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Women's perceptions, knowledge and breastfeeding decision-making

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Theory and empirical data: Using the Hutter-Hennink qualitative research cycle

*“We shall not cease from exploration and the end of all our exploring
will be to arrive where we started and know the place for the first time.”*

T.S. Eliot (1888-1965)

Introduction

This chapter presents the methodology of the research project, specifically the cyclical nature of the research and the application of theory to qualitative empirical data. We used the following research question for the overall research project:

Overall research question: ‘What reasons underlie women’s decisions to stop or continue breastfeeding in the first month after delivery?’

The research was based on the interpretive paradigm and thus qualitative methods were applied, using the methodological framework of Hennink, Hutter, and Bailey (2011). This framework includes the Hutter-Hennink qualitative research cycle (HH-QRC) as a model for designing and conducting qualitative research (see Figure 1). This model illustrates the cyclical nature of qualitative research; this is in contrast to quantitative research, where the research process is more or less linear (Hennink et al., 2011). In the overall project, the HH-QRC was a useful tool for providing structure and transparency, which was crucial to achieving coherence and scientific rigour.

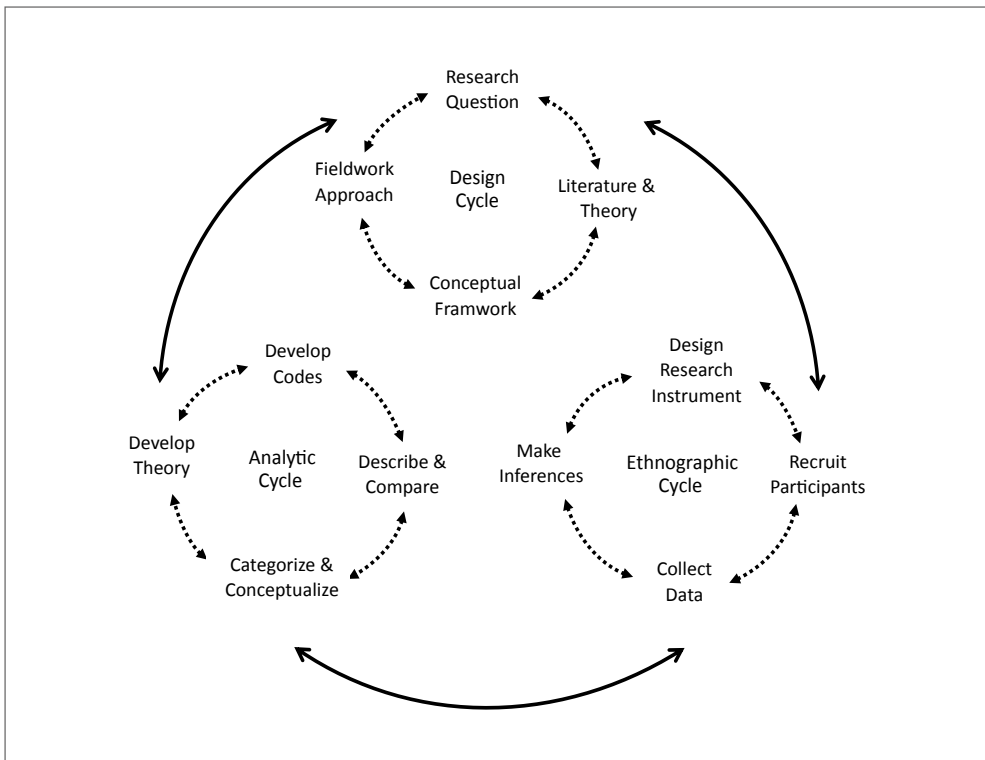


Figure 1: The Hutter-Hennink qualitative research cycle (Hennink et al., 2011, copied with permission)

In the HH-QRC, the cyclical nature of qualitative research is explained in detail, and all stages of the research process are systematically represented. The model is distinct from other qualitative research models in that it consists of three cycles: the design cycle, the ethnographic cycle (later called the data collection cycle; Hutter, 2013), and the analytic cycle. The research process involves moving from the design cycle to the ethnographic cycle to the analytic cycle, and also moving back and forth between these three cycles, which are strongly interlinked. In addition, the model allows the separate stages to be completed within each of the three cycles, in different sequences.

