

# The Hermeneutic Circle Helps to Accumulate Knowledge and Understanding: An Empirical Example of Public Health Nurses' Experiences of Supporting Multiple-birth Families

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**Abstract:** In phenomenological research, the reduction is a complex reflective attentiveness required for phenomenological understanding. A literature review revealed that little research has been done on health care professionals working with multiple-birth families. Van Manen's method has been variously used in nursing science. The aim of this article is to describe the hermeneutic circle and the method of reduction, providing an empirical example of the experiences of public health nurses working with multiple-birth families. The data consisted of open interviews (n = 38) with three participant groups—parents of twins, nurses, and family care workers—written output from them and the researcher's notes. The phenomena of the lifeworld of multiple-birth families as described by nurses can be expressed as: "recognizing the strain", "targeting special needs", and "lightening the load of daily life". Reduction enables in-depth phenomenological hermeneutic research, helping to see the research stages both as parts and as a whole and the hermeneutic circle that accumulates understanding. Social and health care professionals need to listen more to parents' voices to better understand the needs and situation of multiple-birth families. More education and training is needed to empower parents of twins. This article can stimulate discussion on phenomenology, hermeneutic research and reduction.

**Key words:** Phenomenology, hermeneutic, van Manen, reduction, lifeworld, hermeneutic circle, social and health care professionals, family care nursing, multiple-birth families.

## 1. Introduction

The history of philosophical thought has had a significant impact on the development of phenomenology and hermeneutics. Phenomenology can be understood as a philosophy, an approach and also as a human science research method. A distinction can be made between the descriptive phenomenology of Husserl (1859-1938) and the interpretive and hermeneutic phenomenology of Heidegger (1889-1976). [4, 6-8, 19-20, 30-31] Phenomenology in its original sense aims at retrospectively bringing to our awareness some

experience we lived through to be able to reflect phenomenologically on the living meaning of this lived experience [29]. Qualitative methods provide researchers with a way of seeing, and a way of understanding; a way of listening, and a way of hearing; ways of accessing and empathetically knowing the most intimate parts of the other [4]. Phenomenology is the reflective study of prereflective or lived experiences. Phenomenological inquiry focuses on interviewing and gaining understanding of the meaning of the participant's experiences. Since the mid-1990s, phenomenology has been widely imported into the practical, applied, or professional disciplines such as the health sciences, education, clinical psychology, and pedagogical disciplines [27]. Key concepts in phenomenological research are the

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lifeworld and lived experience, and the reduction [6].

The literature contains many philosophical investigations and explications of the reduction that can make this topic complex and confusing [12, 14, 25, 27]. Although the reduction may be understood in various ways, for a basic phenomenology of practice, the reduction can be considered to consist of two methodical opposing moves that complement each other. Negatively it suspends or removes what obstructs access to the phenomenon—this move is called the epoché or bracketing. And positively it returns, leads back to the mode of appearing of the phenomenon—this move is called the reduction [22, 28]. Epoché means that we must try to enter a space of openness to the experience or phenomenon we are trying to understand in its prereflective sense. Reduction means that, once we have opened ourselves, we try to close in on the meaning of the phenomenon as it appears in our experience or in our consciousness [28].

The reduction is a complex reflective attentiveness that must be practiced for phenomenological understanding to occur. Bracketing helps the researcher focus on the essential aspects in the research process. And [13] explores the nature of the “phenomenological attitude”, which applies to psychological research and is understood as the process of retaining wonder and openness to the world while reflexively restraining pre-understandings. She states that the radicality, complexity and discipline of the phenomenological attitude as a whole can be completely missed, especially by novice researchers. [21] also observe that researchers make no reference to some of the fundamental methodological keywords such as reduction and bracketing, using these terms synonymously or the same concept in different ways without distinguishing their specific meanings [10] presents an extensive review of different phenomenological approaches, also discussing reduction. [23] strives through the lens of Merleau-Ponty and [11] to explore differences among

the descriptions of the phenomenological method by philosophers. Tuohy et al. (2013) give an overview of interpretive phenomenology and its core concepts such as being-in-the-world (“dasein”), fore-structure/pre-understanding, lifeworld existential themes, and the hermeneutic circle.

Van Manen’s approach involves several levels of reduction that can be distinguished for their methodological usefulness, and each of these dimensions needs to be practiced as if in concert [25, 27] Researchers need to realize that the outcome of phenomenological research is inseparable from phenomenological reading, writing and rewriting. A text that lacks originary insights into the lived meaning of a phenomenon or event is not phenomenological text [29].

