

Maternal attitude towards breastfeeding

Carrick-Sen, Debbie; Hamze, Layla

DOI:

10.12968/bjom.2018.26.7.462

Other (please specify with Rights Statement)

Document Version Peer reviewed version

Citation for published version (Harvard):

Carrick-Sen, D & Hamze, L 2018, 'Maternal attitude towards breastfeeding: A concept analysis', British Journal of Midwifery, vol. 26, no. 7. https://doi.org/10.12968/bjom.2018.26.7.462

Link to publication on Research at Birmingham portal

Publisher Rights Statement:

Checked for eligibility: 28/09/2018

This document is the Accepted Manuscript version of a Published Work that appeared in final form in British Journal of Midwifery, copyright © MA Healthcare, after peer review and technical editing by the publisher. To access the final edited and published work see: https://www.magonlinelibrary.com/doi/10.12968/bjom.2018.26.7.462

General rights

Unless a licence is specified above, all rights (including copyright and moral rights) in this document are retained by the authors and/or the copyright holders. The express permission of the copyright holder must be obtained for any use of this material other than for purposes

- •Users may freely distribute the URL that is used to identify this publication.
- •Users may download and/or print one copy of the publication from the University of Birmingham research portal for the purpose of private study or non-commercial research.
 •User may use extracts from the document in line with the concept of 'fair dealing' under the Copyright, Designs and Patents Act 1988 (?)
- •Users may not further distribute the material nor use it for the purposes of commercial gain.

Where a licence is displayed above, please note the terms and conditions of the licence govern your use of this document.

When citing, please reference the published version.

Take down policy

While the University of Birmingham exercises care and attention in making items available there are rare occasions when an item has been uploaded in error or has been deemed to be commercially or otherwise sensitive.

If you believe that this is the case for this document, please contact UBIRA@lists.bham.ac.uk providing details and we will remove access to the work immediately and investigate.

Download date: 26. Apr. 2024

Abstract

Background: Mother and infant benefits of breastfeeding have been confirmed globally. Maternal attitude is a significant predictor for intention, initiation and continuation of breastfeeding. It is a multifaceted and frequently used concept.

Objective: Undertake a literature review and concept analysis of maternal attitude as related to breastfeeding.

Method: Walker and Avant's (2011) concept analysis eight step framework.

Results: Attitude is a multifaceted, frequently used concept. Four critical attributes were identified; a) making a **judgment** based on belief, cumulative experience, values, knowledge and/or principles, b) **conscious feelings and/or thoughts** towards a specific topic and/or issue, c) a **decision** to agree, disagree or remain neutral **and d) results in consideration of** behavior and/or action change (which may include a conscience decision not to take action).

The literature review suggests that attitude, influences behavior and therefore health professionals and/or caregivers could apply the assessment of patient attitude to achieve desired behavior. Maternal attitude is related to intention, initiation and continuation of breastfeeding. A validated tool is available to measure maternal attitude to breastfeeding.

Conclusion: A validated assessment tool is available to measure maternal attitude to breastfeeding. Maternal attitude is related to intention, initiation and continuation of breastfeeding. Four critical attributes were identified.

Keywords: breastfeeding, concept analysis, maternal attitude

1. Background

This paper explores and clarifies the concept of maternal attitude as related to breastfeeding by exploring the literature and undertaking a concept analysis using Walker and Avant's, (2011) eight step framework (Table I).

The nutritional, immunological, physical, psychosocial, economic and environmental benefits of breastfeeding for infants, postpartum women and communities have been well proven (Cornall, 2011). Breastfeeding can be described as exclusive breastfeeding, where no artificial milk substitutes or other fluids are given to the infant or as partial/mixed breastfeeding where the infant is given some breast milk supplemented by formula/artificial milk and/or other fluids. The World Health Organization (2003) recommend exclusive breastfeeding for a minimum of six months post birth and partial breastfeeding for up to two years and beyond for optimal health in children. This is further endorsed by the United Nations Children's Fund (UNICEF) organization who recommend that breastfeeding is the optimal way to promote healthy growth and development of the infant (WHO, 2003). Children who are breastfed are less likely to develop infections during infancy and chronic diseases later in childhood. In addition, breastfeeding reduces the risk of a woman developing breast and ovarian cancer and type 2 diabetes (Victora, Bahl, Barros et al., 2016).

Despite the World Health Organization (WHO) recommendations, the duration of breastfeeding in many countries falls short of this. Currently, 37% of infants

less than six months old, worldwide, are exclusively breastfed (WHO, 2012). Furthermore, 75% of mothers do not meet the UNICEF recommendation for optimal breastfeeding (Stuebe & Bonuck, 2011). In Hong Kong, over 80% of postpartum women initiate breastfeeding (Baby Friendly Hospital Initiative Hong Kong Association, 2011), but only 6% are exclusively breastfeeding when the infant is three months old (Tarrant, Fong, Wu et al., 2010).

