# A qualitative exploration of mixed feeding intentions in first time mothers

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**Funding Statement:** This research did not receive any grant from funding agencies in the public, commercial, or not-for-profit sectors.

**Disclosures and conflict of interest statement:** No potential competing interest was reported by the authors. This paper is based on dissertation research carried out by Sophie Swain. Jennifer Taylor acted as dissertation supervisor, with Joanna Heyes, Fiona Cust and Sarah Dean as advisors.

**Acknowledgements:** The authors would like to thank Victoria Riley for her helpful comments on an earlier draft of this manuscript.

#### Abstract

## **Background**

Breastfeeding intention can predict breastfeeding behavior and is influenced by the Theory of Planned Behavior constructs. Despite associations with reduced breastfeeding duration, there is a lack of research to explore intentions to mixed feed infants.

#### **Aims**

The research aimed to explore the factors that influenced pregnant women's intentions to mixed feed their first child.

#### **Methods**

A qualitative method guided by the Theory of Planned Behavior constructs was used. Semistructured interviews were conducted with women pregnant with their first child who intended to mixed feed. An in-depth idiographic multiple case study approach grounded in a 'subtle realist' epistemology was employed.

## **Findings**

Findings highlighted: the importance of flexibility in feeding decisions; a perception of breastfeeding as restrictive and obstructive to normality; and the presence of misinformation and unrealistic expectations about breastfeeding.

## Conclusion

Contributors to mixed feeding intentions included the Theory of Planned Behavior constructs in addition to anticipated emotions and breastfeeding knowledge.

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**Keywords:** breastfeeding; formula feeding; theory of planned behaviour; qualitative methods; case study

## **Key Points:**

- Although a mother's intention to mixed feed their child is associated with reduced breastfeeding duration, little research has specifically explored women's intention to mixed feed.
- Women's intentions to mixed feed were driven by their beliefs around the importance of feeding flexibility, the perception of breastfeeding as restrictive and the presence of misinformation and unrealistic expectations.
- The findings develop psychological theory through the confirmation of the value of the Theory of Planned Behaviour constructs for understanding mixed feeding intentions. In addition, our work makes a unique contribution through the identification of two additional contributing constructs: anticipated emotions and knowledge.

# **Background**

The World Health Organization recommends exclusive breastfeeding, defined as providing a child with breast milk as the only form of sustenance, for the first six months of life (World Health Organization, 2020). Breastfeeding researchers have largely distinguished between mothers who intend to exclusively breastfeed and those who do not, indicating that breastfeeding duration is shorter in those who decided to only 'try' breastfeeding out of a sense of obligation, when compared to mothers committed to exclusive breastfeeding (Nesbitt et al., 2012). However, intentions to breastfeed are more complex and some mothers decide to feed using a combination of breast milk and breast milk substitute which can lead to shorter breastfeeding duration and a reduced likelihood of meeting breastfeeding goals (Chezem et al., 2003), increased levels of guilt and dissatisfaction with feeding choice in mothers of babies under 26 weeks of age (Komninou et al., 2017) and increased risk of obesity when the child reaches school age (Rossiter et al., 2015). This illustrates that mixed feeding can have important implications for both mother and child. Cabieses et al (2014) used a multi-methods approach and found that mothers who intended to mixed feed reported that their intention was influenced by the health benefits of breastfeeding and the convenience of bottle feeding. Further research is required to more fully understand the reasons behind intentions to mixed feed.

The Theory of Planned Behavior (TPB) (Ajzen, 1991) proposes that intention predicts behavior and that intentions are influenced by three contributing factors: attitudes, social norms, and perceived behavioral control. Authors of a recent meta-analysis reported the TPB variables to be significant predictors of breastfeeding intention, and intention a significant predictor of breastfeeding behavior (Guo et al., 2016). Interventions based on the TPB can successfully increase breastfeeding intentions (Giles et al., 2014) illustrating the value of TPB

constructs for influencing intention. However, the inclusion of additional variables including postpartum support and perceived breastfeeding difficulty improves the explanatory power of the TPB (Tengku Ismail et al., 2016) and breastfeeding knowledge has been shown to be the greatest contributor to exclusive breastfeeding behavior, followed by TPB variables (Zhang et al., 2018).

Gaining an understanding of why women plan to mixed feed is highly important because it will inform the development of interventions to promote breastfeeding. There is evidence that the TPB provides a strong theoretical base for investigating infant feeding intentions.

Therefore, in this study, a qualitative approach guided by the TPB constructs (Ajzen, 1991) was used to explore the factors that influenced pregnant women's intentions to mixed feed their first child.

