Breastfeeding, motivation and culture: an exploration of maternal influences within midwife-led instruction in an Asian setting
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**Background:** Breastfeeding is a normal physiological behaviour influenced by layers of internal and external factors. Motivational and cultural influences play an important role in maternal decision making and behaviour, impacting both the initiation and duration of breastfeeding.

**Aim:** The aim of this study was to identify and analyse cultural and motivational links within midwife-led instruction in an Asian setting.

**Method:** Framed within a motivational instructional model and a cultural framework, an observational analysis of all routine breastfeeding instruction was completed (n=204). Systematic, theoretically based thematic and content analysis was completed. Breastfeeding motivational measurements were made, to gain a motivational profile of all breastfeeding mothers (n=183).

**Results:** Cultural and motivational components embedded into routine instruction included congruent goal structures combined with maternally and culturally relevant breastfeeding instruction. Breastfeeding champions, a high organisational value and supportive policies and practices provided consistent maternal care. The motivational maternal profile suggested a higher than normal value for breastfeeding and midwife support.

**Conclusion:** Maternal motivation lies at the heart of women's decisions and experiences. Motivationally consistent and culturally relevant instruction is critical to the initiation and sustainment of breastfeeding. Identifying the underpinning positive and negative cultural values and influences will empower midwives to facilitate optimal breastfeeding achievement in mothers.
of Midwives (RCM) emphasises the challenges facing many women today including a lack of support and appropriately trained and skilled staff, and economic and social pressures on women to return to work (RCM 2018). This creates a less than optimal environment for mothers considering breastfeeding, especially for the first time.

Globally there are wide variations in breastfeeding practices between high, middle and low-income countries with one in five infants in high-income countries never breastfed, in comparison to one in 25 in low and middle-income countries (Arts et al 2018). Evidence suggests that in high-income countries it is low-income mothers who are less likely to breastfeed, in contrast to low-income countries where it is more often wealthy mothers who do not breastfeed (Arts et al 2018). Factors contributing to this include caregiver and societal beliefs which favour mixed feeding, a lack of skilled staff and breastfeeding champions and a lack of knowledge and support in effective breastfeeding techniques (WHO & UNICEF 2014). The authors believe these factors contribute to the complexity of breastfeeding behaviour and demonstrate a range of cultural, family and economic influences which are also impacting breastfeeding behaviour. In Thailand for example only 40% of babies are breastfed within one hour of birth and 23% are fed exclusively up to six months, although the Ministry of Health have now set a target of 50% by 2025 in line with global targets (National Statistical Office & UNICEF 2016, WHO 2019).

The emphasis on the value and benefits of breastfeeding has fuelled global research into the identification of breastfeeding influences. These have now been identified as education, self-esteem and social factors (Chopel et al 2019, Parry et al 2019, Tang et al 2019). Evidence suggests that when professional support is offered to women the duration and exclusivity of breastfeeding behaviour is increased but the timing and form of support remains debateable. A Cochrane review of 24 studies (n=10,056) purported that there was little difference in the initiation and duration of breastfeeding behaviour between targeted antenatal programmes and routine care (Lumbignon et al 2016). In clinical contexts, where financial and human resources are becoming increasingly limited, it is critical to understand the range of determinants which impact breastfeeding behaviour in order to support mothers in their decision making (McFadden et al 2017). This includes influences that impact both maternal decision-making and motivation.

**Motivation**

Research into motivation has become a focus in breastfeeding behaviour and education within the last 20 years and suggests a range of influences which include value, self-efficacy, satisfaction, family dynamics, socialisation as well as transient factors (Stockdale et al 2008b, Avery et al 2009, Pinto et al 2016, Tuthill et al 2016). Motivation has been defined as that which both energises and guides a behaviour towards achieving an identified goal (Harackiewicz & Sansone 2000). With the wide breadth of motivational theories and influences now discussed within research it may be a challenge for midwives and health professionals to explore and understand motivation. However, one key theoretical paradigm has been the selection of behavioural cognitive theories which include expectancy value theory, social motivation, attributional theories and competency theories which are as interlinked as maternal behaviours (Dornan 2015). Stockdale et al (2011) propose that rather than considering motivation as a single construct it would be better viewed as a diamond which can only be fully appreciated when explored from multiple perspectives. Indeed, examining and analysing motivation from multiple angles provides midwives with an opportunity to deepen their knowledge, reflect on practice and increase the effectiveness of their interventions. Understanding human motivation and mothers’ intrinsic and extrinsic goals and their need for feedback to sustain and persevere in their breastfeeding behaviour are key factors in achieving optimal outcomes (Stockdale et al 2011, Dornan 2015).

