

What if something goes wrong? A grounded theory study of parents' decision-making processes around mode of breech birth at term gestation

Emma Thompson, Jo Brett, Ethel Burns

Introduction

Breech presentation is reported to occur in 3-5% of term pregnancies (≥ 37 weeks gestation) (Fox and Chapman, 2006; Fruscalzo et al., 2014, Royal College of Obstetricians and Gynaecologists 2017). Repeatedly associated risk factors have been found to include nulliparity, advanced maternal age, early gestation age and low neonatal birthweight (Albrechtsen et al., 1998; Fruscalzo et al., 2014). High quality evidence for managing term breech births is limited. A seminal international multicentre randomised controlled trial (RCT) was conducted in the 1990s in 26 different countries (N=2,088, 121 centres) to compare planned caesarean section with planned vaginal birth for selected breech presentations at term gestation (37-42 weeks) (Hannah et al., 2000). This term breech trial (TBT) was stopped early, with interim results recommending planned elective caesarean section (ELCS) even before recruitment was completed. The trial was subsequently heavily criticised for issues including significant methodological flaws (Roosmalen and Rosendal, 2002; Glezerman, 2006). Nevertheless, its findings quickly impacted on the already dwindling incidence of vaginal breech birth (VBB). A study three years later found 92.5% of 80 centres in 23 countries had changed to a policy of ELCS for breech (Hogle et al., 2003). Almost two decades later, rates of ELCS performed for breech presentation remain high internationally, with one study reporting rates of between 69-96.1% across 29 European countries (Macfarlane et al., 2015). The inevitable deskilling of maternity care professionals in provision of VBB over this period has only

compounded the effect of the TBT, impacting maternal birth choices and experience levels for the management of both planned and undiagnosed VBB. However, increasing recognition of the need to balance the short- and long-term benefits and drawbacks associated with caesarean section has emerged alongside its increasing usage, and placed term breech birth management at a clinical crossroads. (Ayuk, 2016)

In the United Kingdom (UK) over the last few years, some nascent challenges to the clinical status quo have emerged. For example, a few National Health Service (NHS) Trusts now offer a specific midwife-led upright VBB service. A 2017 national guideline provided updated clinical recommendations on the management of breech presentation to help inform both maternity care providers and the parents they are counselling on mode of birth choices (Royal College of Obstetricians and Gynaecologists, 2017).

A key emphasis since the TBT has been to offer women with a breech presentation external cephalic version. Several large, long-term cohort studies have recently been published to evidence safety, predictors of success, and perinatal outcomes, albeit with an overwhelming focus on high resource settings (Melo et al., 2018; Andrews et al., 2017; Kew et al., 2017; Hutton et al., 2017; Rodgers et al., 2017; Weiniger et al., 2016; Basu et al., 2016). The PREMODA (PREsentation et MODE d'Accouchement) trial used the same criteria and outcome measures as the TBT to address its methodological flaws, but removed the randomised element (Goffinet et al., 2006). Its findings support planned VBB within certain clinical parameters. Recent literature has also addressed the previous paucity in qualitative research surrounding term breech birth, with studies considering the experiences of both women and care providers (Walker et al., 2018a, 2018b; Catling et al., 2016a, 2016b; Petrovska et al., 2016, 2017a, 2017b; Sloman et al., 2016; Watts et al., 2016; Homer et al., 2015; Rosman et al., 2014; Say et al., 2013; Menakaya and Trivedi, 2013; Founds, 2007). However, no research has explored the wider influences involved in parents' decision-making around breech birth.

This study explored factors that influence parents' term breech mode of birth decision-making within the NHS care model. It involved fathers or partners in addition to mothers, in

order to address their limited presence in published research, and in recognition of the role that wider societal influences have been shown to play in women's birth and health-related decision-making (Petrovska et al., 2016, 2017a, 2017b; Davidson, 2015).

Methods

This grounded theory study employed semi-structured interviews with women who were presenting or had presented with breech birth at term. The interviews were conducted with both pregnant women and post-natal women and their partners. Women chose either a face-to-face or telephone interview. A constructivist approach to grounded theory was adopted which places the women at the heart of the research, acknowledges different versions of 'the truth' and recognises that the experiences, values and ideologies of the participants and the researcher influence the conceptual analysis (Charmaz, 2000).

Participants and setting

Participants (N=12) were recruited from a number of UK social media forums including Facebook, MumsNet and Mums Advice, which provided a means of engaging a geographically and experientially diverse target population for this study, in a cost-effective manner. Parents self-reporting a singleton breech baby confirmed by ultrasound at $\geq 36+0$ weeks gestation, who were ≥ 16 years old and spoke sufficient English to consent to and participate in the interview were included.

Data collection and analysis

Information about the study and a short eligibility questionnaire were emailed or posted to potential participants. Eligible participants were invited to contact the researcher if they wished to be interviewed at a time and date to suit themselves but at least 48 hours after initial contact. Data analysis ran concurrent to collection, informing theory development as the research

progressed. The themes emerging from an initial purposive participant sample informed a subsequent theoretical participant sample, to test for theoretical adequacy (Bowen, 2009). Due to the wide geographical reach of the social media recruitment process, all interviews were undertaken remotely via Skype audio call and were conducted by one researcher (ET). Consent was requested at the start of the audio recording. Interviews ranged between 11-43 minutes. Digital recordings of the interviews were transcribed verbatim. Author ET kept a reflective diary throughout the data collection and data analysis to add depth to the analysis and to enhance rigour (Charmaz 2006). Qualitative data analysis was conducted using software NVivo for Mac version 11.4.0, with line-by-line coding of each manuscript. Overall accuracy of coding was checked by a second researcher within two transcripts. More focused coding within transcripts followed to enable higher level concepts to emerge, and the constant comparison of codes between participants. As theoretical coding emerged from the overarching themes, this was then tested and further advanced through the aforementioned theoretical sampling. Regular meetings with the research team (EB, JB) were convened to discuss the coding assigned and the emerging theoretical interpretations, which also allowed a wider range of disciplinary and intellectual perspectives to be considered. Each participant was emailed an individual summary of all of the codes identified within their interview transcript, ranked in order of importance by most frequently referenced to least. Participants were given a week to change both the importance ranking and/or the codes themselves. A second check was performed by sending an overview of the overall main themes identified to all 12 participants. Any comments were considered in the construction of the proposed theory.

