4   RESEARCH METHODOLOGY

4.1   INTRODUCTION

In Chapter 3, I provided an in-depth review of the literature which framed the theoretical context of the study. I orientated the reader to the theory and various published works as they pertain thereto. Chapter 4 is dedicated to the research methodology.

4.2   RESEARCH METHODOLOGY

In Section 1.9, an introduction to the research methodology was presented. As stated previously, in this study, I regarded methodology as consisting of the research design, research approach and research methods. Figure 4.1 presents a schematic summary of the research methodology. A discussion of each component follows.

4.2.1   Research design

Research design is defined as "*the overall plan for addressing a research question, including specifications for enhancing the study's integrity*" (Polit & Beck 2017:743). This study had a qualitative design which is defined by Polit and Beck (2017:741) as: "*the investigation of phenomena, typically in an in-depth and holistic fashion, through the collection of rich narrative materials using a flexible research design*". Exact planning of qualitative studies is not possible due to its overall emergent design (Polit & Beck 2017:464) which reflected my desire to base the study on reality and the perspectives of the stakeholders involved (Guba and Lincoln 1985 as cited in Polit & Beck 2017:463). The emergent design further allowed me, in collaboration with the relevant stakeholders, to make decisions as knowledge developed (Polit & Beck 2017:463; Thorne 2016:126; Creswell 2014:4).

Characteristics of qualitative designs as noted in Polit and Beck (2017:463) and as applied in this study were: the use of various data collection techniques (see Section 4.3.3.1, Section 4.3.3.2, Section 4.3.3.3), collection of data from various levels of stakeholders, which aided me in obtaining a holistic understanding of the needs of NQPNs from different perspectives (see Section 4.3.2), the emergent design (see Section 4.4.1.7) and my active involvement in the study, which is evident throughout this thesis. Although qualitative designs are synonymous with inductive approaches to data analysis (Thorne 2016:59), the use of the Person-centered Practice Framework (see Figure 2.3) guided the co-construction of the nurse residency programme (see Section 4.4.1.7) and called for a combination of an inductive/ deductive approach such as supported in Perry and Jensen's (2001:[4]) modified grounded theory approach. Combining inductive and deductive approaches to data analysis in studies with a qualitative design is further supported by Bergdahl and Berterö (2015:119), Perry and Jensen (2001:4) and Hyde (2000:84).
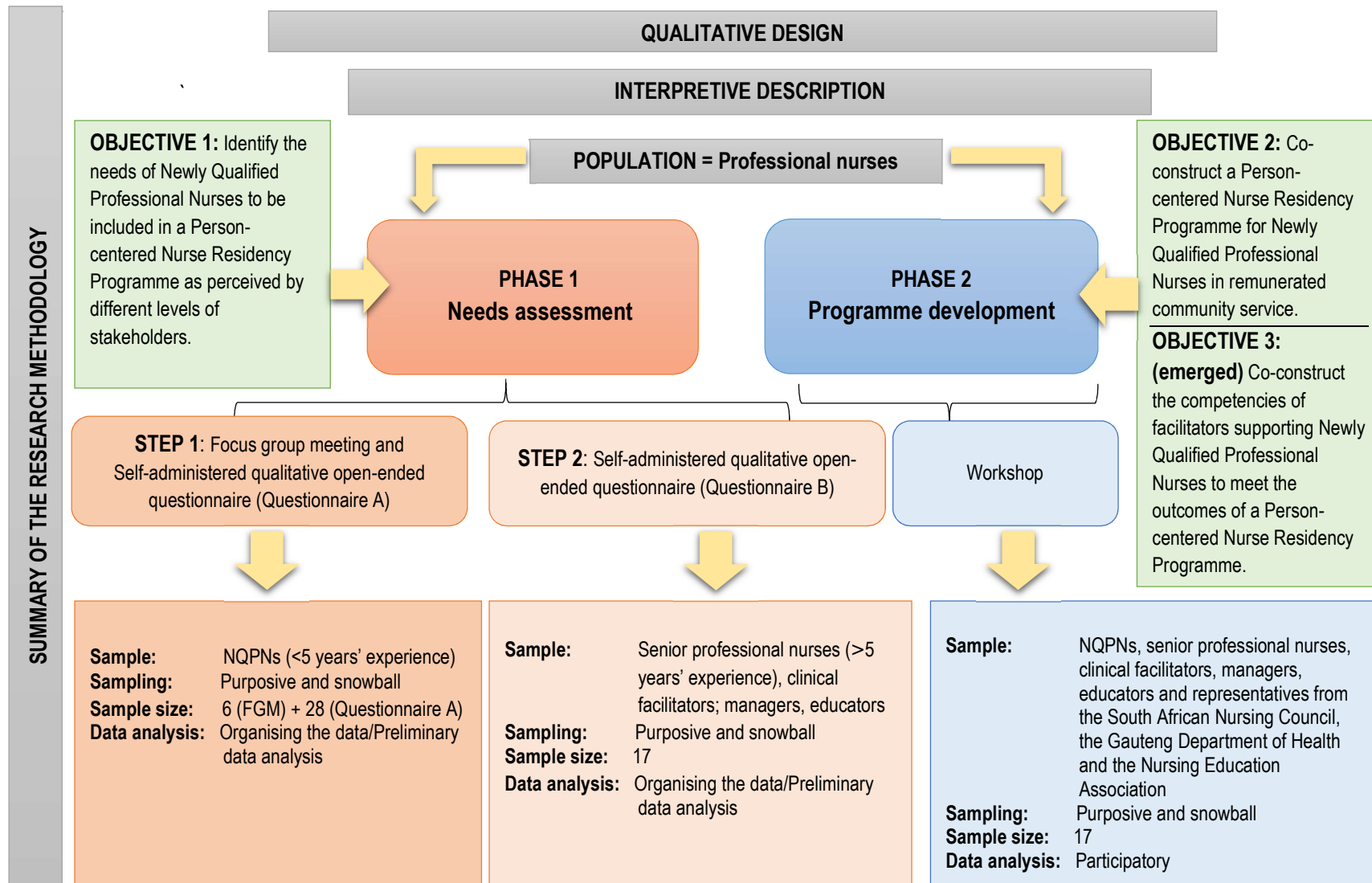
QUALITATIVE DESIGN

INTERPRETIVE DESCRIPTION

SUMMARY OF THE RESEARCH METHODOLOGY

OBJECTIVE 1: Identify the needs of Newly Qualified Professional Nurses to be included in a Person-centered Nurse Residency Programme as perceived by different levels of stakeholders.

POPULATION = Professional nurses

OBJECTIVE 2: Co-construct a Person-centered Nurse Residency Programme for Newly Qualified Professional Nurses in remunerated community service.

OBJECTIVE 3: (emerged) Co-construct the competencies of facilitators supporting Newly Qualified Professional Nurses to meet the outcomes of a Person-centered Nurse Residency Programme.

PHASE 1
Needs assessment

PHASE 2
Programme development

STEP 1: Focus group meeting and Self-administered qualitative open-ended questionnaire (Questionnaire A)

STEP 2: Self-administered qualitative open-ended questionnaire (Questionnaire B)

Workshop

Sample: NQPNs (<5 years' experience)
Sampling: Purposive and snowball
Sample size: 6 (FGM) + 28 (Questionnaire A)
Data analysis: Organising the data/Preliminary data analysis

Sample: Senior professional nurses (>5 years' experience), clinical facilitators; managers, educators
Sampling: Purposive and snowball
Sample size: 17
Data analysis: Organising the data/Preliminary data analysis

Sample: NQPNs, senior professional nurses, clinical facilitators, managers, educators and representatives from the South African Nursing Council, the Gauteng Department of Health and the Nursing Education Association
Sampling: Purposive and snowball
Sample size: 17
Data analysis: Participatory

Figure 4.1: Summary of the research methodology consisting of the research design, research approach and research methods

Figure 4.1 depicts the qualitative research methodology of this study, consisting of the interpretive descriptive approach and the research methods as applied across the two phases of the study. It also provides an illustration of which objectives were addressed in each phase.

4.2.2 Research approach

Qualitative research is categorised according to disciplinary traditions, which denotes the approach used. Traditional qualitative designs are rooted in the research traditions of ethnography, grounded theory and phenomenology. At times, however, researchers take an alternative, generic approach in qualitative studies that is not associated with any specific discipline. One such generic approach is descriptive qualitative studies and interpretive description is an extension thereof (Polit & Beck 2017:462;468-479).

Interpretive description is described by Thorne (2008:26) as "*an approach to knowledge generation that straddles the chasm between objective neutrality and the abject theorizing extending form of understanding that is of partial importance to the applied discipline within the context of their distinctive social mandates. It responds to the imperative for informed action within the admittedly imperfect scientific foundation that is the lot of human science*". It is worthy to note that some studies refer to interpretive description as a methodology (Draper 2015:52; Hunt 2009:1284), but that the founder thereof, Sally Thorne, states that it should be regarded as a disciplinary approach to qualitative research and not a methodology on its own (Thorne 2016:85). Interpretive description was specifically "*designed*" to answer research questions specific to applied disciplines such as nursing (Thorne 2016:85), because traditional qualitative approaches and pure descriptive studies do not always meet the needs of nurse researchers in their quest for knowledge (Thorne, Kirkham & MacDonald-Emes 1997:169;170). This was mostly contributed to the fact that traditional qualitative research stems from social sciences that focus on theoretical problems (Teodoro *et al.* 2018:2; Thorne *et al.* 1997:172) whereas applied science researchers do not just strive to describe what they find, but also need to interpret findings through reflection and critical examination (Thorne, Kirkham & O'Flynn-Magee 2004:6). Applied science researchers attempt to address a practice problem and at the same time also remain flexible for adaptation in different contexts and as new knowledge arises (Teodoro *et al.* 2018:2; Thorne *et al.* 1997:172). The interpretive description approach is, therefore, suitable to solve practice problems in applied disciplines as it does not serve the purpose of extensively theorising findings, but rather to give practical solutions to the problem posed (Teodoro *et al.* 2018:[3]). Although interpretive description was initially developed and applied in the discipline of nursing, it has since been applied to other disciplines such as education (Draper 2015; St. George 2010:1625), public health (McNamee 2018), organisational development, accounting and information systems (St. George 2010:1625).

Interpretive description links traditional research traditions together, allowing researchers to deviate from exact techniques and procedures constituted by each specific one (Thorne 2016:85;87), and rather allows them to choose

techniques and procedures required by the specific discipline in which the study is conducted (Polit & Beck 2017:479). The reasoning of the researcher is, therefore, the central element that drives the design of an interpretive description study (Thorne 2016:45). My reasoning for using an interpretive description approach is discussed in the next section.

4.2.2.1   My reasoning for using an interpretive description approach

I considered interpretive description as an appropriate approach to use in this study because it assisted me to address a practice need within the nursing- and nursing education contexts. I would not have been able to address this problem by using traditional qualitative research approaches such as ethnography, phenomenology and grounded theory. I first looked at ethnography, which is affiliated with the discipline of anthropology and considered it unsuitable as I did not aim to interpret the cultural behaviour of the participants (Polit & Beck 2017:466;468), but rather aimed to address a practical problem, which was the lack of support experienced by NQPNs during remunerated community service as well as their reported incompetence. I then looked at phenomenology, which is primarily related to the field of psychology and aims to understand the lived experiences of participants and how it shapes their perceptions. Phenomenology supports previous knowledge, distinguishes between interpretation and explanation and mainly collects data through in-depth interviews (Polit & Beck 2017:471) using small samples of ten (10) or less participants (Polit & Beck 2017:499). I did not regard phenomenology as an appropriate approach as I did not only want to describe the lived experiences of the participants, but rather wanted to ascribe meaning to NQPNs' needs as perceived by different levels of stakeholders and provide a practical solution thereto. I also scrutinised grounded theory but found it inappropriate as I already identified the research problem, whereas with, grounded theory, the problem emerges from the data (Polit & Beck 2017:474). Grounded theory also requires a maximal variation of the sample (Polit & Beck 2017:499), involves complex essential coding and aims to develop a theory (Polit & Beck 2017:543;474), which was not the purpose of this study.

I lastly considered a generic qualitative design using a descriptive approach as described in Polit and Beck (2017:479) but considered it insufficient seeing as it would only allow me to focus on describing the lack of support experienced by NQPNs in remunerated community service and would not allow me to interpret the data and provide a solution thereto. Description relates to what is perceived in practice (St. George 2010:1627) and plays an essential role in health research (Thorne 2016:59), as it creates awareness of phenomena among colleagues and serves as an empirical basis for creating new research questions. In contradiction to descriptive qualitative studies, interpretive description does not settle for a mere description of phenomena but draws from interpretive hermeneutics which aims to discover associations, relationships and patterns occurring within the phenomenon (Thorne 2016:60). Interpretation is what leads decisions on appropriate actions that are to be taken and assists practitioners to make sense of what is seen - to formulate additional questions and to find solutions, ultimately applying knowledge (St. George 2010:1627).

Another problem that exists when using traditional research approaches, is that the credibility of each of them is directly dependent on the integrity of the methods used to reach the findings. This created a problem for me as this study required methodology grounded in the epistemological beliefs of the nursing discipline to address the research problem. However, I departed from some of these approaches and noted it accordingly as suggested by Thorne et al. (1997:172) to "*legitimise*" its use within nursing research. Considering the original aim of the study was to co-construct a nurse residency programme to address the lack of support experienced by NQPNs in remunerated community service, interpretive description was found to be a suitable approach as it helped me to answer the question of "*So what?*" (Thorne 2016:41; St. George 2010:1624).

4.2.3   Research methods

Research methods are defined according to Polit and Beck (2017:743) as: "*The techniques used to structure a study to gather and analyse information in a systematic fashion*". This interpretive description study consisted of two Phases namely: needs analysis (Phase 1) and programme development (Phase 2). As part of the research methods, I will discuss the population and the stakeholder analysis and gaining entrée to the research site. A comprehensive discussion of each phase follows.