A multiple-birth family is one that has or is expecting twins, triplets or more. (ICOMBO 2017, The Finnish Multiple-births Organization 2017) The present study describes the lifeworld and need for support of multiple-birth families expressed by social and health care professionals (public health nurses). The need for support and the work of social and health care professionals with multiple-birth families have been noted in many studies such as in Refs. [2, 3, 5, 9, 15, 16, 17].

## **2. Aim**

The aim of this article is to describe the method of reduction and provide an empirical example of the experiences of social and health care professionals—that is, public health nurses.

## **3. The Hermeneutic Circle**

As researchers, we can quite often hear and see the concept of the hermeneutic circle, but not so often what it really means in the research process. In the current research, the hermeneutic circle is composed of the components of the method of reduction and shows how the research flowed through it and generated knowledge about the lifeworld of

multiple-birth families as described by parents and professionals. The hermeneutic circle “describes how, in the process of understanding and interpretation, part and whole are related in a circular way: in order to understand the whole, it is necessary to understand the parts, while to understand the parts it is necessary to have some comprehension of the whole” [18]. It is possible to describe reduction as a composite of the various elements of the hermeneutic circle, which can be viewed as a path that integrates all the research stages including researcher decisions and movement forward and back. In this process, the hermeneutic circle helps to accumulate knowledge and

understanding. In the current research, the components of the hermeneutic circle are heuristic, ontological, concrete, eidetic, methodological, and hermeneutic reduction (Fig. 1).

#### 4. Heuristic Reduction

For many years, the researcher has wanted to know what characterizes being a parent in a multiple-birth family and what kind of experiences and understanding social and health care professionals have of parenthood in multiple-birth families. Heuristic reduction is the beginning of the research process. Methodologically, heuristic reduction, or