Ethical considerations

The study was approved by the Oxford Brookes University Health and Life Sciences Faculty Research Ethics Committee (FREC ID: 2016/27). Participants consented to take part voluntarily and were informed that they could withdraw at any time without giving a reason, and without their medical care or legal rights being affected. Data was securely stored on Google drive and

accessed via a password-protected computer. All paper copies of transcripts were kept in a locked filing cabinet in a locked office and destroyed after the analysis.

Results

Twelve parents were interviewed within a self-declared age range of 18 to 49. The sample comprised pregnant women (n=3), postnatal women (n=6) and postnatal fathers (n=3).

Participants' social demographic, pregnancy and birth details are reported in Table 1.

Table 1: Participant characteristics

Part. No.	Status	Parity	Age (yrs)	Ethnicity	Employment status	Location	Pregnancy and birth details
1	Postnatal mother (partner of participant 5)	Primipara	18-29	White, British	FT. On ML.	West Yorkshire	Failed ECV; planned vaginal breech birth at 39 weeks, 6 months prior to interview.
2	Postnatal mother	Primipara	18-29	White, British	SE. On ML.	Telford	Failed ECV; planned elective caesarean section at 39 weeks, 1 week prior to interview.
3	Postnatal mother	Para 1	18-29	Asian/ Asian British - Indian	SE.	Slough	Failed ECV; planned elective caesarean section; actual unplanned vaginal breech birth at 39 weeks, 9 months prior to interview.
4	Antenatal mother (partner of participant 8)	Primipara	18-29	White, British	FT. On ML.	Bristol	37+4 weeks pregnant; planned ECV; planned elective caesarean section if ECV fails.
5	Postnatal father (partner of Participant 1)	Primipara	30-39	White, British	FT.	West Yorkshire	Failed ECV; planned vaginal breech birth at 39 weeks, 6 months prior to interview.
6	Antenatal mother	Primipara	30-39	White, British	FT. On ML.	Hampshire	38 weeks pregnant; declined ECV; planned elective caesarean section.
7	Postnatal father	Primipara	30-39	White, British	FT.	Chelmsford	Declined ECV; planned elective caesarean section at 40 weeks, 8 weeks prior to interview.
8	Postnatal father (Partner of participant 4)	Primipara	18-29	White, British	FT.	Bristol	Failed ECV; planned elective caesarean section at 38 weeks, 3 weeks prior to interview.
9	Antenatal mother	Para 2	40-49	White, British	Permanently sick/disabled	South Yorkshire	38 weeks pregnant; not offered ECV; planned elective caesarean section.
10	Postnatal mother	Para 1	30-39	White, British	Part time	Herefordshire	Failed ECV; planned elective caesarean section at 40 weeks, 1 year prior to interview.
11	Postnatal mother	Primipara	30-39	White, British	FT. On ML.	East Midlands	Failed ECV; planned elective caesarean section at 39 weeks, 6 months prior to interview.
12	Postnatal mother	Primipara	30-39	White, British	FT.	Southwest Somerset	Failed ECV; planned elective caesarean section at 39 weeks, 10 months prior to interview.

FT = full time, ML=maternity leave, SE=self-employed, ECV=external cephalic version

Two core themes emerged from the data: 1) A framework of influences on parents' term breech mode of birth decision-making; 2) Mortality salience: the fear of death or injury.

1) Framework of influences on parents' term breech mode of birth decision-making

Results showed that parents' decision-making was not an isolated process, but underpinned by an extensive framework of potential influences. These factors included: partner relationships; family and friends; healthcare professionals; one's own personal birth culture; one's own personality; shared experiences; and the time available for birth decision-making. This matrix of knowledge, experiences and beliefs were combined to create unique personal worldviews on pregnancy and birth and thus informed parental approaches to term breech mode of birth decision-making (see Figure 1).

