerman, 2003) including affective, cognitive and behavioural aspects. This also lends weight to the argument that the foundations for postnatal attachment are present during pregnancy (e.g. Fonagy et al., 1991; Brandon et al., 2009).

Pregnancy was also a time when participants began to take on a new identity as a mother (e.g. Seibold, 2004; Darvill et al., 2010) and 'caregiver' (Nelson, 2003). This identity was highly valued (e.g. Darvill et al., 2010).

There was also significant overlap in findings between participants' experiences of pregnancy and the experiences of other populations of vulnerable women. Participants were reflective about their past in considering the meaning of, and their feelings about, managing pregnancy and motherhood (e.g. Lewis et al., 1995). This capacity is argued to be important for breaking the cycle of repeating patterns of behaviour (Fonagy,

Steele, Steele, Higgitt & Target, 1994; Slade & Cohen, 1996). The finding that some participants were intending to parent differently from their own experiences of being parented is consistent with Byng-Hall's (1995) 'family script' theory. He postulates that individuals develop 'corrective scripts'. These are conscious ideas about how to avoid replication. However, not guaranteeing their implementation (Byng-Hall, 2008).

Participants expressed anxiety about coping with the challenges of pregnancy and motherhood, e.g. managing mental health difficulties or finances (e.g. Lewis et al., 1995; Chase et al., 2009; O'Mahen et al., 2011). This suggests Braveman et al.'s (2010) research identifying causes of stress during pregnancy needs to be expanded to include uncertainty about the pregnancy experience itself, and the responsibility of motherhood and confidence in managing this. Pregnancy was also experienced by the younger women as a time of separation or loss of others, including partners and friends (e.g. Furber et al., 2009; Chase et al., 2009).

In addition, participants identified opportunities to repair the past and continue to make positive changes, including avoiding risk (e.g. drug taking). This generated hope for the future (e.g. Chase et al., 2009; Schwerdtfeger & Wampler, 2009; Pryce & Samuels, 2010; O'Mahen et al., 2011). The responsibility of pregnancy was seen as positive, stimulating self-caring and protective behaviour (e.g. Armstrong & Pooley, 2005; Chase et al., 2009). Pregnancy was also seen by some as an opportunity to receive love, suggesting a hope that the baby might meet some of their own needs.

The findings of this study suggest that one way pregnancy is potentially reparative is because it is fundamentally "normalising". It gave some participants the opportunity to develop positive representations of the self (e.g. as responsible and/or caring) alongside past negative representations. This has been argued to be a protective factor in children's development (Fonagy et al., 1994; Hodges, Steele, Hillman, Henderson & Kaniuk, 2003).

Summary. The findings of this study broaden what is understood about the experiences of pregnancy from the dominant narrative in empirical research, which largely focuses on risk (Lewis et al., 1995), to one that includes hope, opportunity and reparation.

Research Question Two

In order to consider the second research question, participants' experiences of Mellow Bumps will be discussed in relation to the literature. It is clear that Mellow Bumps was seen as an acceptable intervention. This was reflected in participant accounts and is evidenced by the high rate of attendance. Mellow Bumps was successful at overcoming barriers to access (NICE, 2010), particularly because of the provision of transport, childcare and refreshments. Facilitators and group members were seen as friendly and non-judgmental, and participants enjoyed the social aspect of the intervention. Participants talked about their need for support from multiple sources and their desire to share their experiences with others. Participants appeared to appreciate engaging in normal, ordinary, benign conversations, which reduced feelings of isolation (e.g. Armstrong & Pooley, 2005; Darvill et al., 2010). Pregnancy may be a particularly good time to help vulnerable women develop a new, more positive identity and representation of the self. Meeting other similar women in groups might be helpful for supporting these new self-representations.

Mellow Bumps was also reported as being helpful for allowing time to focus on the "bump" and the impact of this on the developing relationship was considered to be positive. This provides important clinical data supporting the assertion that attachment begins before birth (e.g. Cranley, 1981) and that Mellow Bumps is potentially helpful for encouraging this.

Summary. Mellow Bumps was clearly experienced as positive. Participants found interacting with other similar women during pregnancy a helpful experience. It was also seen as helpful in terms of fostering the developing relationship between participants and their "bumps".

Overall summary

This research adds to our understanding of the experiences of pregnancy for vulnerable women. Pregnancy can be experienced as normalising, which provides an opportunity for building different, more positive, representations of the self, which may be helpful for repairing the past. Mellow Bumps seems to support this.

Whilst it is acknowledged that psychology, and the practical applications derived from it, may contribute helpfully to intervening with some of the risks for vulnerable women, its impact is limited by wider structural inequalities. Many of this populations difficulties are complex, multi-faceted and pervasive, relating to the broader political, social and economic context in which they live and which are not addressed within wider society.

Limitations of the study

IPA is limited by its use of small purposive samples. Although this study attempted to illuminate the experiences of a homogenous sample of participants (Smith et al., 2009), the sample may represent more divergence than convergence. Although all the participants could be considered 'vulnerable', even within one vulnerable population, e.g. those with mental health problems, there is likely to be considerable variation (Lewis et al., 1995). Furthermore, within the sample, there was a broad range of gestational age (14-40 weeks), participant age (17-37) and, for some of the participants, this was their first baby, while for others, it was not. These factors may be important in shaping the experiences of pregnancy; therefore, this study could be criticised for including too much sample variation. Additionally, some potential participants did not consent to the research process and three participants who consented, later declined to participate. Therefore, this study utilised a potentially biased self-selecting sample.

Although IPA aims to gather in-depth data about the meanings of experiences for participants, as with other methodologies that rely on self-report, this is limited to the reporting of conscious narratives. This methodology cannot comment upon unconscious narratives (Clark & Hoggett, 2009). For example, Byng-Hall (2008) talks about the role that unconscious family scripts play in shaping parenting behaviours. This study does not contribute to developing an understanding of these determinants.

In addition to the interview, in order to assess experience by another means, participants were asked to keep a diary. However, this was not used by participants. They reported not having time to complete this. This potentially limited the data that were available.

Future research

Mellow Bumps was described as being helpful in a number of ways. As yet, only small-scale evaluation has been carried out and a quantitative study is indicated; ideally, a randomised controlled trial. However accessing a group of vulnerable pregnant women without offering Mellow Bumps could present ethical difficulties. One way of overcoming these would be to use the experimental group as its own comparison group. This would involve using baseline measures taken four weeks before the programme, and comparing these to those taken at the start and end of the programme and after a period of follow-up. The findings of the current study point to prenatal attachment, maternal mood and social support as important variables. It would be hypothesised that Mellow Bumps would have a positive effect.

This research supports prenatal attachment theory. Several conceptual frameworks have been developed with different emphases on components of this relationship (e.g. Cranley, 1981; Muller, 1990; Condon & Corkindale, 1997). This study suggests that any comprehensive framework must be multidimensional. Further research could concentrate on developing an integrated and coherent theory, drawing on well-established postnatal attachment theory. It seems highly likely that mental representations of the self as a caregiver and of the baby are crucial components, and consistent with previous empirical research (e.g. Fonagy, Steele & Steele, 1991), this study suggested these are present during pregnancy. The links between pre- and postnatal attachment could also be investigated. If coherent theory was found to link these processes, then future research could investigate ways of increasing prenatal attachment.

Clinical Implications

Importantly, this study highlights that this group of women were keen to engage in antenatal care when it was tailored to their needs and barriers to their attendance were overcome (e.g. transport, childcare, refreshments). This study supports the notion that pregnancy may provide a unique and optimal intervention opportunity. Interventions should capitalise on this. Participants described appreciating being around other

pregnant women and found sharing their experiences and hearing those of others helpful. This suggests that group interventions, compared to individually-focused work during pregnancy, may be particularly beneficial. The particular format of this group that facilitated sharing and minimised “teaching” may be significant. This allowed participants to have a genuinely normalising experience, thereby reducing feelings of social isolation and supporting the development of more positive representations of the self.

