



Choosing the Right Qualitative Approach: Is Phenomenography a Design for my Study?

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Introduction

The *Pacific Rim Journal of International Nursing Research* has published a wide range of studies utilizing different research approaches, as well as introducing to readers' descriptions of research approaches they may not have considered before. In this short methodology paper our aim is two-fold. We begin by encouraging you as the researcher or the would-be researcher to think carefully about the qualitative approach that you choose for your study. Then we outline phenomenography so that you can decide whether this would be useful approach for you to explore and use in the future. Phenomenography is not well known or utilized much in the Asia-Pacific region in nursing research, apart from in Australia. It has been used in the west, particularly in Scandinavia, but also in the USA, and UK and a few other countries to study different experiences of the people and their perceptions towards certain phenomena.

A few words on choosing the right research approach

Qualitative approaches help nursing researchers to gain insight into critical phenomena related to the people they care for and to different topics such as those related to the nursing profession, social and policy issues, and health systems. Today, there are many qualitative approaches available as well as different

variations of these, with grounded theory (GT), ethnography, phenomenology, narrative inquiry, case studies, action research (AR), and participatory action research (PAR) being among the more well-known ones. As the years go by, the number of qualitative research approaches and methodologies has grown as scholars extend the boundaries of science and develop new ways of uncovering knowledge and the understandings and meanings of phenomena. In our rapidly transforming world, qualitative scholars attempt to get to the real "truth" of such phenomena, to the core of people's experience, and then describe in the best way possible those experiences lying at the heart of people's realities. Today, for many of us in nursing research and practice, the emphasis is about making sense of too much information being available in our worlds as a result of the exponential rise in technological developments. So it is vital, when deciding on the research approach, theoretical framework and the various methodologies to use in a study, that consideration is given to the congruence of these with the related socio-cultural context of the study setting(s) and the potential participants. This is to ensure that the social realities and experiences of individuals and groups can be efficiently and effectively explored in a meaningful way. Each researcher brings to their study their own particular world-views or presumptions that help to frame their potential or actual form of social inquiry.

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These need to be identified and examined in a reflective way before any project begins. The theoretical perspectives that each of us bring to a research study shapes the way in which we design a study or indeed interpret the findings, even if we have explicitly identified our assumptions about the phenomena or about the research processes or have attempted to be 'objective' about what we are trying to achieve.

There is, we believe, an imperative for nurse researchers to continue to challenge the status quo, to be not only rigorous in research practices, and truthful in our interpretations of the human condition, but also to try out newer approaches and methods to try to understand and explain phenomena better. So as a researcher you need to ensure that you choose carefully the research approach and theories that are culture specific or are adapted to fit the setting under investigation (naturally where necessary seeking permission of the authors of such theories or research approaches). To explain further, there are some research approaches or theories or models that at first glance seem appropriate or relevant, but many are unrealistic in different cultural settings. They simply do not fit or may be rejected by gatekeepers of research. For example, in some cultures it might be altogether taboo to ask questions about sexual dysfunction; in others, people might be willing to fill in an anonymous questionnaire but reject totally the idea of undertaking an in-depth interview on the topic. Additionally, some practices of nursing research in the west may be conducted somewhat differently in eastern countries. But the challenge always is to ensure a balance between innovation, the reality of researcher's abilities, careful and relevant adaptation of research practices or theories to the local situation, and of course the likelihood of getting research approval for your study. Too often in our experiences, novice researchers try to implement various qualitative approaches without sufficient groundwork, mentorship or supervision, or prior practice, Planning and critical thinking, and getting the right advice is vital regarding your research approach,

theoretical framework or various methodologies for your study. So, bearing this in mind, here is another research approach you might want to consider: phenomenography.

What is phenomenography?

This was developed by Ference Marton and his colleagues in Sweden at the University of Gothenburg in the mid-1970s, and originally emerged from an empirical basis, rather than a philosophical or theoretical one. According to Cutler et al.¹ phenomenography is ontologically subjective. There is an emphasis placed on the way a group of individuals construct their own reality to align with their unique experiences and understanding of the world. Marton was a professor and educational psychologist, who characterized phenomenography as a research technique for mapping social reality, in the subjectively unique and diverse ways by which groups of people encounter, conceptualize, see, and comprehend different parts of phenomena in their general surroundings.² Phenomenography has continued to evolve as it began to be used more widely; and today "there are two different approaches in the literature to analysing data: the Marton and Åkerlind methods".^{3,p.30}

Undertaking qualitative research using a phenomenographical design helps you to understand 1) the experiences of people towards the reality 2) the distinctive manners by which they encounter similar phenomena⁴ and 3) the variation in their experience through the 'derived conceptions'⁵, which are interconnected⁶ in different ways.