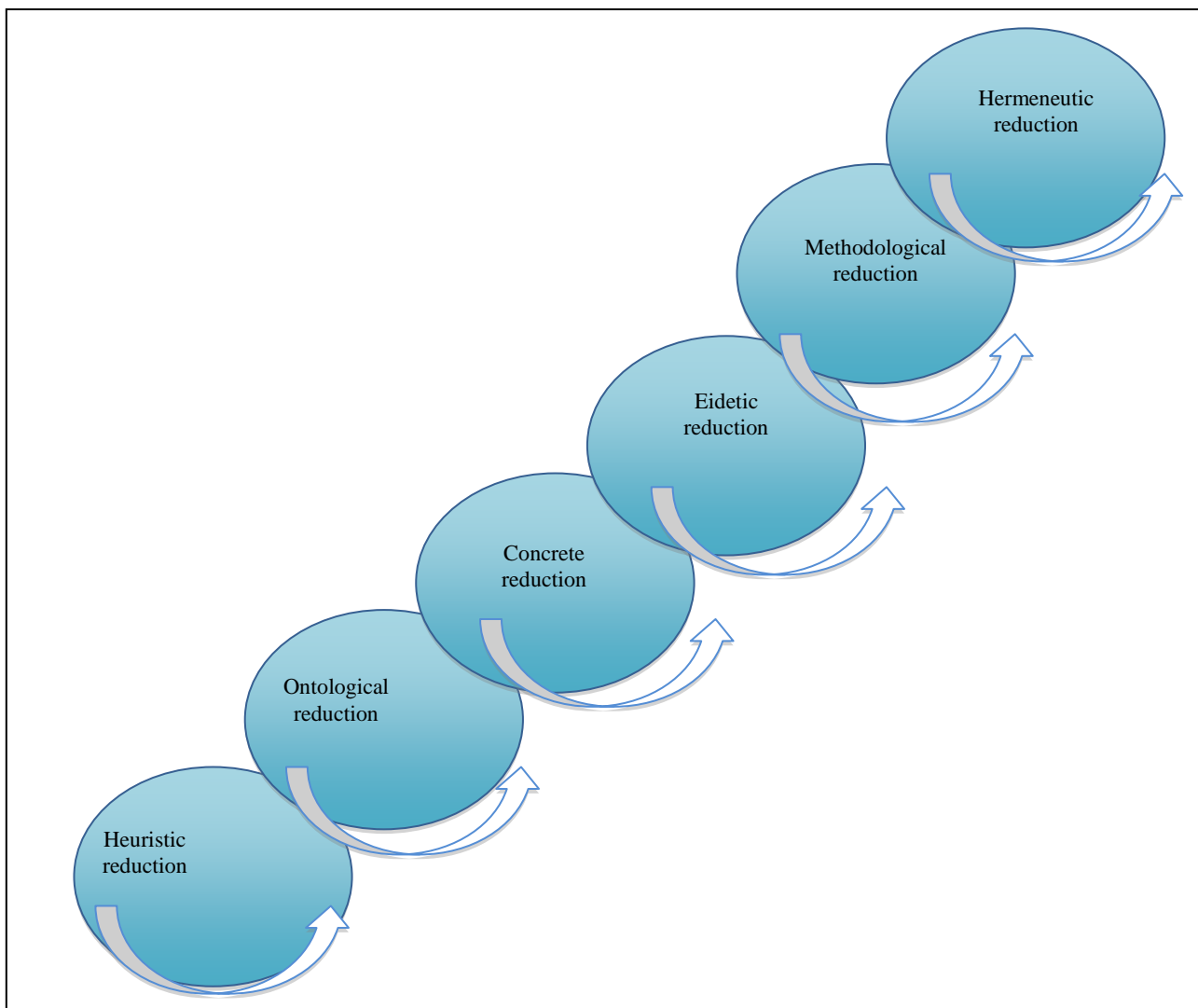


Fig. 1 Hermeneutic circle through the method of reduction [17].

wonder, requires discovering the moment of wonder or openness and, at that moment, a question that speaks to the researcher. Wonder overwhelms, but wonder should not be confused with curiosity, admiration or fascination. Wondering is to step back and let things in the world present themselves on their own terms [28]. This is the phenomenological attitude. Wondering continues throughout the whole research project and involves being open-minded, receptive and asking questions.

The researcher has a background in nursing and has met several multiple-birth families and talked with parents of twins and social and health care professionals as a health professional, colleague and mother of a multiple-birth family. The researcher wrote about her pre-understanding in her research diary at the beginning and throughout the research process. Her pre-understanding consisted of knowledge that there were challenges in providing professional support for multiple-birth parents and that such parents expected and needed more support. The research philosophy and methodological choices based on phenomenology enabled the researcher to acquire experiential material based on the actual experiences of the participants. The open interviews allowed public health nurses to share their experiences and stimulated fruitful discussion in an open atmosphere in their workplaces in health care centers. Being open-minded and wondering gave the researcher energy and strengthened her motivation, inspiring her to listen more to the voice of public health nurses and increasing her desire to investigate further.

## **5. Ontological Reduction**

The ontological reduction in the current research means understanding reduction as a method throughout the research project. It means holistic understanding of human beings and giving prominence to the modalities and lifeworld concepts. The four fundamental concepts of the lifeworld based

on Merleau-Ponty's ideas—lived space (spatiality), lived body (corporeality), lived time (temporality), lived human relation (relationality or communality) and lived things and objects (materiality) [28]—are important for phenomenological questioning, reflection, and writing in the research process [1, 10, 27, 28]. Modalities are productive categories enabling reflecting, questioning and writing [1, 25]. They were especially helpful as guides for the researcher's reflection involving writing the results and describing the studied phenomenon. These modalities are common to all human beings regardless of their historical, cultural or social situatedness. The modalities can be differentiated but not separated. One of them can be stronger or dominant at any given time, but the others are always present [25, 28].

The existential theme of temporality may guide our reflection to ask how time is experienced with respect to the phenomenon being studied. Lived time is our temporal way of being, and our subjective time is different from clock time. The past, present and future constitute the horizons of our temporal view [25, 28]. For example, because of the night-time stress in a multiple-birth family, parents needed support, understanding and sympathy from public health nurses. The new life situation and change also affected the parents' alertness. The existential theme of corporeality may guide our reflection to ask how the body is experienced with respect to the phenomenon that is being studied. Lived body means we are always bodily present. We first meet another person physically. In our physical or bodily presence, we both reveal and conceal something about ourselves. Different bodily feelings affect our emotions [25, 28]. For example, being in a state of quandary as a professional supporting multiple-birth parents shows how true understanding of the life situation can only be achieved through experience either by living it or seeing it first-hand. The existential theme of relationality may guide our reflection to ask how self and others experienced with respect to the

phenomenon that is being studied. We maintain lived relations in the interpersonal space we share [25, 28]. For example, public health nurses felt that continually asking and checking a child's name during the appointment was unprofessional. The existential theme of spatiality may guide our reflection to ask how space is experienced with respect to the phenomenon that is being studied. Lived space is felt space. It is not easy to put into words while one is within the experience, but the space in which we find ourselves affects us [25, 28]. For example, during the first home visit, when the client relationship was still being built, it could be observed that the parents were shy of the public health nurse, but also how the babies were a source of joy and pride. The existential theme of materiality may guide our reflection to ask how things are experienced with respect to the phenomenon that is being studied [28].