# **Methods**

# **Research Design**

An in-depth idiographic multiple case study (Eatough and Shaw, 2017) grounded in a 'subtle realist' (Hammersley, 1992) epistemology was employed. Case study research involves empirical enquiry to investigate a contemporary phenomenon in depth within its real-life context, with conclusions drawn from several cases being more powerful than those drawn from a single case (Yin, 2009). The purpose of this form of research is to represent reality rather than reproduce it (Hammersley, 1992) and aims for selective representation of a phenomena rather than generalizable reproduction of 'truths'. Idiographic qualitative research approaches are ideal for building theory grounded within human experience-in-context in addition to enabling the testing of existing theory, like the TPB, against new data (Willig, 2019). Idiographic designs are committed to detailed examination of individual cases

exploring the how, why and what of phenomena, and therefore neccessitate small samples (Smith and Osborn, 2015).

Ethical approval for this research was granted by BLINDED FOR REVIEW on 19<sup>th</sup> Dec 2019.

# **Setting and Relevant Context**

The research was carried out with women living in the UK. Although there have been improvements in breastfeeding rates, the UK still has some of the lowest breastfeeding rates in the world with only 33% of babies receiving any breast milk at 6 months and less than 1% receiving any at 12 months (Brown, 2016a). Breastfeeding has become a public health priority (Newman and Williamson, 2018) and in the UK schemes including the NHS 'Start for Life' and the Baby Friendly Initiative aim to encourage and facilitate breastfeeding (Brown, 2016b).

## Sample

Women pregnant with their first child, who were over the age of 18 and intended to mixed feed were invited to take part in a study to explore mothers' infant feeding intentions and the potential influences on these intentions. The participants were recruited using opportunistic sampling through advertisements on social media platforms and parenting forums. No compensations or payments were made to participants. This study used four case studies in line with recommendations for 4-5 participants in case study research (Creswell, 2013).

## **Data collection**

Data were collected in the first half of 2020 by \*\* as part of her MSc dissertation research. One interview was conducted face to face and the remainder online due to Covid-19

restrictions in England. All participants provided written informed consent via email. Semistructured interviews (Flick, 2009) were guided by a schedule based on the TPB. The schedule aimed to elicit thoughts and ideas regarding the factors contributing to feeding intentions using the TPB whilst allowing flexibility to identify additional factors. The interview schedule is available as a supplemental file. Participants were engaged with interviews lasting up to one hour. To maintain confidentiality each participant was given a pseudonym and raw data were securely stored, recordings were destroyed following transcription.

The author who collected the data was not a parent and had not had to make infant feeding decisions. Analysis was conducted by the first two authors. The first author is a mother of two children who were breastfed exclusively for the first 6 months and then breastfed alongside complementary foods for 14 and 18 months respectively. The second author has no children and no personal experience of breastfeeding. The analysts kept a reflexive diary to remain mindful of their own perceptions and experiences of breastfeeding.

## **Data analysis**

Demographic data were used to create pen portraits for each participant (Table 1). Each case was analyzed to create idiographic case studies (Eatough and Shaw, 2017) capturing the unique thoughts, experiences, and ideas of each participant. An adapted form of Template Analysis (Brooks et al., 2014) was used to create a thematic account of each case based on the TPB constructs. An *a prior* theme structure identifying the TPB constructs was used in the first reading identifying the following: intentions, attitudes, subjective norms, and perceived behavioral control. A second reading of each case identified additional factors contributing to feeding intentions. Themes were compared across the sample to produce a thematic narrative. The final themes were developed in an iterative process using constant

comparison until the 'best fit' for the data were agreed by all authors. Themes are supported

by evidence from several participants to ensure trustworthiness (Lincoln and Guba, 1985). A

table detailing the themes, subthemes and definitions for each have been detailed in Table 2.

**INSERT TABLE 1 HERE** 

**INSERT TABLE 2 HERE** 

**Results** 

All participants were in their 20s, white and with gestation ranging from 24-37 weeks.

Pen portraits for each case study are provided in Table 1.

Three main themes underpinned by the TPB constructs were developed. In addition,

contributions by two additional constructs not featured in the TPB were identified:

anticipated emotions, and knowledge (see Figure 1). Data extracts supporting each theme are

reported in Table 3.

INSERT FIG 1 HERE

**INSERT TABLE 3 HERE** 

The importance of flexibility: I'm just going to go with the flow and see how it

goes

Despite an intention to begin by breastfeeding their child all participants presented

themselves as being flexible with this decision. This need for flexibility was illustrated within

two subthemes: (1) the influence of uncontrollable factors on breastfeeding decisions and (2)

the importance of doing best for baby. Each of these perceptions also served as a form of self-

protection in relation to anticipated emotions that could arise if unable to achieve more

inflexible breastfeeding goals.

The influence of uncontrollable factors on breastfeeding decisions: You dunno what complications might arise

While intention to breastfeed was within the mothers' control, a range of uncontrollable factors were perceived to impact on their ability to breastfeed. These included circumstances of the child's birth, the child's preference for how they were fed, the potential challenges that could arise with latching and pain, as well as potential allergies.