Conclusion

This study aimed to understand the experiences of pregnancy and of attending Mellow Bumps, for a group of vulnerable women. This study broadens the narrative of pregnancy from the dominant professional discourse around risk, to include the narrative of hope, opportunity and reparation. Pregnancy is a fundamentally “normalising” experience, which provides women with an opportunity to build more positive representations of themselves. These appear to be helpful in repairing the past, and motivating continued positive change. Mellow Bumps seem helpful in supporting the development of these representations. Mellow Bumps was also seen as helpful for reducing isolation, sharing concerns, and allowing time to focus on and build a relationship with the “bump”. Mellow Bumps overcame important barriers to engagement, and was seen as highly acceptable. This study is limited by the use of a small sample, sampling bias, and the reliance on self-report. Future research should formally evaluate Mellow Bumps, as this was seen as helpful. It could also focus on developing a coherent conceptual framework of prenatal attachment, and attempt to understand more clearly the links between pre- and post-natal attachment.

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Section C: Critical Appraisal Paper

Word count: 1997

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

September 2012

SALOMONS CANTERBURY CHRIST CHURCH UNIVERSITY

Overview

This is a critical appraisal of a qualitative study exploring participants' experiences of pregnancy and an antenatal intervention, through interpretative phenomenological analysis (IPA). It will be structured around four questions, along with the consideration of wider conceptual issues and implications.

What research skills have you learned and what research abilities have you developed from undertaking this project, and what do you think you need to learn further?

Initially I was inclined to carry out a quantitative study, because of previous experience and confidence with this methodology. I also had a limited understanding of the purpose and value of qualitative research. Through the development of research aims, it became clear a qualitative methodology was appropriate. This had led to a greater understanding of the value of this methodology (Elliott, Fischer & Rennie, 1999) and my acquiring a new set of research skills.

Conducting interviews for research utilises different skills to assessment interviews for therapy. Conducting a pilot interview and receiving feedback from a participant and my supervisors helped me develop confidence. The experience of interviewing people in their homes has furthered my ability to manage some challenging issues associated with this, e.g. interruptions from partners and children.

Reading through the transcripts highlighted the progress I made with interviewing. Smith (2011) argues "interviewing is a critical skill and it can require considerable time to develop expertise" (p. 23). Experience has been key to my development. It was clear I felt more able to ask about challenging aspects of pregnancy as I became more experienced and confident. This resulted in the development of deeper understandings. With experience I also felt more able to ask questions about topics that diverged from the interview schedule. This enabled a richer level of data to emerge that was more consistent with participants' concerns and experiences than with my interests as a researcher (Yardley, 2008).

The first interview after the pilot yielded particularly poor data. I found myself shocked by the living circumstances of the participant and I felt very different to her. I think this affected how I felt about asking her questions. Reading the transcript, I identified several openings that I failed to take. This taught me about the important potential effect of the social context of the relationship between the researcher and participant. With experience, I would now feel able to elicit more detail from that participant.

Remaining within the 'researcher' role, as opposed to becoming the 'therapist', by perhaps validating participants' experiences, differed from much of the work I have done. At times, I found this difficult, and wanted to give more to the participants. Learning to hold and manage this tension was an important skill, also relevant for future research.

Skills I developed in relation to IPA included being able to hold in mind and analyse substantial amounts of data. I fully immersed myself in the data (Smith, 2011), and at points it was hard to make sense of it. I had to manage my anxiety about this. Texts about qualitative methodology and IPA were helpful in thinking about how to conduct the analysis in a rigorous and transparent way (Yardley, 2000), in addition to a fellow trainee checking the credibility of themes and offering feedback several times during the process (Yardley, 2000).

Interpreting data was also a new skill. Initially, I felt uncomfortable about acknowledging the power this gave me and how it privileged my interpretation as a researcher (Reid & Gough, 2000). As Yardley (2000) suggests, "truth", "knowledge" and "reality" are communally constructed and negotiated. With experience I came to accept my part in this process, and I felt able to appreciate the value of the researcher in this approach (Yardley, 2008).

Additionally, I gained more general research skills including applying for ethical approval and a grant to cover costs. I also developed skills in communicating about the research with supervisors, participants, the ethics and research panels, transcribers, and facilitators of the antenatal intervention. I also had to seek, and negotiate support for myself throughout the process, and this has developed my ability to be assertive about my needs.

Given this was my first IPA study, and skills in this area are likely to develop with experience (Smith & Osborne, 2003), in future, I would like the opportunity to carry out further IPA. I am also interested in transferring what I know about qualitative analysis to developing skills in other qualitative approaches, such as grounded theory. I would also like the experience of applying for NHS ethical approval. This may be required for future work as a clinical psychologist.

If you were able to do the project again, what would you do differently and why?

Although a purposive sample of 'vulnerable' women was utilised, the specific difficulties resulting in women being deemed 'vulnerable' varied within the sample. This sample was selected because it reflects the range and diversity of perspectives of women within this population (Yardley, 2008). However, there are likely to be important differences between sub-groups of women within this population, which this research cannot comment upon. I noticed some common themes within populations, e.g. both participants who had recent histories of heroin use described being really concerned about finances. This may have been linked with their previous experiences of struggling to maintain an addiction in the context of unemployment. Undertaking this research again, I would consider limiting the sample by vulnerability factor.

I would also seek to incorporate the perspectives of others into the research, e.g. partners, family members and group facilitators. This process may highlight more divergence and capture additional themes or add further depth to the themes. This may have further developed understandings about the systemic aspects of the pregnancy experience.

I would also carry out participant validation (Reid & Gough, 2000). Although it is recognised that the final analysis relates to my interpretation of the data, this would allow for more discussion about the balance between participant meaning and my interpretation (Williams & Morrow, 2009).

The participants did not use the diaries/dictaphones provided in which to record thoughts and feelings about their pregnancies. This limited the data available. They

reported not having time to do this. On reflection, this may also have been because they had not met me before I asked them to do this, and perhaps they were concerned about being judged negatively. Undertaking this research again, I would personally attend groups and introduce participants to the research. This would give them a chance to get to know me a little, which may enable them to complete the diaries, and further rich data to emerge for analysis.

Clinically, as a consequence of doing this study, would you do anything differently and why?

I have found it really useful to research a client group I am passionately interested in, and currently working with. I have been able to draw on my research when thinking about clients on my placement. In addition, my placement experience has helped me to think about how my findings might apply to a clinical setting.

My interview skills have developed significantly. As a result, when interviewing in a clinical setting, I feel more able to adopt a genuinely open and curious stance, which allows unique themes to emerge in clients' narratives. This stance helps to place the client as the expert of their experience, which is helpful when building rapport and in therapy.

I have also come to more genuinely understand and appreciate that multiple narratives about a client can exist simultaneously, including narratives of risk and resilience. This has helped me further recognise clients' strengths, resilience and abilities, and this has encouraged me to ask questions that focus more on these aspects of experience than previously.

A major theme in the study reflected the importance participants placed on relationships during pregnancy. Participants' valued contact with other pregnant women. Clinical psychologists are well placed for facilitating therapeutic groups during pregnancy but financial constraints within the NHS might not prioritise such interventions, speaking to the gap between need and NHS priorities. During clinical training, I have only facilitated one group. Most treatments have been offered on an individual basis. In future work in perinatal services, I would be keen to pursue this

modality of work. One caution would be that some women reported feeling too different from other group members to share their personal experiences. It would be important to carefully consider group membership, in order that clients felt able to use groups to their full potential. This study has also reiterated the importance of helping clients access community resources where they can gain social support.