**Culture**

A critical factor in understanding breastfeeding behaviour in different countries and contexts is the recognition of cultural impact. Elliot (2010) suggests that the term culture has different associations depending on whether we have in mind the development of the individual, group or society but argues that each of these is inextricably linked. Culture is frequently manifested at different levels of depth and affects both behaviour and interpretations of the visible and invisible world. In fact, culture lies at the heart of both identity and behaviour. One seminal concept was the recognition that individuals and groups may have strikingly different concepts of themselves and others through their cultural value systems which can affect how they perceive their experiences including cognition, education and motivation, which in turn may impact achievement of aspired goals (Markus & Kitayama 1991, Oettingen et al 2008, Dornan 2015). Breastfeeding as a maternal behaviour occurs across cultures but while there is recognition of the implications of culture, less is known of the cultural values which transcend or immobilise behaviour. A literature review exploring breastfeeding and culture suggested that cultural norms related to the concept of breastfeeding, attachment and maternal obligation seemed to bring together an ideology of value, tradition, meaning and practice which may create a powerful motivational influence (Dornan 2015). Significant differences exist...
between cultures, especially between those identified as Western individualistic cultures and the ‘collective’ or community cultures of Asia as defined by Schwartz (1990) and Hofstede (2001) who were crucial early contributors to the exploration of culture. However, within these differences and similarities there may be valuable lessons and resources which, when explored, could influence and change national and global midwifery practice, particularly within the person-centred approach now evident within nursing and midwifery in the UK (McCormack & McCance 2017). This study analysed the influence of motivation and culture on breastfeeding behaviours and potential application to practice within a global context.

**Aim**

The aim of this study was to identify and analyse cultural and motivational links within midwife-led instruction in an Asian setting.

The objectives were to:

- Report the findings from a range of studies of breastfeeding instruction within a university hospital in Thailand.
- Identify key motivational components with breastfeeding instruction.
- Explore the motivational profile of mothers initiating breastfeeding.
- Examine the impact of culture on education and maternal value for breastfeeding.

**Method**

This study was framed within the macro-theoretical ARCS model of motivation, adapted into breastfeeding (Stockdale et al 2008b, Stockdale et al 2014). ARCS stands for Attention: that which catches a person’s attention, Relevance: the information on a topic which is relevant to the person, Confidence: the instruction and content which builds a person’s confidence and Satisfaction: that which allows the person a sense of achievement upon reaching a desired goal.

Designed to identify motivational strengths and weaknesses within educational instruction, ARCS offered a systematic process in the identification and analysis of motivational influences in breastfeeding through a process of gathering information on antenatal and postpartum education and motivational profiles of breastfeeding mothers. As the experiences of learning and breastfeeding are common to all cultures it was considered that this theoretical framework would allow for the analysis of education. However, to allow for the additional focus on culture a further model was adapted into the framework to analyse the influences of national, organisational and individual cultures (Gardenswartz et al 2003, Dornan et al 2017). Data collection was completed in a three-phased approach including national and corporate policy analysis, observational analysis of all breastfeeding instruction and a motivational analysis of breastfeeding mothers. This paper will report the results of the observational and motivational analysis with reference to the influence of policies and practice.

**Ethics**

Ethical approval was obtained from Ulster University and Chiang Mai University ethics committees prior to commencement of the study. Due to the potential vulnerability of the women and staff in this study, likely ethical issues including cultural expectations, language barriers and social consent were considered and addressed. Permission was also granted by the Faculty of Medicine and Head of Nursing Staff.