## **6. Concrete Reduction**

The method of the experiential reduction consists of the epoche of bracketing all theory or theoretical meaning, all belief in what is (un)real, and aims at explicating concreteness or living meaning [28]. Concrete reduction means avoiding abstraction and theorizing, but it does not mean that the researcher cannot know something about the phenomena. The first literature review preceded the research process; an information search was conducted after the doctoral results section was finished. The researcher needed to reflect on her pre-understanding, the framework and the nature of the question, which was a search for genuine openness to engage in a conversational relationship with phenomena such as public health nurses meeting and supporting multiple-birth families. The researcher kept a diary and reflected on her experiences throughout the research process. Epistemology views the human being as a subject and individual describing her/his unique experience. Every experience or anecdote told by the participants was respected and listened to

carefully. But it was also important to openly write about and deeply reflect on the researcher's own pre-understanding as a twin mother and health professional. Open interviews allowed the participants to describe their experiences just as they lived through them. The interviews were conducted as discussions in the workplace of the public health nurses, accommodating their time preferences. All the interviews began with the researcher requesting these professionals to tell her experiences something about support for multiple-birth families, which they then went on to describe in more detail with examples.

## **7. Eidetic Reduction**

Eidetic reduction focuses on what is distinct or unique in a phenomenon. In the current research, eidetic reduction involves respecting the experience of each participant and seeing in it different context. The method of the eidetic reduction consists of grasping some essential insight(s) in testing the meaning of a phenomenon or event. This is done by varying its aspects through the process of variation in imagination or through comparing empirical examples [28]. It relates to research ethics. Permission from the Ethics Committee at the University Hospital was obtained and the participants were provided with all requisite information and their oral and written informed consent was obtained. All the interviews were audiotaped with permission. Participant anonymity was vital all through the research process and report. The interviews flowed like a discussion with pauses, which allowed the public health nurses to think and continue while the researcher, remained silent and waited. Analysis was done respecting the participants' experiences and without hurry. In the early stages of the analysis, the researcher kept the participants' authentic experiences as a part of the essential themes and individuals were respected throughout the analysis process. Researchers are responsible for participant anonymity.

## **8. Methodological Reduction**

Methodological reduction in the current research involves bracketing all conventional techniques and seeking an approach that might fit most appropriately the phenomenological topic under study. It calls for a phenomenological attitude throughout; this helps to develop a conversational relationship with the phenomenon in order to understand the meaning of an experience. Methodological reduction means researchers gathering experiential material through open interviews and participants' written documents, this method examines the experiences through the modalities: time, body, relation and space [25, 28]. This also involves a deep reflection process. The modalities never affected the interviews as experiential material collection or analysis or disturbed the researcher's phenomenological attitude. The material consisted of transcripts of interviews with eight public health nurses.

Phenomenological hermeneutic analysis needs to be guided by an appropriate phenomenological meaning question. If the question lacks heuristic clarity, point or power, then analysis will fail for lack of reflective focus. But phenomenological hermeneutic analysis needs experiential material on which the reflection can be conducted. If the material lacks experiential detail, concreteness, vividness and lived-thoroughness, then the analysis will fail for lack of substance. So if these two basic conditions are not met, phenomenological writing is unlikely to be successful and will fail to lead to profound phenomenological insight [25].

The aim was to describe the daily lives and need for support of multiple-birth families and family nursing. As van Manen (2014) writes lifeworld, the world of everyday lived experience, is both the source and the object of phenomenological research and one method of phenomenological research is to "borrow" other people's experiences. Researcher got over 100 pages of experiential materials. Some of the descriptions were very good, some less so, but every description is important and that was respected by the researcher.

Examples provided by the participants were especially helpful in understanding their experiences. The analysis method involves three approaches: holistic reading and the selective and detailed approaches; they help identify thematic aspects of the phenomenon in question. The holistic approach involved reproducing public health nurses' comments verbatim. The text was treated as a whole and the meaning expressed by formulating such phases. The selective reading approach meant going through the text several times, identifying themes, reflecting on, describing and interpreting the phenomenon in writing. The detailed approaches mean identifying thematic expressions, phases, or narrative paragraphs that bring out the meaning and lifting out especially powerful whole experiential accounts as exemplary stories or anecdotes [25]. Each approach involves reflection and decisions by the researcher, which is an intellectual process. The phenomenological hermeneutic research requires that the researcher be interested in philosophy, experiences and the key concepts. It is also important to have enough time and trust in one's own decisions throughout research process.