4.2.3.1   Population and stakeholder analysis

The population is defined by Polit and Beck (2017:249) as the complete combination of cases in which the researcher is interested. In qualitative studies, a population is not chosen for the purpose of generalisability, but rather to establish the kinds of individuals that are suitable to take part in the study (Polit & Beck 2017:491). In this study, the target population was identified as professional nurses, irrespective of what position they currently fulfil. Aside from the Management team of the tertiary hospital involved in this study, I also conducted a stakeholder analysis to establish which groups and/or individuals would be good sources of rich data or that would make a positive contribution during the development of the Person-centered Nurse Residency Programme. Schmeer ([n.d]:[1]) defines a stakeholder analysis as a process of systematically gathering and analysing qualitative information to establish whose interests should be considered when developing and/or implementing a programme.

Stakeholders are, therefore, the individuals or organisations that have a vested interest in the programme. Categories of stakeholders include internal stakeholders (staff in the organisation); external stakeholders (staff from outside organisations) and interface organisations who operate across organisational and environmental boundaries (Registered Nurses' Association of Ontario 2012:37; Chapman 2011:TAHP-1). The list of stakeholders was established from literature discussing the development of nurse residency programmes (see Section 3.5.1, Section 4.2.3.1), personal clinical experience as supported by the constructivist and interpretive description approach (see Section

2.7.2.2; Section 2.7.2.3) and expert consultation (Schmeer [n.d.]:2-6). Stakeholders were plotted on an interest/power grid (Registered Nurses' Association of Ontario 2012:40) based on characteristics that assisted me to establish their power and interest in the study such as knowledge, interests, decision-making abilities, experience with teams and the ability to have an effect on the development of the nurse residency programme (Flicker 2014:728; Maric 2013:222; Registered Nurses' Association of Ontario 2012:38). A summary of the stakeholder analysis and where stakeholders were plotted in terms of their potential influence and support is presented in Table 4.1.

Table 4.1: Summary of the stakeholder analysis

POWER		Stakeholder power/interest grid	
		INTEREST ←	
		High	**Low**
	High	**Stakeholders** Newly Qualified Professional Nurses Senior professional nurses Clinical facilitators Educators	**Stakeholders** Ward Managers Top management Nursing Education Association (NEA) South African Nursing Council (SANC) Department of Health
	Low	**Stakeholders**	**Stakeholders** Educational experts

Table 4.1 illustrates the stakeholder analysis conducted and where each group of stakeholders lie on the interest/power grid. Stakeholders with a high interest and high power, were considered as crucial potential participants in this study.

4.2.3.2 Gaining entrée to the research site

Seeing as the idea for the study was developed from my own personal experience as a nurse, frequently working with NQPNs in practice, I set out to obtain other nurses' professional views on the transition and integration of NQPNs into clinical practice and the extent of support given to them during remunerated community service. I engaged in informal discussions with clinical facilitators and NQPNs personally known to me and the results of these informal discussions affirmed my views regarding the lack of support they receive. I then started the formal process of gaining entrée into the research site by making use of guidelines for gaining entrée as provided by Polit and Beck (2017:168).

As an initial step, an appointment was made to meet the Deputy Director of Nursing of the tertiary hospital to informally discuss the central concept of the study and to obtain any inputs she might have. This also helped me to determine how receptive the institution would be for conducting the study in their institution. During the meeting, the Deputy Director of Nursing affirmed my views and discussed the current problems experienced with NQPNs within the tertiary hospital. From this discussion, I could obtain some baseline information. I was advised to develop the proposal and submit it to the Deputy Nursing Services Manager who acted as a gatekeeper to the Director of Nursing and Chief Executive Officer, who are responsible for approving research conducted in the tertiary hospital. Gatekeepers are persons who have the authority to allow entrée into a research site (Polit & Beck 2010:260) and play an important role in the recruitment of participants who would be valuable to the study. Gatekeepers can, however, at the same time block access to the research site, whether deliberate or not, by enforcing their own opinion on participant selection (Barbour 2010:334). The research proposal was developed where after it was approved by the In-House Research Committee on December 2015 and the School PhD Defence on May 2016. Provisional ethical approval from the Research Ethics Committee of the University of Pretoria was obtained on 18 August 2016.

I made an appointment to meet the Deputy Nursing Services Manager to discuss the research proposal and again the overview of the study was well received. The research proposal, provisional ethical approval (see Annexure A1) and a letter requesting permission to conduct the study at the tertiary healthcare institution was submitted to the Deputy Nursing Services Manager who then submitted it to the Director of Nursing and the Chief Executive Officer of the tertiary hospital. I was not able to meet the Director of Nursing or the Chief Executive Officer myself, but the correspondence was done on a continuous basis via E-mail to follow up on the status of hospital approval as suggested by Morse and Field (1995) as cited in Polit and Beck (2017:168). I focused on building a trusting relationship with the Deputy Nursing Services Manager as suggested in Polit and Beck (2017:168); Barker et al. (2016:48) and Booyens (2014:149) as she could influence the success of the study by acting as a gatekeeper to potential participants. The process took long, but Hospital approval was obtained on 14 October 2016 (see Annexure A3). Thorne (2016:130) acknowledges the delays and difficulty in entering a research setting as an applied sciences researcher, especially when being an outsider to the institution. Although I was familiar with the facility, I only knew one gatekeeper, but no other key persons. The document was submitted for final ethical approval to the Ethical Committee of the University of Pretoria and final ethical approval was obtained on 17 October 2016 (Annexure A2). A second appointment was arranged with the Deputy Nursing Services Manager to start negotiating formal access into the wards for data collection purposes. Further negotiations were done throughout the duration of the study as needed.

4.3   PHASE 1: NEEDS ASSESSMENT

A needs assessment is defined by Andelson, Manolakas and Moore (1985) as cited in Pilcher (2016:185) as a systematic approach that establishes what must be learnt. Conducting a needs assessment as part of programme development is supported by the South African Qualifications Authority's suggested "*design down/deliver up*" approach as described in Botha and Coetzee (2010:22) and forms part of person-centered education (Attard *et al.* 2010:3). The rationale for conducting a needs assessment in this study was to establish the needs of NQPNs in remunerated community service as perceived by different levels of stakeholders and at the same time to also establish "*what already exists*" in practice. As motivated in Section 3.6, by including views from multiple levels of stakeholders, I was be able to obtain a more accurate representation of what the "*probable truth*" is about the competence of NQPNs, based on the identified needs (Thorne 2016:89). Furthermore, although not part of the scope of this study, by including stakeholders' suggestions, buy-in increases and successful implementation of the programme can be anticipated (Bratt 2013:103).

4.3.1   Sampling

Sampling refers to the procedure of selecting a subset of the population to represent the whole population (Polit & Beck 2017:743). I considered using convenience sampling, which entailed that data would only be collected from the tertiary hospital involved in this study. Convenience sampling, however, carried the risk that participants would only report on their experiences that are representative of the specific tertiary hospital, as Polit and Beck (2017:492) and Thorne (2016:102) explain. I therefore rather used purposive sampling, a non-probability sampling method where I selected participants based on my personal judgement of which of them would be most informative (Polit & Beck 2017:741). The use of purposive sampling in interpretive description studies is supported by Thorne et al. (2004:6). I also made use of snowball sampling, which is a form of sampling based on a referral from original informants (Polit & Beck 2017:492). A disadvantage of snowball sampling noted in Polit and Beck (2017:493) is having a small sample due to having limited acquaintances. This was not the case in this study as I combined snowball- and purposive sampling to increase the sample size to generate more data. A second disadvantage is that the quality of referred individuals may be poor.

4.3.2   Sample

In **Step 1**, the sample consisted of NQPNs who graduated under Regulation 425 and who completed remunerated community service in a public healthcare institution in the Gauteng province. These participants were selected as they shared "*common ground*", which enables them to share and compare their experiences and generate good interaction (Morgan & Hoffman 2018:254; Polit & Beck 2017:511). Additionally, specific inclusion criteria were established which

affected the NQPNs' ability to participate in the study. Polit and Beck (2017:250) define inclusion criteria as detailed characteristics by which individuals are selected for inclusion in the study.

The following inclusion criteria applied:

- Remunerated community service was completed between 2013-2016.
- Remunerated community service was completed in a hospital and not any other type of public healthcare institution.

The reason for applying the first inclusion criterion was to generate more data and to overcome the disadvantage of difficulty in participant recruitment, which is synonymous with focus group meetings (Carlsen & Glenton 2011:7). I included the second inclusion criterion, by only selecting participants from hospitals to ensure better "*common ground*" as infrastructures of hospitals differ greatly from, for example, clinics, which may lead to significant differences in experiences, challenges and needs.

In Step 2, the sample consisted of senior professional nurses, clinical facilitators, managers and educators. The following inclusion criterion was applied:

- Qualified as a professional nurse for five (5) years or longer.

The involvement of participants other than NQPNs assisted me to obtain maximum variation sampling, which is in line with the constructivist paradigm (Rodwell 2015:[13]) and enriched the data. Maximum variation sampling, according to Polit and Beck (2017:493) refers to the deliberate decision of the researcher to include participants from different backgrounds, e.g. nursing and education and that have different viewpoints of the competency and needs of NQPNs. In the following sections I will discuss the data collection techniques followed in each step.

4.3.3   Data collection techniques

Data collection in Phase 1 consisted of 2 steps. In **Step 1**, a multi-method approach was taken by conducting a focus group meeting and distributing a self-administered qualitative open-ended questionnaire (Questionnaire A) (see Annexure C4). I considered conducting individual interviews, but according to Polit and Beck (2017:511) the data generated from the conversations between participants sharing their experiences in focus group meetings are more informative than individual interviews, which supported my decision to rather conduct a focus group meeting. Thorne (2016:93), however, argues that focus group meetings do not generate the depth of data that can be obtained during individual interviews. I agree with Thorne's view, but seeing as generating in-depth data was not the goal of this study, but rather to obtain the different views of the participants on their experiences during remunerated community service and their suggestions for content to be included in the nurse residency programme, a focus group meeting was deemed a more appropriate technique for data collection.

My decision to collect additional data by distributing Questionnaire A was motivated by the difficulty I anticipated in recruiting participants for the focus group meeting and as supported by my epistemological stance as nurse, where I know that the realities of 12 hour shifts, day- and night duty rotation and duty rosters would further complicate my recruitment of participants. The timeframe in which the focus group meeting was conducted and in which Questionnaire A was distributed overlapped, but I will discuss each technique separately. In **Step 2**, data was collected using a second self-administered qualitative open-ended questionnaire (Questionnaire B) (see Annexure E1), which will be discussed in Section 4.3.3.3.

4.3.3.1   Focus group meeting

Focus group meetings are informal discussions among a small group of individuals that have the same concerns or share similar experiences regarding a specific phenomenon (Polit & Beck 2017:511). Focus group meetings enable the researcher to generate certain "*social knowledge*" such as shared beliefs and values (Thorne 2016:145) and serve as a good platform for participants to share information that normally isn't uncomfortable to share in a social group (Thorne 2016:146). Focus group meetings are guided by either a facilitator or moderator who raises topics for discussion among group participants (Greeff 2011:360,367; Liamputtong 2011:3). By conducting a focus group meeting I could obtain data on different experiences and perspectives of the participants in a short period of time (Morgan & Hoffman 2018:251; Polit & Beck 2017:511; Greeff 2011:361) and without having to spend a lot of money (Kroll, Barbour & Harris as cited in Greeff 2011:361). The use of a focus group meeting as an effective way in which to conduct a needs assessment is supported by Ryan, Gandha, Culbertson and Carlson (2014:1) and McCawley (2009:6). Focus group meetings also align with the person-centered approach as it is considered a friendly and respectful technique to use and carries a message of my preparedness to listen without being defensive (Greeff 2011:362). Masadeh (2012:64) disagrees with these advantages of focus group meetings and argues that they are in fact time consuming and costly. The focus group meeting is discussed at the hand of the adopted and adapted guidelines for focus group discussion methodology as provided in Nyumba, Wilson, Derrick and Mukherjee (2018:22).

❖ **Developing and pilot testing the focus group guide**

Before conducting the focus group meeting, I developed a focus group guide after consulting with my supervisor, and co-supervisor (Thorne 2016:127) (see Annexure D2). The focus group guide acted as a blueprint and memory aid for the facilitator and assisted in making data collection more organised (Vaughn et al. 1996 as cited in Doody, Slevin & Taggart 2013a:[3]). Instead of making use of a structured or unstructured approach, I used what is known as a "*funnel*" approach (Morgan & Hoffman 2018:256) as it allowed for additional questions to be formulated that may have resulted from the interaction between the participants (Millward 2012:429).

The focus group guide consisted of elements adopted and adapted from Drake (2013:4) which included:

- An introduction to inform participants about the purpose of the study and the focus group meeting and how confidentiality will be maintained

- Group agreements or ground rules on participant behaviour during the focus group meeting, which needed to be determined and agreed upon

- A neutral ice-breaker to assist participants in getting to know each other, myself and the facilitator

- Warm-up questions to assist the facilitator to lead participants to think about the topic under discussion and lead to the main questions

- Main open-ended questions

- Wrap-up or ending questions to share final thoughts

I conducted a pilot-test on the focus group guide as Drake (2013:3) suggests. I, however, did not use a pilot population that was the same as the population of interest in the formal focus group (Drake 2013:10), due to the difficulty I experienced in recruiting participants. I therefore rather used a sample group consisting of three (3) university lecturers, who were considered experts in group facilitation and research. The use of research team members, experts and potential participants as part of a pilot test is supported in Morgan and Krueger (1998) as cited in Greeff (2011:370). The pilot test enabled me to establish if participants would be able to answer the questions and how long it would take to conduct the formal focus group meeting, based on the average time it took each participant to answer the questions during the pilot test (Drake 2013:10). The participants understood the questions well and therefore no changes were made to any questions in the focus group guide. It took each participant an average of twenty (20) minutes to answer the questions. Focus group meetings traditionally last between one (1) and two (2) hours (Nyumba *et al.* 2018:23; Drake 2013:8; Greeff 2011:370) but I set out a timeframe of four (4) hours (from 8:00-12:00) to allow extra time for traffic problems, meeting the participants, serving refreshments and other informal discussions.