**Setting and data collection**

Data collection took place in a maternity unit within a university hospital in northern Thailand. The unit is a regional referral centre for women and supports an approximate birth rate of 2000 per annum. Data collection and analysis took place between 2014–2015. Midwife-led observations were completed in pre and postnatal contexts where routine breastfeeding instruction occurred through a convenience sampling approach. Prior to each observation, midwives and women were given information explaining the purpose of the research and invited to participate. Consent forms were then offered. A total of 62 midwives and nurses and 204 women participated in the observation study. Seventy-five hours of observation of breastfeeding instruction were completed in one-to-one and group sessions in eight pre and postnatal environments. Breastfeeding instruction was offered in each setting to both primigravida and multigravida women. Breastfeeding motivational surveys were collected in the postnatal unit of the hospital to women who had initiated breastfeeding within the unit. The Thai Breastfeeding Motivational Measurement Survey (TBMMS) was adapted and translated as per WHO (2014) guidelines with forward and back translation, review by an expert panel and pilot testing (n=37). Feedback included cultural preferences of positive responses to the Likert scale and responses to negative questions as a concern that offence may be caused or the perception of ‘trick’ questions. To address these concerns additional explanations of the purpose of the survey and confidentiality were added and adjustments made to the wording of the questions while maintaining the reliability of the scale (Dornan et al 2014, Dornan 2015). A prospective cohort of 200 women, calculated with a 10% attrition rate based on previous studies, was calculated by a priori power analysis and recruited by the team within the maternity unit. A total of 183 women completed the TBMMS.
Data analysis
Data for the observational analysis was collected by and included observation notes and a field diary to gather cultural, contextual and motivational content. Due to potential cultural and language barriers a second observer was included in some sessions to improve inter-observer reliability. All information was documented, transcribed and analysed immediately after each observation. The data was then mapped to a semi-structured observation schedule for analysis of motivational content. Identified data were also mapped to the Gardenswartz et al (2003) model of national, organisational and personal culture. Thematic and content analyses were completed through the implementation of Braun & Clarke’s (2006) qualitative thematic framework and a motivational goal framework (Harackiewicz & Sansone 2000). This goal framework included purpose goals: reasons to breastfeed; target goals: how to breastfeed successfully; and performance feedback indicators: how to know that you are breastfeeding successfully. These goals are related to the underlying motivational value and relevance components within motivation and form the guidelines in supporting women to achieve their goals. Results were examined by a second researcher with expertise in motivational research for validity. Cultural content and advice were carefully considered and integrated by the international research team. All results and changes were discussed and agreed by the research team.

The TBMMS was designed and tested to examine value and expectancy for success among breastfeeding women receiving best practice education with motivational constructs of value for breastfeeding, expectation for success and midwife support (Stockdale et al 2008a, Dornan et al 2014, Stockdale et al 2014). Data was entered into SPSS V21, checked and verified and data cleaning completed. Statistical analysis comprised of item and factor analysis.

Results
Context
Thailand is an upper middle-income country in South East Asia. Known for its welcoming culture it holds an influential role within the region and is a fascinating combination of tradition, respect and status. The Thai worldview of social harmony and hierarchy is firmly anchored in tradition and included respect for King Bhumibol Adulyadej (who was monarch at the time of data collection) and those in positions of authority (Dornan 2015). Family, Buddhism and attributes of knowledge, patience and virtue are central to the cultural value system. Analysis of national and organisational policies showed a clear support for breastfeeding which is also valued within the culture. Integration of international and national policies into the organisational policies and culture demonstrated a high value of breastfeeding across the multidisciplinary teams which was implemented throughout the unit (Dornan 2015, Dornan et al 2017). These policies were evident in practice and included skin-to-skin, early initiation of breastfeeding and twice daily midwife-led group teaching sessions on the ward which demonstrated strategies to overcome early breastfeeding challenges such as blocked ducts, cracked nipples and breast care. Breastfeeding and maternal health classes were offered to all women within both antenatal and postnatal settings in the hospital. Daily antenatal classes were held with additional individual and group instruction within the antenatal clinic, labour ward, postnatal ward, lactation clinic and nursery settings. Additional classes including a self-efficacy class to build women's confidence to breastfeed and a postnatal discharge class were held regularly on the main postnatal ward. Although all midwives participated in the breastfeeding instruction there was also a designated breastfeeding champion who took the lead in teaching and promoting breastfeeding in each context. This resulted in what appeared to be a sense of ownership among the nurses and midwives across the unit.