Mixed feeding intentions worked as a form of self-preservation against anticipated emotions relating to guilt and disappointment. For example, Chloe drew upon her knowledge of the emotional impact that not being able to breastfeed had on other mothers, indicating that subjective norms were contributing to a feeling that feeding decisions were out of her control and a need to be flexible. Similarly, Olivia reflected on her own mother's challenges when breastfeeding, highlighting the importance of remaining flexible and the perceived lack of control. Olivia alluded to sources of pressure to breastfeed, with an assumption that these 'people' may ask mothers to persevere even when experiencing severe pain. The intention to mixed feed protected Olivia from this pressure and enabled her to make feeding decisions flexibly based on what would be best for her and her child.

# Doing the best for baby: If it doesn't work, I'm not going to starve my baby

Olivia expressed the attitude that the most important factor was that "the baby is healthy", which was referred to by all the participants and worked to justify the importance of being flexible in terms of feeding method. Alice, extended this attitude by alluding to a 'fed is best' narrative, which served to further justify intentions to be flexible, as rigid commitment to breastfeeding could be at the expense of the child not getting the nutrition they needed. For Olivia, Chloe and Lucy there was also an attitude that the nutritional benefits of breastfeeding were time-limited.

Breastfeeding was portrayed as a unique experience. This attitude appeared to be informed partly by subjective norms, specifically for Olivia the experience of her two aunts emphasizing that their babies were "fine," regardless of how they were fed, serving to further validate the acceptability of either feeding method. The importance of flexibility to do what is best for the baby was also emphasized by Lucy who explained throughout the interview her knowledge of the importance of early breastfeeding both for nutrition and bonding, but also acknowledged that she was likely to switch to an alternative form of feeding after the first couple of months despite this knowledge.

# Breastfeeding is restrictive: I don't want to have a baby attached for me for like the whole year

The mothers did not envisage themselves breastfeeding for any extended period. Reasons were underpinned by two key perceptions 1) the belief that breastfeeding was restrictive, and that breast milk substitute feeding would enable a quicker return to 'normality,' and 2) concerns over breastfeeding in public.

The desire to get back to normal: Some people wanna have a baby and get back to normal as quickly as possible

Breastfeeding was portrayed as restrictive for the mother and something that could not be sustained long term. The value of breast milk substitute to allow others to help was perceived to give the opportunity to spend time away from the baby and establish some 'normality'. Olivia described breastfeeding as difficult and a struggle that she would need to make sacrifices for and 'persevere' with, likely stemming from her perception of her own mothers' breastfeeding difficulties.

Getting back to 'normal' was one of the main justifications for using breast milk substitute. Breastfeeding was perceived to be restrictive for both personal life and meeting independently with friends, and there was a perception that breastfeeding would be incompatible with returning to work. This narrative was justified through explaining knowledge that illustrated moving to breast milk substitute would have no detrimental effects. Several of these claims were grounded in misinformation.

Chloe also went a step further to stress the risk of isolation and that feeding the baby alone at home could be a threat to mental health if continued long-term. Chloe hinted at anger around a cultural narrative that places the needs of the mother as secondary to those of the infant. Social pressures to breastfeed were at odds with what Chloe viewed as normality. This portrayal of breastfeeding as restrictive and inconvenient while bottle feeding would provide freedom and normality justified the progression to bottle feeding, whenever this might occur.

Concerns about breastfeeding in public: I just wouldn't feel comfortable getting my boob out in front of everyone on a day out

Anticipated emotions about the discomfort of breastfeeding in public were discussed. This perception was underpinned for Chloe by the assumption that breastfeeding was a barrier to 'normality', with it not feeling 'normal' having people looking at her whilst feeding in public. Lucy was more open to the possibility of feeding in public but still asserted that this may be done 'hidden' in her car and repeatedly stated that her initial breastfeeding would take place when she was on maternity leave and at 'home' hinting that she too may be uncomfortable in public. Olivia also highlighted the perceived acceptability of breastfeeding in public, but only if mothers' exercise a certain amount of modesty when doing so. Olivia talked about a sense of some mothers deliberately exposing themselves when breastfeeding in

public. The mothers all seemed to be conflicted about their perceptions of whether breastfeeding in public was acceptable.

## Misinformation and unrealistic expectations

The process of breastfeeding was portrayed as natural, simplistic, instant and providing easy access to milk for the baby. The importance of nutrients, health and building the immune system were also influencing factors in the intention to breastfeed. It was also seen as an opportunity to bond with the child in the first few months with Olivia describing it as 'a whole new level of closeness'. Despite this acknowledgement, a range of attitudinal positions were used for rationalizing the transition to breast milk substitute.

Many of the attitudes that informed intentions to mixed feed stemmed from misinformation and unrealistic expectations, including the belief that 1) the nutritional value of breast milk substitute and breast milk is comparable, 2) the benefits of breastfeeding are time-limited, and 3) that babies instinctively know how to breastfeed and indicate whether they prefer this.