This research has also helped me develop a deeper understanding of the life contexts of clients and how these differ from my own. This has been helpful for challenging my own assumptions about pregnancy and motherhood, which are based on my own limited experience. It has also made me understand how critical life contexts are for the process of therapy. In particular, this study has made me consider clients' experiences of accessing an outpatient service I work in. Research participants really appreciated the effort that was made to overcome barriers to accessing the antenatal intervention. Transport, refreshments, and in some cases, childcare were provided. Participants said they would not have attended without such provision. I have found it frustrating to work in a service where help with access is not provided and some particularly marginalised clients have not been able to attend because of these issues. This indicates that some NHS services may not be reaching those who need them most. It is incumbent on services to work with these barriers and configure themselves to meet clients' needs. As a clinical psychologist, I would consider the barriers preventing access and seek to find means to address them if at all possible. One idea might be to locate NHS services with other perinatal services, e.g. voluntary sector services or children's centres, where resources such as transport and childcare could be shared and stigma lessened.

It is also important that clinical psychologists consider their role in relation to the wider social and political context of social and health inequality. Through undertaking my research, I feel that psychologists should be trying to promote the voices of clients who are marginalised, within the political arena. Psychology is not a panacea, and far-reaching change may involve addressing structural inequalities drawing on the contributions from many disciplines. However, it could be strongly argued that psychologists should also be actively lobbying for change at social and political levels, by drawing attention to the complex and subtle interplay between the psychological, social, and political dimensions of people's lives.

If you were to undertake further research in this area, what would that research project seek to answer and how would you go about doing it?

As the participants all felt positively about the antenatal intervention, it would be useful to carry out a quantitative study assessing effectiveness. The current study highlights important variables such as prenatal attachment, mood (with a particular focus on depression and stress) and social support. Measures should be taken at baseline (for comparisons), pre-intervention, post-intervention, and at longer-term follow-up. It would be hypothesised that engagement would have a positive impact on these variables. If this was supported, it might encourage wider dissemination of this programme.

Participants' narratives highlight that the prenatal attachment relationship clearly involves mental representations of the baby and of the self as a caregiver. Mental representations are theorised to be crucial in the development of postnatal attachment. This highlights a likely convergence between pre- and postnatal attachment theories. Some researchers have argued these constructs require different frameworks, because of measurement issues, e.g. postnatal attachment can be measured behaviourally from the infants' perspective, whereas prenatal attachment cannot (Brandon, Pitts, Denton, Stringer & Evans, 2009). Future research could identify a measure of attachment that could be used comparatively, both pre- and postnatally, which focused on mental representations. This could then allow the effectiveness of interventions such as Mellow Bumps to be assessed in the longer-term.

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Section D: Appendices of supporting material

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

September 2012

SALOMONS CANTERBURY CHRIST CHURCH UNIVERSITY

Appendix A

Author's guidelines for submission to Clinical Child Psychology and Psychiatry[7]

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[7] Sage UK style guide available from:
*www.**uk**.**sage**pub.com/.../WIH_**SAGE_UK_style_guide**_short.pdf*

Appendix B

Information about weekly activities at Mellow Bumps antenatal intervention

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Appendix C

Participant demographic information

Table 2. Information showing demographics of participants

Name	Age	Ethnicity	With partner	Other children	Gestation starting group	Gestation at interview	Referrer	Vulnerability factors	No. attended
Marie	37	White, Scottish	Yes	3	22	23 weeks[8] post-partum	Health visitor	Previous history of stillbirth. Previous history of being a victim of domestic violence. Previous history of substance misuse Recent previous history of poor housing, homelessness, and living in a violent neighbourhood. Recent previous history of post-natal depression. Recent previous history of relapse (substance misuse).	6
Tammy	24	White, Scottish	No	3	32	40	Social worker	Single mother, no contact with father. Recent history of homelessness. Current involvement of social services, concerns about the care of the children related to hygiene[9].	5
Faye	25	White, Scottish	Yes	1	24	32	Parenting worker (Voluntary agency)	Previous physically high-risk pregnancy. Previous history of post-natal depression. Previous history of anxiety and depression. Previous history of substance abuse. Previous history of homelessness.	6
Cara	23	White, British	Yes	0	23	29	Midwife	Query learning difficulties? Extremely socially isolated. First baby. Family history of poor post-natal mental health (depression, bipolar). History of being in care of grandparents from birth.	6
Angela	35	White, Scottish	Yes	0	20	25	GP	Previous history of long-standing substance misuse Smoked during pregnancy Reported difficulties in her relationship during early	6

[8] This participant was asked to complete the pilot interview after she had given birth
[9] As reported by mother, unable to obtain any further information from social services

								pregnancy	
Jemma	25	White, British	Yes	3	16	24	Substance misuse keyworker	First child adopted age 16 (not in a relationship with father). Two further children placed in custody of different father because of substance misuse. History of being in care as a teenager. Recent history of substance misuse. Recent history of homelessness.	5
Lana	17	Mixed White/ Black Caribbean	No	0	22	24	Keyworker at homeless hostel	Teenage pregnancy, unplanned, not with baby's father, first baby. Homeless with lack of support Family History of poor mental health	2
Danielle	24	White, Scottish	Yes	1	7	14	Substance misuse keyworker	Previous history of anxiety and depression Previous history of long-standing substance misuse Recent history of post-natal depression	6

Appendix D

Participant information sheet

"How does it feel? Pregnancy and the Mellow Bumps programme"

We would like to ask you about how you have felt about your pregnancy and taking part in the Mellow Bumps group, to help us find out how mothers-to-be, like you, feel about pregnancy and the group. It is important that you understand what this study is about, and what you will be asked to do. You can then decide if you would like to take part. Please take time to read this sheet. If there is anything that you do not understand or if you have any questions, please ask your group leader or contact me on the telephone number provided below.

What do we hope to find out from this project?

We would like to find out what pregnancy has been like for you, in particular what kinds of things you have thought and felt about being pregnant. We would also like to know what you have thought of and felt about attending the Mellow Bumps group.

What will the project tell us?

We do not know as much as we would like about how pregnancy is for mums-to-be who are also struggling with other things in life. It is really important to find out, so we can think about whether there are things that can be done to help. 'Mellow Bumps' is a new group to help mums-to-be during pregnancy and it is also important to find out if it really does help or not. One way of finding out these things is to ask you about how you feel about your pregnancy and the group.

Who is running the project?

My name is Bea Birtwell and I'm a student at Canterbury Christ Church University. I have a special interest in the Mellow Parenting programmes. I am doing this project as part of my qualification in Clinical Psychology.

Do I have to take part?

No, the decision to take part in this project is up to you. If you do decide to take part in this project, but then change your mind, you can tell us at any time without even having to give a reason.

What will I be asked to do if I do take part?

I would like to talk to you privately for about an hour and tape record it. I would also like you to keep a diary about your experience of pregnancy from next week until when I meet with you. In this diary you can record your thoughts and feelings about pregnancy. If you have difficulties with writing, that is no problem, we will provide you with an audio recorder and show you how to use it, so you can record your thoughts by saying them.

What will happen to the interview and diary data?

The interview will be recorded so that I can make sure I do not forget anything you tell me. I will use the tape of the interview and the diary (if you use an audio recorder) or your written diary to write down everything you have said. When I do this, I will remove your name and address, so that the information you have given me is anonymous. The recording of the interview will be destroyed when the project is finished. The written record of the interview and diary entries will be stored in a locked cabinet for 10 years. You will be asked whether you would like a copy of your diary returned to you so you can keep it. I will put together all the views of the different mums-to-be I interview and see what everyone thinks and feels. I will make the findings into a report that will go to the University. If I use any quotes of things you have said when I write up this report, no one would be able to identify that it was you that said those things. This report will be ready in September 2012. As many other people will be interested in this work, we may publish it in a professional journal.

