Abstract
Objective – To explore women’s and midwives’ expectations, knowledge and experiences of breastfeeding initiation using Social Cognitive Theory.

Design – A qualitative study using focus group discussions and individual interviews. Breastfeeding initiation was defined for this study as a process within the first 48 hours after birth. Data were analysed using qualitative inductive analysis then further deductive analysis using Social Cognitive Theory (SCT).

Setting and Participants – a purposefully selected sample of primigravid antenatal and postnatal women (n=18) and practising midwives (n=18) from one Health Board area in Scotland.

Findings - Attachment of the baby to the breast at birth was hindered by sleepy babies and the busy unfamiliar hospital environment. These resulted in mothers struggling to maintain their motivation to breastfeed and to develop low self-efficacy. Instinctive attachment was rare. Midwives who considered it was normal for babies to be sleepy and unable to attach or feed at birth did not facilitate instinctive baby behaviour. Midwives sometimes experienced lack of autonomy and environmental circumstances that made women centred care difficult. Furthermore caring for high numbers of women, dependent on their help, resulted in reduced self-efficacy for providing effective breastfeeding support.

Key conclusions - Interviewing both women and midwives specifically about initiation of breastfeeding has allowed for deeper insights into this critical period and enabled a comparison between the data obtained from mothers and midwives.

The findings suggest that instinctive attachment is not an expectation of either mothers or midwives and results in a loss of breastfeeding confidence in both.

Implications for practice - To facilitate initiation there is a need for more research to develop appropriate maternal and midwifery skills, and make changes to the cultural environment in hospitals. Social Cognitive Theory could be used as a framework in
both the antenatal and immediate postnatal period to develop strategies and materials to increase women’s and midwives’ self-efficacy specifically in initiation.

**Key words**
Breastfeeding initiation, instinctive behaviour, breastfeeding attachment, social cognitive theory, qualitative methods.

**Introduction**
Initiation of breastfeeding in the UK is at its highest since the infant feeding surveys began in 1975 (England and Wales) with 81% of babies in the UK (74% in Scotland) starting breastfeeding in 2010 (Health and Social Care Information Centre (HSCIC) 2012). However, the steepest drop off in breastfeeding occurs in the early postnatal weeks despite women having the greatest access to health care services at this time. Many of those stopping in the first week would have liked to have breastfed for longer if they had more support and guidance, less pain and if their baby was able to latch onto the breast (HSCIC 2012). The most common reasons for stopping in the first week were the baby not sucking or rejecting the breast (HSCIC 2012).

Successful initiation of breastfeeding pivots on events and practices during labour, birth and the immediate post-birth period. The UNICEF UK Baby Friendly Initiative has identified practices which support breastfeeding in hospitals and enshrined these in their current standards (Unicef UK Baby Friendly 2012). Most hospitals in Scotland are working towards or have achieved full Baby Friendly Initiative accreditation, where they are shown to have adopted these internationally recognised standards of best practice for breastfeeding in the care of mothers and babies (UNICEF 2016). Breastfeeding outcomes are influenced by post birth practices such as formula supplementation (Tender et al. 2009) and professional support (Entwistle et al. 2010) alongside maternal demographic factors and personal attributes such as self-efficacy (SE) (Avery et al. 2009;Blyth et al. 2002;Dennis 2006). It is hypothesised that, for successful natural unhindered initiation of breastfeeding in healthy term babies, an inborn biological programme of pre-feeding/instinctive behaviour is required. In well, un-medicated babies held skin to skin, pre-feeding/instinctive behaviour is described as the baby crying at birth, then relaxing on the mother’s body, then making hand to mouth movements, gradually
rooting and developing sucking activities as the baby moves toward the breast finds the nipple and starts to suck within the first hour (Widstrom et al. 1987). This sequence of movements by the baby requires uninterrupted skin to skin contact with the mother and is vulnerable to disturbance by handling, washing and narcotic analgesia (Widstrom et al. 2011). A successful first breastfeed is more likely with skin to skin contact (Carfoot et al. 2005; Moore et al. 2012). Furthermore, the longer the baby has skin to skin contact in the first few hours after birth, the more likely s/he will be exclusively breastfed while in hospital and on discharge (Bramson et al. 2010; Marin Gabriel et al. 2010; Mikiel-Kostyra et al. 2002).

Initiation of breastfeeding requires learning a new behaviour. As with any new behaviour, the importance of self efficacy i.e. confidence and belief in an ability to the ability to perform the new behaviour (women and midwives), is essential as is the ability to provide skilled support (midwives). In a recent study the authors found patient, encouraging positive support from health professionals who built confidence were amongst strategies that helped women to be able to breastfeed (Ryan et al. 2017). Skilled support from health professionals is important but previous research has indicated that this may not be effective in helping women learn (Guyer et al. 2012; Hunter et al. 2015; McInnes and Chambers 2008; Redshaw and Henderson 2012). Given the sharp drop in breastfeeding in the first few days after birth it is crucial we improve our understanding of this time. We considered that the constructs in Social Cognitive Theory (SCT) provide a framework to analyse the experiences of women and midwives during the situation specific behaviour (Bandura 1989) of attempting to initiate breastfeeding. This potentially offers the opportunity to deepen our understanding of how women and midwives experience breastfeeding initiation.