Theory and empirical data

A typical characteristic of the role of theory in qualitative research is that empirical data are collected and analysed as the foundation for theory development. An important analytic strategy among qualitative researchers is grounded theory (Charmaz, 2001, 2006; Glaser & Strauss, 1967; Kelle, 2007; Strauss & Corbin, 1990). This involves inductive reasoning in line with the underlying interpretive paradigm. Grounded theory is accomplished by systematically completing multiple interpretive stages, progressing from original empirical data through emerging patterns toward categories and inductive concepts. It is a systematic process (Glaser & Strauss, 1967) as well as a creative process, which may allow for some initial chaos (Maxwell, 2005). The inductive concepts and the way they are linked represent a theory, which can be applied to the particular study population. Thus, a theory is regarded as a set of concepts that are linked or related to each other in a certain way (Maxwell, 2005) or as a set of well-developed categories (Strauss & Corbin, 1998).

An important tool in this inductive process is making inductive inferences, which starts during the data collection cycle and continues in the analytic cycle. Inductive inferences are made by reflecting on the information collected, and involve inquiring more deeply into the meaning of each piece of information after it is collected, which generates deeper understanding (Hennink et al., 2011).

Apart from the application of grounded theory, another important feature of qualitative research is the use of existing theory. Qualitative researchers have made substantial contributions to the discussion on the role of pre-existing theory in research (Sandelowski, 1993; Thorne, 2013, 2014; Snow et al., 2003; Thornberg, 2012). Some researchers focus predominantly on the inductive theory development processes, stating that existing theory distracts from the inductive reasoning process and should therefore be ignored. Others explicitly disengage from this dictum (Thornberg, 2012), which in their view neglects the relevance and potential of existing theory (Lofland, 1995; Snow et al., 2003). Snow et al. (2003) argue that qualitative researchers who suggest that they take a neutral stance when they go into the field are ignoring the implicit deductive

theoretical framework they bring with them. This existing theory guides data collection and data analysis, and provides the starting point for deductive reasoning, which continues throughout the research process (Snow et al., 2003).

Hennink et al. (2011) also emphasise the importance of existing theory in qualitative research, and suggest that qualitative research questions and data collection are embedded in existing theory. They propose being explicit about the source of deductive reasoning and deductive inferences made. Deductive reasoning guides data collection, and is therefore in interaction with the inductive qualitative processes. Existing theory also enters the research process at a later stage, that is, when making deductive inferences in the analysis of the data. In the analysis, theory can be used to provide deductive sensitising concepts. Sensitising concepts are background ideas that inform the exploration of the overall research problem and offer ways of seeing, organising, and understanding experience (Blumer, 1954; Bowen, 2006; Charmaz et al., 2003; Granbom et al., 2014; Thornberg, 2012). One strategy for using sensitising concepts in the analysis is analytic questioning (Hennink et al., 2011), for which analytic questions are formulated.

In our research project, we recognised the importance of existing theory. We used three pre-existing theories in different ways. These theories were the theory of planned behaviour (Ajzen, 1991; Fishbein & Ajzen, 1975), the concept of health literacy (Nielsen-Bohlman et al., 2004; Nutbeam, 2000; WHO, 1998), and the theory of local health care systems (Kleinman, 1980). The theories had different functions (Sandelowski, 1993) and entered the study at different stages (see Table 1).

The theory of planned behaviour (TPB) (Ajzen, 1991; Fishbein & Ajzen, 1975) was used to provide the framework for the research question as well as to identify and categorise the topics for the interview guide. According to the theory of planned behaviour (TPB), behaviour is predicted by behavioural intention, and the intention is determined by attitudes, social environment and norms, and perceived control toward the behaviour. Knowledge was added as an important factor that contributes to both intended and actual behaviour, in line with Duckett et al. (1998), who added 'knowledge' to the TPB as a specific concept, resulting in a modified theory of planned behaviour for breastfeeding (TPB-BrF). The specific research question was: 'What are women's perceptions of breastfeeding during the period of intention?'