Breast milk substitute and breast milk have comparable nutritional value: I know people that have used formula and not breastfed at all and their babies are fine

Breast milk substitute and breast milk were presented as having comparable nutritional value by Olivia, Lucy and Alice. For example, Olivia explained how formula feeding was "just as good" as breast milk and drew upon the discourse of science to strengthen her comparison with the implication being that because breast milk substitute is 'scientifically made' then it is evidently going to be of high quality. In doing this, Olivia justified her decision to mixed feed and decision to approach the feeding of her baby in a flexible manner.

Benefits of breastfeeding are time limited: I've heard about the fact that the first feed is most important

For Olivia, Chloe and Lucy the benefits of breastfeeding were constructed as largely time limited. By breastfeeding early on they would be doing the best for their baby, this was the time when nutrients were needed to build the immune system and it was important to establish a bond. As the child got older the transition to breast milk substitute would be just as good for their child as continuing to breastfeed. Chloe again alluded to the need for flexibility by comparing her own perspective to that of mothers who had more inflexible breastfeeding intentions. Chloe also stressed the importance of knowledge and the role this played in her initial aim to breastfeed for the first few months. The account also illustrated some uncertainty with the suggestion that with 'more information' Chloe's intention may be different, and she may intend to breastfeed beyond her initial goals.

# The baby will instinctively know what to do and what they want: It's up to the baby really

There was an assumption that if the child wanted to breastfeed then they would and that this would come naturally. Olivia reinforced this view of breastfeeding as natural by drawing comparisons with animal instincts to feed after birth. Olivia's account illustrated an attitude that breastfeeding is the natural way to feed, however, this discourse of breastfeeding being 'easy' and 'natural' and assuming that the baby will simply know what to do, just as a baby animal would, is a potentially dangerous assumption. It overlooks the need for realistic guidance and support to help women feel empowered to overcome breastfeeding challenges and to continue breastfeeding rather than assuming breastfeeding is not going to work and moving to breast milk substitute if a challenge is encountered.

For Alice it was also important to consider whether both herself and the baby would like breastfeeding, indicating an assumption that the newborn may be able to consciously form a preference for the bottle and reject her breast. Alice's account also highlighted a unique consideration about whether she would enjoy breastfeeding herself. Alice acknowledged that breastfeeding is not all about the child, but consideration of the mothers' comfort is also an important factor.

# **Discussion**

In this research the factors contributing to pregnant women's intentions to mixed-feed their baby after birth and the contribution of the TPB (Ajzen, 1991) to these intentions was explored.

The importance of remaining flexible in feeding decisions was justified in relation to protection from anticipated emotions. These concerns were not unfounded; those who intend to breastfeed but then are unable to meet their goals are at heightened risk of guilt, frustration, and anger (Brown, 2018). These emotions may stem from internalized shame with implications for help seeking and mother's mental health (Thomson et al., 2015). This fear of negative emotions indicates a problematic culture in which mothers are shamed if they do and shamed if they do not breastfeed (Thomson et al., 2015). The model of goal directed behavior (Perugini and Bagozzi, 2001) has been shown to explain additional variance to the TPB for diet and exercise and proposes that anticipated emotions relating to the appraisal of goal achievement play a role in the development of desires to engage in behaviors. This requires further exploration in the prediction of infant feeding intentions.

The anticipation of negative emotions from not meeting strict breastfeeding goals may also be influenced by infant feeding knowledge. Breastfeeding knowledge has been shown to be the strongest predictor of exclusive breastfeeding followed by the TPB variables (Zhang et al., 2018). All participants rationalized mixed feeding using some form of misinformation or

unrealistic expectation about breastfeeding. The correction of infant feeding misperceptions and enhancement of breastfeeding knowledge is therefore an essential first step towards increasing breastfeeding rates.

In the UK, National Institute for Clinical Excellence (NICE) guidelines advocate for breastfeeding information to be provided by healthcare professionals during antenatal and postnatal care (NICE, 2006; NICE, 2008). However, vicarious experiences and personal relationships were valued above healthcare professional advice in this sample. The perception of other people's views on feeding methods has been illustrated to be an important determinant of the initiation and continuation of breastfeeding particularly views of partners (Swanson and Power, 2005; Yang et al., 2018), and own mothers (Swanson and Power, 2005). The current NICE focus on the provision of information by healthcare professionals alone may not effectively inform women about breastfeeding benefits. Guidelines should include more consideration of how peer supporters and family networks can be involved in enhancing breastfeeding knowledge and the provision of support.