The Thai Breastfeeding Motivational Measurement Survey
The TBMMS consisted of 19 items designed to measure motivation through the constructs of value for breastfeeding, midwife support and expectation for success. Following descriptive, item and factor analysis the results were collated and reported. The overall initiation rate within the unit was over 90%, combined with a continuation rate of 68%. The mean age of mothers was 27 years. Mothers under the age of 20 accounted for 10%. Over 60% were employed and 40% had completed secondary school. Analysis for validity and consistency showed a Cronbach Alpha score of 0.923 with a high mean within items ranging from 6.91–4.74. However, the results showed a high level of skewness and kurtosis across the items. This level of high skewness demonstrated a high ceiling effect which, due to the non-normality of distribution, left little difference between the scores. The Mann Whitney test was completed and showed a wide variance between the items but led to a risk of poor factor structure. Due to this and the high level of skewness and kurtosis full factor analysis could not be reliably completed. The positive responses and high ceiling effect suggested a high maternal value for breastfeeding and midwife support, but further testing of the survey should be completed to test for reliability and validity in motivational profiling of breastfeeding mothers in a different setting.

Motivation
Identification of the motivational components was completed through the analysis and collation of
motivational goals and themes offered during each breastfeeding interaction. Following content analysis initial results were collated into a goal trajectory. A goal/learning trajectory is a researcher-based, empirically supported description of a network of constructs which forms the basis for instruction (Sztajn et al 2012). In this study the goal trajectory was mapped between the settings to identify the number and type of goals that were set by midwives in order to measure the motivational content of the instruction (Figure 1).

Motivational goals contained within the written materials included 36 purpose goals, 44 target goals and one PFI.

Following thematic analysis, it was evident that breastfeeding instructional goals were introduced routinely as ways to motivate women to breastfeed. There was one main overarching goal and a range of higher order and attainment goals which were set within both the antenatal and postnatal phases of care. These included the concept that breastfeeding was always the best option for mum, baby and for Thais. The cultural content was woven throughout the instruction and used to attract attention and increase relevancy to breastfeeding. While the goal structure was complex the overall message communicated throughout the instruction was a positive one, with midwives promoting breastfeeding as a positive behaviour and outcome for individuals, communities and the nation. There was a range of higher order and attainment goals set within the instruction (Figure 2).

Within the higher order and attainment goals there were also multiple subthemes which reflected both the value of breastfeeding and the expectation for success that was being set within the instruction as well as the cultural influences (Figure 3).

Many of the goals emulated the high value of breastfeeding which was evidenced in the policies and practices within the unit and combined practical suggestions with evidence and support. The thematic analysis also showed clear motivational components within the instruction. For example, many of the themes within ‘Breast: best option’ included reasons why women would want to breastfeed and highlighted both the benefits and convenience of breastfeeding. This included the value of attachment, protection, convenience and multiple physical benefits, especially during the antenatal period. (For codes of the data collection see Table 1).

Examples of this include: natural contraception (PNDCV), breastfeeding helps you lose weight (PNDC HN), perfect nutrients (PNDCV), and:

‘Wherever you are, even if you are travelling you can still breastfeed.’ (ANC 5 MW2)

There was a significant focus on building maternal confidence across the themes which was incorporated across the antenatal and postnatal instruction:
The nurse said it would take time to get used to learning to breastfeed and to learn new ways of doing things. You just have to be patient and persevere. Just take one step at a time; in the end you will be able to achieve the best for your child. (SECV2)

‘There are three stages to breastfeeding; stage 1 where your body just starts to get ready in pregnancy, stage 2 when just before you have your baby and your body starts to produce milk and stage 3 when your milk comes in... don’t worry you’ll be ok.’ (PNW1 MW1)

The combination of these goals helped the mother know that there will be less milk in the early days but as she keeps feeding her milk supply will increase, thus providing the goal and motivation to keep feeding longer. The value of breastfeeding was also emphasised through goals such as:

‘By helping mum and child to be able to experience their love and show love to each other they can both get the benefit from the attachment.’ (SECV)

Goals were also combined to show the mother how to breastfeed and how to know that she was doing it successfully:

‘Having correct positioning will help ensure the nipple is deep in the mouth.’ (ANCV & ANC2 MW2)