Social Cognitive Theory proposes that people act within a concept of “Triadic Reciprocal Causation” (Bandura 1986) where the two core constructs are Perceived Self-Efficacy (SE) and Outcome Expectancies (OE) (Luszczynska and Schwarzer 2005). Bandura (1997) suggests that SE is “a belief about what one can do under different sets of conditions with whatever skills one possesses” (Bandura 1997) pp37. This is manifest by how strongly a person believes in their ability to be able to attain a level of performance in a particular situation. The main influence on
perceived self-efficacy is Personal Mastery/enactive attainment where the person has evidence of their achievement. Influences include: vicarious experience where by watching someone perform/model behaviour a concept is formed of the behaviour; verbal persuasion where if a person is encouraged to think they are capable of a task they may make more effort; psychological state which can enhance self-efficacy where success is more likely if the person is not highly anxious as the activity/task may increase the anxiety. Outcome Expectancies are the judgements by a person of the likely consequences of behaviour or what the person expects will happen if the behaviour is performed (Bandura 1977). (see Figure 2 Code Template, Social Cognitive Theory)

Dennis (1999) introduced the application of the concept of self-efficacy as a theoretical framework to the study of breastfeeding confidence (Dennis 1999). Qualitative research as in Entwistle et al (2010) gives a rich explanation of women’s dilemmas in their attempts to start breastfeeding after the birth. Women who were able to breastfeed experienced a sense of mastery which encouraged them to continue but women who did not have this positive experience were less likely to continue. The women’s social environment where the women were familiar with breastfeeding was helpful as the mothers had previous positive vicarious experience. The help women had from the midwives after the birth was influential in women’s attempts to start breastfeeding where they were supported (Entwistle, Kendall, & Mead 2010). These constructs provide the scope to focus on women and midwives’ experiences during the situation specific attempts to initiate breastfeeding with more emphasis on explaining the influences on specific behaviours during the process rather than prediction of intended behaviour.

In consideration of the rapid decline in breastfeeding post birth, this study aimed to explore women’s and midwives’ expectations, knowledge and experiences of breastfeeding initiation, including skin to skin contact and instinctive behaviour.
Methods

The method chosen for the primary research was qualitative, which aims to inductively interpret an in-depth understanding of the social world of the participants. The analysis provides detail and is able to undergo classification of text data which has retained the original characteristics of the participants (Ritchie and Lewis 2003). Considering the aims of this current research, there are many different theoretical perspectives but a pragmatic consideration of the research question informed the choice of method rather than a theoretical perspective of methodology (Patton 2002; Pope and Mays 2006). For the purpose of this study, breastfeeding initiation in healthy term neonates was defined as “a process that starts at birth and continues until successful latching at the breast is learned by mother and baby, which may take 48 hours or more to achieve”. In a study by Matthews (1988) most babies had lower scores in the hours immediately after birth but scored in an effective feeding range within the first 36-48 hours (Matthews 1988). Most women are discharged within 48 hours therefore the study concentrated on this time.

Setting

The study took place in 2010 in a Health Board area in Scotland where there were 14,043 live births in the year ending March 2010 (ISD Scotland 2013). The Maternity Units in the study area were fully Baby Friendly Accredited (Unicef UK Baby Friendly 2013).

Sampling and recruitment

Purposive sampling was used to recruit a maximum diversity sample from two different midwife led maternity care clinics, this also included women new to Scotland whose views might vary from the cultural ‘norm’ (Ritchie & Lewis 2003). Women were recruited from antenatal clinics for the antenatal focus groups. Participants for the postnatal focus groups were either recruited from the antenatal clinics but not included until their babies were a few weeks old (five women) or from a hospital postnatal breastfeeding support group (three women). An exception was made for one woman from this support group who was feeding her second baby but wanted to be included. Recruiting postnatal women from a support group gave access to women who had recently given birth. The closeness to an event with such definitive meaning is less likely to give rise to recall bias (Bowling 2007).
Women were eligible if they were:

- Primigravida and at least 28 weeks pregnant (singleton pregnancy) or had initiated breastfeeding in the previous 6 months, had given birth in hospital and been discharged from hospital with their baby.
- Able to read and/or understand English [to be able to understand the written prompts].
- Living within the study area and over 16 years of age.

Participants were approached by first author (ME) and given study information. If verbal consent was obtained, the study was explained and a participation pack offered. A reply slip collecting contact details was completed to allow the researcher to ring the women to arrange a date and time for the focus group discussion and for the women to ask questions about the research. Postnatal women were phoned later when their baby was a few weeks old. Recruiting was quite challenging with regard to postnatal women with a range of 1:4 to 1:7 of those contacted for each group managing to attend. Antenatal and postnatal women were recruited to five separate focus groups and were only interviewed once.

A sampling framework was developed to identify midwives with a range of experiences and from different areas of practice as these variables may affect knowledge and confidence in helping women to breastfeed (Cantrill et al. 2003). Meetings with lead midwives were held to raise awareness of the study. Midwives who practised in a range of midwifery settings were given study information packs and were invited to approach the researcher. Individual interviews were conducted in convenient periods during midwives’ shifts.

**Data collection**

Data from women were gathered though five focus groups, one of which had only one participant, lasting one to two hours, in rooms used for groups in the clinic setting. The participants completed the consent and demographic information forms and were invited to ask questions before commencing the focus group or interview (see Tables 1, 2 and 3). A topic guide, informed by the literature and the potential sequence of events after the birth, was used to ask open ended questions. Semi-structured interviews lasting one to two hours were conducted individually with the midwives as working patterns presented difficulties arranging focus groups. The
interviews took place in a quiet office in the hospital. An interview guide was adapted for the midwife’s practice setting and was designed to mirror the sequence of events after the birth. A series of colour photographs showing skin to skin and the sequence of pre-feeding/instinctive behaviour at birth (“Feeding cues at birth” Figure 1) were shown to the women and midwives and aimed to increase active participation in the discussion and to assess knowledge of instinctive behaviour. Informed consent for audio recording was obtained for all focus groups and interviews and these were transcribed by the first author. Data collection was completed during 2010.