Since human lactation is a complex phenomenon, many variables such as demographic, physical, social, and psychological factors influence the duration of breastfeeding. There is increasing evidence that knowledge about infant feeding and psychosocial factors such as maternal attitude, self-efficacy, and influence from family and friends are significant predictors of initiation and duration of breastfeeding (Scharfe 2012). Other factors associated with a reduced duration include lack of breastfeeding knowledge and practical skills. Targeted support can be helpful to overcome some barriers (Dykes, Moran, Burt et al., 2003).

It is recognized that women are influenced by female friends' or relatives breastfeeding experience and that this influences attitude and behavior (Oakley, Henderson, Redshaw et al., 2014). Attitude towards breastfeeding is important and a predictor for breastfeeding behavior, including initiation, duration, and exclusivity (Shaker, Scott, & Reid, 2004). Women's attitude and practice towards feeding are also influenced by the availability and perception of social support from their partner, other postpartum women, close friends, and healthcare professionals (Meedya, Fahy, Kable, 2010). Maternal breastfeeding self-efficacy

is associated with women's breastfeeding behavior and can be described as the mother's perceived ability and/or confidence to breastfeed (Ku & Chow, 2010).

There are several factors that contribute to mothers' attitude and subsequent choice to use formula as opposed to breast milk. One factor relates to receipt of formula milk whilst in hospital and therefore mothers may assume, it is the equivalent of breast milk and endorsed by health professionals (Philipp, Merewood, Miller, et al., 2001). The introduction of the global baby-friendly initiative has substantially reduced the availability of formula milk in maternity units. In summary, maternal 'attitude' to breastfeeding intent and duration is a frequently used concept in clinical practice and research. The term is based on a number of assumptions and would benefit from further exploration and clarity to aid understanding and meaning. The aim is to explore and clarify the concept of maternal attitude in relation to breastfeeding.

2. Method

Walker & Avant (2011) eight step framework (Table I) was used to explore and further understand the concept.

Table I: The 8 steps of Walker & Avant (2011) framework		
Step 1. Identify concept	Step 5: Identify model case	
Step 2: Aims and purpose	Step 6: Identify other cases	
Step 3: Identify all uses	Step 7: Confirm antecedents and consequences	
Step 4: Defining attributes	Step 8: Define empirical reference	

3. Results

3.1. Step 1: identify concept

The concept of maternal 'attitude' in relation to breastfeeding was chosen as it is a frequently used term, based on a number of assumptions related to ones believes and values and influences behavior change.

3.2. Step 2: aims and purpose

As maternal 'attitude' is based on a number of assumptions, it can be misinterpreted, misused or overused without clear and defined understanding and clarity of its meaning. It is important to fully understand the concept of maternal 'attitude' to breastfeeding. A positive attitude is predictive of an increased prevalence of initiation and duration of breastfeeding, and breastfeeding results in improved clinical health outcomes. Having a clear understanding of the concept may facilitate the development of interventions to improve breastfeeding intent, initiation and duration.

3.3. Step 3: Identify all uses

In this step, one identifies its etymology, dictionary definition and possible uses of the term. Etymologically, attitude is a French term originated from the Italian word "attitudine" and from the Late Latin "aptitüdø" and "aptitūdini-" (Merriam-Webster's Medical Dictionary online, 2017). The term 'attitude' is most often defined as a noun. The Mirriam Webster's dictionary define it as:

1. A mental position with regard to a fact or state: a helpful *attitude*.

- 2. A feeling or emotion towards a fact or state: a negative *attitude*, an optimistic *attitude*.
- 3. A position assumed for a specific purpose: a threatening attitude.
- 4. A bodily state of readiness to respond in a characteristic way to a stimulus (such as an object, concept, or situation).
- 5. A negative or hostile state of mind and/or a cool, cocky, defiant, or arrogant manner.
- 6: The arrangement of the parts of a body or figure: posture eg: a ballet position.
- 7: The position of a craft (such as an aircraft or spacecraft) determined by the relationship between its axes and a reference datum (such as the horizon or a particular star).

In the same dictionary, medical definition of attitude additionally adds:

8. A feeling or way of thinking that affects a person's behavior, a positive *attitude*, change your *attitude*.

The Longman dictionary adds:

9. The opinions and feelings that you usually have about something, especially when this is shown in your behavior.

The dictionaries identified **synonyms** as: opinions, ideas, beliefs, convictions, feelings, thoughts, perception, judgment, turn of mind, point of view, frame of mind, way of thinking, way of looking at things, reaction and position/posture.