What do I do next?

Think about this until the next Mellow Bumps session, if you are willing to talk with me, then you will be asked to sign a form and give me your details. I will telephone you to fix a date and time for us to meet. You will be offered a £10 'Boots' (the chemist) voucher for your time. We can meet in your home, or anywhere that you feel comfortable, at a time that suits you. If you have to travel to the interview, your travel costs will be paid.

How can I contact you?

If you have any further questions about the project, please ring me on XXXXXXXXXXX, or email me at XXXXXXXXX@XXXXXXX.XX.XX

Thank you for taking the time to read this and I hope to meet you soon.

Bea Birtwell
Trainee Clinical Psychologist,
Canterbury Christ Church University,
Salomons,
Broomhill Road,
Tunbridge Wells,
Kent, TN3 0TG.

If at any point you have any concerns about the way the study has been carried out, you can contact Rosemary Mackenzie on 0141 445 6120.

Appendix E

Consent to be contacted form

"How does it feel? Pregnancy and the Mellow Bumps programme"

Consent to be contacted to arrange an interview:

I give consent for my name, telephone number and address to be passed to Bea Birtwell, Trainee Clinical Psychologist, who will contact me to arrange a time to be interviewed following the end of the 'Mellow Bumps' group.

Signed_____

Date_____

Please print name in CAPITALS:_____

Telephone number_____

Mobile Phone number_____

Email address_____

Address_____

_____

_____

Thank you very much, I look forward to meeting with you and hearing about your experiences of pregnancy.

Please return this form to your 'Mellow Bumps' facilitator.

Appendix F

Diary instructions

Please keep a log in this diary of any thoughts and feelings that you have about your pregnancy, about being pregnant and about your baby. You may also want to write about the experience of attending the Mellow Bumps group, and things that this makes you think about and feel. I am interested in your personal thoughts and feelings. This diary will be returned to you, if you would like it back, after I have had a chance to copy the things that you write down. Thank you so much for taking the time to complete this.

Appendix G

Consent form

"How does it feel? Pregnancy and the Mellow Bumps programme"

Please tick, if you agree

I understand that I am being asked to talk about how I feel about pregnancy and the Mellow Bumps programme and that this will be recorded. ☐

I agree that the referral letter sent to Mellow Bumps, which includes information about me, can be looked at by the researcher. ☐

I agree that quotes from what I say can be used in a report of the project, but that they will not include my name or any details of who I am. ☐

I have been read the information sheet and have had a chance to ask any questions I have. ☐

I understand that I am agreeing to talk about how I feel about Mellow Bumps and Pregnancy but that I can change my mind at any time. If I change my mind, anything I have said will be taken out of the report. ☐

Please print name in BLOCK CAPITALS:_____

Signed_____

Date_____

Please return this form to Bea Birtwell.

Trainee Clinical Psychologist,
Canterbury Christ Church University,
Salomons,
Broomhill Road, Tunbridge Wells, Kent, TN3 0TG.

Appendix H

Interview schedule

Demographic Questions: Before we begin, I wanted to ask a few questions about you.
What is your age?
How would you describe your ethnicity?
How many weeks pregnant are you currently?
When is your baby due?
Who lives with you at home? Do you have any other children? What are their names and ages?
How many weeks pregnant were you when you began the 'Mellow Bumps' group?
How many sessions of 'Mellow Bumps' did you attend?

Warm up questions

In order for me to get some sense of your life story, it would be really helpful if you could tell me a little bit about your life before you were pregnant?

Were you in employment? Do you have other children?

Was your pregnancy planned or unplanned?

Pregnancy

Tell me what it was like when you found out you were pregnant?

Prompts: What did you feel about being pregnant?
What did it mean to you that you were pregnant?
What did you expect pregnancy to be like?
What did you feel about the baby at the beginning of pregnancy?

Can you tell me about your experience of pregnancy so far?

Prompts: Tell me about how pregnancy has been for you?
When did this pregnancy feel real to you?
What did you feel when you saw your baby during your ultra-sound scan?
What about your later scan at 20 weeks?
What did you feel when you first felt your baby moving?
What kinds of things have you felt about being pregnant?
What kinds of things have you felt about your baby during pregnancy?
What has this pregnancy meant to you? (personal meaning)

Has it been what you expected?
Have you talked with other people about your experiences of pregnancy?
What sort of things have you talked to them about?

Experience of 'mellow bumps'

What was attending 'mellow bumps' like for you?

Prompts: What did you feel about attending the 'mellow bumps' group?
Can you tell me what, if anything, you valued about attending the group?
Can you tell me what, if anything, you valued least about the group?
What has attending this group during your pregnancy meant to you?
Can you tell me what it was like to attend a group with other mums-to-be?

The future, you and your baby

What do you imagine your baby will be like?

Prompts: Have you thought about what your baby might be like?
When you first see your baby, what do you expect it to be like?
What do you expect to feel about your baby when it is born?
What ideas do you have about what your baby's personality might be like?
What do you think your baby will be like compared to other babies the same age?

How do you imagine your relationship with your baby?

How do you imagine your relationship with your baby?
What are you looking forward to about your baby?
What do you think you might be difficult about your baby?
Do you think your relationship with your baby will change over time? In what ways? How will you feel about this change?

Debriefing

How did you experience the interview?
Was it OK for you?
Did the interview raise any concerns that you have, which it would be helpful for us to discuss?

Appendix I

Development of the interview schedule

Stage 1: Literature review and development of ideas

Literature review was used to guide the development of ideas of experiences during pregnancy that could be the focus of the interview. In particular, I was interested in exploring what goes on in the minds of mothers during pregnancy. I consulted other measures used during pregnancy to investigate attachment and the developing relationship, particularly those looking at representations during pregnancy (e.g. Pregnancy Interview; Slade & Cohen, 1996; Working Model of the Child Interview; Zeanah, Benoit, Barton, 1993; Neonatal Perception Inventory; Broussard, 1963). Texts suggesting how questions could be phrased in order to be exploratory and gather people's views about the meanings of their experiences, and the understanding they had and sense they made of these were also consulted (e.g. Smith et al. 2009).

Pregnancy

Tell me what it was like when you found out you were pregnant?

Prompts: Was the pregnancy planned or unplanned?
What did you feel about being pregnant?
What did it mean to you that you were pregnant?
What did you expect pregnancy to be like?
What did you feel about the baby at the beginning of pregnancy?

Can you tell me about your experience of pregnancy so far?

Prompts: Tell me about how pregnancy has been for you?
When did this pregnancy feel real to you?
What did you feel when you saw your baby during your ultra-sound scan?
What about your later scan at 20 weeks?
What did you feel when you first felt your baby moving?
What kinds of things have you felt about being pregnant?
What kinds of things have you felt about your baby during pregnancy?
What has this pregnancy meant to you? (personal meaning)
Has it been what you expected?
Have you talked with other people about your experiences of pregnancy?
What sort of things have you talked to them about?

The future, you and your baby

What do you imagine your baby will be like?

Prompts:
Have you thought about what your baby might be like?
When you first see your baby, what do you expect it to be like?
What do you expect to feel about your baby when it is born?
What ideas do you have about what your baby's personality might be like?
What do you think your baby will be like compared to other babies the same age?

How do you imagine your relationship with your baby?