The research team and potential bias
The research team comprised of a retired midwifery lecturer (ME), a senior midwifery lecturer (RM) and a senior social scientist (RJ). The main person collecting the data was ME (supported by RJ). All focus groups were conducted by ME and facilitated by RJ. Individual interviews were conducted by ME. Potential bias may relate to a professional career as a midwife and midwifery lecturer and an interest in breastfeeding, however, the risk was minimised through involving all authors in coding and interpretation of data and the interviewer(ME) introducing herself to the unknown participants as a researcher rather than as a midwife. Furthermore the research was conducted in a health board area which was separate from ME’s area of practice and/or teaching. ME was not known to the midwives or women.

Ethics and informed consent
The study received ethical approval from the University and the NHS Research Ethics Committees.

Analysis
A hybrid process of inductive and deductive thematic analysis was undertaken within the paradigm of interpretivism, which looks for concepts and ideas which can interpret the social meaning of the participants’ experiences (Snape and Spencer 2003). The computer package NVivo 8 was utilized to inductively code the transcript data. Inductive coding was first carried out by searching for patterns and associations in the data (Ritchie & Lewis 2003). Transcripts were coded initially according to concepts drawn from the topic guide then as recurring words and concepts emerged from the data, new inductive codes were assigned. The coding was then analysed to create tree structures/themes. (Richards 2009). A process of
thematic analysis was used (Pope & Mays 2006). Three themes emerged, Expectation; Knowledge; Experience.

The findings were then subjected to deductive analysis using a template of SCT codes (Figure 2) developed a priori (Crabtree and Miller 1992; Fereday and Muir-Cochrane 2006) based on Social Cognitive Theory (Bandura 1986). This hybrid approach was adapted for SCT and the resulting template of SCT codes was applied to the results of the inductive coding that had previously emerged from the N-Vivo process. Deductive analysis was applied during line by line analysis of the results to interpret and understand how the inductive themes were embedded in SCT. At all stages in the conduct of the qualitative study and analysis of the data all authors independently interrogated the processes as assurance of credibility, transferability, dependability and confirmability.

Results
Eighteen women participated (ten antenatal and eight postnatal) in the five focus groups and self identified their ethnicity (Table 1 and 2). Another 13 women agreed to participate but did not attend and no further detail is available for them. The mean age of the babies was six weeks (age range 11 days -12 weeks).

Table 1. Socio-demographic characteristics (antenatal women)

<table>
<thead>
<tr>
<th>Focus Group no.</th>
<th>Age ranges of women in years</th>
<th>Educational status</th>
<th>Ethnic group</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. (antenatal) four participants</td>
<td>26-35</td>
<td>Three had masters/PhD and one to degree level</td>
<td>All Scottish</td>
</tr>
<tr>
<td>3. (antenatal) six participants</td>
<td>26-40</td>
<td>Three had masters/PhD and three to degree level</td>
<td>Polish, German, Spanish, Dutch, Chinese, Scottish/Pakistani</td>
</tr>
</tbody>
</table>

Table 2. Socio-demographic characteristics (postnatal women)

<table>
<thead>
<tr>
<th>Focus Group no.</th>
<th>Age ranges of women in years</th>
<th>Type of delivery</th>
<th>Breastfeeding status</th>
<th>Educational status</th>
<th>Ethnic group</th>
</tr>
</thead>
</table>


Eighteen midwives participated, twelve aged less than 45 and six over 46 years. Semi-structured interviews were conducted at convenient periods during the midwives’ shifts. All the midwives had attended UNICEF breastfeeding education programmes (Table 3).

Table 3. Recruitment of midwives

<table>
<thead>
<tr>
<th>Group</th>
<th>Category and No</th>
<th>Category and No</th>
<th>Category and No</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Community</td>
<td>Labour ward</td>
<td>Postnatal ward</td>
</tr>
<tr>
<td>1-5 years’ experience</td>
<td>0</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>6-15+ years’ experience</td>
<td>6 (including 2 home birth midwives)</td>
<td>3</td>
<td>5 (including 1 mentor for midwives whose specialised field was breastfeeding)</td>
</tr>
</tbody>
</table>

The results presented here are our analysis of the relation between the expressed views and experiences of women and midwives. We have identified similarities and differences between the two groups and linked this to SCT and potential opportunities for practice change. Quotes are not attributed in the text as wordage is limited. Table 4 informs the results section below. Finally we will explore Social Cognitive Theory for breastfeeding initiation from the perspective of both women and midwives in the discussion.

Table 4. Summarises the results of the data and is explained more fully in the accompanying text.
<table>
<thead>
<tr>
<th>Women</th>
<th>Midwives</th>
<th>Relationship to SCT</th>
<th>Potential interventions/Practice changes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antenatal Expectations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Women anticipated having skin to skin contact with their babies as pleasurable.</strong></td>
<td>Midwives expected to facilitate and were warm and enthusiastic about skin contact at birth.</td>
<td>Perceived self-efficacy, Motivation, Vicarious experience, Outcome expectations: women and midwives.</td>
<td>Antenatal information and education for women. Encourage instinctive behaviour: women and midwives.</td>
</tr>
<tr>
<td><strong>Women did not expect a specific length of time for skin contact.</strong></td>
<td>Midwives usually expected to limit the time given for skin contact.</td>
<td>Social outcome expectations: midwives</td>
<td>Allow more time to continue skin contact until attachment: women and midwives.</td>
</tr>
<tr>
<td><strong>Most women expected to breastfeed but expressed uncertainty about learning to breastfeed.</strong></td>
<td>Midwives were focused on ensuring they latched the baby on (“hands on”) before transfer out of the labour ward.</td>
<td>Outcome expectation: midwives Lowered SE/Psychological state: women</td>
<td>Midwives enabled to support skin contact and to normalise waiting for instinctive attachment.</td>
</tr>
<tr>
<td><strong>Few women anticipated feeding difficulties.</strong></td>
<td>Midwives expected problems if the baby did not attach.</td>
<td>Lack of enactive attainment, Lowered self-efficacy, Negative social outcome expectation, Psychological state: women and midwives</td>
<td>Antenatal education to include problem solving and realistic expectations for both groups. Engender a feeling in the women of being able to control their environment.</td>
</tr>
<tr>
<td><strong>Antenatal Knowledge</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Women did not know about instinctive behaviour.</strong></td>
<td>Most midwives did not mention instinctive behaviour.</td>
<td>Lack of vicarious experience: women and midwives</td>
<td>Develop an understanding in women and midwives of the normal unhindered behaviour of babies at birth.</td>
</tr>
<tr>
<td><strong>Women were not aware of how they would enable their baby to attach.</strong></td>
<td>Some midwives used skin contact in the postnatal ward to calm babies when they were attempting “hands on” to achieve attachment.</td>
<td>Negative social outcome expectation: women and midwives</td>
<td>Develop an understanding in women and midwives of the possible delay in babies’ ability to attach due to the effects of labour and analgesia.</td>
</tr>
<tr>
<td><strong>Postnatal Experiences</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>A few postnatal women experienced instinctive attachment</strong></td>
<td>Few midwives had experience of facilitating instinctive attachment</td>
<td>Enactive attainment, Verbal encouragement Outcome expectation: women and midwives</td>
<td>Encourage instinctive behaviour.</td>
</tr>
</tbody>
</table>
| **More than half the women experienced** | Midwives experienced | Lack of enactive attainment, | Discourage “hands on”.