The interview guide based on the TPB was used during the two phases of data collection, namely, among women with middle and high socioeconomic status (SES) (dataset 1) and among women with low SES (dataset 2). SES was determined by educational background, according to the Dutch standard classification of education (Statistics Netherlands, 2008). In the analysis, the TPB guided the interaction between the concepts of the deductive model and the inductive concepts that had emerged from applying grounded

theory. The results of this deductive-inductive analysis of the data demonstrated the importance of the concepts of becoming a mother, combining breastfeeding with work, reflecting on the intention, making arrangements for childbirth, and the overall importance of knowledge and learning about breastfeeding.

The concept of health literacy (Nielsen-Bohlman et al., 2004; Nutbeam, 2000; WHO, 1998), was introduced to follow up on the results of the first study (i.e. the importance of knowledge and learning), and guided the definition of a new analytic question for the analysis of the data collected. Health literacy is defined as a concept that describes the capacity to obtain, process, and understand basic health information and services needed to make appropriate health decisions (Nielsen-Bohlman et al., 2004). We applied the three levels of health literacy as adopted by Nutbeam: functional, interactive, and critical health literacy (Nutbeam, 2000). This concept thus provided the framework for the analytic search strategy of analytic questioning (Hennink et al., 2011), using health literacy as the sensitising concept. The analytic question was 'Can the concept and levels of health literacy be used to understand women's breastfeeding decision-making?' The results of this study led to a nuancing of the concept of health literacy, and as such contribute to the debate on the concept's relevance and applicability.

The theory of local health care systems (LHCS) by Kleinman (1980) entered the research as another deductive theory that was used as a framework to provide the sensitising concepts in the consecutive analysis of the empirical data collected. According to this theory, a health care system consists of three different sectors: the popular sector, the professional sector, and the folk sector. The analytic question was 'What sources do women use to obtain breastfeeding knowledge?' In this study, data were analysed using grounded theory, and five inductive themes were identified to indicate the content of the breastfeeding knowledge. In addition, these inductive themes guided the analysis with the analytic question on what sources women use to obtain their breastfeeding knowledge. The LHCS guided the interaction between the inductive concepts that had emerged from grounded theory and the concepts in the deductive model.

The overall research project was thus composed of three separate studies that each made use of a different theory or concept. Two datasets were collected, and three different data analyses were performed. Table 1 shows the function of the deductive theories in the different cycles of the three separate studies of the research.

Table 1: The function of the deductive theories in the different cycles (design, data collection, and analysis) of the three studies.

Study	Deductive theory	Design	Data collection	Analysis
1	Theory of planned behaviour (TPB)	Guided answering overall research question and specific research question	Guided identification of topics for interview guide (dataset 1 and dataset 2)	Guided interaction between initial deductive concepts and inductive concepts that had emerged from grounded theory (dataset 1)
2	Health Literacy			Provided deductive sensitising concepts and guided answering analytic question (datasets 1 and 2)
3	Theory of local health care systems (LHCS)			Provided deductive sensitising concepts and guided answering analytic question; guided interaction between initial inductive concepts that had emerged from grounded theory and deductive sensitising concepts (datasets 1 and 2)

The role of theory in the analytic cycle thus involved the interaction between theory that already existed and theory that emerged from grounded theory. This corresponds with the underlying paradigm of the qualitative research cycle, which is a mixture of both the interpretive and positivist paradigms (Hennink et al., 2011). The results allow for extending the concepts in pre-existing theory to develop a more refined understanding of the research phenomenon, and to apply them to a broader context than the one in which they were developed (Hennink et al., 2011). Hence, the linking of theory to empirical data (Maxwell, 2005) became the core of the overall research project and the three separate studies.

In the first study of the research project (perceptions during intention), we completed all three cycles of the HH-QRC (i.e. design, data collection, and analysis) and all

stages within these three cycles. Although the two consecutive studies (i.e. health literacy, and sources of breastfeeding knowledge) did not involve all of the cyclic processes, they did include some of them. In the second study, we used both datasets, and applied a new theoretical perspective in the analysis of the data that had already been collected. In the third study, we also performed a new analysis of the data that had already been collected, using an additional deductive theory. Figure 2 presents the overall research project and its three constituent studies. In the section following Figure 2, we briefly describe these three studies and the steps that were part of the methodology.