❖ **Arranging facilitation for the focus group meeting**

According to Polit and Beck (2017:511) and Thorne (2016:147) the facilitator's role is critical in the success of the focus group meeting. To ensure a successful focus group meeting, I identified a senior lecturer with a PhD in nursing education at the University of Pretoria, who is considered an expert in group facilitation and that had the ideal characteristics of a facilitator. Characteristics of facilitators, as noted in literature, include having mental discipline (Drake 2013:14; Millward 2012:426), good communication skills, the ability to minimise bias (Doody *et al.* 2013a:[4]; Masadeh 2012:67, Greeff 2011:368), having adequate knowledge about the topic of discussion, the ability to manage group dynamics that evolve throughout the focus group meeting (Greeff 2011:368), having a pleasurable character, knowing how to respond to non-verbal cues and being respectful (Doody *et al.* 2013a:[4]; Masadeh 2012:67). In Nyumba et al. (2018:29) the authors cite additional characteristics of facilitators as stipulated in Morgan et al. (1998)

and Litosseliti (2004) which include: the ability to build rapport and create a supportive environment, good observational skills, flexibility to adjust to the discussion at hand and a sense of humour. It is evident that many of the abovementioned characteristics also agree with the core values of person-centeredness as stipulated in McCormack and McCance (2010:1) (see Section 2.8.2). Seeing as this study was infused with a person-centered approach, it was especially important that the facilitator had knowledge of person-centeredness and that she held person-centered values.

❖ **Recruiting participants**

I aimed to conduct one focus group meeting consisting of between eight (8) to ten (10) people. The number of participants was a suggestion from the facilitator, based on her personal experience with conducting focus group meetings, as supported by Carlsen and Glenton (2011:3). Literature varies on the number of individuals required for a focus group meeting, as numbers reported range between six (6) to ten (10) participants (Drake 2013:1), six (6) to twelve (12) participants (Millward 2012:425) and two (2) to twenty-one (21) participants (Nyumba *et al.* 2018:25). The complications related with large groups of participants according to Millward (2012:425) lies therein that they are difficult to run, that smaller groups form within the large group and that conversations are hard to record and transcribe. As I wanted to avoid these complications, I aimed to have a smaller group of participants.

The number of focus group meetings held are usually based on the extent of data saturation reached (Morgan & Hoffman 2018:255; Onwuegbuzie, Dickinson, Leech & Zoran 2009:3) and are ideally set on three (3) to four (4) meetings (Drake 2013:12). The epistemological stance of nursing contradicts the claim to data saturation as there is always more to study (Thorne 2016:112). Older literature, such as Stewart, Shamdasani and Rook (2007) as cited in Carlsen and Glenton (2011:2), also state that no clear guidelines exist regarding the number of focus group meetings to be held. I aimed at conducting one (1) focus group meeting which is sufficient according to Onwuegbuzie, Leech and Collins (2010:711).

In line with the constructivist paradigm, participants were selected in a fair manner (Rodwell 2015:[13]) by allowing all interested NQPNs to participate in the study. I obtained permission from post-graduate lecturers from the University of Pretoria that I personally know to enter their classes on three (3) separate occasions to hand out invitations to the focus group meeting (see Annexure D1). Upon entering the classes I provided a short background and rationale to the study and informed the students of the inclusion criteria. Interested students were given invitations. Twenty-four (24) invitations were handed out. I asked the students to extend the invitation to their colleagues that might be interested. Based on the aim of recruiting eight (8) to twelve (12) participants for the focus group meeting and the twenty-four (24) invitations that I personally handed out, I over recruited by 50% to overcome the risk associated with individuals not showing up for the focus group meeting after indicating that they would attend (Nyumba *et al.* 2018:23). A total of eight (8) individuals contacted me via E-mail and indicated that they wanted to attend the focus group meeting. The difficulty

I experienced with recruitment of participants may be explained at the hand of the nursing context, such as NQPNs working at the time of the focus group meeting or having gone home after working night duty.

❖ **Identifying a suitable venue and arranging logistics**

I identified and booked a suitable venue at the University of Pretoria. It fulfilled all the requirements for an adequate venue as identified in Wilson, Slaughter, Forbes, Hanson and Khadaroo (2016:8); Drake (2013:11,12) and Doody et al. (2013a:[2]). The venue has a capacity for forty (40) people with tables and comfortable chairs that could be moved around for face-to-face interaction to take place, with minimal disturbance. The venue allowed for serving snacks and drinks to create an informal atmosphere. All equipment needed was already available at the venue, which included a white board, flip chart and stationery. I obtained name tags for the participants for ease of identification, arranged and purchased refreshments and used my own cell phone and laptop as recording equipment. The second recording device was used for back-up in case of equipment failure as suggested by Greeff (2011:371). The PICD (see Annexure D3) and demographic data sheets (see Annexure D4) were printed in preparation for the focus group meeting, together with the amended Questionnaire A for pre-testing (see Section 4.3.3.2; see Annexure C4). Although I requested demographic data such as race, ethnicity and gender I did not use any of it when I reported on the demographic data of the participants. The reasoning for collecting all the information was to make the process easier, should I want to use the information at a later stage. This reasoning was applied through all the data collection techniques.

❖ **Conducting the focus group meeting**

On the day of the focus group meeting, I arrived early to prepare the venue. A refreshment table was set up and a welcome gift was placed at each participant's seat. The venue layout is illustrated in Figure 4.2.
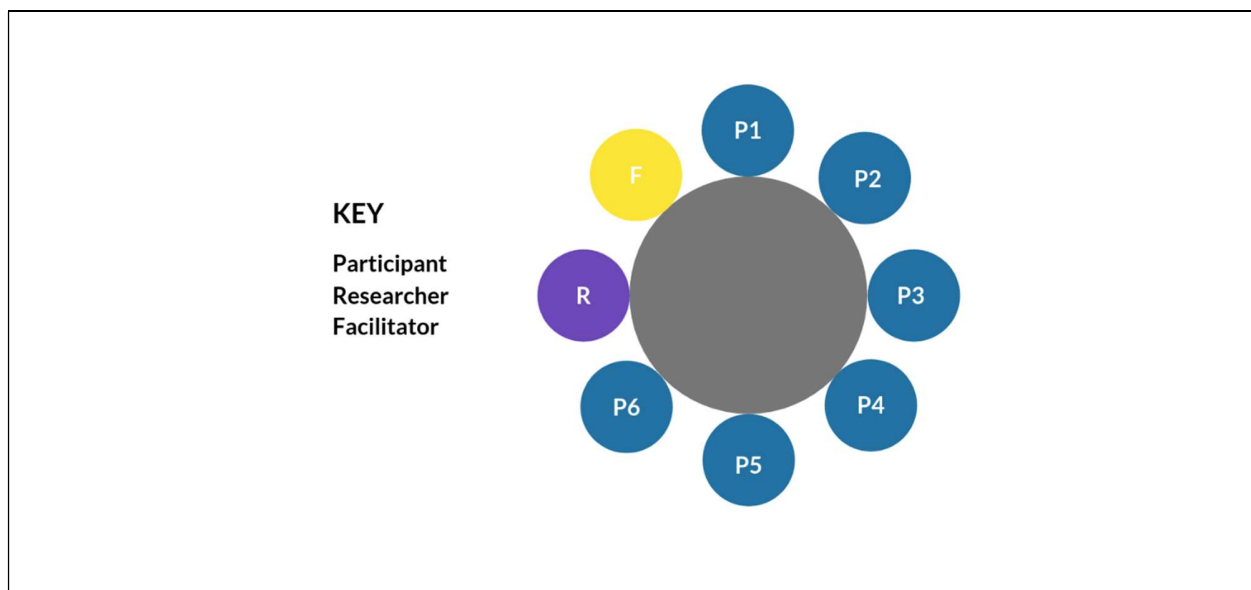

Figure 4.2: Focus group meeting venue layout

Figure 4.2 illustrates the venue layout for the focus group meeting as well as the participants' seating arrangements. Two participants arrived late due to experiencing difficulties in finding the venue. Six (6) of the eight (8) individuals that indicated that they would attend arrived for the focus group meeting. Upon arrival, I, together with the facilitator, welcomed the participants and refreshments were on offer. Name tags were given to each participant. Informal discussions were held across the room to create a relaxing atmosphere. I formally welcomed the participants and presented a brief introduction to the study. I also informed participants of how confidentiality and anonymity would be maintained by not taking any photographs and not stating their names on the transcription documents. Participants were also urged not to discuss what was discussed in the focus group meeting with anyone outside of the group. Participants were given an opportunity to complete the demographic data sheet (see Annexure D4) and to read and complete the PICD (see Annexure D3).

I used this opportunity to do the second pre-test of the amended Questionnaire A (see Section 4.3.3.2, see Annexure C4) as I already had a sample of the target population together in one venue. The completed pre-test questionnaires did not form part of the data. I did, however, use the questionnaires for another purpose in this study, which was to address two other disadvantages known to focus group meetings namely, the reluctance of some participants to discuss their sensitive issues in front of others, and the influence participants tend to have on each other's views (Polit & Beck 2017:511). The findings pertaining hereto are discussed in Section 4.3.3.2. The participants were given twenty (20) minutes to complete the questionnaire (see Annexure C4) without discussing it amongst each other. No additional information was provided except for that which was provided in the PICD.

I formally introduced the facilitator to the participants. An ice-breaker activity was carried out where each participant introduced himself to the rest of the group and was given a piece of paper with an inspirational life quote written on it, which they had to apply to their life as a professional nurse. Enthusiastic participation was noted. Upon completion, the focus group meeting commenced. I acted as a note taker and compiled field notes during the focus group meeting (see Annexure D6). Staying true to the person-centered approach, a beliefs and values clarification was done in which ground rules for the focus group meeting were established collaboratively. Ground rules increase buy-in, enable effective teamwork and contribute to the formation of a safe and respectful environment in which the focus group meeting takes place (Polit & Beck 2017:511; Sinsky 2015:6). The ground rules established for the focus group meeting are presented in Table 4.2.

Table 4.2 Ground rules for the focus group meeting

GROUND RULES FOR THE FOCUS GROUP MEETING
Respect fellow participants
No cell phones;
No bubble gum chewing that could potentially disturb others
Everyone to participate actively
Keeping discussions confidential

Table 4.2 Illustrates the ground rules established for the focus group meeting. The discussion of the questions on the focus group guide commenced (see Annexure D2). Each participant had an opportunity to answer all the questions as the facilitator went around in the circle. This ensured that no participants were left out due to other participants "*taking over the discussion*" which is a general problem with focus group meetings as Polit and Beck (2017:511) state. Participants engaged well in open discussions in response to the other participant's answers. It was clearly visible that some participants referred to their time as NQPNs as a very emotional time. Empathy was well noted amongst participants. Upon completion of the focus group meeting, the facilitator summarised what was discussed, final thoughts were shared, and the participants were granted an opportunity to give their *"like most, like least"* moments of the focus group meeting. Overall the participants indicated that they supported the aim of the study as there was a need for a nurse residency programme in practice. Only one "*like least*" moment could really be considered as a negative aspect of the focus group meeting, which was the fact that some of the participants struggled to find the venue. The other "*like least*" moments were indicative of the empathy shown by fellow participants, towards other participants, for having such negative experiences during their remunerated community service years. A summary of the "*like most, like least*" activity is included in Annexure D7. After the activity was completed, I thanked the participants for their time and input and the focus group meeting was adjourned. The focus group meeting was completed within a period of three (3) hours. I held a debriefing session with the facilitator after the conclusion of the focus group meeting to compare my field notes and perceptions of the data collected to what she perceived. This aided me in establishing if my interpretations of the data were similar to hers, thereby ensuring trustworthiness. The field notes also included the seating arrangements, emphasised topics and the order in which participants spoke (Greeff 2011:372) (see Annexure D6), which assisted the transcription thereof (see Section 4.3.3.3).

❖ **My reflection on the focus group meeting**

When thinking back, I should have provided participants with a detailed map of how to reach the venue, as it is not an easy venue to find if one is not familiar with the University of Pretoria's premises. The participants further confirmed my view on the importance of this study as they all agreed that developing a nurse residency programme is a current need in practice. Although the data obtained in the focus group meeting met my expectations and although constructive input was given by the participants, the findings were not very different from that which I obtained through Questionnaire

A (see Section 4.3.3.2) when I prepared the data for analysis. Time is always of the essence in the nursing context, and the data collected from Questionnaire A, especially with a population that consisted of professional people, proved to be more than enough. It can however not be denied that an additional focus group meeting or more participants in this focus group meeting may have been beneficial to obtain more data but the problems I experienced in recruiting participants made this very difficult.

An approach that also might have been beneficial would have been to use the data obtained from Questionnaire A and even Questionnaire B as a point of discussion during the focus group meeting to initiate further discussions thereon and to give the NQPNs an opportunity to "answer" to the views of the other NQPNs that completed Questionnaire A, as well as the senior professional nurses, clinical facilitators, managers and educators that completed Questionnaire B. It is noted in McCawley (2009:14) that focus group meetings are especially effective as a follow-up method to a survey, which I found may have also been the case in this study. If the data from the questionnaires were obtained first, and were discussed in the focus group meeting, it might have given another form of "depth" to the data. Therefore, if I had to repeat this study, I would not make use of a focus group meeting again unless if I used it as a point of discussing previously obtained data.

I also did not experience the focus group meeting as costly as the facilitator was personally known to me, did not require payment and the arranged venue was also free of charge. I also had an external bursary that covered the costs of the focus group meeting in terms of printing and refreshments.

4.3.3.2 Self-administered qualitative open-ended questionnaire for Newly Qualified Professional Nurses (Questionnaire A)

A self-administered qualitative open-ended questionnaire (Questionnaire A) was used as a second data collection technique in Step 1. Questionnaires are used to acquire facts and opinions on a phenomenon from individuals who are well informed on the specific issue and of which the data can then be used for analysis (Delport & Roestenburg 2011:186). I specifically chose to make use of open-ended questions as it allowed for more in-depth data to be collected and allowed participants to elaborate on their answers (Polit & Beck 2017:270; Delport & Roestenburg 2011:197). The aim of the questionnaire was to obtain additional data on the experiences of NQPNs during remunerated community service and to obtain their suggestions for content to be included in the nurse residency programme, thereby identifying their needs.