Phenomenography and its context

In phenomenography, researchers should be also the participants for parts of the world are interrelated; they should think about the connection between the participants and the phenomena by analyzing the 'concept' of the participants towards the phenomena⁷. Marton described people's experience as having two viewpoints: both a referential and structural perspective. The referential viewpoint examines 'what the phenomena are'⁸. The structural aspect considers 'how do the

participants go with the phenomena?', and it is this latter aspect that phenomenographers need to concentrate on. Marton further divided the structural aspect into two horizons: external and internal horizons. The external horizon separates the phenomena from other phenomena in the world, whilst the internal horizon determines the elements of the phenomena and their relationship with each other as well as the whole entity⁹. For example, if as a researcher you want to study nurses' experiences about conflict in the workplace, you need to explore 'what is the conflict' (referential view) and 'how do the nurses go with a conflict?' (structural view). In the structural view, it is necessary for you to differentiate the conflict from the other elements in the workplace such as tension, stress, and anxiety (that is, the external horizon). Then, you need to further explore the interconnected parts of the conflict such as situations, roles, personal factors, environment, and interpersonal factors that influence that conflict and how do the nurses experience the interconnected elements of the conflict in the workplace. Finally, as researcher you need to gather all the concepts involved and study these again to categorize them, based on the variation of the nurses' experiences towards the conflict. Following this method helps you as researcher to understand the variation of people's experience towards the phenomena as a whole entity.

Semi-structured indepth interviews are an essential strategy for information gathering. Interviews need to be conducted in an open, friendly environment, most preferably in a natural setting and allowing participants time and space to reflect their own experiences and views. The desirable sample size for a phenomenographic study is small. Typically it is 15-20 participants, but the final sample may depend upon the achievement of data saturation¹⁰. Study participants can be selected through a snowballing method, convenience or purposive sampling to ensure maximum variation of their experiences. As in other qualitative approaches, researchers need to employ 'bracketing' of their assumptions and biases, so as

not to contaminate the data with their own perceptions¹¹. Data analysis commonly begins with the transcription of audio-recorded interviews into verbatim transcripts. Below we introduce to you the seven steps to undertake data analysis easily and effectively⁴.

1. Familiarisation: Reading the transcripts many times until you get familiar with the data.
2. Compilation: Categorizing the participant statements based on the similarities and differences.
3. Condensation: Filtering the categories to extract relevant from the irrelevant ones.
4. Preliminary grouping: Grouping the similar categories again into limited numbers.
5. Preliminary comparison of categories: Identifying significant differences between the groups.
6. Naming the categories/groups: Naming categories based on the nature of the elements in each group.
7. Final outcome space: Arranging all the categories based on hierarchy or nature of occurrence to get the whole experience of the participants towards the given phenomena.

We add here an additional process for analysis from our research experience, that is to extract the relevant concepts carefully, for this is not included in the existing review literature about phenomenographic literature. We name the process as warming I-freezing-warming II-comparing-filtering (WFWCF) and whilst this might seem to be time-consuming, we believe it will lead to more rigorous and trustworthy findings.

Warming I- In this step, you have to do all the above-mentioned steps from familiarization to final outcome space and keep the results ready but "away from you".

Freezing- In the session, you need to try to clear your mind from the study by engaging in other activities for a period of one to two months. The purpose of the step is to approach the raw data again as a new one.

Warming II- After the freezing session, you have to transcribe the audio-recorded interviews

verbatim and follow the steps from familiarization to final outcome space once again.

Comparing– In this session, you compare the concepts and final outcome space of warming II with warming I stage results.

Filtering– Again, you have to confirm the ‘even’ concepts which evolved similarly in both stages of warming. In addition, you have to filter the ‘odd’ concepts evolved uniquely in both outcome space based on the relevance. The purpose of the step is to finalize the limited number of concepts with variation.

