

UNIVERSITY OF CAPE COAST

THEORY-PRACTICE GAP: PERCEPTIONS OF NURSE FACULTY AND
NURSING STUDENTS IN UNIVERSITY FOR DEVELOPMENT STUDIES
AND CLINICIANS IN TAMALE TEACHING HOSPITAL

DAVID ABDULAI SALIFU

2016

UNIVERSITY OF CAPE COAST

THEORY-PRACTICE GAP: PERCEPTIONS OF NURSE FACULTY AND
NURSING STUDENTS IN UNIVERSITY FOR DEVELOPMENT STUDIES
AND CLINICIANS IN TAMALE TEACHING HOSPITAL

BY

DAVID ABDULAI SALIFU

Thesis submitted to the School of Nursing and Midwifery, College of Allied
Health Sciences University of Cape Coast, in partial fulfilment of the
requirements for the award of Master of Nursing

JULY 2016

DECLARATION

Candidate's Declaration

I hereby declare that this thesis is the result of my own original research and that no part of it has been presented for another degree in this university or elsewhere.

Candidate's Signature: Date.....

Name:

Supervisors' Declaration

We hereby declare that the preparation and presentation of the thesis were supervised in accordance with the guidelines on supervision of thesis laid down by the University of Cape Coast.

Principal Supervisor's Signature: Date:

Name:

Co-Supervisor's Signature: Date:

Name:

ABSTRACT

The overall goal of this research work was to explore the understanding of theory-practice gap from the perspective of nurse faculty and nursing students in University for Development Studies, and clinicians in Tamale Teaching Hospital. Despite several attempts by nurse faculty and clinicians to address the theory-practice gap, it remains a central issue in both nursing education and practice. Most of the initiatives to bridge the theory-practice gap have evolved in geographic areas such as the USA, UK, and other developed nations. Little research addressing the issues is evident in sub-Saharan Africa. A descriptive phenomenological methodology was used. Data were collected using focus group discussions. A purposive sampling technique was used in recruiting 32 study participants. The sample consisted of 32 participants, comprising 8 nurse faculty, 12 clinicians (6 in each discussion session) and 12 nursing students (6 in each discussion session). The study adopted Colaizzi's descriptive phenomenology data analysis process. Five themes were identified: system inadequacies; resource constraints; challenges of the clinical learning environment; clinical placement and supervision; nurse faculty factors. In Ghana, stakeholders in nursing education and practice are yet to realise the implications of the theory-practice gap and its associated challenges on contemporary nursing education and nursing practice. Based on this evidence of the scope and factors contributing to theory-practice gap in Ghana, further research could be conducted to identify and develop research-based strategies to bridge the gap.

KEYWORDS

Clinician

Nursing education

Nurse faculty

Perception

Student nurse

Theory-practice gap

ACKNOWLEDGMENTS

I would particularly like to thank my supervisors, Dr. Jerry P. K. Ninnoni and Professor Ahmed Adu-Oppong, for their continued support and professional guidance throughout this thesis.

I am ever so grateful. I am also grateful to Professor Janet Gross for her unflinching support throughout my life. To Mr. Mohammed Awal, I say thank you, for your generous and immense contribution in making this work better.

Finally, I would like to thank all the nurse faculty members and level 400 postsecondary students of the University for Development Studies, and all members of the preceptor group of Tamale Teaching Hospital, who participated in this study. God bless you all.

DEDICATION

Specially to my son,

Bright-Jason Bakar

TABLE OF CONTENTS

	Page
DECLARATION	ii
ABSTRACT	iii
ACKNOWLEDGEMENT	v
DEDICATION	vi
TABLE OF CONTENTS	vii
LIST OF TABLES	x
LIST OF FIGURES	xi
LIST OF APPENDICES	xii
CHAPTER ONE: INTRODUCTION	1
Background to the Study	2
Statement of the Problem	5
Purpose of the Study	6
Research Objectives	6
Research Questions	7
Significance of the Study	7
Delimitations	9
Limitations of the Study	9
Definition of Terms	10
Organization of the Research Report	11
CHAPTER TWO: LITERATURE REVIEW	12
Literature Search Strategy	12
Theoretical/Conceptual Framework for the Study	17

The Historical Perspective of Nursing in Ghana	22
Theory-Practice Gap in Nursing	30
Contributory Factors to Theory-Practice Gap	33
The Implications/Effects of Theory-Practice Gap in Nursing Practice	42
Attempted Solutions to the Theory-Practice Gap	44
Summary of Literature Review	69
CHAPTER THREE: RESEARCH METHODS	71
Research Design	71
Study Setting	76
Study Population	78
Sampling Procedure	79
Inclusion Criteria	81
Exclusion Criteria	81
Data Collection Instrument	82
Validity and Reliability of the Instrument	85
Data Collection Procedures	86
Ethical Considerations	88
Data Processing and Analysis	88
Trustworthiness of the Study Results	93
Chapter Summary	94
CHAPTER FOUR: RESULTS AND DISCUSSION	95
Results	96

Discussions	124
Chapter Summary	136
CHAPTER FIVE: SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	138
Summary	139
Conclusions	140
Strengths and Limitations of the Study	141
Recommendations	142
REFERENCES	145
APPENDICES	180
A Topic Guide for Focus Group Discussion	180
B Ethical Clearance from Institutional Review Board, University of Cape Coast	181
C Letter of Introduction from School of Nursing and Midwifery, University of Cape Coast	182
D Certificate of Authorization from Tamale Teaching Hospital	183
E Inform Consent Form	184
F Sample of Clustering Process	190

LIST OF TABLES

		Page
1	What are the Perceptions of Nurse Faculty, Clinicians and Nursing Students on Theory Practice Gap in Nursing?	14
2	Search Strategy Inclusion and Exclusion Criteria.	14
3	Search Strategy; Database-Cinahl (Searched on 17th November, 2015)	15
4	Demographic Characteristics of Participants	96

LIST OF FIGURES

	Page	
1	Flow chart of search strategy for nursing in Ghana	13
2	Flow chart of search strategy for theory-practice gap	16
3	Conceptual framework for theory-practice integration adopted from Botma, Van Rensburg, Coetzee, and Heyns (2015)	17
4	Summary of Colaizzi's (cited in Shosha, 2010) strategy for phenomenological data analysis adopted for the study	90
5	The final thematic map	98

CHAPTER ONE

INTRODUCTION

In recent times the clinical competence of nurses has been increasingly criticised to be on the decline. During the past decade, the image of nursing in Ghana has fallen at a steady rate due to poor nursing care rendered to patients by qualified nurses (Ghana Registered Nurses' Association [GRNA], 2011). There is widespread criticism that graduate nurses though proficient in theory are less proficient in clinical skills at the time of registration (Glen, 2009). This has been and continues to be a major concern for all, especially nurse educators in Ghana.