Using a Google search, 396 million citations of the term 'attitude' were identified

and used in a variety of different topic websites eg: psychology, magazines, quotes, education and music.

'Attitude' is a frequently used term within **psychology**. One example relates to the theory of planned behavior (Ajzen, 1991). The model is based on the premise that individuals make logical, reasoned decisions to engage in specific behaviors by evaluating the information available to them. According to the **TPB**, the behavioral intention depends on;

- Attitude toward the behavior (an individual's positive or negative evaluation of the behavior), indicating a bipolar distinction.
- Subjective norm (an individual's perception of social normative pressure or relevant others' beliefs that he or she should or should not perform the behavior) social support.
- Perceived behavioral control (an individual's perceived ease or difficulty of performing the behavior) self-efficacy or confidence.

The TPB refers to "attitude toward the behavior" as the degree to which a person has positive or negative feelings of the behavior of interest. It entails consideration of the outcomes following the behavior change. The individual's attitude toward performing the behavior (i.e., the person's overall positive or negative feelings of favorableness or unfavorableness with respect to performing the behavior), that is based on the person's beliefs that, performing the behavior will lead to various positive or negative consequence/s (or outcome/s). This theory framework is used in multiple studies in the context of health psychology,

patient education and self-management, social media and health behavior change.

In contrast to the dictionary definitions, Fazio & Williams (1986) confirm 'attitude' as a summary judgment of an objector event, which aids individuals to structure and understand their complex social environment. If we accept, their definition then attitude is a subjective yet non tangible concept acquired through learning over a period of time and influenced by individual's personality and situation. According to Eagly & Chaiken (1993) attitude is a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor. They developed the ABC model, which has three elements including affect, behavior and cognition. They suggest that the affective component relates to individual's feelings towards an object. Behavior refers to the individual's intention towards an object and finally, cognitive refers to the belief, an individual has about an object.

A further useful perspective is construal level theory (CLT). This provides an explanation of **risk attitude** in many social cognitive domains, including judgment of moral behavior, persuasion, values-behavior consistency, and ideological consistency (Alison, Goodwill, Almond et al., 2010). CLT indicates that individuals' response to social events is determined by their social cognitive perspective, based on their psychological representation of the event (Nussbaum, Trope, Liberman, 2003). They describe it as relating to psychological distance using four dimensions, namely, time, space, social distance, and probability.

Studies have demonstrated that smokers hold diverse perceptions about their own smoking risk. For instance, many smokers minimize the magnitude of health risk, especially when comparing their own risk to that of other smokers (Weinstein, 1998). Besides perception of disease risk, other attitudes about the pros and cons of smoking have also been shown to predict smoking behavior. For example, (Halpern-Felsher, Biehl, Kropp et al, 2004) found that smoking was negatively correlated with perceived negative consequence (e.g. bad breath, smelling of smoke) and positively correlated with perceived benefits (e.g. feeling relaxed, popularity) indicating that they maximize the benefits and deemphasize negatives (Pokhrel & Herzog, 2015).

A further important topic relates to vaccination. Successful vaccination programmes are important in the prevention of disease. Attitude can be influenced positively and negatively by information identified in written documents, online, through social media and via family and friends. Yaqub, Castle-Clarke, Sevdalis et al. (2014) suggest that hesitant and rejection attitude towards vaccination was often based on a lack of awareness or misinformation. They further stress the importance of building a trusting relationship between healthcare professionals and patients to influence and counterbalance misconceptions.

Maternal attitude in the context of breastfeeding is important. There is overwhelming evidence of the benefits of breastfeeding in regard to the mother and infant (U.S. Department of Health and Human Services, 2011). Searching the Pubmed database using the term 'attitude' resulted in the identification of 158,973

articles. The term "breastfeeding" and a date limitation of previous five years was added and resulted in the identification of 931 papers. Of these, 111 were selected as the title contained 'maternal attitude' and 'breastfeeding' in the title.

Determinants of maternal **decision to breastfeed** include maternal knowledge and attitude as well as professional and personal support. Women in higher socioeconomic groups with higher levels of education are more likely to choose breastfeeding. Additional factors include sociocultural context; attitude of infant's father, family and friends, and support and involvement of healthcare professionals (Bai, Middlestadt, Peng et al., 2009). A study conducted by Radzyminski,& Callister. (2015) reported findings from 53 healthcare professional interviews and concluded that there were inconsistencies between the healthcare providers perceived support and behavior, lack of knowledge, and a significant lack of skill regarding assessment and management of breastfeeding.