How do you imagine your relationship with your baby?
What are you looking forward to about your baby?
What do you think you might want to change about your relationship with the baby?
How do you think your relationship with your baby will affect your baby's personality?
Do you think your relationship with your baby will change over time? In what ways? How will you feel about this change?

<u>Experience of 'mellow bumps'</u>

What was attending 'mellow bumps' like for you?

Prompts:
What did you feel about attending the 'mellow bumps' group?
Can you tell me what, if anything, you valued about attending the group?
Can you tell me what, if anything, you valued least about the group?
What has attending this group during your pregnancy meant to you?
Can you tell me what it was like to attend a group with other mums-to-be?

Stage 2: Proposal

Feedback from proposal meeting: The reviewers made some suggestions about changing some of the questions.

To remove the question: How do you think your relationship with your baby will affect your baby's personality? As this sounds as if I am fishing to see if participants think that how they relate to their baby will affect their personality.

To change question: What do you think you might want to change about your relationship with the baby? To: What do you think you might be difficult about your baby?

To add in a debriefing following the interview: Switch off recorder. Offer some time to talk about how they experienced the interview. Was it OK? Are there any worries or concerns it has raised for them?

Stage 4: Pilot interview

Feedback from pilot interview with Marie:

1) Participating in the interview was a good experience, and reflecting on the pregnancy was enjoyable for me. It was nice to have someone to talk to about the experience of pregnancy. It was a good opportunity to remember the pregnancy. This might not be the case for all the mums depending on how they have found their pregnancy.
2) The questions were “not too difficult” to answer; and seemed “straight forward”.
3) The length of the interview was fine. I could talk for hours about this!
4) The questions seemed to flow from one into another, which worked well.
5) It will be necessary, thinking of some of the mums that took part in Mellow Bumps, to do some prompting with people, to get them to give more information. Perhaps asking them for more detail when they give general answers, like “it was alright”.
6) It is much easier to see people at home. I don’t think that many mums will attend for an interview unless you go to their homes, especially if they are heavily pregnant and it is hard to get around.
7) As people will be at different stages of pregnancy, the amount they are able to talk about the pregnancy, and the detail that they give might vary.

Stage 5: Meeting with supervisor

On the basis of the pilot interview, none of the questions were changed, however, I felt it was necessary to change the order and to add something at the beginning of the interview to contextualise it. Therefore, warm up questions (see below) were added to the beginning, before the main three questions, in order to gain a sense of the participants life story to help with interpretation when carrying out the analysis. The pregnancy planning question was moved to this section, to get a sense of where the pregnancy fit, with the context at the time.

<u>Warm up questions</u>

> *In order for me to get some sense of your life story, it would be really helpful if you could tell me a little bit about your life before you were pregnant?*

Were you in employment? Do you have other children?

Was your pregnancy planned or unplanned?

Stage 6: Interviews

The final interview schedule (see Appendix C) was used for all of the interviews. However, this was executed with flexibility to ensure that each interview highlighted the concerns of that particular individual participant (Smith et al. 2009).

Appendix J

Coded transcript

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Appendix K

Yardley's (2008) core principles

Core principles for evaluating the validity of qualitative studies (Yardley, 2008):

1) Sensitivity to context:
- Relevant theoretical and empirical literature
- Socio-cultural setting
- Participants' perspectives
- Ethical Issues
- Empirical data

2) Commitment and rigour:
- Thorough data collection
- Depth/breadth of analysis
- Methodological competence/skill
- In-depth engagement with topic

3) Coherence and transparency:
- Clarity and power of your argument
- Fit between theory and method
- Transparent methods and data presentation
- Reflexivity

4) Impact and importance:
- Practical/applied
- Theoretical
- Socio-cultural. (p. 243-244)

Appendix L

Excerpts from reflective journal

Development of research ideas and planning

May 2010

I desperately want to research something of personal interest to me. I think it is really important if it is going to be something I am going to spend the next two to three years of my life thinking about. I loved my experience on my Masters so much, with it's focus on early intervention, and I am excited by the idea of developing parenting focussed interventions for women during pregnancy. It seems like a ripe time to intervene, in order to impact positively on the baby. It seems to me that it might be a time when women are going to be motivated to engage and the potential impact could be so huge.

June 2010

Reading about the experiences of pregnancy makes it all seem more complex than I was imagining. There is very little in the literature about the psychological experiences of pregnancy for women. Which seems strange given it is such a universal experience. This is quite exciting, as it seems to be an area that needs work. However, this makes it difficult to understand and think about. With thinking about the rationale for my research, it is really difficult to write anything, as the interplay between the mother and the baby is so complex. It is complicated by there being so many variables interacting with each other across time. I think I am coming to the realisation that perhaps the idea of 'early intervention' is not as straightforward as I thought. Perhaps there is no such thing as 'early' intervention, and whenever we intervene it is the same because it is a cycle, which keeps on going. And although the baby is not born, it is very present during pregnancy. It is certainly alive in the mind of the mother. The relationship has already begun. Thinking about Fonagy's work with pregnant mums and attachment, I am starting to wonder if it even begins before conception? In which case we could even intervene then?

December 2010

Thinking about the questions I want to ask the mums-to-be. I am personally most interested in the relationship that is developing between them and their babies, and the meaning of this for them. It would be interesting to see what mums make of this, and how this links to their past and their imagined futures with the baby. My supervisor made the observation that this would only be people's conscious narratives about the meaning of their pregnancy, and would not encompass their unconscious narratives. It seems fascinating to me that so much is at work all the time for each individual person, including me, both consciously and unconsciously. It is making me think about my own relationship to 'pregnancy', something I want for myself in my future. I realise I have picked something to research that is applicable to me in many ways, as

it is an experience I hope I will have, and this is going to affect how I feel about my research and probably my own pregnancy. It is also an experience that many of my friends are currently going through. I'm wondering about how it will impact on me and my experiences later on.

January 2010

What is the experience of pregnancy if you are struggling with other parts of your life? It could be so many things; it could be a real worry, a time of stress and confusion and difficulty, resentment, maybe a disaster. Equally, it could be a time to get excited about the future, and 'turn over a new leaf', an opportunity, a distraction, something positive in the midst of so much difficulty. I always imagined it being the best thing ever, for myself, so thought it would be experienced as the same for others. However, I remember people I know who have terminated pregnancies or been very ambivalent about them. It could have so many (almost infinite?) meanings, depending on so many things. I wonder how to capture all these possible different perspectives, within and between people. I also wonder whether mums-to-be will want to name and discuss these many different possible feelings/meanings? I wonder how I would feel about speaking aloud some things that might be easier left unsaid. It is going to be very important to think about how I can get the best out of my participants, engaging them into a discussion where they feel able to tell me things which they might not have thought about or talked about previously.

January 2010

At times I feel overwhelmed by the literature, which focuses so much on 'risk'. Sometimes I feel myself panicking about how much 'risk' exists and how these babies survive. It seems that babies, although they are so affected by their environment, and the 'risks' intrinsic to these environments, must be very resilient. Perhaps the literature does give a skewed view? Perhaps we do focus too much on the 'risk' and not the resilience of people. If that is what we look for and are interested in, then surely that is what we will find?

Interviews and analysis

February 2011

I finally got approval for my project! That has been so difficult, it is such a relief. I am so excited to be able to go ahead with it now, and complete a pilot interview. I feel it will help me to see whether this is really going to work! I am pretty nervous about it, as I have no idea what to expect from the interview process. I am scared because I know that I am so different to the person I am going to be interviewing. I am a middle class, English, professional and she is a working class, Scottish, mum. I hope that I am able to engage her in a discussion with me, in which she feels able to talk to me. I wonder about the differences between us, whether that will affect how she is with me? I worry about being English in a Scottish environment, and what that might mean.