There was a focus on assisting mothers to start off well in breastfeeding. This included suggestions for planning ahead, the importance of position and latch and different options related to breastfeeding:

‘After birth, hormones will be produced in your body, so it is good to have your baby start breastfeeding within an hour of being born. This will help with milk production.’ (ANCV & ANC1 MW1)

This theme also addressed the reality of mothers returning to work, which is an economic reality for many mothers in Thailand. Recommendations included:

‘When you have given birth, if mothers have to go back to work, they can pump and store milk.’ (LW1 MW1)

Within the theme ‘Managing tough times’ there was also a clear recognition and goal structure of breastfeeding challenges with both target goals and PFIs to assist mothers to know how to address and succeed in overcoming challenges:

‘Your breasts are engorged, you need to massage in circular movements like this, first on the outside then further in and around the nipple.’ (LC5 HN)

‘Make sure that the baby’s mouth is wide open and latches on well, right up to the base of the nipple. This will help produce more milk and will ensure that your nipples will not be hurt.’ (ANCV)

A key aspect of maintaining and increasing motivation is the congruence of goals which create a motivationally positive environment (Dornan et al 2017). The recognition and normalisation of
breastfeeding challenges appeared to allow for both a disclosure of difficulties and discussion towards resolution which allowed a continuation of the breastfeeding journey. This appeared to be inherent within the unit.

**Culture**

The concept of culture was evident throughout the midwife-led instruction. Nationally, breastfeeding continues to be an accepted part of Thai culture, although rates are decreasing as cultural shifts occur (Thepha et al 2018). However, within this unit breastfeeding was promoted as both a cultural norm and positive decision. Breastfeeding goals were frequently framed in a way that was both relevant and appropriate to Thai mothers. These included suggestions that:

‘Mothers’ milk helps the nation as it brings down the cost of living.’ (ANL1)

‘Mothers breast milk shows perfect [true] love for your child so it has more benefit than any other food.’ (ANL1).

This goal is in line with a Thai Buddhist belief that is known as the ‘milk debt’. Within Thai culture it is believed that parents are entitled to build up a moral credit through the process of conceiving, carrying, bearing and nurturing their baby which will then be repaid by the child later (Lancey 2108). However, there were also practical suggestions made in relation to the size and shape of women’s breasts in Thailand, which is known to cause concern, for example:

‘The size or shape of your breast does not reflect how well you can breastfeed – how much or how little milk you have. The size of your breasts has to do with how much fat cells have deposited there.’ (ANCV)

Other practical suggestions also included cultural advice such as:

‘Have wide straps on your bras.’ [Thais don’t have maternity bras] (ANC1 MW1 & ANC2 MW2)

One theme which seemed to be uniquely cultural was the idea of breast care. This was taught on the wards in the daily session and women were encouraged to both wash and massage their breasts regularly:

‘Wash hands and breasts before feeding. Dry yourself by patting gently. Don’t use soap regularly and be gentle drying yourself or else your nipples will become dry and cracked.’ (ANCV)

It may be argued that while culture is present in all elements of life it may not be required during specific breastfeeding instruction. However, within this setting breastfeeding was presented in a way that was uniquely Thai, appearing to build a bond between the midwives and mothers as they begin the journey of breastfeeding.

**Discussion**

Values have been a key concept in social sciences since their inception and play an important role in psychology, sociology and anthropology. Values have been used to help characterise cultural groups, societies and individuals, to track changes over time and to offer explanations for the motivational base of attitudes and behaviours (Schwartz 1999, Schwartz 2004, Schwartz 2012). Recognising and identifying key cultural values and implementing them into breastfeeding instruction appeared to increase both maternal attention and relevance.

The underlying cultural value of breastfeeding, although changing, may offer a positive motivational force but women may still encounter breastfeeding challenges. Receiving congruent and comprehensive goals, combined with a high value for breastfeeding, may allow them the motivational energy needed to overcome the barriers they encounter on their breastfeeding journey.