The output of the phenomenography

This involves writing a detailed narrative of the findings to support the named categories and arrange the categories based on the nature of occurrence or hierarchy in a table, conceptual model, chart, called the outcome space. This gives a total variation of experience by the participants towards the given phenomena. For example, related to the above–given example, the categories would be derived from studying the nurse’s experience towards the conflict in the workplace. Suppose, the categories are named as de–escalation, triggering, conflict, escalation, and post–conflict, arrangement of the categories can be based on the nature of the occurrence in a cyclical phase such as triggering, escalation, conflict, de–escalation, and post–conflict. Using the method regarding the outcome space, one can easily understand the variation of experiences of the participants towards the conflict in the workplace rather than the mere collection of categories.

Reliability and validity check of the results¹²

Here are two methods to check the reliability.

1) Intercoder reliability check: The two researchers can analyze the data independently and compare the categories. 2) Dialogic reliability check: The researcher can discuss and finalize the categories through discussions with other phenomenographic researchers. For validating the results¹³, you can opt for two ways, 1) Communicative validity check: The researcher can communicate the results through conferences and seminars, and can

conclude the interpretations based on the suggestions.

2) Pragmatic validity check: The researcher has to validate the results themselves by checking how the result of the exploration is advantageous to the intended interest group.

Phenomenography and phenomenology

Marton developed the phenomenography with an aim to understand a pupil’s variation of experiences towards learning. Nonetheless, we attempted to understand the concepts, its scope in nursing research and difference with phenomenology. There seems to be numerous articles distributed on purportedly phenomenographic studies, where the outcomes introduced appear to be gained from a topical phenomenological examination¹⁴. This issue was also noted by Marton. To avoid such confusions, we briefly describe how the phenomenography differs from the phenomenology.

In phenomenography, the words ‘phenomena’ and ‘graph’, describe the variation of people’s experience towards the phenomena. In phenomenology, the words ‘phenomena’ and ‘logos’ aim to understand meaning through the exploration of the lived experience towards it. It is the study of ‘what the phenomena are’ by exploring the participant lived experience of the phenomena through narrative description. This is called a first–order perspective. Phenomenography studies the participant’s understanding of the phenomena by exploring ‘how it is’ or ‘what do you *feel* about it?’ through the conception of experiences. This study does not focus on the phenomena but on the ‘variation of experiences’ in the participant’s understanding of the phenomena. This is alluded to as a second–order point of view¹³.

To illustrate this, we have selected an article, ‘Anaesthesiologist’s Work’¹⁴, which explains the difference between the phenomenographic and phenomenological approach in the same study. The researchers developed the questions based on ‘What is anaesthesiology?’ in a study using the phenomenology approach, and ‘What do you feel or think about anaesthesiology as an experienced person in the anaesthesia department?’

in the phenomenography approach. The thematic results in the phenomenological approach were 1) Carrying the responsibility regarding the patient's vital capacities 2) Continually being an alarm, observing painstakingly over the patient's body 3) Prepared to act on whatever point the patient's life is in peril and 4) Anesthetizing them safely. Here, the doctors explored the lived experience of anaesthesia focusing only on the patient's life through the first-order perspective. There were no variations on their lived experiences. In contrast, findings from the study using the phenomenographic approach produced four classifications 1) Seeing the patient as a physiological thing, checking and controlling the vital capacities: the expert craftsman 2) Seeing the patient as a man, managing him securely through the activity: the great Samaritan 3) Centering around the healing facility framework, serving patients, different specialists, and medical caretakers: the worker and 4) Sorting out and leading the working theater and group: the organizer with an outcome space (See study of Larsson et al.)¹⁴. The various ideas about anaesthesiology from an 'accomplished anaesthesiologist's point of view', results in getting a far-reaching picture of the anaesthesiology. This method of inquiry helped to find out the 'variations' in the 'understanding' of the anaesthesiologist's work from different angles, and so is deemed a second-order perspective approach.

Conclusion

We cannot say that the phenomenography is superior to phenomenology and vice versa as they are both different approaches with different expected outcomes. If you are serious about trying to understand and learn about the importance, process, use and rigor of phenomenographic and phenomenological designs, we recommend you to conduct a study using both designs; phenomenology in the first phase to understand the structure of the phenomena, and phenomenography in the second phase to understand the variation of participants' experiences towards the phenomena, sequentially. This can be called a sequential

exploratory approach. These type of studies in the healthcare sector help to get the whole picture of the phenomena from the two sides, by analyzing the lived experience and variations in participant's experiences. Study findings would rich and would help, for example, administrators to revise care protocols to ensure quality and effective patient care. This is one way that two-design studies can pave the way to seal the gap between the research and clinical practice. We encourage you to be innovative in your qualitative research and to extend the boundaries of the qualitative approaches and methods you currently choose to use.

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