Exclusive breastfeeding (EBF) is defined as the infant receiving no artificial milk substitutes or other fluids being up to six months of age (WHO, 2003). This is important because infants who breastfed experience less morbidity and mortality from gastrointestinal and respiratory infections, have a reduction in hospitalization and mortality related to diarrhea, otitis media, upper respiratory infections, diabetes mellitus and allergies (Victora, Bahl, Barros et al., 2016). Additionally, infants who are breastfed have improves cognition and IQ (Horta, Mola, Victora, 2015). Furthermore, maternal benefits include, increased return of postpartum uterine tone, postpartum weight loss, delayed resumption of menses, and

reduced incidence of breast, ovarian, endometrial cancers and type 2 diabetes (Chowdhury, Sinha, Sankar et al., 2015).

A large study conducted by Dodgson et al (2003) involving 2400 pregnant women, they examined factors associated with exclusive breastfeeding intention during pregnancy in rural districts of Bangladesh. Results revealed attitude toward **EBF and self-efficacy** were independently associated with EBF intent. Breastfeeding counselling during pregnancy and being literate were each associated with EBF **knowledge and EBF intention**. The authors concluded that increasing maternal knowledge, positive attitude, and self-efficacy were associated with prenatal EBF intention (Thomas, Yu, Tirmizi, et al., 2014).

A further study conducted by Vijayalakshmi, Susheela, Mythili. (2015) in Bangalore reported a strong association between **knowledge and breastfeeding** as well as positive maternal attitude to breastfeeding and breastfeeding practice. Fischer and Olson, (2014) further endorse this, by stating that a mother's intention to breastfeed is the single most significant factor predictive of breastfeeding behavior. Reconsidering construal level theory and social-moral obligation, Ludlow, Newhook, Newhook et al., (2012) purport that some mothers see themselves as having a moral and social responsibility to expose their infant to minimal risk. Additional influential factors include personal demographics, culture, family and maternal confidence in the ability to breastfeed (Avery, Zimmermann, Underwood et al., 2009).

During the 20th century, there has been a significant decline in the **duration of breastfeeding**. In the early 1900s, 89% of mothers in the US were still

breastfeeding their infant at 4 months of age (Sedgwick, 1921). However by 1995, only 22% of mothers in US were breastfeeding when the infant was 6 months old (Ryan, 1997).

In 1999, Russell & De La Mora (1999) developed and validated the 17 item IIFAS (Iowa Infant Feeding Attitude Scale) scale to assess maternal attitude to breastfeeding. The scale consists of (17 items) and a score ranged of 17 to 85, with higher scores reflecting more positive attitudes to breastfeeding. The scale includes domains relating to information, knowledge, opinion, beliefs, feelings, social norms, experience, support, resources and demographic characteristics. Studies using the scale have explored, the relationship between maternal attitude and initiation and/or duration of breastfeeding, as well as maternal demographic characteristics and attitude to breastfeeding.

In **summary**, a number of alternative and contrasting definitions were identified, confirming a lack of clarity and potential misunderstanding of meaning. Majority suggested it is a **dichotomous concept** relating to a positive or negative emotional state. Two outliners were identified, and described the concept as non-emotion related and as a tangible/physical concept. One difficulty of an affective (emotional) concept is the potential for **subjectivity**, which adds further complexity. Further differences include use of the term as a noun or adjective. Majority of definitions related it, to an **emotional reaction to a situation and/or position.** The reaction was noted by others and described as having a positive or negative observed behavior/physical stance.

Evidence from **psychology** provides a useful and comprehensive understanding of the term, particularly in relation to the ABC model. It could be proposed that 'attitude' is formed through learning and information acquired during life, superimposed by ones evaluation in terms of a bipolar response which results in a particular '**feeling' or 'thinking'** towards an object and/or behavior, this is then expressed by verbal and/or behavioral components. The attitude therefore leads to behavior intent or action, in a specific way. Beliefs, knowledge, social norms and cumulative direct or indirect experience regarding the defined object and/or behavior contribute to expressed thoughts, emotions and behavior.

3.4. Step 4: Defining attributes

Walker and Avant (2011) considered the fourth step as the "heart of the concept analysis", i.e. determining the defining attributes and characteristics of the concept. These are always present and associated with the concept. Taking into account, the dictionary definitions, consideration of use and findings from the literature review, four attributes were identified and include:

- Involves a judgment based on belief, cumulative experience, values, knowledge and/or principles.
- Relates to a defined conscious feelings and/or thoughts towards a specific topic and/or issue.
- 3. Results in a decision to agree, disagree or remain neutral.