The integration of theoretical knowledge and practical skills does not usually occur smoothly; leading to the occurrence of a theory-practice gap in nursing (Bendal, 2006; De Swart, Du Toit, & Botha, 2012; Monaghan, 2015). The gap between theory and practice of nursing is an issue of great concern for nurse faculty, students and clinicians. Though widely studied globally, there is little research on theory-practice gap in sub-Saharan Africa (SSA) (Lugina, 2009).

The chapter is organized into the following sections; background to the study, problem statement, statement of purpose, research objectives, research questions, significance of the study, delimitations, limitations, definition of terms, and organization of the report. The background of the study entails the definition of theory-practice gap, factors influencing theory-practice gap, and effects of theory-practice gap in nursing practice.

Background to the Study

The theory-practice gap in nursing and midwifery has been discussed and debated in the literature for decades. Review of professional nursing literature from several countries in Europe and North America as well as Australia provides sufficient support for the existence of a theory-practice gap in nursing and midwifery (Gardner, 2006; Haigh, 2008; Landers, 2000; Maben, Latter, & Clark, 2006; Rafferty, Allcock, & Lathlean, 1996; Sellman, 2010; Sullivan, 2010; Upton, 1999; Wilson, 2008). Although well documented globally, there is a paucity of research on this topic in sub-Saharan Africa (SSA) (Lugina, 2009). However, there is a general consensus among Ghanaian educators and practitioners that a theory-practice gap exists (Lugina, 2009).

Though often defined imprecisely and subjected to differing individual interpretations, it is rife in scholarly literature that theory-practice gap relates to the discrepancy between classroom theoretical preparation and what nursing students encounter in clinical practice (Baxter, 2007; Corlett, Palfreyman, Staines, & Marr, 2003; Higginson, 2004; Holton, Bates, Bookter, & Yamkovenko, 2007; Maben, Latter, & Clark, 2006, Rolfe, 2002; Scherer & Scherer, 2007; Wolf, Bender, Beitz, Weiland, & Vito, 2004). Seemingly, the theory-practice gap manifests on two main levels: first, for nursing students on clinical practicum placements, and second, for newly qualified nurses (Kellehear, 2014; Monaghan, 2015; Scully, 2010). The gap between the theory and practice of nursing is an issue of great concern for nurse faculty, students and clinicians given that it

challenges the concept of evidence-based nursing practice, which is the basis of contemporary nursing practice (Scully, 2010; Webber, 2010).

Ultimately, this influences the delivery of competent nursing care and patient outcomes. Grounding clinical practice in evidence and research is fundamental in evidence-based nursing practice. Upton (1999) wonders how there could be evidence-based nursing practice when theory-practice gap exists. Moreover, inadequate theory-practice integration results in medication errors and poor nursing care decisions (Gregory, Guse, Davidson, Davis, & Russel, 2009; Jones & Treiber, 2010). Additionally, the theory-practice gap adversely impacts the socialisation of nursing students to their professional roles (Maben et al., 2006; Spouse, 2001).

Given the importance of nursing care in the health delivery system of every country, it is imperative that steps are taken to improve the clinical competence of nurses. Globally, the goal of nursing education is to ensure professional clinical competencies and to enhance the delivery of safe, quality nursing care (Forsberg, Georg, Ziegert & Fors, 2011; Tseng, et al., 2011; World Health Organisation [WHO], 2007). This could only be achieved by ensuring that nursing students apply what they have learned in the classroom and simulation laboratories to real-world situations (Lauder, Sharkey, & Booth, 2004). Skill acquisition is one element of attaining clinical competence in nursing practice and this can be achieved through adequate theory-practice integration.

Several reasons have been proposed as to why the theory-practice gap manifests in nursing education. One of these is the relatively recent increase in the

research output and the focus on an evidence-based practice agenda for nursing and midwifery (Gardner, 2006).

Another explanation for the theory-practice gap in literature is the shift of nursing education into the university/college setting, albeit this occurred at different rates globally. Despite the movement of nursing to higher education, providing a new approach aimed at preparing students to meet health care needs, it is argued that those changes have not had much positive influence in bridging the theory-practice gap (Andrews & Reece, 1996; Hewison & Wildman, 1996; Ousey & Gallagher, 2007). They contended that the progression of nursing into higher education demonstrated in a tangible way, the dichotomy between theory and practice in that learning occurs in two separate institutions which hitherto was considered as one. The seeming disconnect has resulted in the theory and practice of nursing being treated as separate entities (Ousey & Gallagher, 2007).

The sheer complexity of the theory-practice gap means that it has remained a perennial problem in nursing. Indeed one of the main criticisms of nursing education programmes today, is the failure to bridge the theory practice gap (Monaghan, 2015). Despite the introduction of several strategies in nursing education, including role models (nurse practitioners, clinical facilitators, nurse educators, mentors and preceptors) to bridge the theory-practice gap, it continues to defy resolution (Bendal, 2006; Clark & Holmes, 2007; De Swardt et al., 2012; Maben et al., 2006; Sedgwick & Yonge, 2008). This phenomenon has plagued nurse educators for decades in their pursuit of ensuring that what is taught in the

classroom accurately reflects the realities of clinical practice and that the theory is relevant to current practice in the clinical setting (Corlett et al., 2003).

Statement of the Problem

Several initiatives have been introduced in an effort to bridge the theory-practice gap. Most of these initiatives have evolved in geographic areas such as the USA, UK, and other developed nations. Some strategies related to the nurse educator's role in the clinical setting have been implemented with no identified documentation of the effectiveness. Although well documented globally (Gardner, 2006; Haigh, 2008; Landers, 2000; Maben et al., 2006; Rafferty, Allcock, & Lathlean, 1996; Sellman, 2010; Sullivan, 2010; Upton, 1999; Wilson, 2008) little research addressing the theory-practice gap is evident in sub-Saharan Africa (SSA) (Lugina, 2009). However, there is a general consensus of opinion among Ghanaian educators and practitioners alike that a theory-practice gap exists (Lugina, 2009).