## **9. Hermeneutic Reduction**

Hermeneutic reduction involves bracketing all interpretation and explicating reflectively whatever assumptions seem to need attention in writing the research text [28]. So background research was important both at the beginning, by doing an information search, and at the end. In the discussions, it was crucial to identify the phenomena involved in supporting multiple-birth families as described by social and health care professionals. These corresponded to the researcher's pre-understanding at the outset, during the heuristic reduction: it really is challenging for professionals to support multiple-birth parents and special education and training with evidence-based knowledge is needed.

The phenomena involved in supporting multiple-birth families, as described by public health

nurses, can be expressed as “recognizing the strain”, consisting of listening to how they are coping and supporting parenthood, “lightening the load of daily life”, consisting of the support network of close relatives and friends, and the need for family care workers and peer support to provide understanding, and “targeting special needs”, consisting of the need for special information, accessibility of the public health nurse and demanding sessions.

## **10. Discussion**

The methodological choices of the current research are based on ontology and the epistemology of phenomenological hermeneutics. The couplet of the epoché-reduction is the famous fundamental method of phenomenological research and inquiry. It is a method of reflection on the unique meaning of the phenomenon that one is studying to gain an eidetic grasp, fundamental understanding, or inceptual insight into the phenomenological meaning of human experience (moment or event) [29]. Researchers can use reduction for their methodological needs. In the current research, reflection was performed through heuristic, ontological, concrete, eidetic, methodological and hermeneutic reduction. These were intertwined and involved movements forward and back. The analysis was based on the epoché and the reduction, but it is more an attitude and intuitive practice than the application of some techniques, or codes, or method in an instrumental sense [28].

[25]describes hermeneutic phenomenological research through a dynamic interplay among six research activities, not to be learned as a set of procedures, but rather to initiate inventiveness and insight. First, turning to a phenomenon that seriously interests us and commits us to the world. Second, being interested in an experience as we live it rather than as we conceptualize it. Third, reflecting on the essential themes that characterize the phenomenon. Fourth, describing the phenomenon through the art of writing and rewriting. Fifth, maintaining a strong and

oriented pedagogical relation to the phenomenon. And finally sixth, balancing the research context by considering parts and whole [25]. [7] states that methodology that is guided by the philosophy of phenomenology can provide the nurse researcher with an in-depth insight into the nursing phenomena under scrutiny and thus lead to more meaningful patient care.

In the current research, the researcher found the question of pre-understanding interesting and important. Examining her pre-understanding at the outset and throughout the research process did not prevent her from seeing the participants' experiences as they experienced them. Rather it helped her keep her own experiences out of the research process and concentrate only on the participants' experiences. It was very important to write a research diary and openly consider the questions that came to mind, including memories that came out in this process, and discuss them by herself. It is important to note the need for a supervisor to share this kind of discussion with students. It could deepen the research process and lead to mutual learning.

Husserl uses “bracketing” to describe how researchers must put aside any pre-existing knowledge or assumptions about the phenomena of interest. And [25] posits that such bracketing is not necessary, but the researcher does have a responsibility to make explicit knowledge of the phenomenon. He questions whether it is even possible for researchers to really put aside their knowledge of the topic or subject. Presumptions may resurface in researchers' reflections when they try to totally forget what they already know [11, 25]. Reflection is important in phenomenology. Reflecting on experience must be thoughtful, and as much as possible, free from theoretical, prejudicial and suppositional distractions. Phenomenology is a project of sober reflection on the lived experience of human existence [26]. So it is important to be aware of one's own knowledge and, as a researcher, to understand that it is present whether one likes it or not.

In the current research, the researcher found the hermeneutic circle helpful in accumulating knowledge and understanding. It should be noted, however, that [7] also found barriers to use the hermeneutic circle: the need for experience in the field being investigated, the time required for data collection and interpretation and the mental skill to focus on and contemplate large amounts of data to form a meaningful interpretation.

## 11. Conclusion

Reduction as a method is vital in phenomenological research. It is important that researchers openly reflect on their decisions during the research process, which can help them develop as researchers and open up discussion. The method of reduction offers us the opportunity to do in-depth phenomenological hermeneutic research. It helps us see the research stages both as parts and as a whole and the hermeneutic circle that accumulates understanding. Using reduction as a method challenges and deepens understanding. It was useful, flexible, adaptive, and interesting, a process of reflection that challenges the researcher and gives energy to continue. The research path was not straight. The best learning process was finding one's own path as a researcher, and overall this was a creative process that still continues in the form of reading, processing, reflecting and better understanding. Even though this process has been hard and challenging for researcher, it has been inspiring and one of researcher's best learning process as a human being, which also changed researcher's life.

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