The first study

Research question: ‘What are women’s perceptions of breastfeeding during the period of intention?’

Design cycle

In line with the HH-QRC, the design cycle consisted of the research question, theory, a conceptual framework, and a fieldwork approach. The initial research question in the first study was identical to the general research question: ‘What reasons underlie women’s decisions to stop or continue breastfeeding in the first month after delivery?’ The theory included literature on the background of breastfeeding in the Netherlands and internationally (see Chapter 1 of this thesis). We considered both the intended (prepartum) behaviour and the actual (postpartum) behaviour to be important. Therefore, we conducted prepartum as well as postpartum interviews. The emphasis was initially on the intention in the prepartum interviews (t1) and on the actual behaviour in the postpartum interviews (t2).

The TPB (Ajzen, 1991; Fishbein & Ajzen, 1975) was chosen as the theoretical framework. The TPB is a theory that concerns decision-making, and underlies the majority of the research conducted on intended and actual health behaviour. This theory is coherent with the initial consideration that both intended and actual behaviour are important in women’s decisions to stop or continue breastfeeding in the first month after delivery.

By making inductive inferences while collecting data, we discovered that the women in our study thoroughly reflected on their intentions, and therefore we decided that it was important to specifically address the period of intention. We refined the research question to the following: ‘What are women’s perceptions of breastfeeding during the period of intention?’ We took a qualitative fieldwork approach, and conducted face-to-face in-depth interviews to gain an in-depth understanding of the individual perceptions and personal experiences from the participants’ point of view (Hennink et al., 2011; Ritchie & Lewis, 2003; Spradley, 1979) up to saturation level (Glaser & Strauss, 1967; Hennink et al., 2011).