The systematic approach of ARCS combined with the cultural framework offered a valuable mechanism for this cross-cultural research (Gardenswartz et al 2003, Dornan 2015). Understanding the underpinning motivational and cultural components embedded within the midwife-led instruction allowed the identification of some critical insights into the role of education and maternal behaviour in breastfeeding. The value placed upon breastfeeding within the unit was notable from the outset through the implementation of policies, practice and the inclusion of both individual and group instruction which was readily available on a daily basis. The focus on building maternal confidence and the inclusion of practices which were acceptable within the collective culture appeared to present an inbuilt peer support between mothers within the groups across the settings.

The results of the TBMMS showed a high level of skewness and kurtosis but the rate of 78% intention to breastfeed with a continuation rate of 68% post birth suggests a high value for breastfeeding. The findings from this study suggest that while breastfeeding is extremely complex, if explored from multiple angles, key motivational elements can be identified and included to overcome barriers. When breastfeeding education is designed to engage mothers, capture their attention, is relevant to their individual (or in the Thai context, group goals) and includes routine confidence-building strategies leading to a sense of satisfaction it may well lead to a continuation in breastfeeding. The role of values, individual, corporate and national, were clearly evident in this research and appeared to be an influential factor. The cultural perspective of values, particularly those of tradition, family and well-being offered an additional layer within the instruction and motivational profile of the mothers. It is recognised that a single educational or care
approach to breastfeeding is unlikely to be successful (Radyzynski & Callister 2016). Understanding the depths of cultural values and contextual influences allowed midwives to adapt their instruction into a uniquely relevant process, which crossed over from a ‘one size fits all’ strategy to an approach which was personalised within the context but still deliverable within group settings. Finding the cultural and contextual factors which increase motivation and relevancy is an area still be explored with midwifery in the UK but is becoming increasingly crucial in our multicultural, resource-limited world. The RCM recognises that many factors influence women’s choices and recommends that every attempt should be made to understand and address the cultural and societal barriers (Livingstone 2018). This may in turn contribute to an increase in breastfeeding initiation and duration in high, middle and low-income countries.

Recommendations in recent studies advised of the need for a deeper understanding of the facilitators and barriers to breastfeeding within Thai settings. This included a focus on the unique needs and motivating factors such as knowledge, health care support and traditional practices (Nuampa et al 2018, Thepha et al 2018). This study contributes to this knowledge through a deeper understanding of integrated motivational and cultural factors within breastfeeding education and the ownership of breastfeeding policies and practices. This led to an integrated, accessible and well-designed educational approach to breastfeeding instruction.

Conclusion and implications for practice

The complexity of the breastfeeding journey cannot be underestimated as it is, by its very nature, inter-related to internal and external influences. Maternal motivation lies at the heart of women’s decisions and experiences and consistent, relevant instruction is critical (Dornan et al 2015, Dornan 2017). Midwives’ ownership of breastfeeding policies including a breastfeeding champion, a high organisational value and consistent motivational goals which are culturally relevant, can all contribute to an optimal breastfeeding environment which would allow midwives to both set and achieve their goals. Although midwives face challenging workloads they continue to be uniquely placed and, in many global contexts, the only point of care in communities as they continue to support mothers. Identifying the underpinning positive and negative cultural values and influences will empower midwives to facilitate optimal breastfeeding achievement in mothers. At a point where the world needs nine million more midwives to achieve universal health coverage (WHO 2020) the development of motivationally and culturally relevant breastfeeding materials could make a significant impact and valuable resource within low, middle and high-income countries.

The authors declare no competing commitments. This study was funded by the Vice Chancellor International Research Scholarship, Ulster University and was presented at the 3rd ‘Spotlight on Breastfeeding Research’ conference at Ulster University hosted by the Centre for Maternal and Fetal Infant Research, Doctoral Midwifery Research Society, Public Health Agency and Queens University, Belfast, Northern Ireland.

Acknowledgements

The authors would like to thank Dr Janine Stockdale, PG dip, CHSE, BSc, RM, RN for her expertise and guidance of motivational research and design throughout the study; Dr Jane Brown, PhD, MSc, BSc for verification of the motivational and thematic analysis; Sandra Joll for her verification of the observations; Dr Watcharee Tanitphra MD for overseeing the Thai research team and Dr Varangthip Khunwudthakorn, Dr Funagluada Tongprasert and Ajarn Siriphon (Head Nurse) for facilitating the observations and information gathering within the maternity unit of Chiang Mai University Hospital, Chiang Mai, Thailand.

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