Given the unique context of nursing and health care in Ghana and other nations of SSA, identification of the nature and scope of the theory-practice gap needs to be undertaken. Without this requisite knowledge, effective strategies to address the theory-practice gap may not be developed.

Moreover, experiences may be varied due to the differences in pedagogical approaches and health care environments in the more technologically advanced western countries and the resource constrained SSA countries such as Ghana, with regards to the theory-practice gap. Hence adopting the attempted strategies from western countries in an attempt to bridge the theory-practice gap

in the context of Ghana may not be appropriate. If the theory-practice gap is not well understood in the context of Ghana and bridged, it will serve as a source of difficulty for the profession because the principles of practice established in curricula may not be aligned with the principles operating in the clinical setting.

Purpose of the Study

The ultimate aim of this study is to explore the understanding of theory-practice gap from the perspective of nurse faculty, clinicians and nursing students. This may help develop an effective strategy for the integration of theory and practice in nursing with the aim of promoting the delivery of competent nursing care to the citizenry of Ghana.

Research Objectives

The specific objectives of this study are:

1. To explore clinicians' understanding of the theory-practice gap.
2. To explore nurse faculties' understanding of the theory-practice gap.
3. To explore efforts nurse faculty is undertaking to bridge the theory-practice gap.
4. To explore efforts clinicians are undertaking to bridge the theory-practice gap.
5. To explore the experiences of postsecondary BSc nursing students with regards to the theory-practice gap.

Research Questions

In accomplishing the objectives of this study, the following research questions were addressed:

1. What is the understanding of theory-practice gap by faculty?
2. What is the understanding of theory-practice gap by clinicians?
3. What are the efforts of faculty in bridging the theory-practice gap?
4. What are the efforts of clinicians in bridging the theory-practice gap?
5. What are the experiences of postsecondary bachelor of nursing students with regards to the theory-practice gap?

Significance of the Study

Globally, the role of universities and nursing training colleges is to prepare nursing graduates with the ability to: think critically; research and deliver autonomous contemporary and culturally competent nursing care based on evidence and best practice principles at the time of registration (Kellehear, 2014; NMC, 2008). This demand requires nurses to be adequately equipped with contemporary nursing theory and practical knowledge (Ajani & Moez, 2011). However, critics are of the view that graduate nurses though proficient in theory, are less proficient in clinical skills at the time of registration (Glen, 2009). Seemingly, this is associated with the existence of the theory-practice gap in nursing.

Exploring the perceptions of theory-practice gap from the perspectives of nurse faculty, clinicians and nursing students will play a key role in developing an effective strategy for theory-practice integration in nursing education. Secondly, it may have implications for Nursing and Midwifery Council of Ghana (NMC), universities and nursing training institutions in terms of policy making regarding curriculum review/development. Thirdly, the study may provide recommendations for universities and other nursing educational institutions in terms of professional development offered for nurse educators prior to employment.

Fourthly, it may have implication for in-service training, monitoring, and evaluation in order to improve the quality of teaching and learning, and establishment of standards in the nursing profession. Furthermore, it will elucidate the understanding of theory-practice gap by major key players (clinicians, nurse faculty and nursing students) in the nursing profession in Ghana. This will serve as a source of literature especially in Ghana on theory-practice gap.

It will also contribute in identifying the factors that militate against theory-practice integration and various strategies employed by nurse faculty and clinicians to remedy the situation. Nurse faculty who play a central role in nursing education will find the basis to examine their own pedagogical strategies for theory-practice integration. Finally, this research work may motivate nurse researchers to undertake further research by providing insight from different contexts.

Delimitations

For the purpose of this study the following delimitations were applied;

1. Only full-time nurse faculty of the University for Development Studies (UDS) with three years teaching experience and a minimum qualification of a master's degree.
2. Level 400 postsecondary student nurses of UDS
3. Clinicians with a minimum of a bachelor's degree in nursing and at least three years clinical working experience and acting as a preceptor, or a clinician with a minimum of diploma in nursing and five years working experience and acting as a preceptor in Tamale Teaching Hospital (TTH).

Limitations of the Study

1. With emphasis on subjectivity and description central to Husserl's phenomenological framework, generalisations of this research findings are limited. It is not, however, the intention of the research study to generalise the findings, but to explore and describe perceptions of faculty, clinicians and nursing students on theory-practice gap. It is the transfer or application of the understanding to another situation, context or point in time by the person reviewing the findings that is of paramount importance.
2. The choice of the nursing faculty of the University for Development studies may also limit the transferability of the findings of this study considering that it is a relatively new department within the university

setup. Some of the concerns and issues raised could be related to the obvious challenges of growth as a department.

3. The perceptions of theory-gap elaborated in this study may be limited to the views of participants. The selection criteria and sampling technique ensured the selection of information rich participants.

Definition of Terms

1. **Nurse faculty** refers to individuals with full-time appointment with departments or schools of nursing and a minimum of a master's degree in nursing.
2. **Clinician** refers to any professional nurse with a minimum of a Bachelor's degree in nursing and at least three years clinical working experience and acting as a preceptor or a clinician with a minimum of five years working experience and acting as a preceptor.
3. **Postsecondary Nursing Student** is any individual pursuing a bachelor's degree in nursing right after senior high school education.
4. **Perception** is an individual's viewpoint, belief or opinion of something. In this study, it is participants' opinion or viewpoint or belief of theory-practice gap.
5. **Theory-practice Gap** refers to the disparities that exist between content that is provided to students in the classroom, inclusive of nursing theories and conceptual models, and those actually encountered in everyday practice in the clinical area.

Organization of the Research Report

This report was organized into five main chapters. The first chapter focused on the introduction of the study. The second chapter dealt with the review of relevant literature. Chapter three addressed the methodology of the study. Chapter four concentrated on the analysis of the data and finding. The last chapter looked at summary, conclusion of the study and recommendations.

The next chapter presents a review of relevant literature for the study. The historical perspective of nursing in Ghana; the theoretical underpinning of the study; search strategy; definition of theory-practice gap; theory-practice gap in nursing; factors influencing theory-practice gap, effects of theory-practice gap in nursing practice, solutions for theory-practice gap; and other relevant issues are discussed.