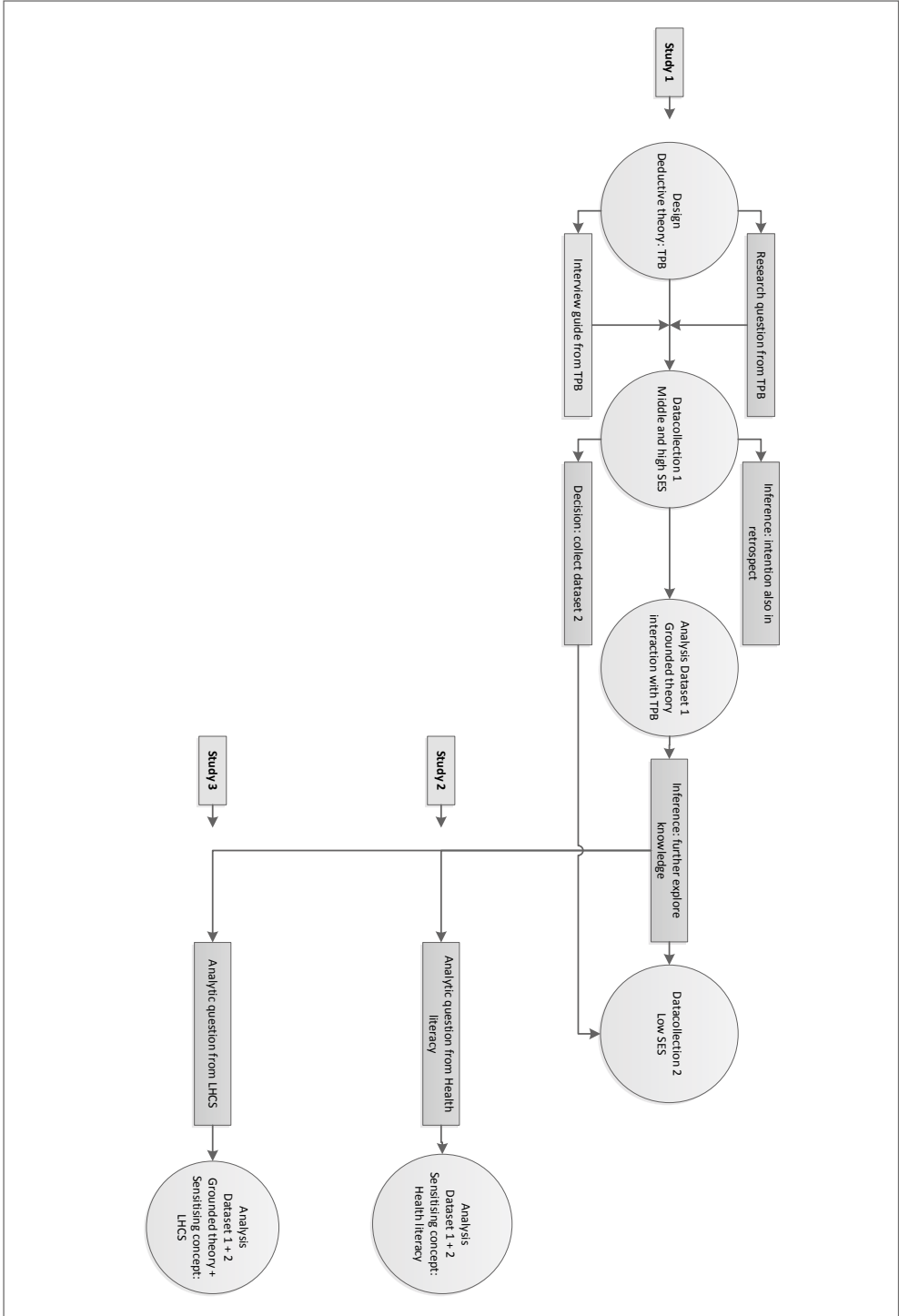


Figure 2: The research project and its three constituent studies

Data collection cycle

In line with the HH-QRC, the data collection cycle consisted of developing the research instrument, recruiting participants, data collection, and making inferences. The interview guides were developed by identifying and categorising the deductive concepts of the TPB-BrF. The prepartum interview questions concerned attitudes toward breastfeeding, social environment and norms, perceived behavioural control, intentions, breastfeeding knowledge, and maternal characteristics. The postpartum interview questions dealt with the same topics, with additional questions on childbirth experiences and actual feeding method. The interview guides were semi-structured; questions could be left out or added during the course of the interview. The questions were broad and open-ended, with probes in variable sequences.

Participants were recruited by contacting a midwife clinic in Heerenveen, a mid-sized town in the province of Friesland, in the northern part of Netherlands. In keeping with common practice, the midwives inquired about the infant feeding intentions of all pregnant women when they were in gestation week 20 (Campen & Kreulen, 2008). The midwives invited women who intended to breastfeed to participate in the research, with the other inclusion criteria being primiparous, in good health, and able to speak Dutch or English. The women who were interested in participating provided their contact information, and the interviewer explained that the research focused on the women's experiences as perceived from their own perspectives, and on their personal narratives, in their own words. All of the women agreed to take part. Before the interviews, participants were assured that no advice or opinions on breastfeeding attitude, knowledge, or practice would be given during the interview. The women's answers and opinions would all be considered equally accurate or relevant, and the information they gave would be treated confidentially and anonymously. All women gave their informed consent.

The prepartum interviews (t₁) were conducted between June and October 2008 among eight women in their last trimester of gestation. The interviews were conducted at the midwife clinic, in a comfortable setting, and took 30-45 minutes.

After the prepartum interviews, the women were also invited to participate in the postpartum interviews later on; all of the women agreed to take part. The midwives notified us about the delivery and immediate postpartum circumstances of the mothers and their infants to indicate when it would be appropriate to contact them for the postpartum interviews. The only criteria for the second interview were mother and infant both healthy and no contraindication for breastfeeding. All mothers who participated in the interview at t₁ met these criteria, and could be interviewed again at t₂.

The postpartum interviews (t₂) were conducted between August and December 2008 at exactly six weeks postpartum. Seven postpartum interviews were conducted at the

participants' homes and one at the midwife clinic. These interviews took 45-60 minutes. At t2, the infants were present, in the same or in a separate room. Two interviews at t2 were interrupted by the infants' crying. One woman's husband was present at the postpartum interview. Contextual field notes were also collected and documented.

All interviews were audio-recorded. The recordings were listened to again and a diary was kept for reflection. No new information was obtained from these reflections, and data collection saturation was confirmed. All recordings were anonymised and transcribed verbatim together with a research assistant.