Table 4. Comparison of women’s and midwives’ expectations, knowledge and experiences*
<table>
<thead>
<tr>
<th>Women</th>
<th>Midwives</th>
<th>Relationship to SCT</th>
<th>Potential interventions/Practice changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>difficulty with attachment and were upset about ‘hands on’.</td>
<td>disappointment if they failed to attach the baby using ‘hands on’</td>
<td>Lowered self-efficacy, Negative social outcome expectation, Psychological state: women and midwives</td>
<td>Develop other ways of supporting women centred care where women are reassured, informed, given choice and learn to attach baby themselves.</td>
</tr>
<tr>
<td>Women were unaware of the effect analgesia could have on babies’ feeding ability.</td>
<td>Midwives were aware of the effect of analgesia on the babies.</td>
<td>Lack of enactive attainment: midwife and the mother</td>
<td>Develop awareness of the effects of analgesia in both mother and baby and explicit acknowledgement of same by midwives.</td>
</tr>
<tr>
<td>Women experienced feeling dependent on midwives.</td>
<td>Midwives attributed women with having a lack of responsibility and/or skills.</td>
<td>Lack of enactive attainment, Lowered self-efficacy: women</td>
<td>Promote a more natural environment for childbirth and reassure and encourage women’s confidence and skill.</td>
</tr>
<tr>
<td>Women were in an unfamiliar and unsupportive environment.</td>
<td>Being too busy stressed the midwives.</td>
<td>Lack of enactive attainment, Lowered self-efficacy, Negative social outcome expectation, Psychological state: midwives</td>
<td>Promote a more natural environment for childbirth and provide more postnatal support. Better postnatal resources could include peer supporters.</td>
</tr>
<tr>
<td>Women who had persisted by themselves said they were now more confident.</td>
<td>Midwives who had experienced personal success could empathise.</td>
<td>Enactive attainment: women and midwives</td>
<td>Encourage instinctive behaviour.</td>
</tr>
</tbody>
</table>

*bold type highlights areas where there were similarities*
Expectations

Primigravid women’s antenatal breastfeeding expectations varied but most were fairly confident of managing with help promised from the midwives. Some were keen or thought it looked easy; others were apprehensive and some expected to feel guilty if they failed, recalling friends who “were made to feel a little bit guilty about it”.

There were similar positive expectations of skin to skin at birth between the women and midwives but there was no mention of how long skin contact should last or that it might support instinctive baby feeding behaviour. At the time of this study the BFI guidelines recommended that midwives should help mothers initiate breastfeeding within a half hour of birth (World Health Organization 1998). According to the labour ward and community midwives in our study, this meant that mother and baby should be able to have skin contact for at least 30 minutes “it’s helping to control the baby’s temperature, it helps the baby calm down” but there was little expectation of continuing skin contact until the baby fed instinctively. Only one community midwife mentioned encouraging instinctive attachment, “look what you’ve done by yourself”. Instead midwives described an expectation of giving “hands on” help with attachment in the labour ward. This may arise in part from BFI guidelines as discussed above. The expectation to encourage the baby to attach in a limited time during the period of skin contact was reported regardless of how busy the labour ward was “they wanted folk out of labour suite and into the postnatal ward, clear the decks.” Such social outcome expectations (i.e. to avoid disapproval from midwifery colleagues) to encourage swift attachment “trying to shove a baby onto a breast” could also create stress and upset. Our data also suggests midwives anticipate the problem of failure to attach the baby, “trying to force the babies to feed because either mum or midwife is getting agitated … the babies just end up just recoiling from it.” So while there was limited expectation of instinctive attachment as part of skin to skin, the midwives in our study considered attachment to be their responsibility and the majority expected to physically “hands on” attach the baby to the breast. The impact of this on women midwives and breastfeeding will be explored in the section on ‘Experiences’.
Knowledge
There were similarities between women and midwives’ acknowledgement of instinctive behaviour. The “Feeding cues at birth” leaflet (Figure 1) was used to stimulate discussion around skin to skin and instinctive feeding behaviour. This elicited a positive response where women commented that it was “so natural” and that they hadn’t “realised how instinctive it was”. Women suggested the pictures were “helpful”, and “it’s outside your everyday experience on the whole”. There was no anticipation of possible effects of the birth or drugs on breastfeeding initiation. Midwives’ responses to the same leaflet (Figure 1), ranged from negative appraisals to more positive reactions but mostly stopping short of mentioning instinctive attachment.