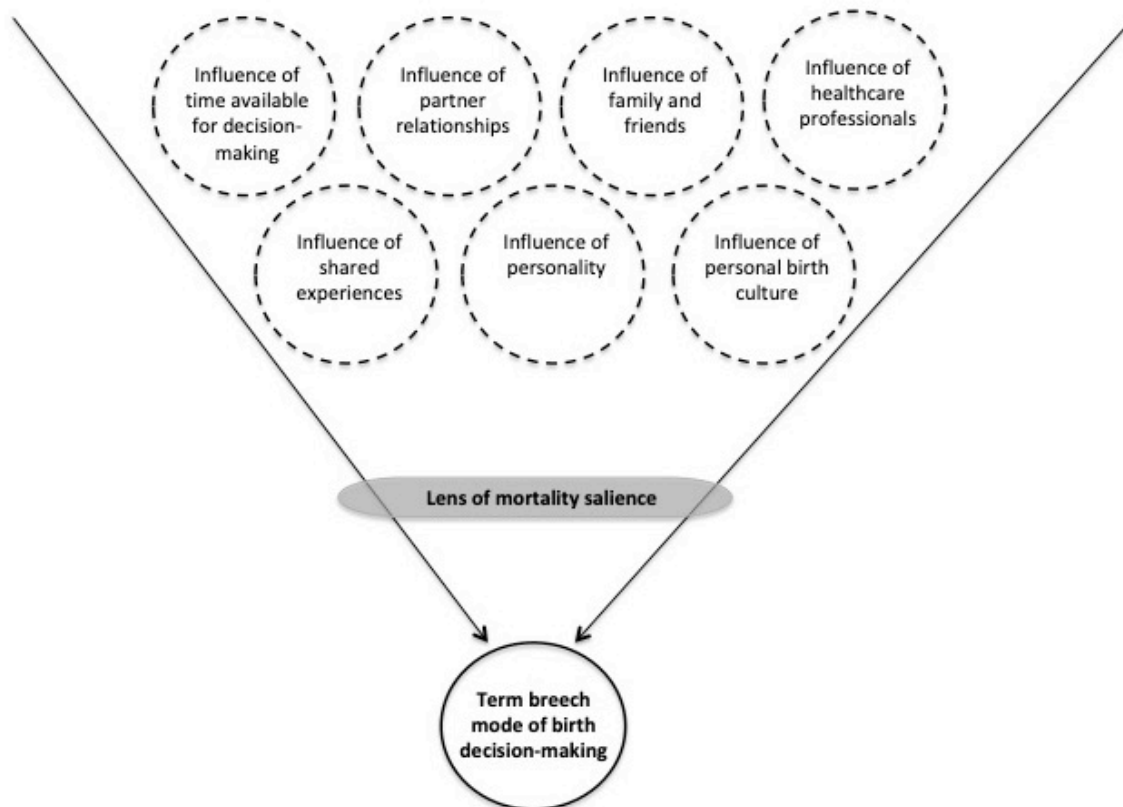


Figure 1.

Partner relationships

Partners exerted a pivotal influence on breech mode of birth. All of the participants were in a relationship and described how they were influenced by their partners in their decision-making. The two couples interviewed provided examples of a mutual, shared couples decision-making dynamic. For one father, his sister's traumatic forceps birth had strongly influenced his attitude towards any vaginal delivery:

My sister had quite a complicated birth before so I think I always thought that even with a normal labour there were still quite a lot of things that could go wrong so I think that sort of pushed me away from vaginal breech birth. [Participant 8, postnatal father, planned ELCS]

This was further corroborated by his partner, and was a key experience that influenced both in their decision-making:

His sister, when she gave birth to his niece, it was quite a traumatic birth and they had to use forceps. It was really long and he was worried about something similar happening. He remembers seeing his niece with bruises all over her face. He would rather a C-section cos he sees that as the safer option. [Participant 4, pregnant mother, planned ELCS]

Another father revealed his fear of vaginal breech birth by describing their decision to plan one as having "taken a lot of faith". However, his wife's self-efficacy in her ability to birth her baby vaginally was strong enough to support both of them to reach the decision:

It was the combination of my wife's ease with which she eventually made the decision and how comfortable she was with it that put my mind at rest really. [Participant 5, postnatal father, planned VBB]

Family and friends

Some participants sought additional informal mode of birth advice from family or friends. A strong maternal influence on some of the female participants was evident:

[My mum] is more pro C-section than natural delivery because she ended up with an episiotomy and forceps with my brother so she had a bit of pelvic floor trauma. [Participant 3, postnatal mother, unplanned VBB]

My mum is a trainee paediatric nurse and she had just done a rotation on maternity when all this came to light [...] she just saw horrendously stressful and traumatic scenarios. [...] She said, 'I just would not wish that on my daughter, I wouldn't want to see my daughter go through that'.

[Participant 2, postnatal mother, planned ELCS]

A specific action shared by some participants was the seeking out of additional informal mode of birth advice from family or friends with a healthcare background. This appeared to centre around a need to obtain wider opinions on breech birth options that combined the clinical expertise of a medical professional, with the trusted familiarity of a known individual:

I have a friend who is a doctor, [...] a general feeling that was in his mind as a medical professional that it was more of a clinical risk decision made now in the hospital and there is not a whole lot of evidence to suggest that it is much riskier. [Participant 5, postnatal father, planned VBB]

We were lucky because [his wife's] mum used to be a qualified nurse in the NHS and her uncle was a doctor. [...] Also some family friend is a paediatrician [...] we had excellent resources in terms of people. [Participant 7, postnatal father, planned ELCS]

Healthcare professionals

The participant-reported attitudes of healthcare professionals towards term breech mode of birth were found to vary. Their beliefs sometimes had a strong influence on the participants' decision-making process:

[...] I didn't feel pressured into anything she [the obstetric consultant] really gave a very balanced view of kind of the pros and cons of caesarean and the pros and cons of like... It was basically just a really balanced view of both [options]. [Participant 1, postnatal mother, planned VBB]

I did not want a C-section in the first place but they said it was a priority. I did not have a choice really. They did not discuss other options because she was breech and yeah at 5 am I went into labour. [Participant 10, postnatal mother, planned ELCS]

Where participants reported having demonstrated interest or self-efficacy pertaining to VBB, healthcare professionals appear to have responded more positively regarding this option:

He [the consultant obstetrician] was like, 'Oh you weren't interested in natural breech delivery'. And I was like, 'Actually I was'. And at this point – it was a Friday – and he said that [city] [hospital] support natural breech birth and he said he could try to refer me [...] [Participant 3, postnatal mother, unplanned VBB]

Where participants reported influences from healthcare professionals not specialised in perinatal care, such as general practitioners or sonographers; these encounters were typically more biased towards surgical birth:

I went and I spoke to my GP [...] and she said, 'Why would you want a natural delivery? You know, all this is very bad. You can have a C-section.' And you know she's known me since I was a baby so she said to me, 'You know if it was my daughter, I would be recommending a C-section'. So that influenced me as well I guess. Which is what made me [initially] choose the elective [caesarean]. [Participant 3, postnatal mother, unplanned VBB]

Personal birth culture

Identifying the influence of participants' birth culture was challenging, typically revealed as a general sense or feeling rather than explicitly discussed. However, where key pivotal events or experiences had occurred in an individual's past, their own birth culture or worldview was clearly defined by them as a result. Participant 9, for example, had suffered a traumatic

induction of labour as a teenager and this experience was shaping much of the narrative surrounding her subsequent breech pregnancy some 20 years later:

My first son, I was 17 and I let them induce me because I didn't know any better and it was pretty horrific. His heart kept stopping and so they literally ripped him out of me with a ventouse. And I still have the physical damage from that day and after he was born I went into shock, I couldn't even hold him. I just wanted them to take him away, I was very ill. [Participant 9, pregnant mother, planned ELCS]

Meanwhile, participant 1, a postnatal woman who had experienced a planned VBB, defined her birth culture through a strong family narrative of non-medicalised, vaginal birth being the natural and optimal experience, and a pivotal fear of surgery related to a negative experience of her father's:

[...] you know it is totally something that is doable, it doesn't need to be medicalised. [...] the thought of a planned operation actually would have made me more anxious. I've had an operation previously and I had to be sedated before it, before, I had the operation, and it comes from, my father had an operation and ended up in a coma. [Participant 1, postnatal mother, planned VBB]

Typically, significant overlap was evident between a sense of an individual's birth culture and their own personality, with the two in combination having a strong impact on mode of birth choices.