 Is a predisposition/precursor to a particular behavior and/or action (which may include a conscience decision not to take action) defined as behavior and/or action intent.

3.5. Step 5: Identify Model Case

In the fifth step of a concept analysis, Walker and Avant advise developing one or more model case that represents a "real life" example of concept using all of the critical attributes.

3.5.1. Model case 1

Shaun is a 25 years old primipara, she is an undergraduate, employed and has a household income of 6000 Yuan/month. She has attended many antenatal classes related to breastfeeding and is well supported by friends and relatives. She has a named midwife and access to a lactation consultant. She has read many books about the importance of breastfeeding, has social insurance and she is currently 37 weeks pregnant. She plans to breastfeed her baby for more than six months because she believes that the breast milk is the best as it meets the needs for ideal infant growth and development and will strengthen the baby's resistance and enhance immunity. Shaun also considers breastfeeding to be cheap and therefore affordable, clean and safe as well as convenient. She feels excited about breastfeeding as it will enhance the emotional bond between herself and baby. She knows she will benefit from breastfeeding, as it will reduce her risk of developing cancer. The birth was normal and she started breastfeeding within one during the hour after birth with assistance from health

professionals. When the baby was six weeks old, she reports feeling excited about her new role as a mother and was enjoying breastfeeding. She reports the assistance from her mother-in-law in caring for the baby as helpful. She is planning to return to work, but is already preparing for this by expressing breast milk and freezing it.

This is a model case as it includes all the defined attributions including a conscience and informed decision to breastfeed. It results in feelings of excitement about the pending birth and the emotional bond she and the baby will develop. Her decision is informed by knowledge and beliefs that breastfeeding is the best for her and her baby. She has made a decision to breastfeed and activates her decision to breastfeed by breastfeeding her baby at the earliest opportunity after the birth and puts things in place (eg help from mother-in-law) to maximise success. A further case illustrates the critical attributes but with a different infant feeding outcome.

3.5.2. Model case 2

Xin is a 35 years old lady pregnant with her second child. She is educated to high school level and is currently unemployed. She is 37 weeks pregnant and doesn't plan to breastfeed this baby. She tried to breastfeed her first baby but recalls this as a bad experience. She remembers feeling so tired and fatigued. She reports not getting enough sleep due to frequent breastfeeds and having a lot of breast pain. This made her feel depressed and not enjoying being a mother. Once she gave up breastfeeding and transferred to formula milk, she got more rest, had

more energy and felt emotionally better. Based on this experience she has made a decision not to breastfeed this baby and feels relieved about her decision.

This is a model case because although it results in a difference outcome, it still contains all the critical attributes. These include conscience thoughts about what she would like to do once her current baby is born. The thoughts included recollection of feelings, regarding her last breastfeeding experience. Based on this experience, she makes a judgment, that she doesn't want to breastfeed this baby and makes a conscience decision not to breastfeed this baby and is relieved once that decision is made.

3.6. Step 6: Identify other cases

Development of other cases include, a borderline, related, contrary, invented, and illegitimate case and contain some or none of the required critical attributes.

3.6.1. Borderline case

A borderline case contains some but not all of the critical attributes.

A midwife working on a maternity ward provides information about why and how to breastfeed to pregnant mothers in an antenatal education programme. She explains and shows the women how to position the baby and the importance of drinking enough fluids and having adequate rest.

This case contains knowledge to inform conscious thoughts and feelings but does not contain the attributes related to decision-making and consequential behavior and/or action.

3.6.2. Related case

A related case is similar to the model case but does not contain critical attributes.

Qing is a 27 years old, primiparous woman. She had a normal delivery and her baby is now two days old. After the birth, she started to breastfeed because health professionals asked her to do so, as they felt that was the best for the baby. Her mother-in-law didn't want her to breastfeed, and asked her stop, once she was discharged from the hospital and was at home with the baby. Her mother-in-law wanted Qing to stop breastfeeding, so she could get plenty of rest, which would allow her to recover from the birth.

This case is a related case because at no point do the health professionals and/or her mother-in-law attempt to explore what the woman wants, believes or feels about breastfeeding. It does not reflect conscience thoughts resulting in an action and/or behavior. Although the baby needs and receives milk, the choice of which type of milk is not as a consequence of conscience thoughts, belief and self decision-making.

3.6.3. Contrary case

Mary is a female baby smiling and saying some non-understandable sounds, however when she sees her mother's breasts she gets excited as she knows she

A contrary case describes a situation that is clearly not the concept of interest.

will get some milk and a cuddle.

This case demonstrates an example of what the concept is not, it doesn't meet any characteristics or critical attributes related to attitude. Mary is a baby without any developed cognitive ability to thinking about the issue, knowledge or experience, belief or judgment. Humans receive these gains when they make progress in life from their surroundings and encounters.