A more detailed inquiry into the meaning of the collected information was done by making inductive data collection inferences (Hennink et al., 2011). For example, one of the inductive inferences made during data collection in the prepartum interviews was the importance of the period of intention. We then collected data on this period again retrospectively, and the participants were also invited to talk about their perceptions of the period of intention during the postpartum interviews. As a result, our study covers the same period – that is, the period of intention – from two different time perspectives, prospective and retrospective. As a consequence, the actual postpartum behaviour was no longer part of this study.

After conducting 16 in-depth interviews with 8 women, no new information was collected, therefore information saturation (Glaser & Strauss, 1967) could be determined.

All women selected by the recruitment procedure in the first study had middle and high SES (dataset 1). At a later stage, we also interviewed women with low SES backgrounds (dataset 2).

Analytic cycle

In line with the HH-QRC, the analytic cycle consisted of coding, comparing, categorising, and developing theory. All verbatim transcripts were given a detailed line-by-line reading, and text excerpts that related to the research question were selected. Open coding was used to code the selected excerpts according to the criteria: recurrence, repetition, and forcefulness (Owen, 1984). Each of the selected excerpts that had new content was labelled with a code and recorded using Atlas.ti (6.015) software. We retained the participants' colloquial language; at this point, there was no interpretation of the text, or translation from Dutch to English. Pieces of text with similar content were assigned the same code. A text fragment could be labelled with more than one code. The fragments were extensive, and included the interview questions to guarantee that the context of the information was included.

After assigning codes to all of the prepartum and postpartum interviews, we re-examined the codes. All interviews were listened to again to make sure we had not

missed any information or nuances. Information saturation had been determined earlier, while collecting the data. In the analytic cycle, saturation was confirmed when no new codes were selected.

All codes were compared and merged into supercodes, according to Atlas.ti terminology. In a consecutive interpretive stage, these supercodes were merged into five categories that related to the specific research question. These categories generated five inductive concepts:

- ‘combining breastfeeding with work’
- ‘learning about breastfeeding’
- ‘making arrangements for childbirth’
- ‘reflecting on the intention’
- ‘becoming a mother’

All five concepts emerged from inductive reasoning, and were grounded in the empirical data. In the interaction between the inductive concepts and those in the deductive model, it was possible to determine which concepts were more inductive (that is, resulting from perceptions of the women themselves) and which concepts were more deductive (that is, deriving from the TPB). Some of the phrases that referred to the inductive and deductive concepts were almost identical, for example, the inductive concept ‘learning about breastfeeding’ and the deductive concept ‘breastfeeding knowledge’. However, the phrase ‘learning about breastfeeding’ was retained when presenting the results of this study, because this colloquial language accurately represented the women’s perceptions of breastfeeding during the period of intention. The deductive theory did not include concepts that referred specifically to a woman’s transition to an additional role or identity, and therefore ‘becoming a mother’ was our most grounded inductive concept.

The inductive concepts were added to the original deductive model and constitute a new deductive/inductive model, which is explained in detail in Chapter 3 of this thesis.

Additional data collection

While ‘becoming a mother’ was our most grounded inductive concept, the related inductive concept ‘learning about breastfeeding’ and the deductive concept ‘knowledge about breastfeeding’ required a more detailed exploration in relation to our overall research question, which confirmed the initial consideration that knowledge is an important factor. In the first study only women with middle and high SES participated (dataset 1), and because we assumed that learning and obtaining knowledge might be different between high and low SES women, we did a second series of interviews with low SES women (dataset

2). To recruit these women, we contacted a midwife clinic in Winschoten, a mid-sized town in the province of Groningen, which is also in the northern part of the Netherlands. This clinic provides antenatal, perinatal, and postnatal care to women, many of whom have low educational backgrounds. The participant recruitment procedure for collecting this second dataset was similar to the one used for our first dataset, and, apart from SES, the inclusion and exclusion criteria were the same.