Personality

Participants' own personalities had a strong impact on their approach to birth decision-making, and naturally variation between individuals was common. Self-efficacy, where parents felt confident and in control of their decision making, was reported by the two women who had chosen a VBB, both planned and unplanned:

Just I think everything I had read and I think kind of everything I had informed myself with and people told me about their stories, their positive experiences, it really kind of bolstered the fact that yeah I can do this. [Participant 1, postnatal mother, planned VBB]

Participant 3 had reported previously supporting other women's confidence in VBB in her role as an antenatal pilates teacher, even though initially her own planned choice of birth was an ELCS. However, it was this element of self-efficacy in her personality that ultimately swayed her towards an unplanned VBB whilst in labour before her planned surgery date:

Because of being a pilates instructor, like there had been other girls in my class who have had babies in breech position and I said, you know, it is possible to have a breech birth. I had sort of given them information, told them what they should be reading and looking at. [Participant 3, postnatal mother, unplanned VBB]

A personality trait shared by most participants was the strong desire to inform themselves about the physiology and clinical management options for term breech birth, beyond the literature provided by their healthcare providers. Personal research occurred soon after a term breech diagnosis. It appeared to validate decisions made, and may also have provided a feeling of control within the sudden, unplanned nature of discovering a term breech pregnancy:

In the hospital to have my baby the registrar [...] said "OK well the best thing we can do here is to have an epidural", and my response to her was "Well, from everything that I have read, and I have spoken to the consultant and that is not, that is not a good thing. I need to be moving around and I don't want to have an epidural." [Participant 1, postnatal mother, planned VBB]

I went away and then at that point I tried to do research to find out what my options were, if there were any other hospitals close by which supported natural breech delivery. [Participant 3, postnatal mother, unplanned VBB]

Shared experiences

Both male and female participants sought out individuals, either online or in real life, with whom to share the breech experience. Information, personal experience and advice was shared with others going through or who had gone through a similar situation:

I think, actually, joining that Facebook group and talking to other mums who have either had a breech baby or were experiencing the same scenarios as I was, was an additional support [...] and was maybe a little more positive on what the outcomes could be and maybe a little more objective [...] [Participant 2, postnatal mother, planned ELCS]

Sharing the experience appeared to provide participants with a means to overcome the sense of a term breech pregnancy being 'abnormal' or a 'problem'. It provided a comparison for their own circumstances, and enabled them to use the shared experiences and views of others as a measure against which to validate their own mode of birth decisions. For participant 1, hearing about positive VBB experiences via a breech social media group reinforced her own self-efficacy in her body's ability to birth vaginally. Again, the influence this had on her partner, participant 5, was also reflected in his interview:

Certainly that Facebook group, their stories, just generally the support my wife had there. I guess it gave me a lot of confidence as well. [Participant 5, postnatal father, planned VBB]

Conversely, participant 3 avoided VBB imagery, in the knowledge that seeing other women achieve this would persuade her away from her planned ELCS - the mode of birth she perceived as safest but ultimately ended up avoiding after choosing a VBB in labour:

I tried not to look on YouTube for natural breech birth, cos I kind of felt if I started watching YouTube videos I would end up having a [vaginal] breech baby. [Participant 3, postnatal mother, unplanned VBB]

However, social media shared experiences did not always have a positive impact. In the case of Participant 2, whose eventual decision to have a planned ELCS went against her real desire to labour and birth vaginally, it only fuelled the conflicted emotion she felt postnatally:

There was a lady in [the breech Facebook group] who, her and I were exactly the same gestation and she was with a different trust, and I went down the caesarean route and she had a natural breech delivery and I just kind of feel like, shit, maybe I should have tried. [Participant 2, postnatal mother, planned ELCS]

Time available for decision-making

The impact that the time available from breech diagnosis to mode of birth decision had on mode of birth decision-making was not always clear. There was some evidence that time could be critical regarding birth planning, and then conversely not at all:

Part of me thinks that perhaps if I had known, all along, that she was breech [...] then I probably would have prepared myself or maybe done a bit more research to be more inclined towards a vaginal birth. But on the other side I think perhaps actually I would have had much more time to get used to the idea that it was not the best route. [Participant 12, postnatal mother, planned ELCS]

In general, participants' experiences highlighted the importance of maternity care professionals understanding the upheaval and changing of long-established plans associated with late pregnancy breech diagnosis and supporting parents more thoroughly after it:

So I felt like, [breech diagnosis at 33 week growth scan] was the only point in my entire pregnancy that I felt quite unsupported by the midwifery team. That it was like here is this massive piece of information that you are completely not expecting. Go and stew on it for two weeks because that is how long you have to wait until your next appointment. [Participant 2, postnatal mother, planned ELCS]

2) Mortality salience: the fear of death or injury

The second overarching theme that emerged surrounding mode of birth choice was parental focus on risk of potential morbidity or mortality associated with birth. This mortality salience (awareness of death or injury) was a consistent, key element of a narrative focused on 'what if things go wrong', when discussing mode of breech birth both pro- and retrospectively.