Perceptions of the time limited benefits of breastfeeding highlights that mothers are aware of the value of colostrum. These initial feeds can help to boost the child's immune system (Andreas et al., 2015) however, it is longer term breastfeeding that will have the greatest benefits for both mother and child (Brown, 2019a). It is concerning that mothers use this knowledge as a rationale for introducing breast milk substitute against WHO recommendations (World Health Organization, 2020) and illustrates that the methods in which knowledge is conveyed and understood requires further investigation. This time limited value was also stressed by the participants as a justification for progression to breast milk substitute to get 'back to normal' in their lives post-partum. This vision of normality may be explained by vicarious experience of breast milk substitute feeding that has been

shown to influence the behavior of first-time mothers resulting in a decreased likelihood of breastfeeding (Bartle and Harvey, 2017). Portraying breastfeeding as a restrictive inconvenience and bottle feeding as a return to 'normality' has important implications for women's intentions for how they will feed their baby and is routed in bottle feeding culture.

Bottle feeding culture also explains the anxiety expressed by the mothers around breastfeeding in public. The invisibility of breastfeeding means that when problems with pain, latch or supply are encountered the lack of support options results in mothers who may perceive their bodies as 'failing' (Brown, 2019b) and have a significantly increased risk of post-natal depression (Brown et al., 2016) occurring when breastfeeding expectations do not align with experiences (Borra et al., 2014). Fears are likely to be grounded in a cultural narrative that includes medial portrayals of breastfeeding in public as exhibitionist and breastfeeding at home as the most appropriate way to feed an infant (Grant, 2016). This illustrates a need to challenge these cultural narratives to enable more women to feel comfortable and confident about the choice to breastfeed their infant whenever and wherever they need to.

The flexibility of mixed feeding may also be protective from negative mental health impacts for the small proportion of women physically unable to breastfeed. It would be valuable to explore the function of these perceptions and whether these views are protective in terms of mental health for mothers with the intention to mixed feed who are later unable to breastfeed. Arguments for breast milk or breast milk substitute feeding were primarily related to nutrition and this may explain the potentially protective nature of intent to mixed feed as those women who intend to exclusively breastfeed are often doing so for a broader range of reasons than nutrition alone and therefore the psychological impact of not meeting these goals could weigh more heavily (Brown, 2019).

Breastfeeding was portrayed as a natural endeavor that the child would be able to do with little support. Challenges were assumed to reflect a child's preference against breastfeeding, and this was used as a rationale for the need to be flexible. This performed a protective role enabling avoidance of negative emotions associated with not meeting breastfeeding goals that may not fit with their child's preference. This assumption may mean these mothers intending to mixed feed are less likely to educate themselves around breastfeeding challenges and as a result be less prepared to seek support. There is evidence to suggest that women with unrealistic expectations about breastfeeding are more likely to wean early (Hegney et al., 2008), and this may help to explain why women who choose to mixed feed are more likely to cease breastfeeding by nine weeks post-partum (DiGirolamo et al., 2005)

## Limitations

To minimize the potential for bias in the research, the author who collected the data and those who analyzed it took a reflexive approach and were thorough and transparent in the methods used. However, this was a self-selecting sample and all participants were young, white first-time mothers, more research is needed with broader populations and the current findings should not be applied across cultures. Long-term experiences exploring whether actual behavior was in line with intentions should also be explored.

## **Conclusions**

Feeding intentions contribute to feeding behaviors, but there are various factors that bear influence. Women need access to accurate and clear information and to be informed and supported by professionals, peers, families, and broader communities. Cultural narratives must be challenged to enable mothers to feel in control of feeding decisions and without the need to justify feeding activities to protect themselves from anticipated negative emotions.

#### References

- Ajzen I. The theory of planned behavior. Organizational Behavior and Human Decision Processes, 1991; 50(2), 179-211.
- Andreas NJ, Kampmann B, Mehring Le-Doare K. Human breast milk: A review on its composition and bioactivity. Early Human Development; 2015 91(11), 629-635. https://10.1016/j.earlhumdev.2015.08.013
- Bartle NC Harvey K. Explaining infant feeding: The role of previous personal and vicarious experience on attitudes, subjective norms, self-efficacy, and breastfeeding outcomes.

  British Journal of Health Psychology; 2017, 22(4), 763-785. https://10.1111/bjhp.12254
- Borra, C, Iacovou, M, Sevilla, A. New Evidence on Breastfeeding and Postpartum

  Depression: The Importance of Understanding Women's Intentions. Maternal and Child

  Health Journal; 2014 19(4), 897-907. https://10.1007/s10995-014-1591-z
- Brooks J, McCluskey S, Turley E, and King N. The Utility of Template Analysis in Qualitative Psychology Research. Qualitative Research in Psychology; 2014 12(2), 202-222. https://10.1080/14780887.2014.955224
- Brown A. Breastfeeding Uncovered: Who Really Decides How We Feed Our Babies? Pinter and Martin. 2016a
- Brown A. What do women really want? Lessons for breastfeeding promotion and education Breastfeeding Medicine; 2016b 11(3): 102-110. doi:10.1089/bfm.2015.0175.
- Brown A. What Do Women Lose if They Are Prevented From Meeting Their Breastfeeding Goals? Clinical Lactation; 2018, 9(4), 200-207. https://10.1891/2158-0782.9.4.200

Brown A. Informed is Best. Pinter and Martin, 2019a.

