

Critical research analysis



In this paper, a critical analysis was conducted on the article by Joy Phillips, “Exploring Student Nurse Anesthetist Stressors and Coping Using Grounded Theory Methodology” focusing on the qualitative methodology, description of target population, sample and setting, ethical issues, data analysis and quality of description of findings and implications for nursing practice. Next a summary of this paper is provided synthesizing the content of the paper.

The purpose of this paper is to cultivate critical thinking, evaluate the research methods and discuss the strengths, limitations and logical links among the steps of the research process. Overview The overall presentation of the study was consistent with the study’s purpose, method and findings. The study has some implications and recommendations for both student nurse anesthetist and nurse faculty. Also, the recommendations in the study may be beneficial for the students enrolled in parallel programs.

A number of steps of the research process were not identified in the article, however this could be due to the specific requirements that articles should include before being submitted to the American Association of Nurses Anesthetists Journal for Publication (American Association of Nurse Anesthetists, 2011). The report could have provided more detail on the type of literature that was reviewed before and after the study was conducted and what methods was used to prevent researcher bias. Overall, this was a good article that contains a few strengths, weakness and limitations.

Qualitative Methodology

As stated by Burns and Groves “ the method section of a research report describes how the study was conducted and usually includes the study design, sample, setting, methods of measurement and data collection

process” (2011). In this article, Phillips used the naturalistic paradigm and grounded theory tradition to collect and analyze the data. This was described in the abstract and again in the methods section of the article. Written interviews were used to contact the participants and the author used semi-structured interviews to collect the data. This strategy of data collection was consistent with the grounded theory tradition.

By using semi-structured interviews this allowed the participants to identify their particular stressors and coping mechanisms they used to successfully negotiate those stressors. Literature Review Loiselle and McGrath defined literature review as “ a critical summary of research on a topic of interest, often prepared to put a research problem in context” (2011). The author does not have a literature review section in the article but this could be due to the restrictions placed on the author by the publisher. Depending on the QL research the literature review may be conducted before or after the research process.

For grounded theory tradition which the author used in this article researchers include a minimal review at the beginning of the research so that the researcher is aware of what studies have been conducted but the major literature review is conducted at the end of the research process (Burns & Groove, 2011). No relevant literature citing was noted anywhere in the article and Phillips stated that to her knowledge there is no research that explores how recent graduates of nurse anesthesia programs viewed and negotiate the challenges of the nurse anesthesia programs.

Not conducting a literature review at the beginning of the study could be seen as a weakness of the study because the issue the researcher was

considering may no longer be a problem and thus the researcher's initial research question and purpose may need to change addressing a relevant issue. Forty eight references were cited at the end of the article dated from 1967 to 2009. Fourteen of the references were within five years. Purpose The purpose of the study was very specifically noted at the beginning of the abstract. This was followed by the two research questions which were clearly delineated as follows: a) From the graduates' perspectives, what were the stressors that they encountered during their nurse anesthesia program? b) And how did they successfully negotiate those stressors in order to graduate from their program? The question was consistent with the naturalistic paradigm, grounded theory tradition and the data-driven developmental framework for the student nurse anesthetist experience was made explicit. The purpose is directly related to the problem, which are the stressors the student nurse anesthetists face during their curriculum.

The purpose statement is important because it “ indicates the nature of the inquiry, the key phenomenon under investigation, and the group or community under study” (Loiselle & McGrath, 2011). The purpose statement was clearly stated identifying information that supports the need for the study and it answered the ‘ who’ and ‘ what’ of the statement. However, the ‘ where’, was implied because of the nature of the study. Problem Statement Well established nurses pursuing a career in anesthesiology face inherent stressors within the curriculum and after they graduate from the anesthesia program.

The research problem was that little is known about nurse anesthesia graduate education and most of it is dedicated to cultural competency

training, attrition rates, clinical aspects of the curriculum, or a historical overview of how the education has changed through the years (p. 474). The problem does not specifically influence nursing practice, however it does address educational concerns and generate findings to improve the nurse anesthesia curriculum and decrease student's stressors.

The research problem fit well with the naturalistic paradigm because based on the nature of the problem the answers can only be obtained through inquiry of the student's perspectives. Grounded theory was a perfect fit for this study because it allowed the author to pursue the discovery mode of nursing inquiry to obtain the in-depth information she needed from the participants. Through this mode of inquiry substantive theory was developed. If the author had used another QL tradition she would not have been able to get such in-depth information to develop a theory.