3.6.4. Illegitimate case

An illegitimate case describes a situation that is not in the same context, as that intended.

Liu is a 25 years old woman who has just delivered her first baby one hour ago by caesarian section. Whilst still under anesthesia, the midwife places the baby on her chest to stimulate breast milk and encourage emotional bonding.

This is an illegitimate case because the mother is unconscious and therefore cannot have cognitive conscious though, feelings, decision-making and/or action.

3.6.5. Invented case

An invented case describes a 'make believe,' 'imaginary' situation not related to the context but does contain some and/or all of the attributes.

A policeman named Tom, was standing in the street, crying and looking distressed. His shoulders were down and his head was drooping in complete misalignment to his normal upright and head held high position. He pointed to the small snail that was crawling across the road and shouted that all traffic must stop until the snail was safely across the road.

In this case, Tom demonstrates feelings and emotions as well as a conscience decision. This may have been based on previous experience and/or knowledge, however the crying and distressed presentation is unexpected, out of character and context for the situation described.

3.7. Step 7: Confirm antecedents and consequences

The seventh step in Walker and Avant's model is to identify antecedents and consequence that occur prior to, and as a result of the "occurrence of the concept" (Nuopponen, 2010). The following table (table II) presents the antecedents, attributes and consequence.

Attributes	Consequence
Judgment	Behavior/action (or not)
Conscious feelings and/or	Positive or negative
thoughts	outcome
Conscience decision-	Need to intervene (or not)
making	
Behavior and/or action	
intent	
	Judgment Conscious feelings and/or thoughts Conscience decision-making Behavior and/or action

characteristics

Available support

As an antecedent, knowledge regarding mother and infant benefits of breastfeeding is important and informs attitude. The mother's beliefs, social norms, culture and support from others impact on the decision to initiate and/or continue breastfeeding. The direct or indirect previous experience of breastfeeding, educational level, household income and other socio-demographic characteristics such as higher educational attainment is significantly associated with mother's positive attitude toward breastfeeding. Mothers aged between 30-33 years old, and/or with a higher economic status were found to have a higher IIFAS score indicating a positive attitude towards breastfeeding. On the other hand, mothers who lack available support at home and/or workplace, have a lack of information, lesser education and/or have low household income were found to have a lower IIFAS score (Darwent and Kempenaa, 2014).

As a consequence, once a conscience decision is made, it will result in behavior change and/or action. However, non-action is still a conscience behavior choice. This may result in a positive or negative consequence/outcome. The degree (severity) of attitude will influence action (or no action) and the ability for the attitude to be challenged and/or changed.

3.8. Step 8: Define empirical reference

The last step in Walker and Avant's (2011) model explores the empirical referents in the real world to enable one to consider and apply its application. Within nursing and midwifery, the empirical reference is useful to health professionals because it provides objective and clear consideration of the concept (Walker & Avant, 2011). The attitude characteristics identified lead to behavioral intent and this is then followed by an action (or decision not to act).

There is an interesting debate concerning whether attitude is subjective and cannot be measured. (Altman, 2008) proposes that the concept cannot be directly measured. However, in terms of breastfeeding, (Russell & De La Mora, 1999) purport that it can be measured and developed a validated tool to measure it. By developing the tool, the authors are clear that the concept can be measured. Mothers with high education and knowledge about breastfeeding, have skills and experience, are older and have a high household income are more likely to have a stronger attitude to commit to breastfeeding (Chen, Binns, Liu, 2013). Providing support and encouragement for breastfeeding during the postnatal period is likely to enhance the mother's experience and increase attitude toward breastfeeding (Tarrant, Dodgson, Wu, 2014). Mothers with a high score on the IIFAS are more likely to initiate breastfeeding (Chen, Binns, Liu, 2013).

Health professionals training programmes should include information related to breastfeeding knowledge, skills and methods to support mothers. Strategies should be implemented that support initiation and prolonged breastfeeding duration. These should include elements related to education, information and support (Wang, Lau, Chow et al., 2014).

4. Conclusion

Attitude is a response to a stimuli and involves a judgment being made based on belief, cumulative experience, values, knowledge and/or principles, conscious feelings and/or thoughts and results in conscience decision-making which leads to behavior and/or action intent. The consequence is behavior and/or action change or a conscious decision not to act.

This paper provides new insights regarding maternal attitude to breastfeeding. It has clarified the definition by identifying critical attributes, antecedents and consequence and illuminated these using case studies. The process has identified a validated tool to measure maternal attitude to breastfeeding and explored different perspective of 'attitude' as a concept. Understanding the concept in detail is informative, will assist in clinical decision-making and the development and implementation of interventions to improve clinical outcome.