Typically, it was either implied indirectly through veiled, general references to fear, worry, safety, risk, or via direct descriptions of the potential consequences of breech birth – either surgical or vaginal - on mother or child:

You ask yourself what if, God forbid, something happened during birth, afterwards how would you feel, could you forgive yourself? [Participant 5, postnatal father, planned VBB]

Yeah they talked about the vaginal birth but very much the safest option at this point is C-section, so I think as soon as you hear the word 'safest' that automatically steers you in that direction. [Participant 6, pregnant mother, planned ELCS]

I felt there was a huge amount of fear about having elective major surgery. I just did not want that at all. [Participant 2, postnatal mother, planned ELCS]

Most female participants expressed their ideal birth as being vaginal, with reasons for this ranging from surgical recovery time, needing to be 'natural' or 'normal', or labouring being a rite of motherhood. Conflict was sometimes evident between this common desire for a vaginal birth, and the perceived desire to safeguard their unborn child by opting for surgical birth:

Interviewer: Did you feel like there was really a choice to make?

Participant: Not without being selfish. To me it would have been selfish to go for a vaginal breech birth because that is what I wanted. I would have felt selfish at putting my baby at risk, in my mind, so to me there wasn't that much of a choice. [Participant 12, postnatal mother, planned ELCS]

Discussion

The process of constructing a grounded theory from these 12 parents' experiences of term breech birth decision-making pivoted around the two overarching themes – a framework of potential influences and the effect of mortality salience. The highly variable and individualised framework of influences found to underpin mode of birth choices for all participants, presented a core belief system underlying their decisions. In this research these influences are explained by diverse heuristics where people subconsciously bypass complexities and constraints, in order to facilitate real world decision-making based on their experiences. The results are

everyday cognitive biases that lead individuals to make choices. Meanwhile, mortality salience, or the the awareness of death or injury to oneself, partner, or unborn child, was found to provide a lens through which the participants' varied influences relating to birth were then focused into specific mode of birth choices, as theorised in figure 2 below.

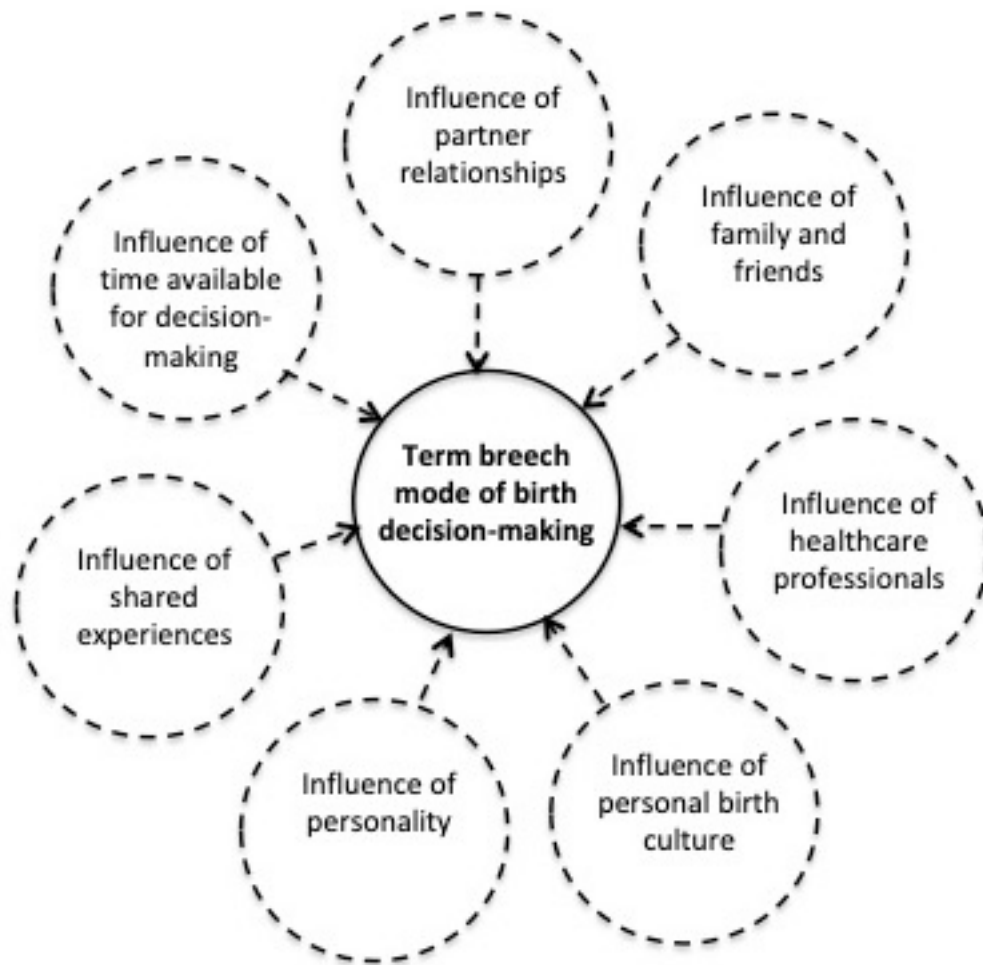


Figure 2.

The wider framework of potential influences noted in this research does resonate with related literature. Petrovska et al.'s (2016) survey of 204 women's experiences of planning vaginal breech birth, revealed similar influential elements of family and friends, healthcare professionals, and shared experiences including online support and information seeking.

Personality was also found to influence breech birth decision-making among participants in this study. Other work has shown how increased conscientiousness and openness to experience and decreased agreeableness and neuroticism has been found to correspond to preferring the most active decision-making style compared with the least active (Flynn and Smith, 2007). A better understanding through future research into how personality traits relate to women and their partners' decision-making styles may help clinicians tailor breech mode of birth discussions to the needs and preferences of individual families.