CHAPTER TWO

LITERATURE REVIEW

In the previous chapter, the researcher introduced the reader to the research field within which this study lies. In this chapter the researcher will build on it further by reporting the findings of previous research work done in this domain. Initially the researcher will outline the search strategy, conceptual framework and historical perspective of nursing in Ghana. The researcher will also examine the theory-practice gap as it occurs in nursing. Next the researcher will provide an insight into the effects of theory-practice gap, factors contributing to the theory-practice gap and outline solutions which have been trailed in an attempt to bridge the theory-practice gap.

Literature Search Strategy

Search strategy for nursing education and practice in Ghana

The electronic database Cumulative Index of Nursing and Allied Health Literature (CINAHL) on EBSCO was searched on 17th November, 2015 to identify and retrieve published articles on nursing education and practice in Ghana. This generated 45 articles, 21 of which were rejected because they did not focus on nursing in Ghana. Six more papers were included upon review of the reference list. A total of 30 articles were included in the review. This is illustrated in figure 1.

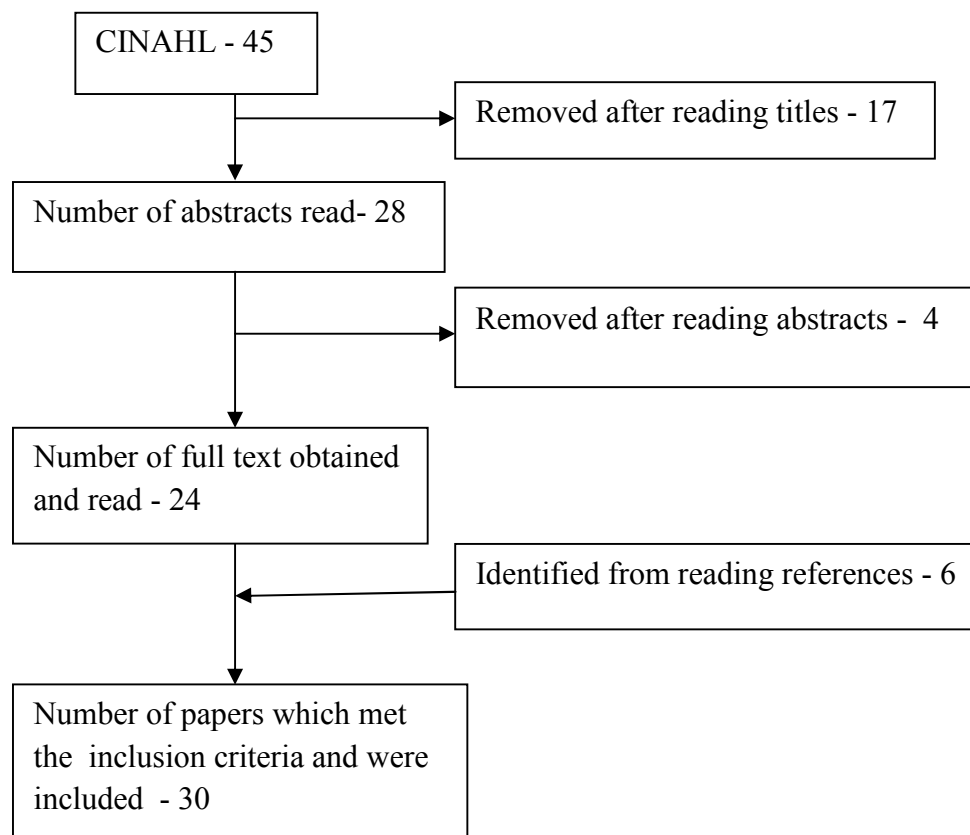


Figure 1:Flow Chart of Search Strategy for Nursing in Ghana

Search strategy for theory-practice gap

Electronic database search

Cumulative Index of Nursing and Allied Health Literature (CINAHL) on EBSCO was searched on 17th November, 2015. This enabled the researcher to identify and retrieved published research articles addressing the research questions (see tables 1 and 2) for this literature review.

Table 1 - *What are the Perceptions of Nurse Faculty, Clinicians and Nursing Students on Theory Practice Gap in Nursing?*

Population	Phenomenon of Interest	Context
Nurse faculty (nurse educator, nurse lecturer, nurse tutor)	Theory practice gap (knowledge translation gap, knowledge practice gap, education practice gap)	Nursing
Clinicians (nurse, nurse practitioner)		
Nursing students		

Table 2 - *Search Strategy Inclusion and Exclusion Criteria.*

Inclusion Criteria	Exclusion Criteria
<ul style="list-style-type: none"> English language literature. Relevant review articles, systemic reviews and research studies published between 2005 (inclusive) to 2015 (inclusive). Relevant literature on theory-practice gap related to nursing practice 	<ul style="list-style-type: none"> Non-English language literature Relevant review articles, systemic reviews and Research studies published before 2005 Literature on the theory practice gap, but unrelated to nursing practice.

This database was selected because of its extensive coverage of nursing and allied health research journals. The search strategy was formulated by using a three-step-approach. The term “theory practice gap” was searched first on Google scholar to identify relevant articles relating to the phenomenon. The keywords and synonyms used in the retrieved articles were then noted and incorporated into the facet analysis of the term “theory practice gap”. A more thorough search was then

carried out using a combination of indexed and free text terms to enhance the sensitivity of the search results. The facets of the terms “theory practice gap” and “nursing” were first combined separately using the Boolean operator “OR” and then the total of each group combined using the Boolean operator “AND”. The search result was restricted to articles published in English language only and within/after 2005 (see table 3)

Table 3 - *Search Strategy; Database-Cinahl (Searched on 17th November, 2015)*

Step	Search Terms	Results
S13	S12 (LIMITED TO PAPERS PUBLISHED BETWEEN 2005 - 2015)	259
S12	S11 (LIMITED TO ENGLISH LANGUAGE)	493
S11	S9 AND S10	519
S10	Nurs*	616, 156
S9	S1 OR S2 OR S3 OR S4 OR S5 OR S6 OR S7 OR S8	907
S8	EPG	127
S7	KTG	0
S6	KPG	7
S5	TPG	27
S4	Education practice gap	126
S3	Knowledge translation gap	18
S2	Knowledge practice gap	218
S1	Theory practice gap	448

The search yielded a total of 259 papers out of which 67 were removed after reading the titles. A further 68 were removed after reading the abstracts leaving 124. Two could not be retrieved via electronic search. The full text of 122 was obtained. One was dropped after reading the full text, it did not contain any

detail information on theory-practice gap. Twenty nine publications that had met the inclusion criteria were identified reading through the references/bibliographies of the 121 retrieved papers. This increased the number of included papers to 150. A total of 150 consisting of 51 non-systematic review articles, 60 research articles, 34 position papers and 5 systematic reviews had met the inclusion criteria, selected and included in this literature review. Majority of the papers were from Europe, Asia, North America, and Australia, with only one opinion paper from Africa. Figure 2 below gives further illustration on articles retrieved upon the search.