Description of Target Population, Sample & Setting In this study, the target population is student Nurse Anesthetist and the sample population is students who have graduated from the anesthesia program. The inclusion criteria for the study were implied, however the exclusion criteria were not provided. This could be considered a weakness for the study in terms of how the sample was selected. Phillips stated on (p. 475) that the method of sampling used in the study was theoretical sampling.

This method of approach for collecting data is congruent with the grounded theory design and the goal is to select participants who can contribute to the evolving theory. Theoretical sampling was a good fit for the grounded theory design because through this sampling method theoretical ideas are generated and developed allowing the researcher to see the interrelationship

that occur in theory (Loiselle & McGrath). Participants were recruited through written invitations which were placed in their respective mail boxes in the anesthesia lounge of the hospital.

Participants who were interested in the study contacted the researcher via email or telephone. The study included twelve recent graduates of the nurse anesthesia program, representing five different nurse anesthesia programs, and who have been out of school for less than two years (p. 475). The author stated that the goal in QL study sampling is depth of information rather than large numbers. Although, this may be true, the average sample size for grounded theory study is 25-30 people. Having such a small sample size could limit transferability of the findings thus causing this to be a weakness in the study.

Purposive sampling is implied because of being a grounded theory study and subjects were self-selected using a convenience sampling design (p. 475, column 1, paragraph 3). These methods all fit with the naturalistic paradigm and the grounded theory tradition. Based on the needs of the study which is to examine the challenges that recent graduates of the nurse anesthesia programs and to gain their perspectives on the stressors they faced and the coping mechanism they used to negotiate the stressors, these methods of sampling were the best method to enhance information richness and address the needs of the study.

Demographic information on the participants would have been useful in determining the selection of the participants. Ethical Issues Loiselle and McGrath defined ethics as “ a system of moral values that is concerned with the degree to which research procedures adhere to professional, legal, and

social obligations to study participants” (2011). Before conducting the study, Phillips obtained approval from the institutional review board of Walden University (p. 474). The author did not state whether ethical procedures were followed to prevent the participants from harm, risks and exploitation.

There was also no discussion on the benefits and risks of the study, however implied benefits would be the findings from the study would fill a gap in the current nursing education literature, nurse anesthesia faculty would acquire the knowledge needed to assist adult students in managing the steps to successfully concur challenges face throughout the program and help students assimilate into the new professional roles (p. 474). Risks of the study may include emotional discomfort with disclosure of feelings and emotions. In regards to respect for human dignity, the author stated that written consent was obtained from all participants (p. 74). Participants were also given the opportunity to decline participation at the time of contact for inclusion in the study (p. 475). By respecting human dignity the author must protect the interest of the study participants and ensure that their rights to self-determination, the right to full disclosure and informed consent are met (Loiselle & McGrath). The full extent of this principle was not discussed in the study. Justice, another core ethical principle was defined by Loiselle and McGrath as the right to fair treatment, right to privacy, and inclusivity (2011).

More information was needed to determine how the author followed this principle. Minimal information was provided on the steps the author took to protect the study participants following these three core ethical principles: beneficence, respecting human dignity, and justice. From the reader’s

perspectives it may seem as if the author was more interested in conducting the study and neglected the wellbeing of the participants. This could also be viewed as a weakness in the study. Data Analysis and Quality Data analysis is “ the systematic organization and synthesis of research data” (Loiselle & McGrath, 2011).

In qualitative research, researchers seldom state the style of analysis they used in their study. In this article it was implied that editing analysis style was used in this grounded theory study and this style of analysis requires the researcher to act as the interpreter to read through the text in search of meaningful segments (Loiselle & McGrath, 2011). The author did not provide a full description on the methods she used to manage, organized and collect data from the participants. Phillips stated that the data from the interview were read multiple times and the participants were emailed a copy of their transcript.

From this statement one can suggest that Phillips used the computer program to manage her data, however, whether the data was collected by audiotape, recording, taking field notes etc. was not stated in the article. The quality and trustworthiness of data can be enhanced in several ways. In Phillips article we will look at how credibility, confirmability, dependability and transferability of the data were met in the data analysis process. Through prolonged engagement with participants by individual and group interviews each lasting 60-90 minutes was one way credibility was enhanced in this study.

This did not just give the researcher sufficient time to collect the data, but it also allowed her to build a trusting relationship with the participants. By

building a trusting relationship with the participants they would be more inclined to share their experiences, thus enhancing credibility. Triangulation was another method the author used to enhance credibility although the specific type was not specified. Member checks was also used by the researcher and this was carried out when the researcher emailed each participants a copy of their transcript