References

Ajzen I (1991) The theory of planned behavior. Organ Behav Hum Decis Process. 50(2):179–211.

Alison, L., Goodwill, A., Almond, L., Heuvel, C.V.D., Winter, J.I. (2010)

Pragmatic solutions to offender profiling and behavioral investigative advice. The British Psychological Society, 15,115–132.

Altmann T. K. (2008) Attitude: a concept analysis. Nursing Forum, 43(3),144-50.

Avery, A., Zimmermann, K., Underwood, P. W., & Magnus, J. (2009). Confident commitment is a key factor for sustained breastfeeding. Birth, 36(2), 141–148.

Bai Y. K., Middlestadt S. E., Peng C. Y., & Fly A. D. (2009). Psychosocial factors underlying the mother's decision to continue breastfeeding for 6 months: An elicitation study. Journal of Human Nutrition and Dietetics, 22, 134–140.

Cornall, D. (2011) A review of the breastfeeding literature relevant to osteopathic practice. International Journal of Osteopathic Medicine, 14, 61–66.

Chen S, Binns, C.W., Liu, Y., Maycock, B., Zhao, Y., Tang, L. (2013) Attitudes towards breastfeeding- the Iowa Infant Feeding Attitude Scale in Chinese mothers living in China and Australia, Asia Pac J Clin Nutr, 22(2), 266-269.

Chowdhury, R., Sinha, B., Sankar, M.J., Taneja, S., Bhandari, N., Rollins, N., Martines, J. (2015) Breastfeeding and maternal health outcomes: a systematic review and meta-analysis. Acta Paediatr, 104 (467), 96–113.

Darwent, K.L., Kempenaa, L.E. (2014) A comparison of breastfeeding women's, peer supporters' and student midwives' breastfeeding knowledge and attitudes. J Nurs Educ Pract, 14(3): 319- 325.

Dykes, F., Moran, V.H., Burt, S., Edwards, J. (2003) Adolescent postpartum women and breastfeeding: experiences and support needs—an exploratory study. J Hum Lact, 19(4), 391–401.

Eagly, A.H. & Chaiken, S. (1993) The psychology of attitudes, Fort Worth, TX: Harcourt Brace Jovanovich.

Fazio, R., Williams, C. (1986) Attitude accessibility as a moderator of attitude perception and attitude-behavior relation: An investigation of the 1984 presidential election. J Pers Soc Psychol, 51(3), 505–514.

Fischer, T. P., & Olson, B. H. (2014) A qualitative study to understand cultural factors affecting a mother's decision to breast or formula feed. Journal of Human Lactation, 30, 209–216.

Halpern-Felsher, B. L., Biehl, M., Kropp, R. Y., & Rubinstein, M. L. (2004)

Perceived risks and benefits of smoking: differences among adolescents with different smoking experiences and intentions. Preventive Medicine, 39(3), 559–567.

Horta, B.L., Mola, C.L.D., Victora, C.G. (2015) Breastfeeding and intelligence: a systematic review and meta-analysis. Acta Paediatrica, 104 (467), 14–19.

Ku, C.M., Chow, S.K. (2010) Factors influencing the practice of exclusive breastfeeding among Hong Kong Chinese women: a questionnaire survey. J. Clin. Nurs, 19, 2434–2445.

Ludlow, V., Newhook, L. A., Newhook, J. T., Bonia, K., Goodridge, J. M., & Twells, L. (2012) How formula feeding mothers balance risks and define themselves as 'good mothers.' Health, Risk & Society, 14(3), 291–306.

Longman dictionary online. https://www.ldoceonline.com/dictionary/attitude

Meedya, S., Fahy, K., Kable, A. (2010) Factors that positively influence breastfeeding duration to 6 months: a literature review. Women and Birth, 23,135–145.

Merriam-Webster's Medical Dictionary online. https://www.merriam-webster.com/dictionary/attitude Published 2002 Updated: Dec 8, 2017. Accessed October 20, 2017.

Nuopponen, A. (2010) Methods of concept analysis – a comparative study, LSPJ, 1(1), 10.

Nussbaum, S., Trope, Y., Liberman, N. (2003) Creeping dispositionism: The temporal dynamics of behavior prediction. Journal of Personality and Social Psychology, 84,485–497.

Oakley, L.L, Henderson, J., Redshaw, M., Quigley, M.A. (2014) The role of support and other factors in early breastfeeding cessation: an analysis of data from a maternity survey in England. BMC Pregnancy and Childbirth, 14, 88.