July 2011

Interview with Tammy: also present was her other 3 children, her brother and her ex-partner, in another room during the interview. They lived on the 20th floor, of a high-rise tower, in a flat for a 'homeless' family. The flat was dirty, there was no shampoo or washing products in the bathroom, or a towel, no duvet covers on the duvets, and the curtains were drawn during the day. I was actually scared by the idea of children being bought up in this environment.

The little girl, aged about 4, was so excited that I was there, someone to talk to maybe? A new and different person. I wondered how many people she got to have contact with in her world? She was showing me her new shoes very excitedly, and I asked her if she was going to wear them to a party. Later on I thought about this, and thought that perhaps this was a stupid question. I wondered if that little girl would ever go to a children's party? Would she know anyone in her life who would have a party for their child's birthday? This really made me think about my own experiences as an extremely privileged middle-class child, with access to so many different social experiences, which may have been dependent to some extent on money, and culture. I felt so different to this family that I was immersed in for such a short time. How am I possibly going to make sense of these participant's experiences? They are a world apart from mine.

July 2011

I have been left with an unbearable feeling of responsibility since the interviews. I feel so lucky, privileged and fortunate. I feel guilty. I feel like on this basis, I should be doing something more useful for these people. Not just asking them about their experiences. I am left feeling quite angry, why aren't we doing more? The problems that people face are enormous. Generations of struggling with the same difficulties. When will this ever end? I feel helpless and hopeless about what I could possibly offer that would make a drop of difference to anyone, in my lifetime. Is it ridiculous to think that I could really help anyone? I also question what I am doing with this research? Is it really going to benefit anyone? Is it going to benefit any of these women who have given me their time?

April 2012

It is really amazing to be so immersed in the transcripts. I feel like I know the interviews off by heart now. It is such an interesting and strange process to become so involved with a person's life, and then to zoom back out, both to the wider project and the other transcripts and also to the literature and my own thoughts about what they were saying. Being so involved with the mums again, has made me think about them so much. How are they now? Their babies will be born by now. I wonder how they are managing and doing? I have been finding it hard to make the interpretations of the data. It is hard to know how far to push these, whilst remaining with the transcript. It's quite amazing to think how much I have learned throughout my course, and how

much this affects the interpretations that I am making. I am sure that my analysis would look be different if I didn't have the psychological knowledge I have.

May 2012

It is useful thinking about the way that my research has affected my clinical practice on placement. I am currently working with several mums of babies, or pregnant women. Knowing from my results that my participants all highly valued the opportunity to share and talk about their experiences helps me to value my role as someone who can offer that to clients. My data has also helped me think about just how difficult it must be to attend a clinic where there is no help with childcare, transport, refreshments, etc. When people are unable to attend because of these things, it makes me really angry that we don't have more resources to help support people to engage and make use of our services. It seems so pointless to have a service that is inaccessible to the people that need it. It is really making me question what the point is, and think about how I might go on to do work with these mums in a setting that they can access, and what that would mean for me.

Appendix M

Review panel and ethics panel approval

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Appendix N

Table of further examples of themes

Table 3. Further examples of each theme

Super-ordinate Themes	Master themes	Themes	Examples
1. A time of reflection	1.1 The past affecting feelings about the future	Difficult life experiences have made me stronger	"It makes me stronger...what I've been through" (Cara).
		Anxiety about managing motherhood	"I hope I will - and I know this is really, really, really difficult - be able to let go a little bit at the right stages and let them explore and have their independence and grow without me sort of trying to control things or impose my own sort of self too much on them. I hope I'll be able to let go enough at the same time as protecting enough" (Angela). "Yeah, and I want the baby to have everything, I want us to be together, I worry about "Oh, what will happen if we're not going to be together?" You know? Make sure that this baby has everything and I'm fine" (Jemma).
	1.2 Pregnancy as an opportunity	Being different and repairing the past	Danielle talked about this current pregnancy being different to her previous experience of pregnancy when she was coming off herion and methadone. It was an opportunity for a different, healthier experience of pregnancy. "Because this will be my – this is like all new to me as well, like this is going to be my first, eh, normal pregnancy and I'm going to feel everything and all that. See like it all with wee [removed child's name] but, it's just this – I didn't know how to explain it, it's just – wee [remove child's name] was different

			because of what I've been through, so it was always like a worry with wee [removed child's name] and all that so this is like a completely different pregnancy".
		Recreating experiences from the past	Danielle talked about being close to her mum a lot during the interview, she also talked about bad times they had when she was a teenager. Here she talked about hoping that her own children would always have a special bond with her, as she does with her mum: "Like me and my mum, we've went through our bad patches and all that but I hope that never happens to me and them. I know it does like when they hit teenagers and things but I'm not really worried about that, I think you'll always have a special bond until they don't need you, I don't know. Even at that, I'm 24 and I still need my mum"
2. My body being taken over	2.1 Pregnancy as a physical process	Pregnancy is physically demanding	"Your body's changing, your way of thinking changes, your hormones, so you go in for like a new, a different experience but what you get at the end of it is like amazing and it's like "Wow!"" (Jemma). "So it made me feel like all different, which it always does, doesn't it? It made me feel hungrier – a lot hungrier! Things like that" (Danielle). "Well, it's been alright so far apart from the heartburn and sometimes I can get really bad heartburn" (Tammy).
		Experiences are out of control	Jemma talked about wanting to remain in control during labour: "So this time I just want to make sure I look okay and I don't, you know, look like a mess".
		The impact on attractiveness	Jemma talked about conversations she had with her boyfriend, when he said labour might put him off her ""Well, you don't want to embarrass yourself, do you, you just don't want to embarrass yourself and I don't really want to see all that uckky, ooky stuff because I just

			might go off of you" – I said "Okay, thanks"".
		Feeling restricted	‘‘Well because obviously you can't do everything that you used to do before” (Danielle).
	2.2 Feeling uncertain	Uncertainty about pregnancy	“I just thought that… I thought it would be easier. I didn’t know I’d be sick a lot” (Cara). “But for two months I didn’t know I was pregnant, so I’ve only had a couple of months you know? But now, I’ve heard that, like, from 28 weeks until birth, you can have a still birth. And that’s why I’m really, really worried. It should be fine but I’m trying to eat healthy and I don’t smoke any more. I stopped smoking one year ago” (Cara).
		Uncertainty about labour	“I’m a bit scared about labour. But everyone tells me not to think about it and you get a baby at the end of it” (Cara).
	2.3 Being responsible	My ability to carry the baby safely	“When he kicks and stuff then I’m really happy. And then also before I go to the midwife, the night before, I’m like, “Oh my god, I hope he’s OK” and stuff. And then when I go to the midwife and hear him, it’s like a relief. That’s scary” (Cara).
		Taking better care of myself	“It is very different to normal life, because like normal life you have like, you can do really well whatever you want, well you have that choice but with pregnancy you've got to think about somebody else and you've got to make sure you're perfectly, you know, you're fine, you're healthy, you're doing the right thing because you've got another little human being inside of you” (Jemma). “I think I feel like I've – I think I felt I was a healthy eater at the beginning, I've become even more healthy and I've cut out all the alcohol and cigarettes so I feel like I've achieved a lot and also I've started doing my yoga thing everyday and I'm doing my swimming,

			although I haven't been for a couple of weeks. So I kind of – and above that, do my 15 minutes' meditation. For me there's like a lot of progress even from where I was in myself and with the actual baby, I'm just really happy everything's gone really well" (Angela).
3. Pregnancy is an emotional rollercoaster	3.1 Adjustment	Emotions involved in adjusting	"I was shocked but happy" (Faye). "Just happy and excited, I cannae wait!" (Tammy). "I think I was, at my heart, really excited and happy about it" (Angela). "I wasn't angry. Actually, I think I was – I was kind of annoyed because I think – actually I was angry because I took my anger out on him, I blamed him but that kind of settled down because I realised it was my fault too so it was kind of like – "Can't really blame you without blaming me", so yeah" (Lana).
	3.2 Heightened emotions	Feeling less in control	"I get very emotional. Very. Like I cry at the easiest things" (Cara). "My emotions are sky high. I could just be like sitting in and watching something on the telly and I could start greeting or I could argue with Dave for the least wee thing, like he annoys me so much and just silly wee things like that, because I said that, "This is to get worse anyway, Dave", because he said that "These hormones, I canny be dealing with them" - oh, ha, ha!" (Danielle).
		Wanting to be more in control	"Just remembering to take my vitamins every day, you know, which I must continue doing after as well and, yeah, like my lifestyle, like maybe exercising, stuff like that, but yeah – and trying not to get into a bad mood and, you know, because the baby senses that as well" (Jemma).
4.	4.1 Forming new	My relationship with the baby	"Yes, I do I get mad surges of love towards the baby for no apparent