Discussions around this leaflet and during the focus groups then highlighted women’s uncertainty about learning to breastfeed and lack of awareness of how they would enable their baby to attach. While the midwives were very positive and knowledgeable about most physical and psychological benefits of skin contact, they were not knowledgeable about the importance of this leading to instinctive attachment and the initiation of breastfeeding. Midwives in all areas of practice were also aware of the effects of analgesia on babies and knew an active alert baby was advantageous to starting breastfeeding soon after birth, “Yeah, I would say you do notice a difference yeah, especially with narcotics, em,----- that just totally knocks them off”. Midwifery knowledge came from professional experience, formal education and personal experience. The effects of their knowledge on women’s experiences will be discussed in the next section.

Experiences
This section will discuss women and midwives’ actual experiences of attachment and will include attachment difficulties and its management such as “hands on”, effects of labour and analgesia and feelings of dependency.

Where the baby attached instinctively postnatal women said they were surprised and pleased that their babies took the initiative to attach to the breast and start feeding during the period of skin contact “She just pretty much knew what to do, ah, very quickly”. Likewise midwives described being pleased and relieved when babies
attached in the labour ward, “Oh over the moon it’s great ‘cause you know that if it’s [the baby] rooting it’s attached it’s going to be a great wee feeder” and also saw this as encouraging for the women. However, there was a lack of experience of instinctive attachment and only one midwife said she encouraged mothers to achieve instinctive attachment “look what you’ve done by yourself”, or to continue using their own and their baby’s initiative to feed.

The majority of women experienced difficulty with their babies attaching at birth described feelings of “failure” and “embarrassment” or being “cheated” when their babies did not attach. Women were surprised when midwives handled their breasts in an effort to encourage the baby to attach and used emotive words such as “manhandled” and “grabbing”. Midwives also expressed disappointment, and sometimes anger, when they failed to enable the baby to attach “hands on”, “Em, frustrated, an, sometimes angry if you’ve maybe spent a long time and it’s just not for attaching”.

As women did not anticipate any effects of the birth or drugs on breastfeeding initiation, they were unprepared for any delay and/or difficulties “He was just too sleepy and just not interested in it, even when they put him on my chest he wasn’t rooting he wasn’t doing anything; admittedly I’d had some morphine.” Reflecting on their births women said they now realised that their baby’s reluctance to feed (not showing instinctive behaviour) at birth was not due to their personal lack of ability but instead could be related to circumstances at birth or analgesia in labour “It never occurred to me that your baby might not want to feed”.

Women’s birth experiences seemed quite negative with reports of tiredness and pain, dependency on the midwives and not feeling in control “I felt I was really dependent on somebody else”. This was regardless of whether this was an uncomplicated vaginal birth, an instrumental delivery or an operative caesarean section. Although midwives in labour and postnatal wards expected to physically attach the babies to the breast (as discussed above) they also expressed frustration at what they considered to be a lack of responsibility or effort on the part of the women in the postnatal ward “I’ve seen them in the ward like the baby’s lying in the
cot and the mum’s fully dressed in her bed and will say, ‘can you help me with breastfeeding?’” and seemed overwhelmed by the number of women needing help.

Women and midwives experienced the postnatal ward environment similarly but from different perspectives, emphasis was on busyness and lack of time. This meant that there was inconsistency in care “Every shift that came on they’d tell you to do it a different way”. Midwives in our study indicated that stress levels were higher and perception of efficacy was lowered when dealing with high numbers of women depending on their help “You could have 8 women that you are looking after in a day all feeding 8 to 10 times a day how do you divide yourself, you can’t.”.

Midwives could use skin contact in the postnatal ward to calm babies when they were attempting “hands on” to achieve attachment. Midwives said as babies became distressed they started to refuse to attach “if you (midwife) are putting a baby onto the breast they just become, they start to breast refuse”.

Personal experience was important for both women and midwives. For example women who had persisted by themselves said they were now more confident “we have all persisted and it has paid off”. Midwives, who had initially struggled to feed their own babies and then experienced personal success suggested that this had increased their understanding, empathy and confidence in helping women and were capable of encouraging effort and persistence and imparting confidence to women having difficulties “Since I’ve become a mum I understand the effect tiredness can have on mums”.

**Discussion of findings in relation to Social Cognitive Theory framework**

Our analysis of the data from women and midwives indicate that while both groups wanted breastfeeding to succeed they had different expectations of how this would happen. Both women and midwives rarely anticipated or experienced mastery of instinctive breastfeeding. Midwives were exposed to (vicarious experience) their colleagues’ ineffective breastfeeding support and poor breastfeeding outcomes while women had no exposure to (vicarious experience) other women initiating breastfeeding. Competing priorities in the busy postnatal period resulted in
In our study although some women were fairly confident and expected that breastfeeding would be straightforward and easy with help from the midwives, there was not an expectation by the women or midwives that the baby would feed instinctively. Previous research highlights idealistic expectations of breastfeeding being “easy and wonderful and natural” or automatic (Mozingo et al. 2000) pp122, (Hoddinott et al. 2012) but for participants in our study this did not equate with ‘instinctive’ feeding (Widstrom, Lilja, Aaltomaa-Michalias, Dahllof, Lintula, & Nissen 2011; Widstrom, Ransjo- Arvidson, Christensson, & Matthiesen 1987). Midwives outcome expectations focused on facilitating skin-to-skin contact but not instinctive attachment and instead anticipated physically latching babies on ‘for’ women, despite this being a Baby Friendly Accredited hospital. This may reflect both women’s and midwives’ lack of vicarious experience (witnessing) of instinctive attachment during skin-to-skin. The midwives were more likely to have witnessed other midwives attempting to attach babies to the breast “hands on”, where modelled behaviour encourages performance (Bandura 1977). It may also reflect gaps in midwives’ knowledge of instinctive attachment (Cantrill et al. 2004). Skin contact can be helpful in the initiation and continuation of breastfeeding (Thomson and Dykes 2011) and being supported to breastfeed within the first hour after birth and continue to breastfeed exclusively in hospital is associated with high breastfeeding self-efficacy scores and more positive experiences (Koskinen et al. 2014). However there may be a lack of expectation or experience of this resulting in attachment in a busy labour ward (Reddin et al. 2007; Weddig et al. 2011; West and Topping 2000) where the priority is often to transfer women out quickly (Furber and Thomson 2007).