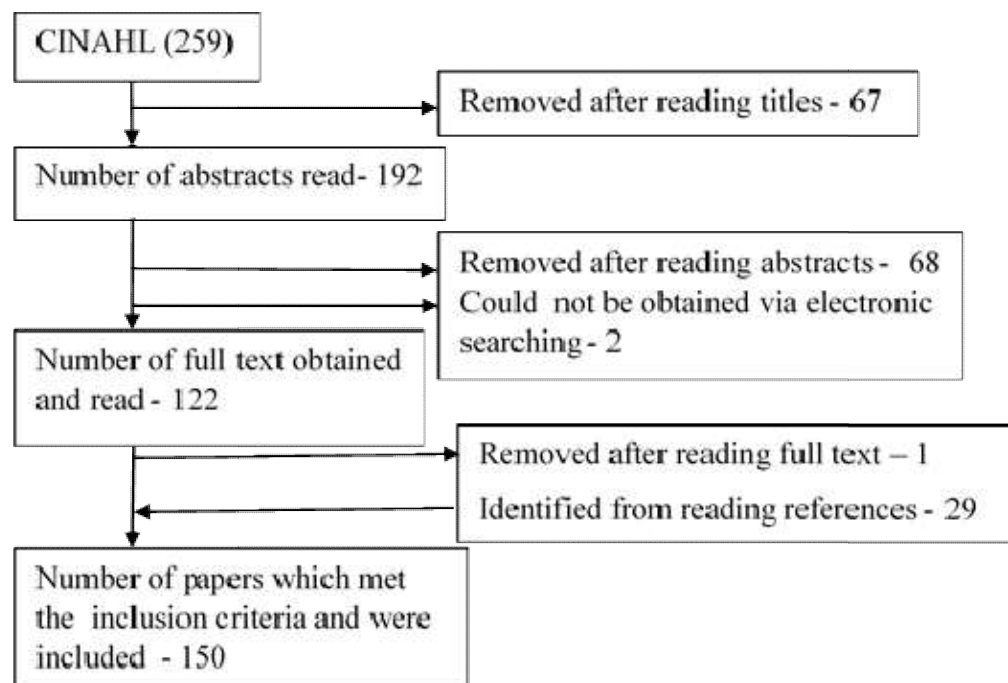
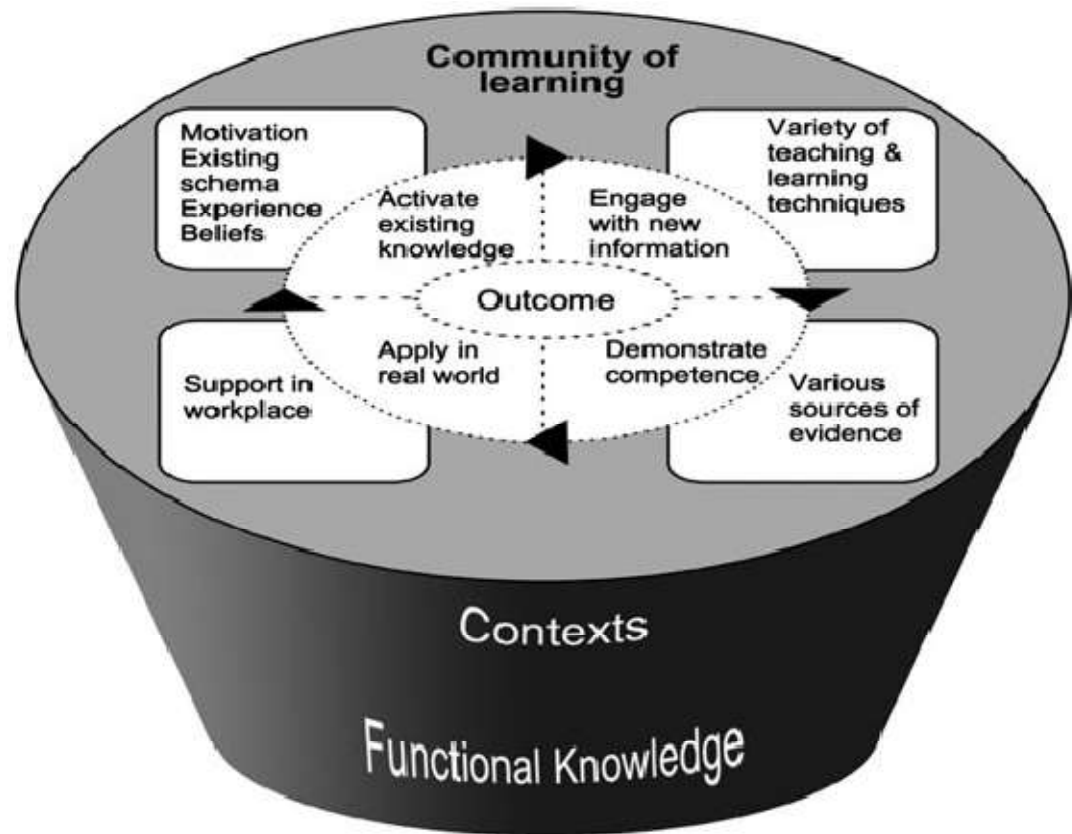


Figure 2: Flow Chart of Search Strategy for Theory-Practice Gap

Theoretical/Conceptual Framework for the Study



*Figure 3:*Theoretical/Conceptual Framework for the study Adopted from Botma, Van Rensburg, Coetzee, and Heyns (2015).

The theoretical/conceptual framework adopted for this study is based on the theory of constructivism. This framework offers a frame of reference to organise the thinking, problem solving and application needed in both clinical and non-clinical nursing education (Botma et al., 2015). The theoretical/conceptual framework is based on the principles of constructivism as a learning theory, constructive alignment and the elements of effective learning opportunities (Botma et al., 2015). This is aimed at guiding nurse faculty and clinicians on how to facilitate theory-practice integration.