Relationships	relationships		reason you know" (Angela). Marie talked about Mellow Bumps helping her to build a relationship with her "bump": "Em, I think it helped us and all kinda. So when Suzy was born, I felt like I knew the wee person she was. I got to know her before she was born. And I kinda got to know all her wee mannerisms, you know, all the wee things she did and stuff and I think it brought us closer. I think the group helped to bring us closer you know? Helped us to get to know the bump better". Faye talked about her relationship with her baby: "it's just that unconditioned love that nothing can break it. That's my wain and that's it. No matter what anybody says or what anybody does".
		Giving my partner a baby	"Because like, my husband is 31, no he's 32 sorry and em, he's like at that age where he really, really wants children. Like, cause my friend had a child and every time he kept going, when are we going to have a baby? When are we going to have a baby? All the time!" (Cara).
		The sibling relationship	"I was happy cause then it gives my other wee boy somebody to play with as the girls have got each other" (Tammy). "Just probably being a mum again and Will having a wee brother and sister, I'm looking forward to that to see what that's going to be like" (Danielle).
		Friendships	"Em, and as I say, also building up the friendships with other people there as well. People that were also pregnant as well" (Marie). Faye talked about meeting others at Mellow Bumps and making friends: "It was dead good like meeting other pregnant lassies and

			hearing them talking about what their pregnancies were like. And one of the lassies Cara, she only stays over the street."
	4.2 Solidifying relationships	The baby will make us stronger	Tammy talking about her belief that the baby would make her and the baby's dad's relationship stronger. "I just thought it would make the two of us happier. But we ended up just splitting up because he was cheating and all that". Faye talked about the commitment of having a baby with her partner: "We were dead close before then and it's just… seals it."
		Creation or completion of our 'family'	''I just want to be like a happy little family – happy" (Jemma). "Well as I say now it just felt that that was my wee family complete now. We always loved it from when I found out I was pregnant, you know?" (Marie). Faye talked about being one of 11 siblings, and what she wanted for her family: "I just want a small family where it's quiet".
	4.3 Impact on relationships	Impact on other children	Angela talked about worrying about the impact of her baby on her partner's daughter. "And also a lot I think about with Erin, how I'll be if she's – like many big sisters are resentful, angry with attention going to the baby because she's been an only child for almost five years and she has a lot of parents in a way. Do you know what I mean? She has – she lives with her granny and her great-granny and her mum and her auntie, a lot of the time, and she's got me and Matt so I'm worried about making sure I seem totally fair and her not feeling like I've got a greater love with the new baby and stuff, so –"
	4.4 A need for support and sharing	Valuing family support	Danielle talking about support she gets from her mum: "She takes him all day and all night, right till the Tuesday. And we get to go there on a Thursday and we get our tea, and on a Friday, she takes us out for

			something so – so really, honestly, I've got the most amazing mum ever". "It would have been nice to have the dad there but as long as I've got family and friends to support me" (Tammy).
		Valuing sharing my experiences	"Well, I liked Mellow Bumps because that was good to like to speak to other people and especially if you don't know anybody who's pregnant at the same time as you and it's good to talk to them, they've got great advice" (Danielle). "It was good because then you'd see other people's thoughts on it as well" (Tammy). Marie, talked about how helpful it was to attend Mellow Bumps during pregnancy: "I think it came at a time just when I found out about the Downs Syndrome and stuff like that as well, so it kinda gave me something to focus on if I had any worries and stuff like that that I didn't want to worry Gary about. I knew that I could go and talk to Tasha or Delia or Julie or that. You know? It was really good." Marie again talking about sharing her experiences at Mellow Bumps: "It felt like a wee family, the group. We had a really good group right enough, we were lucky that way and everybody all got on…"
5. Separating identities	5.1 Developing an identity as a mother	Valuing the identity of 'mother'	Danielle talking about seeing the baby at the scan: "You think – oh, my life's going to be better". "I think I'm looking forward to being a mum, looking forward to being a mum again, that experience again and looking after my baby, and

			that, yeah" (Jemma). Tammy talked about valuing being a mum: "It's been great. The fact that you can just do stuff for them and you can ask them to do some things and they'll go and do it".
		Letting go of other identities	"I think at the beginning I wasn't attached. Sometimes I felt attachment and sometimes resentment, like my life was being taken away - never have a drink with my friends, and Billy was laying down the law "You will never go out" - Aye right!" (Angela). "Yes, I guess it just meant that I had to grow up. I mean I was always quite mature for my age – everyone always used to say that but I guess the first thing it meant was that my education would suffer because I'm kind of goody two shoes, I like school but it's like I had – I wanted to do Uni, I guess, I wanted to go to university and take Psychology but it had to be, obviously it's going to have to be put on hold slightly" (Lana).
		Am I good enough?	''I hope the baby's not going to be born discontent like, you know, it's going to be settled, and I have wondered how are we going to bond and get on? How am I going to be to the baby as a mother? You know, lots of things" (Jemma).
		Acknowledging the responsibility	"I'm going to be a very proud mum, we're going to be really overwhelmed and happy, protective – really protective and just, just on cloud number nine, I'll be on cloud nine with my little baby and it'll just be about – I know that – I won't like forget about everything else but my, everything's going to be – oh, that's scary! – everything's going to be like the baby, so everything I do is just going to be, you know, for the baby" (Jemma).

			“It's changed my life, I guess, completely, just yeah – just like – I don't know, you're responsible for someone other than yourself” (Lana). Danielle talked about feeling responsible when her little boy hurts himself and is in pain, and imagining feeling very responsible for the baby, and anxious about this responsibility: “It absolutely breaks my heart because you wish you could just take it away from them and I get myself a bag of nerves and if he bangs himself we go "Oh", you know, just stupid stuff like that. So I'm looking forward to being a mum but still having the mother worries. Like everybody will have.”
		Valuing the responsibility	Danielle described what she is looking forward to about being a mum again: “I don't know, just this wee person is dependent on you and – I don't know, that's pretty a hard question.” She went on to say “Well that's just pure like love for – even from the day you find out you're pregnant, even before the photo, the minute you know your pregnant it's pure love. And then you go through the nine months of being pregnant and actually the first time you seeing it, it's like you need to look after it, you know, you need to guide it in the right direction and show it love and show it respect and show it when it's being bad and show it when it's doing good things and going through the whole life with it and all that, that's what I just feel, you know.” Lana talked about the responsibility of being a teenage mum: “I think I can do it, and I think the people who think that people my age can't do it, I'm going to prove them wrong and I'm just going to rub it in everyone's face – "Look, I did it, in your face!"”