Questionnaires are traditionally discussed as a quantitative data collection method (Polit & Beck 2017:269) that is self-administered, which means that the participant completes the document themselves without the researcher being present. On the other hand, qualitative research refers to the term "interview schedule", which is a document used in

face-to-face interviews. As there were no clear guidelines as to what the self-administered data collection instrument should be called in a study with a qualitative design and where qualitative analysis is done, I opted to refer to the instrument as a "questionnaire" based on it being self-administered.

Although qualitative self-report data is usually collected by means of face-to-face interviews rather than with questionnaires as Polit and Beck (2017:509) state, the disadvantages associated with face-to-face interviews were what motivated me to make use of a self-administered questionnaire. Disadvantages of face-to-face interviews as described in Polit and Beck (2017:515) include, for example, the extended length of time it takes to conduct and participants' fears of being recorded. The limited-time available during a normal workday in the nursing context and the amount of time needed to conduct a face-to-face interview further contributed to my decision to rather use self-administered questionnaires that allowed participants to answer the questions in their own time and when they found it most convenient.

❖ **Development of Questionnaire A**

I developed Questionnaire A (see Annexure C2) following the principles provided in Polit and Beck (2017:276-279) and Delport and Roestenburg (2011:192,197) where after I consulted with my two supervisors. These principles included: introducing the purpose of the study that was provided in the PICD (see Annexure C1), using clear questions that reflect the purpose of the study and avoiding bias.

The questionnaire consisted of two open-ended questions that allowed participants to provide answers in their own words, giving them a voice to create a story, which fits in with the person-centered approach used in this study. By using open-ended questions, participants were not forced into any prearranged responses such as in the case of closed-ended questions that do not compare with their own views. The data generated was, therefore richer, although questions were more complex to answer and analyse (Polit & Beck 2017:270). Open-ended questions are, however, not without critique. Respondents may have difficulty in articulating themselves well and questions tend to invade more on participants' privacy (Polit & Beck 2017:270). When compared to interviews, Polit and Beck (2017:276) state that questionnaires are often lacking as they do not allow for probing, which leads to data that is often of a lower quality. Supplementary data, such as what is observed by the interviewer, also cannot be obtained in questionnaires. This disadvantage was not relevant to this study as I did not aim to collect data of such a nature as it would not have contributed to this study.

The questionnaire consisted of two main sections:
- Section A: Demographic data
- Section B: Nurse residency programmes

The sequence in which the questions were asked was specifically chosen to bring about the meaning of the questionnaire and to encourage cooperation among the participants. Question 1 was posed as a positive, motivating question, as suggested by Polit and Beck (2017:276). The rationale for the question as stated in Section 4.3 was to identify "*what already exists*" in practice. Although some literature on the experiences and competence of NQPNs in remunerated community service in South Africa exists (see Annexure F6.4), I still decided to include Question 1 based on Thorne (2016:45) where she sites Morse (2007) in saying that there is a need for new knowledge with regard to subjective experiences and the patterns that exist therein. The information was therefore not for theorising further, but for me to obtain contextual understanding that would assist in guiding decisions pertaining to the future implementation of the nurse residency programme into practice. The rationale for Question 2 was to obtain the participants' suggestions for content to be included in the nurse residency programme, thereby identifying their needs.

❖ **Pre-testing Questionnaire A**

The purpose of pre-testing the questionnaire was to determine the comprehensibility of the questions and to establish if the correct type of answers would be provided by the participants (Polit & Beck 2017:268). Multi-method pre-testing of the questionnaire was done by firstly conducting an expert review, having an editor check for spelling and grammatical mistakes (Polit & Beck 2017:277) and secondly by administering the questionnaire to a sample of the target population (Delport & Roestenburg 2011:195). I gained permission to access my supervisor's post-graduate class at the University of Pretoria, established who met the inclusion criteria (see Section 4.3.2) and requested volunteers from the group of students to complete the questionnaire. Five (5) NQPNs volunteered and stayed behind after class. The pre-test questionnaire (see Annexure C2) was accompanied by a PICD (see Annexure C1) without the section on demographic data as I wanted to provide the participants with some background knowledge to the study, and thereby assist them to understand the questions asked.

A blank section was provided for the participants to leave any comments or suggestions regarding the composition of the questionnaire (Delport & Roestenburg 2011:195). As the questionnaire was going to be self-administered to the formal group, I did not engage in conversation with the participants nor did I provide them with any additional information other than that which was stated in the PICD (see Annexure C1). This enabled me to create the same circumstances as that which would exist in the formal group. It took the participants an average of twenty (20) minutes to read through the PICD (see Annexure C1) and complete the questionnaire. When reading through the completed questionnaires I noticed that four (4) of the five (5) participants only reported on technical skills that they wished to include in the Person-centered Nurse Residency Programme and no other skills that are required for professional development. An example is included in Annexure C3. This occurrence supports the statement of the WHO (2007:6) in Section 1.3, in which they say that technical skills are over-emphasised. Seeing as the questionnaire was self-administered and the contact

between myself and the participants was going to be minimal, the questions were restructured to ensure that the participants would not just focus on suggestions around technical skills, but also other skills required for professional development. The questionnaire (Question 1) was amended (see Annexure C4) by providing participants with some examples of skills to report on, other than technical skills. The amended questionnaire was pre-tested during the focus group meeting as discussed in Section 4.3.3.1. The questions were answered correctly and in line with the data that I aimed to collect. No further amendments were made. The data collected from the pre-test questionnaires were not included in the results of the main study as suggested by Smith, Morrow and Ross (2015:220) and Rubin and Babbie (2010) and Unrau, Gabor and Grinnell (2007) as cited in Strydom (2011c:237).

❖ **Data collection**

Questionnaires can be distributed through various methods of which Delport and Roestenburg (2011:186-189) distinguish between mailed-, telephonic, hand-delivered-, self-administered-, group-administered and electronic questionnaires. Hand-delivered questionnaires refer to questionnaires that the researcher personally delivers to the participants (Delport & Roestenburg 2011:188) and group-administered questionnaires refer to questionnaires that are handed out to participants that are all together in one venue (Chaleunvong 2009:8).

I distributed the questionnaire by means of: (1) hand-delivery; (2) group-administration and (3) E-mail to potential participants. The questionnaires were all self-administered which eliminated bias (Polit & Beck 2017:275). I chose to use a combination of distribution techniques based on the advantages and disadvantages associated with each, and to overcome these disadvantages. Hand-delivered questionnaires and group-administered questionnaires have higher response rates as Delport and Roestenburg (2011:188;189) report, whereas E-mailed questionnaires generally have weak response rates (Krishnamurty 2018:1420; Polit & Beck 2017:281). Christensen, Ekholm, Glümer and Juel (2014:331) however report an overall low response rate in self-administered questionnaires which may possibly be due to the absence of an interviewer to motivate individuals to participate. It is, however, also stated that self-administered modes lead to better quality data as participants tend to be more honest, especially when a sensitive topic is discussed. Although the response rate is insignificant in qualitative studies, I still took the literature that report on the success of each method, based on its response rates, into consideration. This was because interpretive description studies do not measure data saturation (Thorne 2016:112) and I could, therefore, not use it to establish the richness of my data. I consequently aimed to generate more data by using a larger sample.

I followed the suggestions provided by Thorne (2016:132) and stayed in constant communication with the Nursing Services Department of the tertiary hospital, informing them that I would visit the hospital on three (3) separate occasions to distribute the questionnaires. The necessary arrangements were made and I hand-delivered a total of forty-two (42) questionnaires (see Annexure C4) together with the PICDs (see Annexure C1) to NQPNs at the hospital.

I identified the NQPNs that completed remunerated community service at the hospital during 2015 and 2016, using name lists that I obtained from a gatekeeper at the hospital. As I did not have name lists of NQPNs that completed remunerated community service in 2013 and 2014, I asked the staff in the ward upon each visit if anyone else complied to the inclusion criteria and if they were willing to complete Questionnaire A. While visiting the hospital on three (3) occasions, additional questionnaires were left with the ward managers for staff that were on night duty or that were on annual leave. Because participants did not necessarily work on the same shift, collection of the completed questionnaires was challenging, and I anticipated high cost if I had to collect each of the completed questionnaires again (Delport & Roestenburg 2011:188). I therefore requested the participants to return the completed questionnaires in a sealed envelope to a sealed box placed in the Deputy Nursing Manager's office. After two (2) weeks, only one (1) questionnaire was returned to the sealed box. Although Delport and Roestenburg (2011:188) state that hand-delivered questionnaires have higher response rates, it should be stated that this is only when the completed questionnaire is personally collected from the participant again – which should ideally be done within forty-eight (48) hours after delivery.

I decided to redistribute the questionnaire using group administration. To address the barrier of simultaneously gaining access to a group of participants (Delport & Roestenburg 2011:189), I held a meeting with the same gatekeeper that provided me with the name lists of NQPN that completed remunerated community service. I negotiated access to nurses with whom she had regular contact as they attended classes for induction to specialisation areas with her on a weekly basis. Permission was granted to enter her classes on two occasions. On my visit to each class I established who complied with the inclusion criteria and asked these individuals if they would be willing to complete the questionnaire. To create similar circumstances than those under which participants answered the hand-delivered questionnaire, I did not give any additional information on the study, except that which was given in the PICD (see Annexure C1). Participants in the group format were also not allowed to discuss the questions or their answers amongst each other to minimise the influence they might have on each other (Delport & Roestenburg 2011:189). I left the classes after distributing the questionnaire. The gatekeeper collected the completed questionnaires in sealed envelopes on my behalf and kept it in a locked office. I collected the questionnaires from her on a next occasion. I personally handed out twenty (20) questionnaires through group administration, of which all the questionnaires were returned.

As a third method of distribution, I E-mailed questionnaires to potential participants who's contact details I received from their former lecturers at the University of Pretoria. I also E-mailed questionnaires to some of my former colleagues. I decided to make use of E-mailed questionnaires because they are regarded as an economical and an effective way to cover a large area, enabling collection of data from far-off sites (Polit & Beck 2017:275;492; Delport & Roestenburg 2011:189) as opposed to the limited area of distribution per occasion when using hand-delivered questionnaires (Delport & Roestenburg 2011:188). Together with the questionnaire, the PICD (see Annexure C1) and a cover letter (see Annexure C5) providing clear instructions on how to complete and return Questionnaire A (Chaleunvong 2009:8)

was sent requesting the individuals' participation in the study. A total of fifteen (15) questionnaires were E-mailed to potential participants. A follow-up E-mail, together with a copy of the questionnaire was sent out five (5) to ten (10) days after the initial E-mail was sent out as suggested by Polit and Beck (2017:281) in an attempt to increase the response rate, and thereby generate more data. Seven (7) questionnaires were returned via E-mail.

I personally distributed a total of seventy-seven (77) questionnaires across the three (3) distribution methods used. The number of distributed questionnaires could, however, be more as they were also distributed through snowball sampling. A total of twenty-eight (28) questionnaires were returned.

❖ **Preparing for data analysis**

The purpose of data analysis is to discover, communicate, bring order and make sense of the data collected (Polit & Beck 2017:725; Doody, Slevin & Taggart 2013b:266; Millward 2012:430). The first step in data analysis involves preparing the data for analysis. The focus group meeting was transcribed verbatim (see Annexure D5) and the field notes were compared thereto (see Annexure D6). I chose to transcribe the focus group meeting myself to avoid transcription errors that may arise when transcriptions are done by someone that was not present at the focus group meeting (Krueger 2006:480). Transcriptions are also challenging due to numerous participants taking part as it is often difficult to record everyone's voices (Polit & Beck 2017:548) and because I was present at the actual focus group meeting, I could make sense of the data in a clearer manner. Clear recordings are dependent on each person's tone and where they are seated or if more than one person speaks at the same time (Polit & Beck 2017:548). Transcription being done by the researcher or data collector themselves is supported by Liamputtong (2011:166). I read through the complete transcription to ensure that it was accurate and reflected the totality of the focus group meeting (Moser & Korstjens 2018:15) and to get an overall view of the data (Creswell 2014:197). Although the data analysis would take place during the workshop, I re-read the transcript various times and listened to the audio recording repeatedly to create a deeper understanding thereof and to make sense of the data for myself. I removed the non-verbal data from the transcript after I had familiarised myself with it and as it did not play any significant role in the interpretation of the data. I compared my fieldnotes with the focus group transcription to identify and add any additional data that was not evident in the transcription.

As stated in Section 4.3.3.1, the amended Questionnaire A that was pre-tested during the focus group meeting did not form part of the data. I, however, still compared the questionnaires with the focus group transcript (see Annexure D5) to see if I could identify any data that may have been withheld during the focus group meeting. No additional data was identified. I read through the rest of the questionnaires that were returned from the real sample and familiarised myself with the data. I took the time to think about the data and then reread it again. Avoiding immediate summarising and synthesising of data ensures that the contextual whole of the data is preserved for ongoing analysis (Thorne 2016:155).