Self-efficacy is increased through enactive attainment or mastery whereby being successful can increase belief in ability to perform (Bandura 1977). Midwives in our study expressed pleasure and relief when the baby attached in the labour ward, reflecting previous findings of satisfaction (Henderson et al. 2000). Failing to achieve attachment suggests the theoretical position of experiencing a lack of enactive attainment, reduced self-efficacy and a perception of a lack of skill on the part of the
midwife. In our study midwives appeared to achieve enactive attainment when they themselves attached babies “hands on”. There is considerable evidence of “hands on” being common practice in postnatal areas (Mozingo, Davis, Droppleman, & Merideth 2000). Mothers in our study and elsewhere do not find it helpful (McInnes & Chambers 2008) and it is thought to disrupt the neonate’s ability to suck effectively (Cooke et al. 2009) and can result in breast refusal (Vogel and Mitchell 1998). Thus the lack of instinctive attachment and the poor outcomes from “hands-on” attachment would have a negative effect on the midwife’s belief in her ability to help breastfeeding mothers and on the mother’s ability to feed. This could also hinder women feeling in control of their own behaviour and experiencing enactive attainment (being able to do it themselves). Feeling autonomous and being in control of one’s own actions are strong influences on thoughts and behaviour (Luszczynska & Schwarzer 2005).

The mother’s perception of breastfeeding progress and achieving feeding as planned (outcome expectations), can predict maternal breastfeeding self-efficacy in the first week (Blyth, Creedy, Dennis, Moyle, Pratt, & De Vries 2002; Dennis 2006). Women who have repeated successful breastfeeding experiences in the first week develop an increase in their perceived ability to breastfeed (Creedy et al. 2003) which was also evident in our study. Supporting mothers to feed their babies directly from the breast in the first 24-48 hours has been recommended to encourage continuation of breastfeeding up to six months (Forster et al. 2015).

Overall the reality of initiating breastfeeding for women in our study was not always positive. Women had anticipated starting to breastfeed easily but felt embarrassed, cheated and a sense of failure when the baby didn’t feed, reflecting previous findings (Kelleher 2006; McGrath and Philips 2009; Mozingo, Davis, Droppleman, & Merideth 2000; Thomson & Dykes 2011). Physical and mental wellbeing impact on an individual’s ability to carry out a behaviour (Bandura 1977) and the physical effects of birth can also be unexpectedly upsetting (Kelleher 2006). Women in our study who reported poor labour and birth experiences might have benefited from supported skin-to-skin and instinctive attachment which have been shown to be pleasurable, give closeness to their baby and a sense of achievement even after a difficult birth.
Emotional upset can affect lactation (Dennis 1999) and in one study (O'Brien et al. 2008) where 44% of the sample reported signs of postnatal distress within the first 14 days after the birth the duration of breastfeeding was significantly associated with psychological factors including self-efficacy.

There is good evidence for the impact of contextual factors such as narcotics (Brimdyr et al. 2015; Rajan 1994), care organisation, regional analgesia, episiotomy or instrumental birth (Sandall et al. 2016) on breastfeeding and the mothers' response to their infant. This knowledge did not seem to be shared with women who were unprepared for these effects.

In our study, as in other research (Dykes et al. 2003; Vogel & Mitchell 1998), the busy postnatal ward environment was not conducive to learning to breastfeed: midwives were busy, some were perceived to be uninterested, and there was a lack of continuity of care and inconsistency in the information. There was evidence of verbal persuasion whereby women were encouraged to persist with breastfeeding. However encouragement alone is unhelpful if the conditions for success, in this case consistent unhurried support, are not in place (Bandura 1977) and can leave women feeling alone with their difficulties (Dykes, Moran, Burt, & Edwards 2003). In the postnatal environment around women who are upset and having colleagues with differing attitudes and experiences and strict feeding policies, midwives may experience a lack of autonomy affecting their motivation (Luszczynska & Schwarzer 2005). Midwives in our study indicated feeling upset when women they had been helping gave up. People tend to avoid situations if they feel they lack competency, which may explain women's reports of lack of support and may be reflected in findings where midwives were said “to have lost their patience with supporting breastfeeding” (Reddin, Pincombe, & Darbyshire 2007)pp75). Midwives who said they had personal experience of breastfeeding difficulties and subsequent success gave positive support to women (West & Topping 2000).

A sense of control of the environment (Luszczynska & Schwarzer 2005) is important for building self efficacy, however, events in the postnatal ward were out with both
the women’s and the midwives control. Circumstances and unfamiliar surroundings affected women’s ability to be autonomous, develop rapport with the midwives or be able to start to develop their skill in breastfeeding. An environment that does not support peoples’ psychological needs reduces motivation to act, in this case to breastfeed, or provide effective support. Shared agency where the mother and midwife are able to share power and control over the learning process can enhance the mother’s experience (Ryan, Team, & Alexander 2017).

Four environmental factors support positive outcomes: feelings of being comfortable; perception of being able to control one’s environment; being able to develop a skill and the behaviour being considered normal (Dzewaltowski et al. 2002). UNICEF UK BFI new standards suggest improving the environment to encourage feelings of being comfortable and able to control one’s environment (Entwistle 2013).