This second series of interviews was conducted between January and August 2011 among five women with particularly low SES backgrounds. These interviews were also conducted at two time points (prepartum and postpartum) and the same interview guides were used. This resulted in a total of ten interviews. After ten interviews no new information was collected, therefore information saturation was reached, which was confirmed later in the analysis. Four prepartum interviews were conducted in the midwife clinic, and one prepartum interview took place in a village hall. The postpartum interviews were conducted between four and six weeks postpartum. Three postpartum interviews with mothers who had discontinued breastfeeding were conducted at four weeks. Three postpartum interviews were conducted at the women's homes, and one interview was conducted at the woman's parents' home. One postpartum interview was conducted by telephone because the mother could not keep the appointment. All other interviews were conducted face-to-face. Contextual field notes were collected and documented.

All transcripts of the second dataset were coded with open coding. Subsequently, all codes from the first dataset (middle and high SES women) that concerned 'learning about breastfeeding' were added to those of the second dataset. We used this as our starting point when we began analysing the two datasets as a whole.

The second study

Analytic question: 'Can the concept and levels of health literacy be used to understand women's breastfeeding decision-making?'

The aim of the second study was to further explore the concept of learning about breastfeeding by analysing the data collected. We looked for a theoretical framework that was specifically oriented to understanding knowledge and the role of information in decision-making, and arrived at the concept of health literacy. Health literacy is defined as a concept that describes the capacity to obtain, process, and understand health information needed to make health decisions (Nielsen-Bohlman, et al., 2004). We used the three levels of health literacy adopted by Nutbeam: functional, interactive, and critical health literacy (Nutbeam, 2000).

We used the health literacy framework in the analytic data search strategy of analytic questioning (Hennink et al., 2011), with the three levels of health literacy as sensitising concepts (Blumer, 1954; Bowen, 2006; Charmaz et al., 2003; Granbom et al., 2014; Thornberg, 2012). The analytic questions were ‘What is the functional health literacy [and interactive health literacy, and critical health literacy] of the women in the two samples?’ Using these questions, we systematically searched all of the pieces of transcript with the codes ‘learning’, ‘knowledge’, and ‘information’. We then searched all of the transcripts and contextual field notes.

Using the three levels of health literacy as sensitising concepts, we linked theory to empirical data (Snow et al., 2003). This enabled us to contribute to the further development and nuancing of the concept of health literacy, and to propose recommendations for practice and policy, which are presented in Chapter 4 of this thesis.

The results of the second study confirmed we had collected ample empirical data on breastfeeding knowledge. In this second study, the analytic questioning did not yet include the content and sources of breastfeeding knowledge. Therefore, we formulated a consecutive analytic question, which was addressed in the third study.

The third study

Analytic question: ‘What sources do women use to obtain breastfeeding knowledge?’

In the third study, the analysis was performed using a combination of grounded theory and analytic questioning, with the theory of local health care systems (Kleinman, 1980) as the deductive theory in the analysis. Grounded theory was used to re-examine all codes concerning breastfeeding knowledge, learning, and information (from the first and second datasets combined) and by applying another series of multiple interpretive stages (from codes to supercodes to categories). We identified five inductive themes on the content of breastfeeding knowledge:

‘the pros and cons of breastfeeding’

‘how breastfeeding works’

‘individual breastfeeding practice’

‘expressing milk’

‘formula feeding’

Subsequently, we applied the analytic data search strategy of analytic questioning (Hennink et al., 2011), using the theory of local health care systems (LHCS) to provide a framework for a deeper understanding of the different sources the women used to obtain their knowledge. According to this theory, a health care system consists of three different sectors: the popular sector, the professional sector, and the folk sector. The theory asserts that individuals or groups start their health care activities in the popular sector. Subsequently, they consult the other sectors by moving back and forth within and between these sectors in a dynamic process (Kleinman, 1980). In our study, we used the different sectors of a health care system as sensitising concepts for analysis. The analytic questions were ‘What breastfeeding knowledge do women obtain from the popular sector [and from the professional sector, and from the folk sector]?’ A systematic data search was conducted with these questions, guided by the five inductive concepts and using the coded text fragments, transcripts, and field notes. A deductive/inductive model was developed, and is presented in Chapter 5 of this thesis.