In order to prepare the data for participatory data analysis in Phase 2, I copied excerpts from the focus group script and Questionnaire A that would easily be understood and interpreted by workshop participants onto Datasheet 1. I also identified excerpts that would be difficult to interpret due to language and grammatical errors, rewrote them and also included it in Datasheet 1 (see Annexure F6.1). By rewriting these excerpts, comprehensibility was ensured, and the risk of misinterpretation was decreased. I also added on additional statements from the focus group transcription and questionnaire based on my own interpretations and the meaning I generated from the data that would not have been easily identifiable by the workshop participants if I provided them with the original raw data (Thorne 2016:178). By using parts of original excerpts, the workshop participants could collaboratively re-read the data, reflect thereon and hypothesise before interpreting it and determine where the data fits into the study (Thorne 2016:165;169). The demographic data of the NQPN that participated in the focus group meeting and that answered Questionnaire A are illustrated in Figure 4.3 and Figure 4.4.
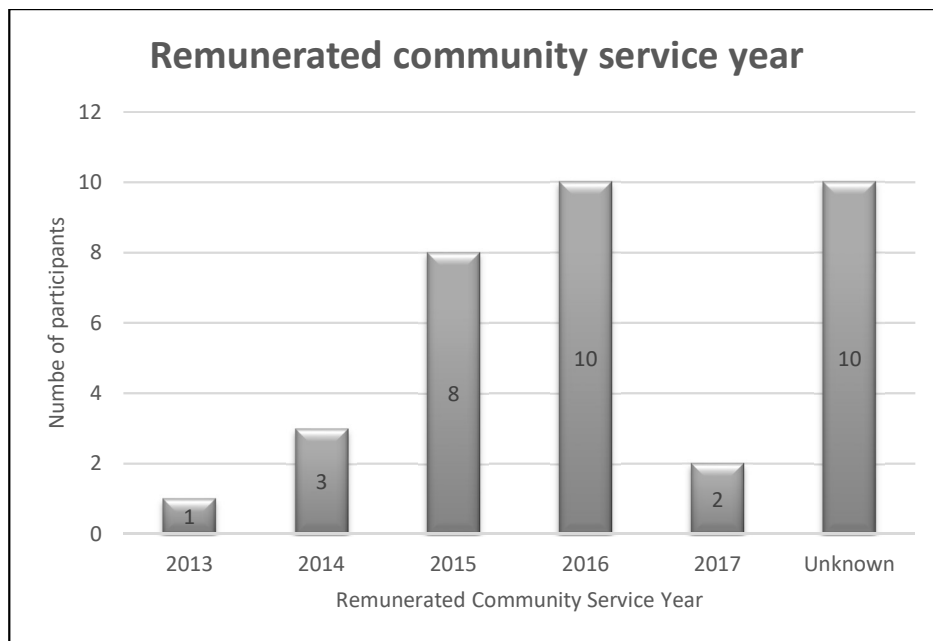

Figure 4.3: Number of participants that completed remunerated community service in each year

Figure 4.3 illustrates the number of participants from each year group that participated in the study. Two NQPNs that attended the focus group meeting were in their remunerated community service year at the time of data collection and therefore did not fall within the inclusion criteria. I however still included them in the study as they were already at the venue and would still be able to contribute to the study. Most of the participants were from the 2016 year-group and 10 of the participants did not answer the question.
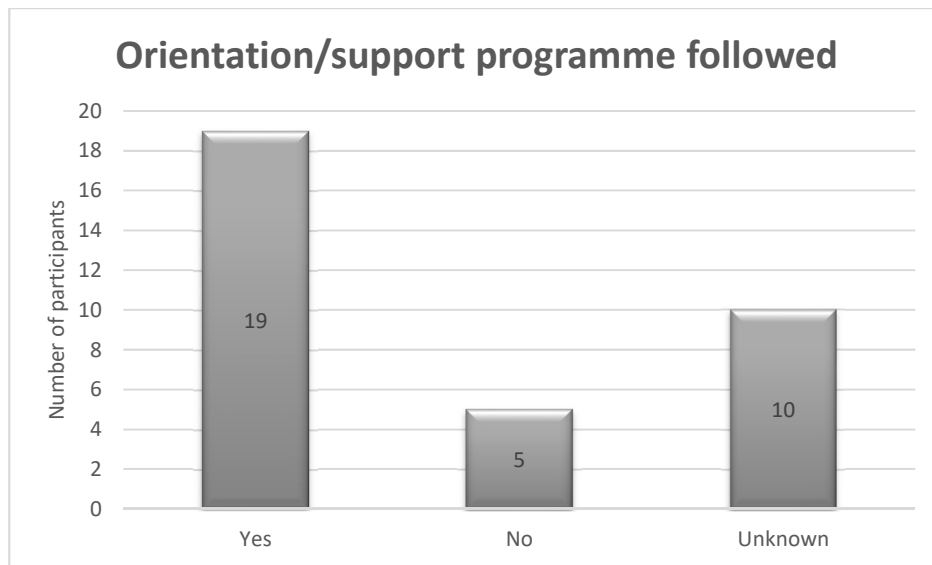
Figure 4.4: Number of participants that completed an orientation or support programme during their remunerated community service year

Figure 4.4 illustrates the number of participants that completed an orientation or support programme during their remunerated community service year. Nineteen (19) participants followed such a programme, five (5) did not follow a specific programme and ten (10) participants didn't answer the question.

❖ **Reflection on Questionnaire A**

The biggest problem I experienced with Questionnaire A, although insignificant in qualitative studies, was the weak response rate. This may be because the questionnaire was not personally collected from the participants to which it was hand-delivered (Delport & Roestenburg 2011:188). When thinking back, it may have been better to take the telephone number and the date of the participant's next shift at the hospital in order to ensure collection. I could then have sent an SMS reminder to the participant prior to their next shift to bring the completed document with on the specific shift and to personally collect it from them. This would however have been a very time-consuming process. I should also rather have made use of more post-graduate classes at the University of Pretoria to gain access to participants like I did with the recruitment for the focus group meeting. What was evident, however, during these visits to learners at the University of Pretoria, was that a large amount of the class did not fall within the inclusion criteria as they had completed remunerated community service before 2013 or had qualified under Regulation 683. This made gaining access and recruiting the correct individuals very difficult.

4.3.3.3 **Self-administered qualitative open-ended questionnaire for senior professional nurses, clinical facilitators, managers and educators (Questionnaire B)**

In Step 2. a second self-administered qualitative open-ended questionnaire (Questionnaire B) (see Annexure E1) was used to conduct a needs assessment on different levels of stakeholder, other than NQPNs. A discussion on this questionnaire follows.

❖ **Development of Questionnaire B**

Questionnaire B was developed on the same basis as Questionnaire A (see Section 4.3.3.2). Question 1 served the purpose of establishing the competency of NQPNs as perceived by different levels of stakeholders. Question 2 was the same as in the second question in Questionnaire A, where participants were asked to make suggestions on content that they would like to have included in the nurse residency programme.

❖ **Pre-testing Questionnaire B**

The pre-testing of Questionnaire B was the same as that which was described for Questionnaire A in Section 4.3.3.2. Five (5) lecturers/clinical facilitators from the University of Pretoria were asked to complete the questionnaire. The PICD (see Annexure E2) accompanied the questionnaire to provide them with the needed background information. It took the participants fifteen (15) minutes to complete the questionnaire. The questionnaire was answered well, and no amendments needed to be made to any questions.

❖ **Data collection**

Questionnaire B (see Annexure E1), together with the PICD (see Annexure E2) was either (1) hand-delivered or (2) E-mailed to potential participants. I hand-delivered questionnaires to colleagues that I previously worked with, personal friends and lecturers from the University of Pretoria whom I saw on my visits to my supervisors. A total of ten (10) questionnaires were handed out and I received all of them back via E-mail. Although I did not personally collect the questionnaires, the reason for the high response rate may have been due to the personal relationships or friendships that I had with each of these participants.

I conducted a LinkedIn search using the keywords "*nurse*", "*nurse practitioner*", "*nurse manager*", "*clinical facilitator*", "*nurse educator*" and "*lecturer in nursing*" to assist me in identifying potential participants in the Gauteng province. LinkedIn is an online platform that connects professionals in various fields and thus presents a better means to direct data collection to a suitable social network. It provides an easy way to target a sometimes hard-to-reach population and presents a starting point for snowball sampling. Social media sites such as these, assist PhD students to reduce the costs of research and addresses time constraints for data collection while maintaining good rigour (Dusek, Yurova, & Ruppel 2015:282;283,292). A message was sent to thirty-three (33) potential participants via LinkedIn, providing

them with a short explanation of the study and asking them for their E-mail addresses, should they be interested in participating. None of these individuals showed interest in participating. I also visited the websites of tertiary institutions offering pre-graduate nursing programmes to obtain E-mail addresses of their educational staff across Gauteng. The E-mail addresses were often available publicly on the websites, but in the case where it was not, the relevant administrative department was E-mailed, which then was asked to distribute the E-mails among staff members. I personally sent out a total of fifty (50) E-mails of which seven (7) were returned. The low response rate of E-mailed questionnaires is again consistent with the view of Krishnamurty (2018:1420) and Polit and Beck (2017:281).

In total, I personally distributed sixty (60) questionnaires across the two (2) distribution methods used. The number of distributed questionnaires could, however, be more as they were also distributed through snowball sampling. A total of seventeen (17) questionnaires were returned.

❖ **Preparing for data analysis**

I prepared the data from Questionnaire B for analysis as described for Questionnaire A in Section 4.3.3.2. The demographic data of the participants are illustrated in Table 4.3

Table 4.3: Demographic data of participants that completed Questionnaire B

Participant number	Years qualified	Qualifications							Work experience			
		Nursing diploma	Nursing degree	Administration	Education	Post-graduate specialty	Master's Degree	PhD	Professional nurse	Unit Manager	Clinical facilitator	Lecturer
1	7		x		x	x	x		x	x		
2	20	x	x		x	x	x		x	x		
3	11		x	x					x	x	x	
4	25		x	x	x	x	x	x	x	x		x
5	30	x	x		x	x			x		x	x
6	10		x	x	x	x	x		x			
7	20		x			x			x	x		
8	9		x						x			
9	25	x	x	x	x				x		x	
10	18	x	x	x	x	x	x		x	x	x	x
11	22	x	x	x	x	x	x	Candidate	x	x	x	x
12	19	x	x	x	x	x	x		x	x	x	x
13	21	x				x			x			
14	16	x				x			x			
15	15		x			x			x	x	x	x
16	16	x	x	x	x	x			x	x	x	x
17	20		x			x			x	x		

Table 4.3 Illustrates the demographic data of the participants that completed Questionnaire B, indicating the number of years qualified as a professional nurse, qualifications and work experience

❖ **My reflection on Questionnaire B**

When thinking back, I should have delivered more questionnaires by hand as I know a lot more individuals that fall within the inclusion criteria. Following this approach may have taken longer, but it would have increased the response rate and would therefore have generated more data. A good option would also have been to ask different universities if I could have the opportunity to hand out questionnaires during a scheduled staff meeting, thereby following a group-administration approach, which had high response rates as evidenced in Section 4.3.3.2. My reflection with regard to the timing of the completion of the questionnaires and the focus group meeting and the impact it may have had on the depth of the data collected was discussed in Section 4.3.3.1.

4.4 PHASE 2: PROGRAMME DEVELOPMENT

The person-centered approach used in Phase 1 was further infused into Phase 2 by collaborating with stakeholders with different levels of expertise to participate in the data analysis and to co-construct the Person-centered Nurse Residency Programme. Programme development took place during a two-day workshop. A discussion hereon follows.

4.4.1 Workshop

Looking at literature relating to the use of workshops in research, I considered the work done by Christodoulou, Kachrilas, Dina, Bourdoumis, Masood, Buchholz and Papatsoris (2013:13) and Pavelin, Pundir and Cham (2014:1) who each describe a different type of workshop. In Christodoulou et al. (2013:13), educational workshops are discussed as workshops where the purpose is to learn and acquire knowledge. In Pavelin et al. (2014:1) the authors refer to interactive workshops which involve structured facilitated activities for groups who collaborate to explore a problem and develop ways to resolve it over a set period and in one location. Interactive workshops are also referred to as participatory workshops in Jisc (2012:online) and the Community Tool Box ([n.d.]:[2]). I will, however, just make use of the term "*workshop*" as the term "*participatory*" is already included in the way in which data analysis was conducted during the workshop. The use of workshops as a collaborative method for data collection- and/ or analysis in order to reach study objectives is supported in Levit (2015:539) and Sharma (2011:[1]).

According to Westhoff and Drougas (2002:9), participatory workshops serve the purpose of "*developing something new*" and are considered an appropriate method to use when analysing data as workshops are usually conducted after the initial research was conducted (Strydom 2011b:503). I regarded the workshop as an appropriate method to use because of the purpose of co-constructing the Person-centered Nurse Residency Programme for the South African context – something that did not exist before. The use of a workshop to develop a programme was demonstrated in a study by Dearden ([n.d]:[5]-[14]) where a curriculum was developed for the Ministry of Forests and Soil Conservation for Forest Guards in Nepal, also using a person-centered approach. The study reported a feeling of ownership among the stakeholders involved in the development of the curriculum, which is also what I strived for in this study.

4.4.1.1 Sampling

I made use of purposive- and snowball sampling as discussed in Section 4.3.1.

4.4.1.2 Sample

The stakeholder analysis (see Section 4.3.4, see Figure 4.1) assisted me in identifying which stakeholders I wanted to include in the workshop. The sample included NQPNs, senior professional nurses, clinical facilitators, managers and educators with the same inclusion criteria as mentioned in Section 4.3.2. In addition hereto, I also included professional nurse representatives from SANC, the Gauteng DoH and the NEA, a non-profit organisation registered with the Department of Social Development which focuses on the dissemination of information and continuous professional development for nurse educators (NEA [n.d]:online).

4.4.1.3 Arranging facilitation for the workshop

Facilitation during a workshop serves the purpose of "*smoothing the way*" for participants without instructing participants on what to do (Community Tool Box [n.d.]:[11]). Skilled, expert facilitation is required in order to conduct a fruitful workshop (Pankaj, Welsh & Ostenso 2011:7; Biodiversa Practical Method Note 2 (2014:[1]) and to lead participatory data analysis (Taylor & Drake 2014:1). The Community Tool Box ([n.d.]:[6]) furthermore states that the way in which the workshop is presented should mirror the topic.