**Strengths and limitations**

This is the first study to apply Social Cognitive Theory to deductively analyse both women’s and midwives’ inductive responses to initiation of breastfeeding. It is also the first study to use a novel images/tool of instinctive behaviour to stimulate discussion during the focus groups and interviews. The advantage of SCT is that it focused on situation specific behaviour and gave a rich explanation of women’s and midwives’ experiences and a deeper understanding of the resulting influences on behaviour than describing the behaviour alone. A further strength could be claimed that in spite of the study being carried out in a Baby Friendly Accredited hospital it may provide an insight as to why initiation of breastfeeding continues to present a challenge.

The study limitations primarily relate to sampling and recruitment: recruiting women in general was challenging and we failed to recruit teenagers despite a range of efforts. The recruitment areas were chosen to enable a wide and diverse population to reflect a range of views but participants were older and more highly educated than the general childbearing population and therefore do not represent the wider childbearing population. Fewer women attended than were recruited with various reasons for non attendance. Perhaps telephone interviews would have suited more women. As fewer newly qualified midwives were practising than anticipated we recruited a higher number of experienced midwives.
As with any qualitative research, this study focuses on depth of understanding of a specific phenomenon or experience in a particular context (Thomas and Magilivy 2011). This is different to quantitative research which can in certain circumstances be generalised to the whole population. The transferability of these findings requires careful consideration of the unique clinical environment and the model of care within the research area. Also since the data was collected practice may have changed and perhaps further research could be focused on specific areas of practice such as skin to skin.

**Implications for practice**

Further research is required into antenatal education and professional practice to enable women to have more realistic information about initiation of breastfeeding, access to positive vicarious experience and information about possible effects of the birth and analgesia. Midwives could be supported to have the time and confidence in their ability to provide skilled woman-centred care rather than ‘doing for’ women. This may present challenges as in Scotland there were rising sickness absence and vacancy rates in midwifery in the year 2015/6 and challenges in the future as over a third of nursing and midwifery staff were aged 50 and over (Audit Scotland 2016).

**Conclusion**

To our knowledge, this is the only study that has interviewed both women and midwives specifically about initiation of breastfeeding. This has allowed for deeper insights into this critical period and enabled a comparison between the data obtained from mothers and midwives. This is also the first piece of research to explore women’s antenatal expectations in relation to skin to skin contact and their baby’s instinctive behaviour at birth.

There may be a mismatch between the expectations and experiences of women and midwives underpinned by a lack of knowledge and positive vicarious experience which results in lack of enactive attainment, poor experiences, negative feedback, dependency, emotional stress and reduced self-efficacy.

While women anticipate breastfeeding to be enabled with midwives help, midwives anticipate problems. Instinctive feeding evolving from skin to skin at birth is not
expected to lead to breastfeeding by mothers or midwives and is therefore not facilitated.

**Ethical statement**

1. Conflict of interest
   
   This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.”
   “No conflict of interest has been declared by the author(s).”

2. Ethics and informed consent
   
   The study received ethical approval from the University and the NHS Research Ethics Committees.

3. Funding sources
   
   No funding was accessed for this study

4. Clinical Trial Registry
   
   Not applicable

5. Acknowledgements
   
   We would like to thank the women and midwives who participated in this study and the midwives who gave their support and helped with recruitment.
   
   Our gratitude is extended to Sue Saunders IBCLC, CIMI who kindly gave permission to use the photographs used in the Feeding Cues at Birth leaflet. Contact details:

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   **IAIM Australia**
   
   Official Partner to the World Health Organisation Maternal, Newborn and Child Health Program
   
   Full Member of the Mental Health Council of Australia
Authors’ contributions
This study was carried out as part fulfilment of a PhD award to ME. RJ and RM were her supervisors. The main person collecting the data was ME (supported by RJ). RJ was involved in developing the questions and attended all the focus groups. RJ and RM were involved in coding the transcripts and paid attention to possible areas of bias. ME performed the qualitative and deductive analysis and drafted the manuscript. Both RJ and RM revised the manuscript. All authors read and approved the final manuscript.
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Ref Type: Journal (Full)


Bramson, L., Lee, J.W., Moore, E., Montgomery, S., Neish, C., Bahjri, K., & Melcher, C.L. 2010. Effect of Early Skin-to-Skin Mother-Infant Contact During the First 3 Hours Following Birth on Exclusive Breastfeeding During the Maternity Hospital Stay. *Journal of Human Lactation* 0890334409355779 available from: http://jhl.sagepub.com/cgi/content/abstract/0890334409355779v1


ISD Scotland. Child Health. website . 2013. 6-2-2013. Ref Type: Electronic Citation


Unicef UK Baby Friendly. New Baby Friendly Standards. website . 2012. 6-2-2013. Ref Type: Electronic Citation

Unicef UK Baby Friendly. Unicef Awards. website . 2013. 6-2-2013. Ref Type: Electronic Citation


Babies love to be in skin contact with their mothers from just after birth. This helps regulate the baby's temperature and breathing and babies cry less when held this way. After birth if held in continuous contact with the mother's skin babies may:

- **Suck on the breast**
- **Open their eyes**
- **Use their hands to massage their mother's breast**
- **Bring their hands to their mouth.**

- **Turn their mouth towards their mother's nipple**
- **Touch the nipple with their hand**

- **Lick their mother’s breast**

New mothers learn about their baby's behaviour very quickly in the first few weeks but in the first few days it may be helpful to learn how to recognise the very subtle cues you may see when he/she is hungry or when he/she is too sleepy to feed. Your midwife will explain how to hold the baby and how you help him/her to attach to the breast.

A wee note about sleepy babies: Babies can be quite sleepy after birth and may not show signs of being ready to feed, especially if mum has had an injection in labour for pain. Continuing with skin contact helps babies to be interested in feeding. If mum has had an epidural babies can go from sleepiness to crying without the stages in between or the opposite, from crying to sleepiness without the stages in between.