Brown A. Why breastfeeding grief and trauma matter. Pinter and Martin, 2019b.

- Brown A, Rance J, and Bennett P. Understanding the relationship between breastfeeding and postnatal depression: the role of pain and physical difficulties. Journal of Advanced Nursing; 2016, 72(2), 273-282. <a href="https://10.1111/jan.12832">https://10.1111/jan.12832</a>
- Cabieses B, Waiblinger D, Santorelli G, McEachan, RRC. What factors explain pregnant women's feeding intentions in Bradford, England: A multi-methods, multi-ethnic study; 2014, BMC Pregnancy Childbirth **14,** 50. https://doi.org/10.1186/1471-2393-14-50
- Chezem J, Friesen, C, and Boettcher, J. Breastfeeding Knowledge, Breastfeeding Confidence, and Infant Feeding Plans: Effects on Actual Feeding Practices. Journal of Obstetric, Gynecologic, and Neonatal Nursing; 2003, 32(1), 40-47.

  <a href="https://10.1177/0884217502239799">https://10.1177/0884217502239799</a></a>
- Creswell JW (2013). Qualitative inquiry and research design: Choosing among five approaches (3rd ed.). SAGE; 2013
- DiGirolamo A, Thompson N, Martorell R, Fein S, Grummerstrawn L. Intention or experience? Predictors of continued breastfeeding. Health Education and Behaviour; 2005, (32), 208-226.
- Eatough V, Sha, K. 'I'm worried about getting water in the holes in my head': A phenomenological psychology case study of the experience of undergoing deep brain stimulation surgery for Parkinson's disease. British Journal of Health Psychology; 2017, 22(1), 94-109. https://10.1111/bjhp.12219

- Flick U. An Introduction to Qualitative Research. Sage; 2009
- Giles M, McClenahan C, Armour C et al. Evaluation of a theory of planned behaviour–based breastfeeding intervention in Northern Irish Schools using a randomized cluster design.

  British Journal of Health Psychology; 2014, 19(1), 16-35. https://10.1111/bjhp.12024
- Grant A. "I don't want to see you flashing your bits around": Exhibitionism, othering and good motherhood in perceptions of public breastfeeding. Geoforum; 2016, 71, 52-61.
- Guo JL, Wang TF, Liao JY, Huang CM. Efficacy of the theory of planned behavior in predicting breastfeeding: Meta-analysis and structural equation modeling. Applied Nursing Research; 2016, 29, 37-42. https://10.1016/j.apnr.2015.03.016
- Hammersley M. What's wrong with ethnography?. Routledge; 1992
- Hegney D, Tony F, O'Brien ML. Against all odds: A retrospective case-controlled study of women who experienced extraordinary breastfeeding problems. Journal of Clinical Nursing; 2008, 1182-1192. https://10.1111/j.1365-2702.2008.02300.x
- Komninou S, Fallon V, Halford JCG, Harrold JA. Differences in the emotional and practical experiences of exclusively breastfeeding and combination feeding mothers. Maternal and Child Nutrition; 2017, (13(3)), e12364. doi:10.1111/mcn.12364.
- Lincoln SY, Guba EG. Naturalistic inquiry. Sage; 1985
- Nesbitt SA, Campbell, KA, Jack SM, Robinson H, Piehl K, Bogdan JC. Canadian adolescent mothers' perceptions of influences on breastfeeding decisions: a qualitative descriptive

- study. BMC Pregnancy and Childbirth; 2012, 12(1), 149. https://10.1186/1471-2393-12-149
- Newman KL, Williamson IR. Why aren't you stopping now?! Exploring accounts of white women breastfeeding beyond six months in the East of England. Appetite; 2018, 129, 228-235.
- NICE. Postnatal care up to 8 weeks after birth. (Clinical guideline [CG37]). London: National Institute for Health and Care Excellence; 2006
- NICE. Antenatal care for uncomplicated pregnancies. (Clinical guideline [CG62]). London:

  National Institute for Health and Care Excellence; 2008
- Perugini M and Bagozzi RP. The role of desires and anticipated emotions in goal-directed behaviours: Broadening and deepening the theory of planned behaviour. British Journal of Social Psychology; 2001, 40(1), 79-98. https://10.1348/014466601164704
- Rossiter MD, Colapinto CK, Khan MK et al (2015). Breast, formula and combination feeding in relation to childhood obesity in Nova Scotia, Canada. Maternal and Child Health Journal; 2015, 19(9), 2048-2056.
- Smith JA, and Osborn M. Interpretative Phenomenological Analysis. In J. A. Smith (Ed.),

  Qualitative psychology: A practical guide to research methods (pp. 25-52). SAGE; 2015
- Swanson V, Power KG. Initiation and continuation of breastfeeding: theory of planned behaviour. Journal of Advanced Nursing; 2005, 50(3), 272-282. https://10.1111/j.1365-2648.2005.03390.x

- Tengku Ismail TA, Wan Muda, WAM, Bakar MI. The extended Theory of Planned Behavior in explaining exclusive breastfeeding intention and behavior among women in Kelantan, Malaysia. Nutrition Research and Practice; 2016, 10(1), 49-55.
- Thomson G, Ebisch-Burton K, Flacking R. Shame if you do shame if you don't: women's experiences of infant feeding. Maternal and Child Nutrition; 2015, 11(1), 33-46. https://10.1111/mcn.12148
- Willig C. What Can Qualitative Psychology Contribute to Psychological Knowledge?