For the reasons stated above, I did not plan on conducting the workshop myself, but to rather make use of an external expert facilitator that could mirror the person-centered approach in the way in which she conducted the workshop. I discussed my need for an expert facilitator with my supervisor and co-supervisor. Together, we considered the programme to be developed, the size of the workshop, the sample and the time available in which to reach the objectives and based thereon we identified a suitable potential facilitator. The individual was an Associate Professor at the Department of Nursing Sciences at the University of the Free State, Yvonne Botma, who had extensive experience in programme- and curriculum development, facilitation of workshops and showed interest in person-centeredness and the person-centered approach. In collaboration with my two research supervisors, we consulted with Professor Botma via telephone, gave her a background to the study and discussed the purpose and objective of the workshop. She agreed to act as a facilitator. Two additional telephonic discussions were held with Professor Botma prior to the workshop in order to adequately plan and prepare for it.

I compiled a preliminary agenda in collaboration with Professor Botma (see Annexure F2). I asked two additional experts who were knowledgeable about person-centeredness and facilitation to assist me during the workshop by doing a short presentation on person-centeredness and to facilitate the sticky wall activity respectively (see Section 4.4.1.7). The time duration in which workshops are conducted range between 45 – 90 minutes for short workshops; 90

minutes to three (3) hours for medium length workshops and three (3) hours to two (2) days for long workshops, according to the Community Tool Box ([n.d.]:[1];[6]). The workshop duration was set at two (2) days as agreed upon by me and Professor Botma due to the extent of the content that had to be covered before we could progress to develop the Person-centered Nurse Residency programme.

4.4.1.4   Recruiting participants

The demographic data sheets used in Phase 1 requested that participants give their personal details should they be interested in taking part in the workshop. I identified the interested participants and E-mailed invitations to them (see Annexure F1). I requested permission from the Deputy Nursing Manager of the tertiary hospital to visit all the wards and put up posters at the duty stations to invite nurses to the workshop (see Section 2.6.2) (see Annexure F1). Invitations were E-mailed to tertiary education institutions in Gauteng that offer the four-year nursing qualification and another five (5) invitations were sent to members of professional nursing organisations namely the SANC, DoH and NEA. Together with the E-mailed invitations, I asked that the invitations be forwarded to other potential participants. The invitation was also E-mailed to the Nursing Services Manager and Assistant Manager of the tertiary hospital involved in this study to ask for assistance in allowing staff of the hospital to attend the workshop. Permission was granted to send staff members from the wards and the clinical facilitators to the workshop during their on-duty time.

The number of participants involved in workshops ideally range between six (6) to fifteen (15), according to the Community Tool Box ([n.d.]:[2]), or between six (6) to twelve (12) participants according to Levit (2015:537), to ensure that individual attention can be given to everyone and that everyone's voice can be heard. My target workshop size was bigger and set at twenty-four (24) participants, who would be divided into four (4) smaller groups (Levit 2015:538; Community Tool Box [n.d.]:[2];[6]). Each group would then consist of at least one (1) NQPN, senior professional nurse, clinical facilitator, manager, educator and an expert from either SANC, the Gauteng DoH or NEA. I personally E-mailed seventy-three (73) invitations to potential participants. Twenty-one (21) individuals indicated that they would be attending the workshop but no representatives from SANC, NEA or the Gauteng DoH were able to attend the workshop, which corroborates the view of Patton (2018:471) where it is stated that getting highly knowledgeable experts to cooperate is a challenge associated with qualitative enquiries. A WhatsApp group was created with all the participants' details to enable me to stay in constant communication with them regarding arrangements for the workshop.

4.4.1.5   Identifying a suitable venue

Costs of a workshop are usually funded by the researcher hosting the workshop, according to Levit (2015:539). A budget was set for payment of the facilitator's flights and accommodation, stationery, printing, refreshments, lunch and a welcome- and thank you gift for each participant. Research funds allocated to my supervisor and co-supervisor for research purposes from the University of Pretoria was used as well as a bursary I obtained from a private institution. I

used my good relationship with the Nursing Services Manager to arrange a venue at the tertiary hospital involved in this study, free of charge, for 23 and 24 February 2017. The venue has a capacity of approximately eighty (80) people and complied with all the requirements for an adequate venue as stipulated in Wilson et al. (2016:8); Drake (2013:11,12) and Doody *et al.* (2013a:[2]).

4.4.1.6   Preparing for the workshop

I had a one-on-one meeting with the facilitator one (1) month before the workshop to discuss the final logistics thereof and to ensure that we agreed on the objectives to be met. Additional resources for the workshop activities were arranged after I established the number of participants that would attend the workshop. Folders were made for each participant that contained the demographic data sheet (see Annexure F4), PICD (see Annexure F3), notepad and a pen. The data sheets containing the excerpts from the needs assessments in Phase 1, Step 1 and 2 were typed out, and printed to hand out to participants (see Annexures F6.1; F6.2). The data was supplemented with articles from South African literature reporting on the experiences and competency of NQPNs in remunerated community service (see Section 3.6, see Annexure F6.4) and international literature reporting on experiences and competency levels of NQPNs (see Section 3.7, see Annexure F6.3), from which excerpts were chosen and retyped. On the day before the workshop commenced, I met with the facilitator to finalise the agenda and the timeframes required for each activity. I typed out the agenda and added it to the folders (see Annexure F2).

On the morning of the workshop, the venue was prepared by moving tables and chairs to form four smaller groups, named according to four colours, dark blue, light blue, purple and yellow. I wrote the names of participants on each name tag and colour coded it to include at least one participant from each category in every group as far as practically possible. I identified one participant in each small group that I knew had experience in research and assigned them as group leaders. Folders, together with a welcome chocolate were placed at each participant's place at their table. A video recorder and an audio recorder as back-up as suggested by Greeff (2011:371) were set up. A cell phone was used to take pictures of the workshop after obtaining written informed consent from the participants. A projector and a white board were available at the venue. A table was set up with all art supplies and paper as well as a table for refreshments. An illustration of the venue layout and seating arrangements is provided in Figure 4.5.
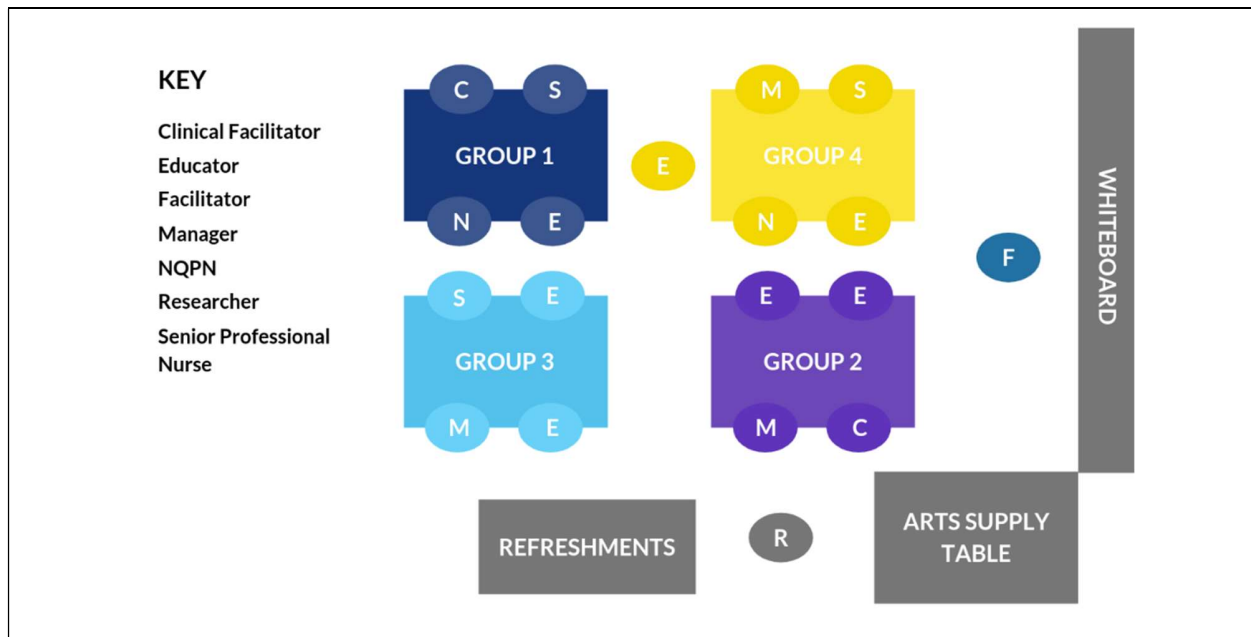
Figure 4.5: Workshop venue layout and seating arrangements

Figure 4.5 illustrates the venue layout for the workshop, dividing the large group into four smaller groups. The participants' seating arrangements are also illustrated. Although the composition of the group of participants did not allow for me to place one participant from each stakeholder category at each table as I initially planned to do, the placement was still sufficient as many of the participants had experience in multiple fields, for example, work experience as a senior professional nurse and a clinical facilitator during the course of their careers. A detailed illustration of the work experience of each participant is illustrated in the demographic data of the participants provided in Table 4.4. Photo evidence of the venue is provided in Annexure F5.2.

Table 4.4: Demographic data of workshop participants

PARTICIPANT NUMBER	EMPLOYED BY		YEARS EXPERIENCE					QUALIFICATIONS						
	Government	Private	Prof. Nurse	Manager	Clinical Facilitator	Educator	Other	Basic Nursing Diploma	Bachelor's Degree	Nursing Education	Admin	Specialty	Master's Degree	PhD
1		x	6					x				ICU		
2	x		4	1	5	5	5	x	x	x	x		x	x
3		x	12	8					x				x	
4	x		30		5	20		x	x	x	x	ICU	x	x
5	x		10	5	2	5			x				x	x
6	x		21						x	x	x	Paeds		
7	x		26		10				x	x	x			
8		x	9		10	4	5yrs Flight nurse	x		x		Trauma	x	
9	x		22	8				x						
10	x		10			20		x	x	x			x	
11	x		3						x					
12	x		9			16		x	x	x	x	Neonatology & Paeds	x	x
13	x		1						x					
14	x		33		21			x		x		ICU		
15	x		5						x					
16	x			5				x	x	x	x			
17	x		10			20			x	x	x	ICU/Trauma	x	x

Table 4.4 Summarises the demographic data of the workshop participants, indicating if they are employed in the government- or private sector, their years of experience in different positions, and qualifications obtained. Most of the participants were employed in the government sector and were currently in an educational role, as either an educator or a clinical facilitator. This means that they still have regular interaction with NQPNs in remunerated community service, and therefore especially had current and relevant inputs into the study, and therefore improved the credibility of the findings.

4.4.1.7   Conducting the workshop: Day 1

Upon arrival, I welcomed the participants and refreshments were served. Seventeen (17) individuals attended the workshop, some of which were also part of the sample in Phase 1. An attendance register was signed. Participants received their name tags and took their places in the allocated smaller groups based on their colour codes. An ice-breaker activity was conducted in the smaller groups. The ice-breaker entailed that each group member had to tell the other participants their names and link them to a word starting with the same letter. Participants had to memorise each person's name as well as the word with which it is associated and manage to go around the table and say it fast without making a mistake. A beliefs and values clarification were done by establishing ground rules for the workshop for the same purposes as discussed in Section 4.3.3.1. The ground rules are presented in Table 4.5. For photo evidence please view Annexure F5.1.

Table 4.5: Ground rules for the workshop

GROUND RULES FOR THE WORKSHOP
Have fun
Regard all participants' voices as equally important
Cell phones to be switched to silent mode
Keep to the time schedule
Create a psychological safe space
Give valuable input
Have respect for other participants

Table 4.5 Presents the seven (7) ground rules established for the workshop. I presented an introduction and background to the study and participants were given an opportunity to read and complete the PICD (see Annexure F3) and the demographic data sheet (see Annexure F4). I collected the documents after it was completed and acted as a note taker during the rest of the workshop. An example of the field notes taken is provided in Annexure F9.

❖ **Activity 1: Creating shared meaning - Placemat consensus and visual representation of person-centeredness**

When working with others in a person-centered way, Manley et al. (2013b:59) state that it is unavoidable to discuss what being person-centered means. In order to so, a placemat consensus activity was done with the workshop participants. A placemat consensus activity serves the purpose of giving participants the opportunity to state their own ideas and consider the ideas of others. Thereafter, consensus is reached, which also develops collaboration skills (The Seven Minute Scientist 2015:online; Curiocity 2014:online).

A large poster size paper was given to each group and divided into a section for each participant as well as a central space, joining all sections (see Figure 4.6). Each participant had 5 minutes to write down, in their individual spaces and

without discussion, their own ideas on the meaning of the word "person-centeredness". After everyone completed their individual part, the group had 10 minutes to identify ideas that were duplicates/similar among all individual group members and those ideas were then written in the centre space as "common ideas". Groups were then given fifteen (15) minutes to discuss the rest of their ideas in the "individual spaces" to determine if the rest of the group members agree with it. In such a case, the idea was then also included in the "common ideas" space in the centre of the poster. Ultimately group members had to reach consensus on the meaning of person-centeredness. Ideas on which consensus could not be reached, were excluded from the "common ideas" space. Photo evidence is provided in Annexure F5.3.
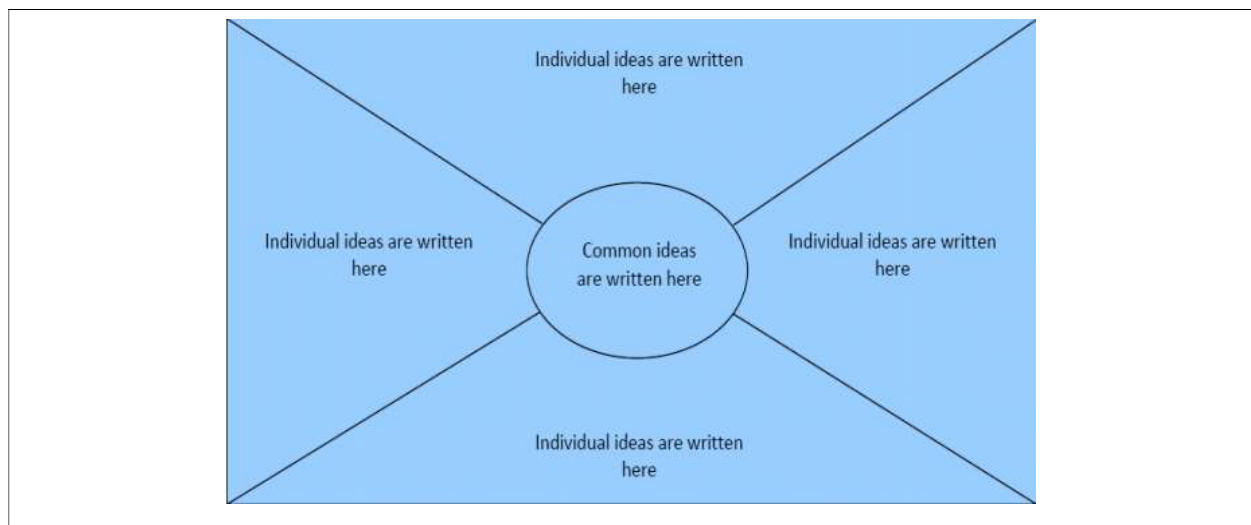

Figure 4.6 Placemat consensus diagram *Source: Adopted from Virginia Science Standards of Learning Institute (2012:[1])*

Figure 4.6 shows the typical layout of a placemat and how the ideas are recorded. In the second part of the activity, the small groups had to illustrate person-centeredness through artwork. Using art during group activities is a way of incorporating an enjoyable element into the workshop, increasing participants' interest and providing interesting ways to voice opinions other than just making use of words (Steward & Shamdasani 2015:100).