Encounters with 'coercion and fear' are also described, supporting this study's finding of mortality salience as a decision-making influence, if not specifically the same 'focusing lens' identified here. The commonality of sharing experiences online to assist general pregnancy decision-making has been previously reported in a web-based survey of midwives' perceptions of women using the Internet in pregnancy (Lagan et al., 2011). Meanwhile, peer group social media support has been observed in US women seeking information, birth narratives and emotional support via online message boards for vaginal birth after caesarean section (Konheim-Kalkstein et al., 2014). Similarly, the grandmother/new mother perinatal influences observed in this study are evident across a wide range of cultures (Grassley and Eschiti, 2008; Aubel, 2011). The degree of mutual influencing between women and partners and healthcare professionals found in this work has also been demonstrated in ECV experience research (Say et al., 2013) and in non-birth related shared clinical decision-making (Lown et al., 2009). The inclusion of both mothers and fathers/partners, has helped to further evidence the wider sphere of influences involved in perinatal decision-making, highlighting the critical importance of considering these factors in clinical decision-making counselling and research. This study also reports that time can be critical regarding breech birth planning. Some research suggests that the way in which a woman experiences pregnancy and childbirth is crucial for a mother's relationship with her child and her future childbearing experiences (Fox and Worts, 1999; Hauck et al., 2007). Having time to plan and prepare expectations during birth is critical to their

birth experience. Different constructions of how time affects the experiences of childbirth, and the need for enough time for shared decision making has previously been reported (McCourt, 2009). Health professionals therefore need to engage with women regarding breech birth options as early as possible.

The defence mechanism concept Terror Management Theory (TMT) proposes that much human behaviour is designed to limit the anxiety associated with both conscious and unconscious mortality salience (Greenberg et al., 1986). This has been evidenced by a wide range of research, whereby mortality salience has the effect of individuals' worldviews tending to reinforce their healthcare choices (Solomon et al., 2015). Non-breech related perinatal research has demonstrated evidence for TMT, finding diverse links between mortality salience and women's role in reproduction, for example, explaining negative reactions to women's pregnant bodies in the media, or public breastfeeding (Cox et al., 2007; Goldenberg et al., 2007). Analytical work regarding online English-language media representations of breech birth has also identified mortality salience, with caesarean section depicted as the 'safest' option and vaginal breech birth as being associated with poor outcomes (Petrovska et al.'s (2017b). Other research has revealed a similar risk discourse surrounding breech birth decision-making, describing an associated 'societal lens of risk and medicalization' (Petrovska et al., 2017a). This study may lend further evidence to suggest there is potential to apply TMT in the term breech mode of birth decision-making context. However, much work into TMT has been conducted in the field of psychology, with a greater emphasis on clinically testing the impact of mortality salience on individuals' behaviour, which is ethically problematic in a perinatal context.

Planned, clinically appropriate VBB is starting to re-emerge in the UK, and a thorough updated overview of the current evidence for term breech birth management is guiding practice and recommendations (Royal College of Obstetricians and Gynaecologists, 2017). Mode of birth counselling for term breech pregnancies now has a renewed clinical perspective and impetus, but represents a complex and highly individualised journey of information and choices for

women and their partners to navigate through with the guidance of their maternity care provider. By considering parents' and not solely women's experiences, this study has provided an opportunity to explore and evidence the wider social context of term breech birth decision-making. Albeit a small study, it provides a deeper insight for healthcare professionals counselling parents in mode of breech birth decision-making, by highlighting not only their own potentially significant influence, but also the individuality and potential wider framework of parent's decision-making influences. It also helps illustrate the conflicted emotions that parents and women in this position may experience, and gives parents a greater insight into the potential influences that may be driving their own decision-making, enabling more objective consideration of their birth wishes for themselves and their child.

Limitations and future research

This study is only an initial exploration of a complex topic, and further research is required to consolidate the grounded theory proposed and address the study's limitations. A key limiting factor was the small sample size, as is the case in many qualitative studies. However, as Charmaz (2006) states, deep and thoughtful analysis of a small sample can be more revealing than a less carefully considered larger sample. The 12 interviews provided rich in-depth data, detailing a full range of participant perspectives and actions, which revealed sufficient metadata for the creation of analytical categories and theory. From the constructivist standpoint the term 'data saturation' is problematic as it may not ever be attainable. Therefore 'sampling adequacy' was instead evidenced via a theoretical sample (Bowen, 2009). Constructivist grounded theory readily acknowledges the inevitable impact of researcher bias, and an important aspect of this research to address these concerns was the optional involvement of participants in the analysis and interpretation of their interview data. This was done to ensure the theory constructed was as accurate and grounded in the original data as possible, and to minimise interpretation bias.

The study relied on self-reporting of term breech presentation confirmed by ultrasound, and the sample was further limited to participants who could speak English. It was also not sufficiently ethnically or culturally diverse, and did not include non-heteronormative pregnancy and birth experiences. A more diverse sample would represent an opportunity for future research in the field to test and explore application of the proposed theory.

Conclusion

This study constructed a grounded theory of parents' term breech mode of birth decision-making, by detailing potential factors that may influence their choices. The common dialogue of fear, worry and risk that ran through all the participant narratives should be acknowledged by those involved in breech pregnancy and birth care. The findings of this research may inform midwives and other health professionals' practices, and enable more individualised, person-centred and evidence-based counselling for term breech mode of birth decision-making.