Constructivism learning theory drive its roots from both psychology and philosophy (Doolittle & Camp, 1999). The essential core of constructivism learning theory is that learners actively construct their own unique understanding and knowledge of the world, through experiencing things and reflecting on those experiences (Brandon & All, 2010; Yilmaz, 2008). The constructivism learning theory is associated with cognitive psychology, as it focuses on a learner's ability to mentally construct meaning of their own environment and to create their own knowledge (Bruce, Klopper, & Mellish, 2011). Constructivism learning theory claims that, the process of constructing knowledge is dependent on existing knowledge, the context or situation, and internalisation of the information in an organised cognitive structure (Bruce et al., 2011). Philosophically, the concepts of subjectivism and relativism are central to the constructivism learning theory (Doolittle & Camp, 1999). Constructivism developed with the following four essential epistemological tenets (Von Glasersfeld, 1984; Yilmaz, 2008):

- Knowledge is not passively accumulated, but rather it is the result of an active learning process adopted by the individual;
- Cognition is an adaptive process that functions to make an individual's behaviour viable in a particular context;
- Meaning making is a subjective process and does not render an accurate representation of reality; and
- Knowing is influenced by social, cultural, language, and biological/neurological processes (Yilmaz, 2008).

These four fundamental tenets provide the foundation for the basic principles of teaching, learning, and the knowing process as described by constructivism (Doolittle & Camp, 1999).

The conceptual framework consists of four steps: the activation of existing knowledge; engagement with new information; demonstration of competence; and application in real-world practice (Refer to the second circle from inner out in Figure 3). The squares represent criteria for successful implementation for each of these steps. These four steps are dependent on two principles: the primacy of learning outcomes; and the demand that learning take place within a community of learning. The four steps have as their objective the integration of theory-practice.

Principles

Establish a community of learning

The community of learning consists of colleague students, facilitators and experts in the field of nursing that assist in developing students' communication, critical thinking skills and the ability to elaborate and defend dissenting views (McLoughlin, 2001). The usefulness of the engagements and interactions are dependent on the availability and influence of the facilitator (Reaburn, Muldoon, & Bookallil, 2009).

The primacy of learning outcomes

Researchers in cognitive psychology hold the view that solving realistic problems consolidate learning, demonstrating the significance of learning (Merrill, 2002). Deductively, solving authentic problems in the clinical and non-

clinical environments of nursing education may contribute significantly in improving students learning and skills acquisition. For this reason, it is important for nurse faculty and clinicians to identify the competencies nursing students are supposed to accomplish at each level of their professional training before engaging them in any learning activity.

Four steps

Step 1: activate existing knowledge

Knowledge is constructed when new information is integrated into existing mental schemas (Botma et al., 2015). Pedagogical and learning events that activate relevant prior knowledge in long-term memory and stimulate internalisation in working memory supports knowledge construction (Clark & Harrelson, 2002). However, in both clinical and non-clinical learning environments in nursing education, many nurse faculty and clinicians introduce students to new learning material without identifying the students' prior knowledge (Botma et al., 2015). It is therefore fundamental to establish and modify any existing experience of the students before introducing them to any new material. In order to incorporate new information, existing schemas need to be recalled and modified (Botma et al., 2015). In other to facilitate knowledge construction, it is essential to deconstruct existing misconceptions and then reconstruct the appropriate concepts before introducing the students to the desired teaching and learning activities (Doolittle & Camp, 1999).

Step 2: engage with new information

Learning is enhanced and measurable when the learning activities are aligned with the outcome or expected competence (Biggs, 1996). The engagement phase should be student centred and outcome focussed because learning is adequately promoted when students are actively engaged with the aim of constructing knowledge aimed at integrating theory and practice (Pascoe & Singh, 2008; Rust, 2002; Sefton, 2006). Students engagement is achieved when they discuss the new information, think about it, reflect on it, or use and apply the information to solve real-life problems or challenges in the clinical area (Botma et al., 2015). Sefton (2006) recommends that nursing students develop these skills progressively throughout their period of training. The emphasis during the engagement phase should be on mastering content, becoming proficient in nursing skills and being actively engaged in the process of learning through various student-centred pedagogical strategies. After the engagement phase, students should be given the opportunity for a returned demonstration.

Step 3: demonstrate competence

Nursing students are expected to progress from novice to competent practitioners in the acquisition and application of practical nursing skills (Benner, Sutphen, Leonard, & Day, 2010). Consistent with constructivism and experiential learning theories, Benner poses that developing nursing skills through situational experience is a prerequisite for expertise (Benner, 1984). Nursing students develop competence when they start to plan their actions in terms of long term goals (Roberts, Gustavs, & Mack, 2012). Nurse faculty and clinicians are

admonished to recognise that this involvement is still part of the learning cycle of the student hence clinical supervision is still required as nursing students are still learning through their mistakes (Allan, Smith, & O'Driscoll, 2011). When nursing students are not able to demonstrate clinical competence in specific competencies, nursing faculty and clinicians should collaboratively develop and implement strategies to give the students an opportunity to deliberately practice to become competent in those identified incompetencies (Clapper & Kardong-Edgren, 2012).

Step 4: apply in real world

Health delivery systems (hospitals, polyclinics, and clinics) rather than serving a dual purpose of being both service and learning centres, are more workforce and service orientated (Allan et al., 2011). Therefore, the workplace environment or organisational culture is not always conducive for learning hence, does not promote learning. Maben et al. (2006) describe the pressures and constraints of the clinical environment as organisational and professional sabotage. The authors outlined sabotage to include time pressure, role constraints, staff shortage and poor skills mix, work overload, task orientation and high patient turnover. It is therefore instructive to include in nursing curricula strategies to support students in the workplace in order to enhance theory-practice integration, thus applying theory in the real world of practice.

The Historical Perspective of Nursing in Ghana

Nurses play an integral role in the health care delivery system of every country. Nurses in Ghana are no exception; they play an instrumental role in the provision of health care to individuals, families, and communities (Donkor, 2009).