After the groups completed their artwork, (see Annexure F5.4) each small group nominated a representative that had the opportunity to present their artwork and explain how they visualise person-centeredness to the rest of the workshop participants. Members of the same small group that presented their artwork had the opportunity to add to the representative's presentation in case any aspects were left out or forgotten. Workshop participants were asked to comment on the artworks using the phrases: *"I see", "I feel", "I hear" and "I imagine".* After all groups presented their artwork, workshop participants were asked to identify similar aspects that were evident in all four (4) groups' artwork to reach consensus on the meaning of person-centeredness. Consensus does not refer to making decisions based on a majority vote, but to finding a solution or answer that all members can support or at least can *"live with"*. This enables

everyone to have a voice and through listening to each other's voices leads to forming an answer or solution that suits all group members (Seeds for change 2010:online). Consensus was reached on the following meanings of person-centeredness: professional relationship, respect, needs, caring, self-awareness, collaboration, empower, voice, individualism, confidence, flourish, safe environment and responsibility. Hereafter, a 20-minute presentation was done by a co-facilitator on the person-centered approach and the Person-centered Practice Framework. This provided participants with an educational background to the concept and how it is applied in the care context.

- ❖ **Activity 2: Forming Categories, themes and sub-themes - Sticky wall activity**

In activity two, each small group was given one of the Datasheets (see Annexure F6.1, F6.2, F6.3, F6.4) and strips of coloured paper that matched their group colour. The small groups were instructed to read through their respective Datasheets, interpret the data and write down key concepts on the strips of paper that represented the needs that they felt needed to be included in the Person-centered Nurse Residency Programme. A summary is provided in Table 4.6.

Table 4.6 Datasheet and colour matching

Group number	Datasheet	Colour paper
1	**Datasheet 1:** Summary of the data generated from Phase 1, Step 1 (see Section 4.3.3.2; Annexure F6.1)	**Dark Blue**
2	**Datasheet 2:** Summary of the data generated in Phase 1, Step 2 (see Section 4.3.3.3, Annexure F6.2)	**Purple**
3	**Datasheet 3**: Summary of the articles on the experiences and competencies of international NQPNs (see Annexure F6.3)	**Light Blue**
4	**Datasheet 4:** Summary of the articles on the experiences and competencies of South African NQPNs (see Annexure F6.4)	**Yellow**

Table 4.6 provides a summary of which datasheets were allocated to which small group, and which colour paper they used to write their key concepts on. Once finished, participants were asked to allocate the key concepts under "*pre-categories*" that I adopted from the Person-centered Practice Framework's original domains (see Figure 2.3) and adapted to suit the educational context. This deductive approach is borrowed from Perry and Jensen's (2001:[4]) modified version of the grounded theory approach that supports the combined use of inductive and deductive approaches to data analysis by selecting "*pre-categories*" prior to data analysis taking place. The "*pre-categories*" were (1) *prerequisites* (2) *outcomes of the Person-centered Nurse Residency Programme,* (3) *person-centered learning environment* and (4) p*erson-centered learning process*. Consistent with the modified grounded theory approach, workshop participants could eliminate "*pre-categories*" that were not used and add new categories should the need arise. The "*pre-categories*" provided some structure and guidance for data analysis to take place and by using this approach, I was off to "*flying start*" (Perry & Jensen 2001:[4]).

Before participants started organising the key concepts under the respective categories, an informal discussion started among the larger group of workshop participants on how NQPNs are currently supported during their remunerated community service year. The participants agreed that the onus fell on clinical facilitators that are permanently employed by the healthcare institution and that it would not be possible for these clinical facilitators to take on the additional task of implementing the nurse residency programme in addition to their other responsibilities (see Section 2.4.1). The participants consequently felt that there was no value in developing an in-depth nurse residency programme with its macro- and micro curriculum if it was technically going to be very challenging to implement. The participants suggested that an alternative approach be taken to ensure successful implementation of the nurse residency programme. Consensus was reached among the workshop participants to rather make use of senior professional nurses on ward-level to implement the Person-centered Nurse Residency Programme, as it was more practicable and would also assist in ensuring that continuous support can be provided to NQPNs in the ward in which they work. At the same time, it was emphasised that not all senior professional nurses would be able to act as facilitators due to various factors such as: not being competent nurses themselves and therefore lacking certain knowledge and skills; not having a post-graduate qualification in education or experience in an educational role; or unwillingness to act as facilitators. The focus of the nurse residency programme therefore shifted to identifying senior professional nurses in practice that would be able to effectively implement the Person-centered Nurse Residency Programme. The "*prerequisites*" category was renamed to "*prerequisites of the senior professional nurse*" and the aim of the study was changed from co-constructing the Person-centered Nurse Residency Programme to co-constructing competencies of facilitators supporting Newly Qualified Professional Nurses to meet the outcomes of the Person-centered Nurse Residency Programme. Verbal consent was given by all workshop participants to take part in co-constructing the competencies of facilitators as part of the workshop. In constructivist studies, adapting informed consent as the study emerges is a common phenomenon (Fortune, Reid & Miller 2014:87) and refers to the process of ongoing consent in qualitative studies (see Section 1.13.2.2).

The sticky wall activity resumed hereafter. Participants firstly identified the outcomes of the Person-centered Nurse Residency Programme, which represented the learning outcomes that the NQPN should meet upon completion of the programme. The rest of the categories followed until all the needs were categorised. Photo evidence is provided in Annexure F5.5. The day had drawn to a close and there was no further time for any additional activities. Participants were thanked for their participation and had the opportunity to reflect on the day by telling the rest of the participants what they "*liked least*" and "*liked most*" of the day. The activity assisted me in reflecting on the functioning of the workshop, the role of each individual and their respective contributions to the workshop. At the same time, I could identify methods that could assist me in running Day 2 and improve the outcomes thereof (University of New South Wales 2017:[1]; Murray & Christison 2010:165). Most of the participants indicated that they enjoyed the workshop, learnt from the experience, and appreciated the participatory nature of the workshop. Some participants already

indicated that they were thinking of how they could apply what they had learnt to their own practice when working with NQPNs. Only three "*like least*" statements were made, but none of them agreed with each other, which indicates that it was the view of the individual participant. One participant did, however, note that not everyone was equally verbal and therefore the facilitator focussed on facilitating the participation of the quieter participants on Day 2. A summary of the participants' comments is presented in Annexure F10.

❖ **Organising the data**

Upon closing of Day 1, I, the facilitator and my supervisor and co-supervisor met with the purpose of de-cluttering and organising the data of Day 1. I used the key-concepts (needs) underlying each category as guidance to form "clusters" of concepts that related to each other. I looked at each cluster and determined if one of the concepts in the cluster could describe the cluster as a "whole". In some cases, I could identify such a concept and used it to form a *theme,* with the rest of the concepts in the cluster forming sub-themes. In some cases, I could not establish an appropriate concept, and, therefore, chose a new concept to describe the cluster. The concepts in these clusters therefore all formed sub-themes. I discussed my reasoning with the facilitator, supervisor and co-supervisor and consensus was reached that the themes and sub-themes were correctly decluttered. After careful consideration, discussion, reflection and comparison to the original Person-centered Practice Framework, some themes and sub-themes were moved from the categories where it was originally allocated by the workshop participants to other more relevant categories (see Annexure F5.6). Key-concepts that had a direct negative connotation (i.e. bullying, professional isolation) were placed under the themes or sub-themes that would address the negative/adverse behaviour as it did not form a direct part of the content of the Person-centered Nurse Residency Programme. After the workshop, I typed out a Summary of Day 1 that included the categories with the original concepts as they were structured by the workshop participants and the de-cluttered data to hand out to each participant on Day 2 (see Annexure F8).

4.4.1.8   Conducting the workshop: Day 2

Upon arrival on Day 2, participants enjoyed refreshments and were welcomed to the workshop. I handed out a Summary of Day 1 (see Annexure F8) and presented an explanation of how the themes and sub-themes were formed. I also discussed the changes we made when we decluttered the data. Workshop participants indicated where they did not agree with our decisions and changes were made where after consensus was reached among everyone. The final layout of the categories, themes and sub-themes is presented in Annexure F7.

❖ **Activity 1: Formulating outcome statements**

After consensus was reached, Professor Botma did a presentation on programme development specifically pertaining to the "*design up/deliver down*" approach (see Section 4.3). She also discussed the difference between foundational-, conditional- and functional knowledge and meta-cognition as discussed in Section 3.3.

Training was provided on how to formulate outcome statements and two practical examples were done together with the large group to ensure that they were comfortable with doing the activity themselves. Each small group was allocated three (3) to four (4) themes from either the category: *Outcomes of the Person-centered Nurse Residency Programme*, to formulate learning outcome statements for NQPNs, or from the categories *Person-centered learning environment* and *Person-centered learning process* to formulate outcomes statements for the facilitator. The *prerequisites* category was not included in this activity as it focused on the attributes that the senior professional nurse should already have in order to be identified as a potential facilitator in the Person-centered Nurse Residency Programme. The small groups had thirty (30) minutes in which to complete this activity. The facilitator and I moved around between the groups and helped where the small groups experienced challenges with the activity. Upon completion, each small group chose a representative and was given an opportunity to present their outcome statements to the larger group (see Annexure F5.7). Participants struggled with developing the outcome statements at first and required assistance from the facilitator, but they soon grasped the correct way in doing so after a few attempts. As the rest of the small groups presented, they reflected on their outcome statements and could immediately identify if they had made a mistake and rephrased the outcome statements at the same time. Some of the outcome statements were merged with others as they had similar meanings, which further simplified the data. We did however come to the realisation that the findings necessitated the establishment of two additional categories. Consensus was reached after all small groups presented their outcome statements to the whole group and the facilitator proceeded to explain the next activity to the workshop participants.

❖ **Activity 2: Establishing related knowledge, skills and attitudes**

The facilitator demonstrated to the workshop participants how to establish the formulated outcome statements' associated KSAs that are needed to meet the respective outcomes. Small groups now had the opportunity the go back to their own outcome statements and formulate the associated KSAs. Although bringing a laptop was not a requirement for the workshop participants, some participants had brought theirs along, which led to each small group having at least one laptop among them. Laptops were used to research additional KSAs, over and above those already identified by the small group members. The groups had thirty (30) minutes to complete this activity. Upon completion, the small groups chose another representative who then presented their findings to the large group. Some KSAs were changed by the large group and consensus was reached among all participants.

The workshop concluded and the facilitator summarised the events of the workshop over the two days. Participants had an opportunity to reflect on what they had learnt from the workshop and in closing a "*like most, like least*" activity was done. Most participants only had "*like most*" statements and a lot of these statements revolved around what had been learnt during the day. Learning did not just apply to the phenomenon under study, but also about the research itself. The two "*like least*" statements showed that the participants did at times feel confused and lost, which is

understandable, especially for individuals that have not been involved in research previously. The findings of the "*like most, like least*" activity is illustrated in Annexure F10.

I thanked the facilitator for her contribution and presented her with a small gift. Participants were thanked for their time and each received a small gift and thank-you card. All participants indicated that they would be interested in learning about the outcome of the study once completed. The workshop was adjourned, and everyone enjoyed refreshments before departing. After all participants left the venue, I, together with the facilitator and my research supervisor and co-supervisor, held a debriefing session to reflect on the events of the past two days. Everyone agreed that the objectives of the workshop were met, with consideration of the amendment of Objective 3.

❖ **My reflection on the workshop**

Two participants arrived late as they experienced problems with finding the venue inside the hospital. When thinking back, I should have sent the participants instructions on how to get to the venue from the main entrance to make it easier to find.I should also have taken another approach to recruiting participants. Taking a more personal approach to recruiting participants may have led to more success in recruiting, especially with the experts from SANC, DoH and NEA. Face-to-Face recruitment and making contact on multiple occasions do lead to more successful recruitment according to Polit and Beck (2017:261). The authors further add that offering incentives are also a good strategy to use, which I should have considered. According to Polit and Beck (2017:252), invitations posted on walls as advertisements are subject to bias as individuals make themselves available as volunteers and are often different to those individuals who do not volunteer. As an interpretive description researcher, I do not agree with this view as I believe that every individual has some form of bias (Thorne 2016:101) and that it should be acknowledged, rather than ignored.

The change of objectives created some confusion among some of the participants, especially those with no experience in research. These participants required a lot of direction from the rest of participants that had previous experience with research and they constantly had to be reminded that the aim of the study was no longer to co-construct the nurse residency programme for NQPNs together with its curriculum and teaching activities, but that the focus had shifted to the facilitator. There is no better way that this could have been managed other than to just make use of participants that are seasoned researchers, especially in the qualitative tradition, as they tend to be more open-minded to such changes.