Discussion

The continuous linking of theory and empirical data was characteristic of the overall research project. Although all of the studies were theory-driven, they took different routes; we applied deductive and inductive reasoning, going from deductive theory to data collection and analysis, and from empirical data to inductive theory.

The analytic strategies we employed – grounded theory and analytic questioning using sensitising concepts – were applied in different modes and in different sequences; all of these strategies were characterised by the linking of theory to empirical data.

Our research project confirmed the relevance of combining deductive and inductive reasoning. Using a deductive theory during data collection meant that the empirical data were grounded in theory, and at the same time, theory development was grounded in the empirical data (Dey, 1993). By accomplishing these two types of grounding, both the empirical data and the theory were validated by the reality of everyday life (Prus, 1996).

In the academic discourse on the role of deductive theory in qualitative research, some authors have questioned the convention of positioning qualitative research within a theoretical framework (Thorne, 2014). Thorne goes on to say that in qualitative studies the theory is often mentioned in the introduction, and then quietly disappears from the research. Others have also argued that the circumstances under which the theory actually enters or leaves a study are not always clear (Sandelowski, 1993). We also propose that researchers provide transparency on the different roles of the theories and where they enter a study. We did this by mentioning the roles of the theories and the stages of the HH-QRC

in which these theories entered the study (i.e. design cycle, data collection cycle, or analytic cycle) (see Table 1).

The research project was characterised by the use of three existing theories. The use of different theoretical perspectives is referred to as theoretical pluralism (Kelle, 2007), which provides the researcher with choices among different extant concepts and ideas. Comparing different pre-existing theories helps the researcher remain theoretically sensitive during the analysis (Thornberg, 2012).

The theories constituted solid conceptual frameworks for each of the three separate studies. However, it was particularly in the interaction with empirical data that the strength of the conceptual frameworks became manifest. These frameworks provided tools for interpreting the empirical data and gaining a deeper understanding of the meaning of these data (Thornberg, 2012). In doing so, the data confirmed the applicability of the theories in the analysis. Hence, theory and empirical data reinforced one another.

We reflected extensively on whether it would have been possible to arrive at these research findings without using pre-existing theory. It is true that inductive reasoning was applied without deductive theory, such as when grounded theory was applied at the start of the analysis in the third study. In the first study as well, ‘becoming a mother’ was an inductive concept, and only identified with open coding; the deductive theory did not include a concept for ‘becoming a mother’. However, the particular impact of becoming a mother was identified specifically by using the theory: the TPB enabled the data to be interpreted in a way that allowed identification of the women’s difficulty in anticipating behaviour while still in the period of intention. This confirms that the theory was crucial to gaining insight into the meaning of this inductive concept. The concept’s meaning is also not to be understood as standing on its own, but should be seen in relation to the other deductive/inductive concepts and in the way these are linked together (Maxwell, 2005).

Similarly, particularly in the interaction with empirical data, the applicability – and also the limitations – of the deductive theories or concepts became apparent. In the second study, for example, we proposed a nuancing of the concept of health literacy, which was supported by the empirical data. Without these empirical data, we could not have actually achieved this nuancing.

This research project is an example of how theory-driven research can generate both a refined understanding of the research phenomenon from a theoretical perspective and, at the same time, implications for practice. These implications are represented by the recommendations for health practice and policy, as explained in detail in the Chapters 3, 4 and 5 of this thesis, and discussed in Chapter 6. The recommendations are also grounded in the interaction between empirical data and theory. Theoretically engaged qualitative research thus contributes to practical policy and interventions (Snow et al., 2003).

Ample consideration has been given to providing optimal transparency on the inferences and methodological decisions made in the course of the research process. Scientific rigour (Hennink et al., 2011; Mays & Pope, 1995) was achieved by applying the HH-QRC. The use of this methodological framework ensured coherence between the scientific paradigm, the research questions, the development of the theoretical frameworks, the research instrument, data collection, and the types of data analysis. The consolidated criteria for reporting qualitative research (COREQ) (Tong et al., 2007) were consulted for presenting the results of the three studies as separate research papers.

The reflexivity of the principal researcher included both sensitivity to empirical data and theoretical sensitivity (Strauss & Corbin, 1990), which contributed to the coherence of the overall research project.

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