Nursing encompasses autonomous and collaborative standards of care for individuals of all ages through the use of clinical judgment to enable people to improve, maintain, or recover health, cope with health problems, and to achieve the best possible quality of life, whatever their disease or disability, until death (Royal College of Nursing [RCN], 2003). Nursing is a practically oriented profession, thus requiring the integration of theory and practice and the development of practical, interpersonal and communicative skills necessary for the delivery of care to clients (Deloughery, 1991). The evolution of nursing in every country is aimed at equipping nurses with adequate knowledge and skills necessary for the delivery of contemporary and culturally sensitive nursing care to clients.

Nursing practice and education in Ghana has similarly undergone various reforms aimed at improving nursing care delivery. It has evolved from the training of male orderlies during the pre-independence era to the current level of post-graduate education (Donkor& Andrews, 2011; Twumasi, 1979). In the colonial era (1902-1957), the training of nurses began as apprenticeship in hospital settings and was under the control of the hospitals (Donkor& Andrews, 2011). After independence, the training continued to be under the control of the hospitals, though it was more structured than before.

During the pre-independence era, the health care system was fashioned to provide health care for the colonial masters, civil servants, and African soldiers (Patterson, 1981). The influx of white colonial sisters from Britain in 1899 saw a change in the approach of nursing training (Donkor& Andrews, 2011). In order

to ensure Ghanaian trained nurses were accepted for registration in Britain and for further studies, the nursing curriculum of General Nursing Council of England and Wales was used for the training of nurses in Ghana (Donkor& Andrews, 2011).

According to Addae (1996), concrete efforts to provide facilities for training nurses in Ghana started in the 1940s to produce African nurses to feed the health service setup. This brought about the establishment of a nursing school in Kumasi in 1945 by Isobel Hutton for the training of State Registered Nurses (Osei-Boateng, as cited in Opare& Mill, 2000). Subsequently, another facility for nursing school was built in Accra at Korle-Bu. The trainees used the general hospitals for their practical training. Until after 1957, nursing education and practice was dominated by the British nursing educational system and expatriate nurses mainly from Britain.

Shortly after independence, a policy of Africanization (an international health workforce gradually being replaced with an indigenous workforce) saw the replacement of expatriate workers with Ghanaians (Rose, 1987). The period between 1957 and 1980, saw a shift in the training of nurses from preparing nurses to work in hospital-based curative health system, which had been a legacy of colonialism to a broad-based education that prepared nurses to work in a variety of health care settings (Donkor& Andrews, 2011). Obviously, the British system played a fundamental role in shaping nursing education in Ghana. Chittick (as cited in Opare& Mill, 2000) argued that the influence of the British's system in nursing education in Ghana accounted for the lack of flexibility, scope,

and impetus necessary for accomplishing the unique health needs of the citizenry of Ghana. The British system encouraged rote learning (Chittick, as cited in Opare& Mill, 2000). These assertions confirm some of the weaknesses in the nursing educational system of Ghana today.

Ghana was a pacesetter in nursing education, having been the first country in sub-Saharan Africa to gain independence (Opare& Mill, 2000). In 1963, University of Ghana was the first university in tropical Africa to introduce a diploma in nursing programme to prepare nursing tutors (Opare& Mill, 2000). The Nurses and Midwifery Council of Ghana which is the regulatory body for nursing in Ghana established by Act 857 introduced the Registered General Nursing (RGN) programme in 1999, at the diploma level, to be run in the Nurses Training Colleges that were training the State Registered Nurses (SRN). The SRN and RGN programmes ran concurrently till the SRN programme was subsequently phased out. The introduction of the diploma programme was intended to raise the standard of nursing education to produce the calibre of personnel who could eventually staff the universities (Akiwumi, 1994).

Though slow, the move to raise qualification requirements of initial education programmes for professional nurses to a higher-educational level to meet the global standards for the initial education of professional nurses and midwives appears to be gaining impetus in Ghana (Tally, 2006; WHO, 2009). Currently, there are several public funded and private schools in Ghana offering undergraduate nursing programmes. Adequate preparation of professional nurses at the first-degree level is fundamental in nursing education (WHO, 2009).

Research shows that, a highly educated nursing workforce does not only improve patient safety and quality of care, but equally saves lives (WHO, 2007). In Ghana, the undergraduate bachelor's of nursing programme is 4 years for straight students and 2 to 3 years for nurses with diploma depending on the university of choice.

Despite the movement of nursing to higher education, providing a new approach aimed at preparing nurses to meet health care needs, Ousey and Gallagher (2007) argue elsewhere that those changes have not had much positive influence in bridging the theory-practice gap. They contend that the progression of nursing into higher education demonstrated, in a tangible way, the dichotomy between theory and practice in that learning occurs in two separate institutions which hitherto was considered as one.

Additionally, identified challenges of nursing education in Ghana such as lack of infrastructure, large class sizes, and shortage of nurse educators appears to be a hindrance to theory-practice integration (Bell, Rominski, Bam, Donkor, & Lori, 2013; Talley, 2006). Talley (2006) posited that, nursing educational resources are limited in Ghana. The author postulated that in the schools he visited, nurse faculty and students did not have access to the wealth of data available online. Schools did not have electronic library systems and wireless connections were erratic. They did not have departmental libraries. Simulation rooms were poorly supplied and some equipment were outdated. Disposable nursing supplies were inadequate or not available for teaching. Students were not supervised by Department staff during clinical placements. These challenges perpetuate the theory-practice gap.

Clinical practice consists of the application of both theory and practical skills in a variety of clinical settings, such as hospitals, health care centres and community care (Haggman-Laitila, Eriksson, Meretoja, Sillanpaa, &Rekola, 2007; Lindahl, Dagborn, & Nilsson, 2009). Seemingly, the emphasis on task oriented nursing care has not changed. Talley (2006) asserted that the hospital-based diploma model has been the most frequently used in nursing education in Ghana. Students are still taught to follow the functional model of nursing care (Donkor& Andrews, 2011). Nursing students are expected to be assigned to the hospital wards to practice nursing skills taught in the classroom and skills lab once a week intra-semester. Practical experiences, by the standards of Nurses and Midwifery Council of Ghana should be at least 6 hours duration on the ward (Nursing and Midwifery Council [NMC], 2015).

According to Baille (2001), to learn the motor dimension of a skill in reality requires both practice and studying the theory behind the skill. Following the classroom teaching of the theory, students are introduced to practical procedures in the skills laboratory where they observe the nurse faculty perform the procedure. After the demonstration, the students use a mannequin for a counter demonstration.