		Finding motherhood hard	Tammy talked about motherhood being hard: “Aye, it’s alright but sometimes it can be up and down. Cause when you ask them to do something then my oldest, she goes into wee huffs and says “I don’t want to do that. It’s boring!””
	5.2 The baby becoming real	The baby becoming real	“Oh well, because you know you're pregnant but you don't like feel it and all that but like when you go to the scan, the minute the woman puts the gel – I break down greeting, I was in tears and you just see this wee thing and just it's a life inside of you...it’s an actual person inside you.” (Danielle). “Definitely when I got the first scan and then when she started moving and now more so when the Bump is getting bigger and bigger, I can just feel this wee thing all the time. It’s a lovely feeling, lovely, I like it” (Angela). “Em, aye, as I say, Suzy was really active but it was amazing. See when you shone the torch, it was like you could see that she was just coming up to the middle of my belly here and then you would put the torch over to the side, she would move right up to the side!” (Marie). “But then when I got to like 16 weeks I think it started to process because I started feeling it move. But then it's like now, it's like – I can feel it move, I can feel it kick and all this but it's like – it's kind of, it's in my head it's like “yes, there is a baby inside you” but it's like – I'm more excited now” (Lana). “So I think I had got the scan at about 14/15 weeks and kinda about then maybe it was like, this is real! You know? When you see it on the screen, it’s quite emotional right enough when you go for your

			scan" (Marie).
		How will the baby look?	''I just want it to like – okay, babies are quite ugly when they're born – no offence – oh, ha, ha! – but I just want it to get like cuter, quicker. You know, they have like puffy eyes and stuff when they're born and all that sort of thing'' (Lana). "That was kinda the thing that I was wondering is she going to be tiny with all these toty fingers and toty toes…" (Marie).
		Hopes for the baby	Tammy: "I think everything will basically change when it's here". Me "Everything will change?" Tammy: "Yeah". Me: "What's going to change?" Tammy: "Just like the fact that I'll love it and care for it and do everything". Angela talked about what she hoped for her and the baby's relationship in the future: "I imagine it being very close and – I imagine it being really close and being like a companion, the sort that you've not had before." Danielle talked about hopes for the baby: "So I hope like it isn't a greeter and all that and it's going to come out and feel the bond with me. I do worry about that but - that's all." "Well if it's a girl it's definitely going to be like a mini-me – oh, ha, ha! I already know that! If it's a boy I can't definitely say but if it's a boy I think it's going to – this is probably not true, it's going to look like my brother, I know that for sure but I think it's – either way it's going to have a strong bond with my mum, I know that" (Lana). Marie talked about how she imagined/hoped she would feel about the

			baby when it was born: “Eh, I think every mother’s the same. I think, I don’t know if it’s just me being selfish or nasty or whatever, but my wean’s the best! My wean’s better than everybody else’s wean and stuff like that. And you do, I don’t care what anybody says, and I believe I’m not the only person that does it. When you’re in the maternity ward looking after your wean and you’re in with all the other mothers and babies and you do, you kinda look and compare them with everybody else. My wean’s nice, my wean’s gorgeous. Look at mine, mine’s nicer than yours!”
	5.3 Separating from others	Separating from the father	Lana talked about conversations she had with her baby’s father about pregnancy: “But, I mean, I spoke to him a lot about it but it's like our views on things are vastly different so I didn't really – I respected what he said but I didn't really agree with it at all.” “I guess yeah, we – yeah, you could say we were together at the beginning and then we weren't, and then he got with another girl. And then I found out I was pregnant then after the end of that month, at the end of December she asked him for a child, his girlfriend that is, and he said yes and then in the middle of January she was pregnant so – and then she left him!” (Lana). Cara talked about how different she felt her experience of being a mother would be to her husbands experience of being a father: “But that will be like, it’s a bond between mother and baby and a man would never ever feel that”.

Appendix O

Summary of findings for mothers and ethics panel

Dear XXXX,

Thank you for participating in my research project. I really appreciated you making time for the interview. I was really interested in what you had to say and I really valued your honesty and openness. I hope that having time to talk about your “bump” was useful for you too.

Here is a summary of the results of the project.

Background
This study explored the experiences of pregnancy, of eight women who were considered to have ‘additional needs’, including, a history of mental health difficulties, substance misuse, homelessness or social isolation. It was hoped that more could be learned about your experiences of pregnancy, including thoughts and feelings you had about the pregnancy, the baby, yourself, your relationship with the baby, and attending the Mellow Bumps programme.

Results
Between you, you had a broad range of experiences. The findings are summarised as ‘themes’. These are explained below.

1) Pregnancy as a time of reflection
Some of you talked about how past experiences made you feel more positive and more anxious about managing the challenges of motherhood. Some of you saw pregnancy as an opportunity to move on from the past and continue to make positive changes. Pregnancy was also seen by some of you an opportunity to recreate positive experiences you had as children.

2) My body being taken over
Most of you described finding pregnancy physically demanding. For some, this felt out of your control, which was challenging. The impact of the pregnancy on how attractive you felt also caused some of you anxiety. Some of you saw pregnancy as restricting, both physically and socially, which sometimes led to feeling frustrated. Some of you felt anxious about how pregnancy should feel, and the responsibility of carrying and delivering a baby. Mellow Bumps was seen as helpful for sharing worries about these aspects of pregnancy.

At the same time, you also valued some of the physical aspects of pregnancy. For one of you, pregnancy relieved your health problems, and many of you saw pregnancy as helpful for encouraging you to take better care of yourself. You all said that Mellow Bumps helped you with this also.

3) Pregnancy is an emotional rollercoaster

Most of you experienced a range of emotions during pregnancy, including happiness, excitement, shock, sadness, worry, stress, anger, loss, guilt and loneliness. Some felt more emotional than normal. Mellow Bumps was seen as helpful for sharing emotional experiences with other pregnant women. This helped some of you to feel less alone.

4) Relationships during pregnancy
You all talked about important relationships during pregnancy. You talked about your developing with your baby as something that was positive and made you feel proud. Many of you felt Mellow Bumps helped with this. Some of you saw having a baby as an opportunity to be loved. For some of you, giving your partners a baby, also made you feel proud. You all talked about needing support during pregnancy, and Mellow Bumps was seen as a place you could get this. Pregnancy was also seen as an opportunity for some of you to give children you already had a brother or sister to play with. Some of you thought having a baby would make your relationship with your partner stronger.

5) Separating identities during pregnancy
Pregnancy was a time when many of you began to see yourself as a 'mother' to your baby. This was seen as positive by most of you. For some of you, pregnancy meant giving up on doing things that you wanted to do (for example, going to college). For some of you, pregnancy also meant letting go of some of your friends, or partners, who were in a different life stage to you. Over the course of pregnancy, you described the baby becoming more like a real person, with it's own identity. Mellow Bumps was seen as helpful for allowing time to think about the baby.

Summary
Most of the experiences you talked about were similar to the experiences of woman without 'additional needs'. Overall, for most of you, pregnancy was a positive experience, which included feeling hopeful and optimistic, proud, and excited. As with most experiences, there were also challenges, and these included feeling anxious, feeling more emotional and less in control, and having to let go of some friendships because of pregnancy.

Mellow Bumps was seen by all of you as a positive experience. It helped you to have the opportunity to talk with other pregnant women, and share some of your feelings. This helped you to feel less alone. You really appreciated the effort that was made to get you to the group, especially the transport, and you valued the non-judgemental attitude of the group leaders.

I hope this summary is helpful. If you have any questions about this research, or these results, please feel free to call me on XXXXX XXXXXX or email me on XXXXX@XXXXX.XX.XX.

Very Best Wishes,

Bea Birtwell