  Psychological Methods; 2019, 24(6), 796-804. https://10.1037/met0000218
- World Health Organization. Infant and young child feeding: Fact Sheet. World Health Organization.; 2020
- Yang X, Ip W, Gao L. Maternal intention to exclusively breast feed among mainland Chinese mothers: A cross-sectional study. Midwifery; 2018, 57, 39-46. https://10.1016/j.midw.2017.11.001
- Zhang Z, Zhu Y, Zhang L, Wan H. What factors influence exclusive breastfeeding based on the theory of planned behaviour. Midwifery; 2018, 62, 177-182. https://10.1016/j.midw.2018.04.006

#### Table 1

## Case study pen portraits

Olivia was 22 years old and 24 weeks pregnant. During pregnancy Olivia had been experiencing hyperemesis gravidarum. Olivia expressed that she had been bottle fed as a child

Chloe was 23 years old and 30 weeks pregnant. Chloe came from a big family with all of her siblings already having children. Chloe was on furlough due to COVID19 at the time of the interview and was feeling restricted and keen to get back to work.

Lucy was 25 years old and 37 weeks pregnant. Lucy was beginning to find pregnancy uncomfortable and was working long shifts in a physically demanding care worker role. Lucy was looking forward to starting her maternity leave.

Alice was 25 years old and 28 weeks pregnant. Alice explained that this was a surprise pregnancy as they had not been trying to conceive. Alice experienced a lot of morning sickness in early pregnancy.

Classification: Restricted

Table 2

Data Analysis Structure Table

Theme: Definition	Subtheme: Definition
The importance of flexibility: Despite an intention to begin by breastfeeding their child all participants presented themselves as being flexible with this decision	The influence of uncontrollable factors on breastfeeding decisions: While intention to breastfeed was within the mothers' control, a range of uncontrollable factors were perceived to impact on their ability to breastfeed. These included circumstances of the child's birth, the child's preference for how they were fed, the potential challenges that could arise with latching and pain, as well as potential allergies.
	Doing the best for baby: Ensuring the baby was healthy and was the main justification for the need to be flexible with feeding decisions
Breastfeeding is restrictive: Breastfeeding was portrayed as restrictive for the mother and something that could not be greatly and long town.	Desire to get back to normal: Breastfeeding was viewed as restrictive and human-milk substitute portrayed as a means to return to normality.
not be sustained long term.	Concerns about breastfeeding in public: Participants anticipated a number of negative emotions would result from attempts to breastfeed in public.
Misinformation and unrealistic expectations: A range of attitudinal positions were used for rationalising the	Comparable nutritional value: Human milk and human-milk substitute were presented as having comparable nutritional value.
transition to human-milk substitute grounded in unrealistic expectations and misinformation	Benefits of breastfeeding are time limited: Participants suggested that human milk would only have health and nutritional benefits for the first few days or weeks after birth.
	Baby will instinctively know what to do and what they want: There was an assumption that if the child wanted to breastfeed then they would and that this would come naturally with the child capable of choosing their preferred method of feeding.

**Table 3**Data extracts exemplifying each theme

Theme	Subtheme	Example Quote
The importance of flexibility	The influence of uncontrollable	"I know some people who are set hearted on breastfeeding and then when the time comes that's not actually possible due to health circumstances so I feel like that's, it can be quite disheartening for them." (Chloe)
	factors on breastfeeding decisions	"my mum tried to breastfeed me and erm like one I wouldn't latch properly and when I did she said it was the worst pain ever, and that the blood made the milk look like strawberry milkshake [] she tried it for like three days and she just couldn't do it anymore so I was bottle fed so I think that you know like people can be like oh persevere persevere like it will get better [] that's a lot when you've just gone through like nine months and then you're having labour and, you don't know how things are going to pan out and how you're going to feel" (Olivia)
	Doing the best for baby	"I am flexible, so I do want to breastfeed but if it doesn't work I'm not going to like starve my baby, if they won't take to my nipple but they'll have a bottle then obviously I will go with the bottle" [] "My aunty breastfed one of them for like over a year then my other aunt had a baby, and she didn't breastfeed at all and she was adamant she wasn't going to breastfeed, so straight onto bottles but her babies are fine as well." (Olivia)  "I want to breastfeed because I think it is important to have the right method but at the same time like I said you know I'm quite flexible not going to force my child to have breast milk if they doesn't want to or I think the most important thing is that your baby is fed" (Alice)
		"For me breastfeeding would fulfill like the bonding aspect of it as well is I think y'know that is important for me to have even if it's just for the first month [] it's not one size fits all. I'm so open to breastfeeding, formula, pumping I'd be so open to trying all of it so it's important to me that my baby is getting the nutrients it needs but to me it doesn't matter the method that I use, I'm not fixated, but it's just what's best for my baby." (Lucy)