Photographs courtesy of Sue Saunders (Lactation Consultant Services)
### Figure 2. Code Template – Social Cognitive Theory

<table>
<thead>
<tr>
<th>Code and Label</th>
<th>Definition</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Self –efficacy</td>
<td>How strongly a person believes in their ability to be able to attain a level of performance in a particular situation or whether they avoid the situation if they do not believe they are capable of achieving their desired outcome (Bandura 1977; Bandura 1986).</td>
<td>Statements about how well a person thinks they can or can’t do something.</td>
</tr>
<tr>
<td>2. Enactive attainment</td>
<td>Mastery experience of being successful in an activity (Bandura 1986).</td>
<td>Facilitation of instinctive behaviour/positive achievement/breastfeeding confidence.</td>
</tr>
<tr>
<td>3. Lack of enactive attainment</td>
<td>Failure lowers self-efficacy, particularly if something goes wrong in the first few attempts despite effort and no unfavourable circumstances (Bandura 1977; Bandura 1986). Failure reduces self-efficacy if it is thought to be caused more by lack of skill than being in an unusual situation (Bandura 1977). If the person doubts their ability they are more readily affected by what they perceive as failure and may stop trying and give up (Bandura 1986; Bandura 1989).</td>
<td>Where breastfeeding goes wrong / where women try but just don’t know what to do when the baby does not attach.</td>
</tr>
<tr>
<td>4. Vicarious experience</td>
<td>By watching other people model behaviour especially social behaviour or perform an activity/task, a concept is formed of the behaviour and how the performance of this behaviour affects the other person. Seeing others coping and persevering can encourage performance. Watching someone like themselves succeeding, who they can identify with, helps (Bandura 1977; Bandura 1986; Bandura 1989). Similarly if watching another person they identify with and who tries hard but fails at the activity/task then this can reduce feelings of self-efficacy (Bandura 1986).</td>
<td>Role models of people breastfeeding or hand expressing.</td>
</tr>
<tr>
<td>5. Verbal/social encouragement</td>
<td>If a person is encouraged to think they are capable of a task they may make more effort (Bandura 1986). People can be influenced by suggestions that they could perform the activity/task especially by someone they find credible but only if the strategies to help them succeed are also in place (Bandura 1977).</td>
<td>Supportive help/practical/emotional</td>
</tr>
<tr>
<td>6. Physiological/ psychological state</td>
<td>Success is more likely if the person is not highly anxious as the activity/task may increase the anxiety. A person considers how anxious or physically hampered they are when assessing their ability to complete a task (Bandura 1977; Bandura 1986).</td>
<td>Positive statements about progress. Negative statements about feelings/emotions Eg. Sadness, guilt, anger.</td>
</tr>
<tr>
<td>7. Outcome expectancies</td>
<td>Outcome expectation is the judgement by a person of the likely consequences of behaviour or what the person expects will happen if the behaviour is performed. This influences the choice of what a person may try to do. Behaviour that can be anticipated to be beneficial can increase self-motivation</td>
<td>This will be a description of what the person anticipates as the consequences of their behaviour, physical, social or self evaluative.</td>
</tr>
<tr>
<td>Code and Label</td>
<td>Definition</td>
<td>Description</td>
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<td>(Bandura 1977; Bandura 1997).</td>
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<tr>
<td>8. Motivation</td>
<td>An ability to consider future events where people are motivated to do something by thinking about how well they might be able to perform and also to anticipate the positive and negative aspects of their actions. A person then plans to do what they think will be worthwhile and highly valued (Bandura 1997). A person’s belief in their self-efficacy is a large part of this motivation (Bandura 1989; Bandura 1997). Thinking about and anticipating what they plan to do can motivate a person even when the circumstances are not especially favourable (forethought) (Bandura 1986; Bandura 1989). People who don’t think of themselves as efficacious think more of how they will fail and the thought of problems can lead to exaggeration of the anticipated level of difficulty if people doubt their own abilities (Bandura 1986; Bandura 1989).</td>
<td>Influences on decision to breastfeed. Problems arising because of lack of awareness/ knowledge of possible events/difficulties that could occur.</td>
</tr>
<tr>
<td>9. Self-regulation</td>
<td>Self-appraisal plays a large part in the actions people take as action is not simply influenced by others. The self-directed efforts people make include arranging their surroundings to be helpful, having prompts and incentives as well as being influenced by others (Bandura 1986). People judge how capable they think they are to be able to achieve a level of performance which is their perceived self-efficacy ((Bandura 1986).</td>
<td>Statements explaining what women thought they would be able to do.</td>
</tr>
<tr>
<td>10. Agency and Goals</td>
<td>Goals incentivise the person and the more immediate specific goals guide behaviour (Luszczynska &amp; Schwartz 2005) The goals people set for themselves are affected by the progress they make especially if the person has doubts about their capability (Bandura 1989).</td>
<td>Statements about what the person intends to do. Statements about changing plans.</td>
</tr>
<tr>
<td>11. Reflection</td>
<td>An ability to think through experiences and thoughts of these experiences. This can enable a person to learn about themselves and their surroundings and to modify how they think about things (Bandura 1986).</td>
<td>Statements about changing thoughts of an experience or event.</td>
</tr>
<tr>
<td>12. Effort and persistence</td>
<td>Development of perseverance is important in helping to raise efficacy expectations as some difficulties that can be overcome teach that some sustained effort is needed (Bandura 1977). The more self-efficacy a person feels the more effort is made and the longer he/she will keep trying even if the activity/task is not easy especially if they expect eventual success (Bandura 1977; Bandura 1982; Bandura 1986).</td>
<td>Statements that convey the person makes persistent effort to achieve their goal.</td>
</tr>
</tbody>
</table>