References

- Albrechtsen, S., Rasmussen, S., Dalaker, K., Irgens, L. M., 1998. The occurrence of breech presentation in Norway 1967–1994. *Acta Obstet Gynecol Scand*, 77. <https://doi.org/10.1034/j.1600-0412.1998.770409.x>
- Andrews, S., Leeman, L., Yonke, N., 2017. Finding the breech: influence of breech presentation on mode of delivery based on timing of diagnosis, attempt at external cephalic version, and provider success with version. *Birth*, 44(3). <https://doi.org/10.1111/birt.12290>
- Aubel, J., 2011. The role and influence of grandmothers on child nutrition: culturally designated advisors and caregivers. *Maternal & Child Nutrition*, 8(1). <https://doi.org/10.1111/j.1740-8709.2011.00333.x>.
- Ayuk, P., 2016. Re: The risks of planned vaginal breech delivery versus planned caesarean section for term breech birth: a meta-analysis including observational studies' and accompanying editorial. *BJOG*, 123(9). <https://doi.org/10.1111/1471-0528.14021>
- Basu, A., Flatley, C., Kumar, S., 2016. Intrapartum intervention rates and perinatal outcomes following successful external cephalic version. *J Perinatol.*, 36(6). <https://doi.org/10.1038/jp.2015.220>
- Catling, C., Petrovska, N., Watts, A., Bisits, A., Homer, C., 2016a. Barriers and facilitators for vaginal breech births in Australia: Clinician's experiences. *Women and Birth*, 29(2). <https://doi.org/10.1016/j.wombi.2015.09.004>
- Catling, C., Petrovska, K., Watts, N., Bisits, A., Homer, C., 2016b. Care during the decision-making phase for women who want a vaginal breech birth: Experiences from the field. *Midwifery*, 34. <https://doi.org/10.1016/j.midw.2015.12.008>
- Charmaz, K., 2000. Grounded theory: Objectivist and constructivist methods. In: Denzin, N. and Lincoln, Y. (Eds.), *The Handbook of Qualitative Research*. Thousand Oaks, CA: Sage Publications Ltd, pp. 509–535.
- Charmaz, K., 2006. *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. London: Sage.
- Cox, C., Goldenberg, J., Arndt, J., Pyszczyński, T., 2007. Mother's milk: an existential perspective on negative reactions to breastfeeding. *Personality and Social Psychology Bulletin*, 33(1). <https://doi.org/10.1177/0146167206294202>
- Davidson, J., 2015. The experience of vaginal breech birth: A social, cultural and gendered context Doctoral thesis, University of Brighton. <http://eprints.brighton.ac.uk/id/eprint/15141>
- Flynn K.E., Smith M.A., 2007. Personality and health care decision-making style. *The Journals of Gerontology: Series B*, 62(5). <https://doi.org/10.1093/geronb/62.5.P261>
- Founds, S. A., 2007. Women's and providers' experiences of breech presentation in Jamaica: a qualitative study. *Int J Nurs Stud.*, 44(8). <https://doi.org/10.1016/j.ijnurstu.2006.07.018>

- Fox A. J., Chapman M. G., 2006. Longitudinal ultrasound assessment of fetal presentation: a review of 1010 consecutive cases. *Aust N Z J Obstet Gynaecol.*, 46(4).
<https://doi.org/10.1111/j.1479-828X.2006.00603.x>
- Fox B., Worts D., 1999. Revisiting the critique of medicalized childbirth: A contribution to the sociology of birth. *Gender & Society*, 13(3). <https://doi.org/10.1177/089124399013003004>
- Fruscalzo, A., Londero, A. P., Salvador, S., Bertozzi, S., Biasioli, A., Della, M. M., Driul, L., Marchesoni, D., 2014. New and old predictive factors for breech presentation: our experience in 14 433 singleton pregnancies and a literature review. *J Matern Fetal Neonatal Med.* 2014, 27(2).
<https://doi.org/10.3109/14767058.2013.806891>
- Glezerman, M., 2006. Five years to the term breech trial: the rise and fall of a randomized controlled trial. *Am J Obstet Gynecol.*, 194(1). <https://doi.org/10.1016/j.ajog.2005.08.039>
- Goffinet, F., Carayol, M., Foidart, J., Alexander, S., Uzan, S., Subtil, D., Bréart, G., 2006. Is planned vaginal delivery for breech presentation at term still an option? Results of an observational prospective survey in France and Belgium. *American Journal of Obstetrics and Gynecology*, 194(4). <https://doi.org/10.1016/j.ajog.2005.10.817>
- Goldenberg, J., Goplen, J., Cox, C., Arndt, J., 2007. "Viewing" pregnancy as an existential threat: the effects of creatureliness on reactions to media depictions of the pregnant body. *Media Psychology*, 10(2). <https://doi.org/10.1080/15213260701375629>
- Grassley, J., Eschiti, V., 2008. Grandmother breastfeeding support: what do mothers need and want?. *Birth*, 35(4). <https://doi.org/10.1111/j.1523-536X.2008.00260.x>
- Greenberg, J., Pyszczynski, T., Solomon, S., 1986. The causes and consequences of a need for self-esteem: A terror management theory. In: Baumeister, R. F., (Ed.), *Public Self and Private Self*. New York: Springer-Verlag, pp. 189-212.
- Hannah, M., Hannah, W., Hewson, S., Hodnett, E., Saigal, S., Willan, A., 2000. Planned caesarean section versus planned vaginal birth for breech presentation at term: a randomised multicentre trial. *The Lancet*, 356(9239). [https://doi.org/10.1016/S0140-6736\(00\)02840-3](https://doi.org/10.1016/S0140-6736(00)02840-3)
- Hauck Y., Fenwick J., Downie J., Butt J., 2007. The influence of childbirth expectations of Western Australian women's perceptions of their birth experience. *Midwifery*, 23(3).
<https://doi.org/10.1016/j.midw.2006.02.002>
- Hogle, K. L., Kilburn, L., Hewson, S., Gafni, A., Wall, R., Hannah, M. E., 2003. Impact of the international term breech trial on clinical practice and concerns: a survey of centre collaborators. *J Obstet Gynaecol Can*, 25(1). [https://doi.org/10.1016/S1701-2163\(16\)31077-5](https://doi.org/10.1016/S1701-2163(16)31077-5)
- Homer, C., Watts, N., Petrovska, K., Sjostedt, C., Bisits, A., 2015. Women's experiences of planning a vaginal breech birth in Australia. *BMC Pregnancy and Childbirth*, 15.
<https://doi.org/10.1186/s12884-015-0521-4>
- Hutton, E. K., Simioni, J. C., Thabane, L., 2017. Predictors of success of external cephalic version and cephalic presentation at birth among 1253 women with non-cephalic presentation using logistic regression and classification tree analyses. *Acta Obstet Gynecol Scand.*, 96(8).
<https://doi.org/10.1097/01.aoa.0000532303.98988.72>