Philipp, B.L., Merewood, A., Miller, L.W., Chawla, N., Murphy-Smith, M.M., Gomes, J.S; Cook, J.T. (2001) Baby-friendly hospital initiative improves breast-feeding initiation rates in a US hospital setting. Pediatrics, 108(3), 677–681.

Pokhrel, P., & Herzog, T. A. (2015) Reasons for quitting cigarette smoking and electronic cigarette use for cessation help. Psychology of Addictive Behaviors, 29(1), 114 –121.

Russell, D.W., & De La Mora, A. (1999). The Iowa Infant Feeding Attitude Scale: Analysis of Reliability and Validity. Journal of Applied Social Psychology, 29, 11, 2362-2380.

Ryan, A. S. (1997) The resurgence of breast-feeding in the United States. Pediatrics [on-line serial], 99(4), 12.

Radzyminski, S., & Callister, L.C. (2015) Health Professionals' Attitudes and Beliefs about Breastfeeding. The Journal of Perinatal Education, 24(2), 102-109.

Scharfe E. (2012) Maternal attachment representations and initiation and duration of breastfeeding. J Hum Lact, 28 (2), 218–225.

Sedgwick, J. P. (1921) A preliminary report of the breast-feeding in Minneapolis. American Journal of Diseases of Children, 21,455-464.

Shaker, I., Scott, J.A., & Reid, M. (2004) Infant feeding attitudes of expectant parents: breast-feeding and formula feeding. J Adv Nurs, 45(3), 260–268.

Simmons, V. N., Webb, M. B., & Brandon, T. H. (2004) College-student smoking: An initial test of an experiential dissonance-enhancing intervention. Addictive Behaviors, 29(6), 1129–1136.

Stuebe, A.M, Bonuck, K. (2011). What predicts intent to breastfeeding exclusively? Breastfeeding knowledge, attitudes, and beliefs in a diverse urban population. Breastfeeding Medicine, 6, 413–420.

Tarrant, M., Fong, D.Y.T, Wu, K.M, Lee, I.L.Y, Wong, E.M.Y., Sham, A. Dodgson, J.E (2010) Breastfeeding and wean practices among Hong Kong

postpartum women: a prospective study. BMC Pregnancy and Childbirth, 10, 1–12.

Tarrant M, Dodgson JE, Wu KM. (2014). Factors contributing to early breast-feeding cessation among Chinese postpartum women: An exploratory study. Midwifery, 30(10), 1088–1095.

Thomas J S, Yu, E.A., Tirmizi, N., Owais, A., Das, S.K., Rahman, S., Stein, A.D. (2014) Maternal Knowledge, Attitudes and Self-efficacy in Relation to Intention to Exclusively Breastfeed among Pregnant Women in Rural Bangladesh. Matern Child Health. 2014; DOI 10.1007/s10995-014-1494-z.

U.S. Department of Health and Human Services (2011) The surgeon general's call to action to support breastfeeding. Retrieved March 3, 2018 from http://www.surgeongeneral.gov.

Victora, C.G., Bahl, R., Barros, A.J., França, G.V., Horton, S., Krasevec, J., Rollins, N.C. (2016) Breastfeeding in the 21st century: epidemiology, mechanisms, and lifelong effect. Lancet, 387(10017): 475-490.

Vijayalakshmi P, Susheela T, Mythili D. (2015) Knowledge, attitudes, and breast feeding practices of postnatal mothers: A cross sectional survey.

International Journal of Health Sciences, 9(4), 365-374.

Walker L Avant K. (2011) Strategies for theory construction in nursing. NJ: Pearson Education, 157–179.

Wang, W., Lau, Y., Chow, A., Chan, K.S. (2014) Breastfeeding intention, initiation and duration among Hong Kong Chinese women: A prospective longitudinal study. Midwifery, 30(6), 678–687.

Weinstein, N. D. (1998) Accuracy of smokers' risk perceptions. Annals of Behavioral Medicine, 20(2), 135–140.

World Health Organization, UNICEF. Global Strategy for Infant and Young Child Feeding. World Health Organization and UNICEF, Geneva, 2003; ISBN 92 4 156221 8 (printed in Singapore).

World Health Organization (2012) Maternal, newborn, child and adolescent health; Understanding the past – planning the future: celebrating 10 years of WHO/ UNICEF's global strategy for infant and young child feeding. Retrieved March 3,2018 from

http://www.who.int/maternal_child_adolescent/news_events/news/2012/30_07_2 012/en/

Yaqub O, Castle-Clarke S, Sevdalis N, Chataway J. (2014) Attitudes to vaccination: A critical review. Social Science & Medicine, 2014, 112:1-11.