4.5   RIGOUR

Rigour in qualitative studies is measured by many different frameworks. A popular framework that can be applied across multiple paradigms is that of trustworthiness by Lincoln and Guba (1985) as cited in Polit and Beck (2017:559). Thorne (2016:117), however, argues that there are more effective ways to ensure credibility in interpretive description studies and that credibility should rather be driven by what the researcher is trying to achieve and not just on specific methodology and technicality (Thorne 2016:236).

I do, however, agree with Polit and Beck's (2017:559) argument in stating that even though creativity and insightfulness should be encouraged in qualitative research, "*scientific excellence*" should not be disregarded. The opposite is also true where it is stated that researchers should not just seek to achieve rigour at the expense of interpretation and the abstraction of findings. I, therefore, decided to incorporate Guba and Lincoln's (1994) framework for ensuring trustworthiness (as cited in Polit & Beck 2017:559) with the credibility criteria of an interpretive description study as discussed in Thorne (2016:236-237). Each of the relevant criteria and how they were applied in this study is discussed in the following section. As this is an interpretive description study, I will start the discussion with the credibility indicators specifically related to interpretive description followed by the criteria for trustworthiness.

4.5.1   Quality indicators in interpretive description

The four criteria that judges the research to be theoretically-, epistemologically- and technically sound in interpretive description are referred to as epistemological integrity, representative credibility, analytic logic and interpretive authority (Thorne 2016:236-237). A discussion on each and how it was applied in this study follows.

4.5.1.1   Epistemological integrity

Epistemological integrity was ensured by adhering to the foundational underpinnings of interpretive description as noted in Thorne (2016:235). The research question was consistent with my epistemological stance which I described in the professional context of nursing and I also acknowledged my biases (see Section 2.5). The focus group meeting and the questionnaires that I used as data collection methods aligned with the epistemology and principles of interpretive description. I also transcribed the focus group meeting myself as suggested in Liamputtong (2011:166) to familiarise myself with the data again, which assisted me to prepare the data for analysis (see Section 4.3.3.2). I conducted a preliminary data analysis to form beginning conceptualisations that are representative of the entire sample before giving the data to the participants of the workshop for participatory data analysis, as supported by Thorne et al. (1997:175) and (Thorne 2016:178), as providing participants with raw data to analyse does not suffice. Thorne et al. (1997:175) further argues that better conceptualisations can be formulated from the participants' perception of why something does not fit instead of why it does. Each of the above aspects were designed to improve the epistemological integrity of the study, ultimately enhancing the credibility.

4.5.1.2   Representative credibility

Representative credibility was attained by paying close attention to the design of the study, ensuring that the participants selected through purposive sampling represented the relevant population that it was originally intended for. Inclusion criteria were relevant to the NQPNs and the professional nurses (see Section 4.3.2), which increased the respective sample sizes as a means to collect more data. The inclusion criteria set for the NQPNs ensured that their experience was still recent and that they could recall their time as NQPNs. Secondly, the NQPNs were exposed to similar circumstances as they completed remunerated community service in a hospital and not any other type of public healthcare institution. Both these inclusion criteria lead to more accurate data being collected. In addition, hereto, the professional nurses were those nurses that had more than five (5) years' of experience. Snowball sampling led to the inclusion of a variety of other categories of participants working at different healthcare institutions and educational institutions through which representative credibility was also achieved. The value of having participants from various practice settings and that were in remunerated community service in different years eliminated the risk of obtaining data on experiences that were linked to a specific practice setting (such as the tertiary hospital involved in this study) or a specific year-group of NQPNs.

Another way in which representative credibility was achieved was through methodological triangulation (Thorne 2016:237) using both a focus group meeting (see Section 4.3.3.1) and Questionnaire A (see Section 4.3.3.2) to collect data from NQPNs on a single theme. The use of methodological triangulation to enhance credibility is also supported by Denzin (1970) as cited in Yeasmin and Rahman (2012:156-157). Collecting data from different levels of stakeholders (see Section 4.3.2) is referred to as person triangulation (Polit & Beck 2017:563), a form of data triangulation which also enhances the representative credibility in interpretive description studies (Thorne 2016:236). The involvement of multiple data sources ultimately increased my confidence in the conclusions that were drawn for this study.

4.5.1.3   Analytic logic

Analytic logic was reflected by clearly stating the research decisions and interpretations throughout the emergent design of the study by generating an audit trail. The audit trail, specifically in interpretive description studies, is evident in the reflexive writing style that shows the reasoning processes throughout the study (Thorne 2016:157;237). Reflexive writing was done at the hand of Rolfe, Freshwater and Jasper's (2001) Framework for Reflective Practice that uses the questions *What*?, *So what*? and *Now what*? The *What*? question described the situation. The *So what*? described the analysis and explanation of the *What*? question together with supporting literature. Lastly, the *Now what*? question described what was learnt and what the way forward is, thereby contributing to practice (see Chapter 7).

Focus group meetings were voice-recorded and transcribed by me within two (2) days after the focus group meeting was held. In addition, hereto, I also made field notes (see Annexure D6) and audio- and video recordings although it

was not transcribed. The use of field notes or reflective journals to retrace how abstracts were developed and to justify analytic decisions is synonymous with the interpretive descriptive approach (Thorne *et al.* 1997:175). The transcript was read in its entirety and a summary of the views of the participants was compiled, which was given to the workshop participants responsible for participatory data analysis in Phase 2. I read through the questionnaires completed by the NQPNs (see Section 4.3.3.2) and through constant comparative analysis based on my subjective judgement I could summarise the data and present participants with a shortened and organised version of the data. Constant comparative analysis is often associated with qualitative studies using a grounded theory approach and refers to comparing data with previously obtained data to determine commonalities and differences (Polit & Beck 2017:474). In this study I did not make decisions about eliminating any data except that which was repeated. The person-centered approach required of the participants in the workshop to critically decide which data was relevant and had to be included in the Person-centered Nurse Residency Programme. Thorne et al. (1997:175) state that more significant conceptualisations can be formulated from participants' perceptions of why some aspects do not fit rather than why it does. This process was repeated with Questionnaire B (see Section 4.3.3.3, see Annexure E1).

4.5.1.4   Interpretive authority

Interpretive authority is required to ensure that the researcher gives trustworthy descriptions that portray the truth despite the researcher's own bias and experience (Thorne 2016:238). In this study, interpretive authority was shared between me and the workshop participants. I did the initial interpretation of the literature and the data collected (see Section 4.3.3.2, Section 4.3.3.3) but further data analysis was done in a participatory manner during the workshop which limited my own bias. Workshop participants also collaboratively developed their own interpretation of what person-centeredness means to them (see Section 4.4.1.7) without influence from me. The shared interpretive authority of this study enhanced the credibility thereof.

4.5.2   Trustworthiness

Lincoln and Guba's (1994) framework for trustworthiness includes the following criteria: credibility; dependability; confirmability; and transferability. Authenticity was later added by Guba and Lincoln (1994), which is specifically relevant in constructivism (Polit & Beck 2017:559; Loh 2013:5; Zhang & Wildemuth 2009:6) and therefore is also referred to in this study. Each criterion and how it was applied in this study are discussed in the following section.

4.5.2.1   Credibility

Lincoln and Guba (1985) describes credibility as the assurance in the truth of data and interpretations thereof (as cited in Polit & Beck 2017:559; Loh 2013:5; Zhang & Wildemuth 2009:6). Credibility is therefore ensured by conducting the study in a way that makes it more believable and by taking steps to demonstrate the credibility in the findings (Polit & Beck 2017:559). According to Thorne (2016:213) credibility in the findings of an interpretive description study is evident

when the reader can see that the study is "*well made*" through the visible logic displayed in the "*conceptual structure*" and the "*narrative form*" used by the researcher. Credibility is therefore demonstrated in how I reported the emergent nature of the study by reporting on events as they happened (see Section 4.4.1.7), the conceptual framework developed from it (see Figure 6.1) and by writing in the first person, using the term "I". Writing in the first person is also supported in Shelton (2015:3), where it is argued that it makes the thesis more clear, readable, and understandable.

Further quality-enhancement strategies in relation to criteria for a qualitative inquiry provided by Guba and Lincoln (1994) as cited in Polit and Beck (2017:562) that I applied was:

- *Reflexivity:* I continuously reflected on the findings throughout the whole study as evident in the writing style throughout the thesis. I created awareness of my background, person-centered values and my professional identity, which may have affected the research process. Declaring my bias also formed part of reflexivity in this study (see Section 2.5).

- *Comprehensive field notes:* During data collection in the focus group meeting and during participatory data analysis I wrote comprehensive field notes (see Annexure D6, F10) of what happened in the field and how the study emerged in Phase 2. I did, however, not include much information on the participant's demeanour and behaviours as it was not needed for the scope of this study.

- *Audio recordings and verbatim transcription:* I did an audio recording of the focus group meeting and the workshop and a verbatim transcription of the focus group meeting myself (see Annexure D5).

- *Data- and method triangulation:* Data triangulation refers to the use of multiple data sources in order to validate conclusions (Polit & Beck 2017:563). In this study I made use of person-triangulation when I collected data from various levels of stakeholders. The extent of triangulation is illustrated in Annexure F7. Triangulation is further noted in the use of the international- and South African literature that were also compared with the data collected from the participants. A second form of data triangulation used in this study is method triangulation, which refers to the use of multiple methods for data collection about the same phenomenon (Polit & Beck 2017:564). Method triangulation is evident in my use of both focus group meetings and questionnaires during data collection in Step 1 (see Section 4.3.3.1; Section 4.3.3.2).

- *Investigator triangulation:* Investigator triangulation refers to the use of two or more researchers during data analysis where decisions are made about coding, analysis and interpretation (Polit & Beck 2017:566). This is demonstrated in the use of participatory data analysis in Phase 2 (see Section 4.4.1.7).

- Credibility was further ensured by documenting quality-enhancement efforts as discussed in this section; disclosing my background and reflecting on the influence thereof on the study (see Section 2.5) and the thick description of the context (see Section 2.2), which according to Thorne (2016:238) also forms part of the credibility criteria of analytic logic (see Section 4.5.1.3).

4.5.2.2 Dependability

Dependability refers to the reliability of data over a period of time and circumstances, which gives an indication of whether the findings of the study will be the same if it were to be repeated with the same or similar participants and in the same or similar context (Polit & Beck 2017:559; Loh 2013:5; Zhang & Wildemuth 2009:6). Dependability is a prerequisite for attaining credibility (Polit & Beck 2017:556). Dependability strategies according to Guba and Lincoln (1994) that I used in this study included:

- *Careful documentation and keeping an audit trail*: An audit trail is the collection of documents that would allow an independent person to reach the same conclusions about the data (Polit & Beck 2017:564). Records of the raw data and questionnaire development forms were kept. I discussed the research methodology overall, including a comprehensive description of the data collection process as well as data analysis to provide readers with a clear and accurate description of the Steps I followed. An accurate description is provided on the emergent nature of the study as well as the challenges I experienced during each Phase. The same results can however not be expected when repeating the study on similar participants as this study required interpretation and subjective views of the participants.

4.5.2.3 Confirmability

Confirmability is concerned with the possibility of similarity between two (2) or more individuals' view on the data's correctness, significance or meaning. Data should reflect the information participants provide and should be correctly interpreted as that (Polit & Beck 2017:559; Loh 2013:5; Zhang & Wildemuth 2009:6). The confirmability strategies of Guba and Lincoln (1994) as cited in Polit and Beck (2017:562) that I used in this study, included:

- *Careful documentation and keeping an audit trail*: I provided readers with a comprehensive description on the process I followed to collect- and analyse data. Supporting evidence is provided in the form of photos taken during the workshop as well as actual completed documents of participants, which serves as evidence of their voices that were heard. Original documents are available for auditing.

- *Peer review/debriefing:* Confirmability was further ensured by letting the focus group facilitator read through the focus group transcript and by holding debriefing sessions after the focus group meeting (see Section 4.3.3.1) and the workshop (see Section 4.4.1.7, Section 4.4.1.8). By letting the facilitator read through the focus group transcript it assisted in limiting my bias in the data provided to the workshop participants for analysis and it ensured that no important themes were missed in my interpretation thereof. Debriefing after the workshop assisted in eliminating errors of interpretation and ensuring that all the important themes and sub-themes were identified.

4.5.2.4 Transferability

Transferability refers to the applicability of the study findings to other research contexts. In order to establish if findings are transferable, comprehensive descriptive data is needed to allow readers to evaluate its applicability of the findings to other contexts (Polit & Beck 2017:560; Loh 2013:5; Zhang & Wildemuth 2009:6). Credibility criteria in Guba and Lincoln (1985) as cited in Polit and Beck (2017:562) that were applied in this study included:

- *Thick and contextualised description:* Constructivist studies do not aim to generalise but I still provided the reader with a thick and contextualised description of the research methodology (Chapter 4) and the research context (Chapter 2) in order to make an informed decision of the generalisability of the findings.

4.5.2.5 Authenticity

Authenticity entails showing the extent to which researchers show a range of different realities. It reflects the "*feeling*" tone of participant's lives as they are lived by them (Polit & Beck 2017:560). Strategies for authenticity as described by Guba and Lincoln (1994) as cited in Polit and Beck (2017:562) and that were applied in this study includes:

- *Thick and vivid description:* A thick description of the context and inclusion of the voices of multiple levels of stakeholders (see Section 4.2.3.1, Section 4.3.2) by following a person-centered approach allowed me to show a range of realities to readers. This created an understanding among readers of the South African context, with specific reference to the healthcare context as well as the experiences and challenges that NQPNs in South Africa face.
- *Impactful and evocative writing*: I used inductive analysis in the way I wrote up my findings in Chapter 5, carefully reporting on my reasoning for the sequence, structure and form in which it is written (Thorne & Darbyshire 2005 as cited in Polit & Beck 2017:569).

4.6 SUMMARY

In Chapter 4, I discussed the research methodology, which consisted of the research design, research approach and research methods. Each phase and its underlying steps were discussed comprehensively. I provided my reflection on all the events as they occurred. I further explained how rigour was ensured throughout the study. In Chapter 5, a discussion on the findings is presented.