Breastfeeding is restrictive	Desire to get back to normal	"I plan to breastfeed but if it doesn't work and I don't feel like I can carry on persevering and trying then obviously bottle feeding will be what's [] maybe y'know do a bit of mixed feeding when they're a bit older because I don't want to have a baby attached for me for like the whole year do you know what I mean? and you can always express and feed from a bottle like if y'know you need to pop out if your partner or their mum and dad has them or something like that" (Olivia)
		"the reason I don't plan to do it long term is because of the way the baby will depend on me to give it its feeds and stuff like that, because obviously erm cos y'know I'll be going back to work and stuff anyway I don't want the baby to only depend on having milk from me erm I'd much rather get it into a routine of specific times and stuff" (Chloe) "I don't think like the health professional and the social media influencers who are all like 'ooo it's all for baby' and stuff like some people wanna have a baby and get back to normal as quickly as possible because I feel like with postnatal depression and stuff like that, you could take into consideration, I feel like just staying at home on your own with a baby can be quite detrimental" (Chloe)
	Concerns about breastfeeding in public	"I think it's important that you want to live a normal life as possible after having a baby, so you don't want to be thinking oh that's someone's staring at me or stuff like that I just personally, I just wouldn't feel comfortable getting my boob out in front of everyone on a day out (laughs)" (Chloe)  "I probably will be at home the first couple of months of my maternity leave. So I think I will I will breastfeed, because I am very pro-breastfeeding and like people doing it in public who is to say if I will be comfortable enough in public, but then say I ran to the shop, like feeding in the car before I left so I would do that." (Lucy)
		"I mean some people don't get me wrong make a point out of it and I see a lot of things on social media where people have full like y'know not trying to cover up at all, it's not that I don't support it but I don't necessarily agree with it, I wouldn't do it, even if you can put a slight blanket over then why wouldn't you you know what I mean? so yeah I definitely want to breastfeed in public just be more modest about it." (Olivia)

Misinformation	Comparable	"But it's not like if I can't do it, like physically can't do it, then obviously it doesn't matter,
and unrealistic	nutritional	bottles formula will do, it might not be best but it will do the same it mimicks y'know what
expectations	value	we have it will have all the vitamins and stuff in them in it needs[]its scientifically made
		the formula so if you can't breastfeed then I don't really think they are going to be losing out
		on a lot so it's not really something I'm worried about" (Olivia)
	Benefits of	"there are a lot of people that are completely full breastfeeding and it's like the only thing that
	breastfeeding	they'll stick by and stuff erm so maybe if I had a bit more information then I'd probably try it
	are time	for longer but erm obviously because I've heard about the fact that the first feed is most
	limited	important, I feel that's like persuaded me to do it for the first two or three months" (Chloe)
	Baby will	"So, you know I just want to try breastfeeding because it's like the most natural way [] its
	instinctively	natural, we've all done that, animals do it like it's just how it is. It's our own source so why
	know what to	not use it." (Olivia)
	do and what	"You can't predict the future but you just can't so I don't know what my baby's gonna like I
	they want	don't know what I'm going to like you know it's got a like if I don't like breastfeeding my
		baby likes it I think you know that's another decision isn't it you know I think I I would end
		up stopping because I just think as much as you know my baby is important and but then I am
		as well you know you've got to be happy and with what's going on cos then your baby will be
		happy as well so" (Alice)

## **Interview Scheule and Demographic Questions**

How are you planning to feed your baby?
How old are you?

How many weeks pregnant are you?

How would you describe your ethic origin?

- Tell me about your experience of pregnancy so far
- What are your views on motherhood and what it's going to be like?
- Can you tell me how you intend to feed your baby when its born?
- How knowledgeable do you feel about different feeding methods?
- Tell me about the importance of the right feeding method to you?
- Can you tell me about how confident you feel in the method you are choosing to feed your baby?
- Can you explain to me your partners (if you have one) views on their preferred feeding method?
- Can you think of any times where someone around you has advised you on how to feed your baby?
- Tell me about how supported you feel by people around you on different feeding methods?
- Explain to me which factors have influenced you on how to feed your baby?
- Tell me about which factor(s) are the most important to you?
- Can you tell me how flexible your feeding methods are?
- Is there anything else you would like to chat about or ask questions about?

Classification: Restricted