- Kew, N., DuPlessis, J., La Paglia, D., Williams, K., 2017. Predictors of cephalic vaginal delivery following external cephalic version: an eight-year single-centre study of 447 cases. *Obstet Gynecol Int.* <https://doi.org/10.1155/2017/3028398>
- Konheim-Kalkstein, Y., Barry, M., Galotti, K., 2014. Examining influences on women's decision to try labour after previous caesarean section. *Journal of Reproductive and Infant Psychology*, 32(2). <https://doi.org/10.1080/02646838.2013.875133>
- Lagan, B., Sinclair, M., Kernohan, W., 2011. A web-based survey of midwives' perceptions of women using the internet in pregnancy: a global phenomenon. *Midwifery*, 27(2). <https://doi.org/10.1016/j.midw.2009.07.002>
- Lown, B., Hanson, J., Clark, W., 2009. Mutual influence in shared decision making: a collaborative study of patients and physicians. *Health Expectations*, 12(2). <https://doi.org/10.1111/j.1369-7625.2008.00525.x>
- Macfarlane, A., Blondel, B., Mohangoo, A., Cuttini, M., Nijhuis, J., Novak, Z., Ólafsdóttir, H., Zeitlin, J., 2015. Wide differences in mode of delivery within Europe: risk-stratified analyses of aggregated routine data from the Euro-Peristat study. *BJOG: An International Journal of Obstetrics & Gynaecology*, 123(4). <https://doi.org/10.1111/1471-0528.13284>
- .McCourt, C. (Ed.), (2009). *Childbirth, Midwifery and Concepts of Time*. Oxford: Berghahn Books.
- Melo, P., Georgiou, E. X., Hedditch, A., Ellaway, P., Impey, L., 2018. External cephalic version at term: a cohort study of 18 years' experience. *BJOG*, 126(4). <https://doi.org/10.1111/1471-0528.15475>
- Menakaya, U. A., Trivedi, A., 2013. Qualitative assessment of women's experiences with ECV. *Women and Birth*, 26(1). <https://doi.org/10.1016/j.wombi.2012.09.001>
- Petrovska ,K., Watts, N. P., Catling, C., Bisits, A., Homer, C. S., 2016. Supporting women planning a vaginal breech birth: an international survey. *Birth*, 43(4). <https://doi.org/10.1111/birt.12249>
- Petrovska, K., Watts, N., Sheehan, A., Bisits, A., Homer, C., 2017a. How do social discourses of risk impact on women's choices for vaginal breech birth? A qualitative study of women's experiences. *Health, Risk & Society*, 19(1-2). <https://doi.org/10.1080/13698575.2016.1256378>
- Petrovska, K., Sheehan, A., Homer, C. S. E., 2017b. The fact and the fiction: A prospective study of internet forum discussions on vaginal breech birth. *Women and Birth*, 30(2). <https://doi.org/10.1016/j.wombi.2016.09.012>
- Rodgers, R., Beik, N., Nassar, N., Brito, I., de Vries, B., 2017. Complications of external cephalic version: a retrospective analysis of 1121 patients at a tertiary hospital in Sydney. *BJOG*, 124(5). <https://doi.org/10.1111/1471-0528.14169>
- Roosmalen, J., Rosendal, F., 2002. There is still room for disagreement about vaginal delivery of breech infants at term. *BJOG*, 109(9). <https://doi.org/10.1111/j.1471-0528.2002.01005.x>
- Rosman, A. N., Vlemmix, F., Fleuren, M. A., Rijnders, M. E., Beuckens, A., Opmeer, B. C., Mol, B. W., van Zwieten, M. C., Kok, M., 2014. Patients' and professionals' barriers and facilitators to

external cephalic version for breech presentation at term, a qualitative analysis in the Netherlands. *Midwifery*, 30(3). <https://doi.org/10.1016/j.midw.2013.03.013>

Royal College of Obstetricians and Gynaecologists, 2017. Guideline No. 20b: Management of Breech Presentation. Available at: <https://www.rcog.org.uk/en/guidelines-research-services/guidelines/gtg20b/>

Say, R., Thomson, R., Robson, S., Exley, C., 2013. A qualitative interview study exploring pregnant women's and health professionals' attitudes to external cephalic version. *BMC Pregnancy and Childbirth*, 13(4). <https://doi.org/10.1186/1471-2393-13-4> [Accessed 19th November 2018]

Slooman, R., Wanat, M., Burns, E., Smith, L., 2016. Midwives' views, experiences and feelings of confidence surrounding vaginal breech birth: A qualitative study. *Midwifery*, 41; 61-67 <https://doi.org/10.1016/j.midw.2016.07.015>. [Accessed 19th November 2018]

Solomon, S., Greenberg, J., Pyszczyński, T., 2015. *The Worm at the Core*. Allen Lane.

Walker, S., Scamell, M., Parker, P., 2018a. Deliberate acquisition of competence in physiological breech birth: A grounded theory study. *Women Birth*, 31(3); e170-e177 <https://doi.org/10.1016/j.wombi.2017.09.008> [Accessed 19th November 2018]

Walker, S., Parker, P., Scamell, M., 2018b. Expertise in physiological breech birth: A mixed-methods study. *Birth*, 45(2); 202-209. <https://doi.org/10.1111/birt.12326> [Accessed 19th November 2018]

Watts, N. P., Petrovska, A., Bisits, A., Catling, C., Homer, C. S. E., 2016. This baby is not for turning: Women's experiences of attempted external cephalic version. *BMC Pregnancy and Childbirth*, 16; 248. <https://doi.org/10.1186/s12884-016-1038-1>. [Accessed 19th November 2018]

Weiniger, C. F., Lyell, D. J., Tsen, L. C., Butwick, A. J., Shachar, B., Callaghan, W. M., Creanga, A. A., Bateman, B. T., 2016. Maternal outcomes of term breech presentation delivery: impact of successful external cephalic version in a nationwide sample of delivery admissions in the United States. *BMC Pregnancy Childbirth*, 16(1); 150. <https://doi.org/10.1186/s12884-016-0941-9>. [Accessed 19th November 2018]