The 6 hours per week practical arrangement is to expose students to the practical realities of patient care. It offers students the opportunity to practice taught skills on patients. In addition to the weekly ward practice, students are posted to the hospitals on clinical placement for at least four weeks during the inter-semester breaks (NMC, 2015).

Exposing students to real practical situations in the hospital environment is intended to build their clinical competence (Smith, 1991). However, elsewhere, the ethos of the ward environment has been observed to have a profound effect on nurses' and nursing students' ability to incorporate theory into practice. Amidst increased workload, scarce resources, and stress, the tensed atmosphere of the ward, where routine and rituals prevailed, appeared not to promote learning, creativity, and initiative (Craddock, 1993; Landers, 2000; Maben et al., 2006; Ogier, 1989; Ousey & Gallagher, 2007). The authors posited that such a working environment appears to militate against the application of theory to practice. This is a major obstacle which possibly prevails in the Ghanaian context and tends to hinder bridging of the theory-practice gap.

As a practice oriented profession, nursing requires supervision of its trainees to acquire the necessary competence. Supervision is key in ensuring that clients are not unduly exposed to unsafe practices by novice nurses and to ensure accomplishing the objectives of the clinical placements.

Though not formally structured, most nursing schools in Ghana appear to be using the preceptor model of clinical teaching and supervision. Some hospitals and schools appoint Registered General Nurses to assume supernumerary roles as nurses of the facility and as preceptors without any formal training. The role of the preceptor is to supervise and offer on the job training for nursing students on clinical placement. In the absence of a preceptor it is the responsibility of the head nurse of the ward to assume the role of a clinical supervisor (Brown, 1992).

Unfortunately, however, because of staff shortage and the huge number of students usually sent on clinical placements, it has become hard for the preceptors to juggle their roles as ward nurses and preceptors at the same time, hence abandoning the students to their own fate. Moore (1986) expressed strong sentiments for the need for adequate theory-practice integration to ensure the training of competent nurses.

In recent times, concerns have been expressed about newly qualified nurses performing below the expected standard of nursing practice. During the past decade, the image of nursing in Ghana has fallen at a steady rate due to the poor nursing care rendered by qualified nurses to patients (Ghana Registered Nurses' Association [GRNA], 2011). This has been and continues to be a major concern for all, especially nurse educators in Ghana.

Contemporary healthcare environment amid scarcities of resources, changes in technology, evolution of diseases, differences in practice arenas, changes in communication, updates in professional standards, new laws, and globalization, is demanding for nurses to meet the multifaceted needs of patients, and Ghana is no exception (Bandman&Bandman, 2002; Milton, 2008).

Evidence-based practice promises to be the vehicle through which the multifaceted needs of patients could be met. However, in a study (Wombeogo, 2015) conducted in three main hospitals in Tamale aimed at establishing the relevance of research to nursing practice from the perspectives of nurses, it was established that 62.75% of respondents intimated that research was only relevant

for educational purposes. While only 14.71% of respondents indicated that research was relevant to the advancement of the nursing profession and practice.

This lack of appreciation for the role of research in nursing practice in Ghana clearly hinders evidence-based nursing practice. There is therefore the clarion need for theory-practice gap in nursing to be well understood in the context of Ghana and strategies developed for efficient theory-practice integration.

Theory-Practice Gap in Nursing

The objective of nursing education programmes is to provide nurses and nursing students with a set of skills necessary to enable them cope with the complex clinical situations they find themselves each day (Forsberg, Georg, Ziegert, and Fors, 2011; Tseng et al., 2011). However, it seems the challenge of nursing education is to help these nurses and nursing students put what they have learned in the nursing education programme into practice (Bendal, 2006; De Swart, Du Toit, & Botha, 2012; Monaghan, 2015). Apparently, striking a balance between theory and practice appears to be one of the greatest challenges for all nursing education programmes.

The theory-practice gap in nursing has been discussed and debated in the literature for decades. Studies of nursing education and practice from several countries in Europe and North America as well as Australia have repeatedly revealed a disparity between the theory learned by students in their nursing education programme and the subsequent clinical practice of these nurses (Gardner, 2006; Haigh, 2008; Landers, 2000; Maben et al., 2006; Rafferty,

Allcock, & Lathlean, 1996; Sellman, 2010; Sullivan, 2010; Upton, 1999; Wilson, 2008).

The theory-practice gap has not been consistently defined. From a purist standpoint, the theory-practice gap refers to the contrast between the theoretical content taught and the application of the same in the clinical setting. Seen as a widely spread concept in nursing literature, theory-practice gap is defined as one which relates to the distance between theoretical knowledge and the actual performance of nursing students in practice (Carson & Carnwell, 2007). Theory-practice gap is further defined as the discrepancies or disparities that exist between the best practice ideals and values taught in the classroom and those actually encountered in everyday practice (Baxter, 2007; Corlett et al., 2003; Higginson, 2004; Lander, 2001; Maben et al., 2006; Rolfe, 2002; Scherer & Scherer, 2007; Wolf, Bender, Beitz, Weiland, & Vito, 2004).

In some instances the terms education-practice gap are used interchangeably with theory-practice gap. In reference to the former, literature typically focuses on the educator claiming to have prepared students for nursing as it ought to be with practitioners decrying the need to teach nursing as it is (Corlett, 2000; Ousey & Gallagher, 2007).

Wilson (2008) completed a qualitative study to explore the theory practice gap from the perspective of midwifery students. Findings of the study identified four themes that described the students' perceptions of the theory-practice gap: (1) practice based on tradition contributed to the gap; (2) having peers to identify with helped to bridge the gap; (3) acceptance of the status quo in the face of

powerlessness was a coping mechanism; and (4) seniority and increased autonomy allowed some freedom to implement practice preferences based on evidence, which helped to bridge the gap. Early studies in nursing revealed that nursing as practiced was task-centered and did not focus on holistic care of the patient (Maben et al., 2006).

According to Sellman (2010) use of the phrase theory-practice gap implies “(1) that the distinction between theory and practice is easily defined; (2) that theory belongs in the classroom while practice resides in the clinic; and (3) that practice does not need theory” (p. 86). The position of Sellman (2010) appears to be misleading on face value, in that it is indicative of a worst case scenario of the existence of the theory-practice gap. Theory and practice are inseparable. Fawcett, however, maintains that “every nurse must use an explicit nursing conceptual model and explicit nursing theories to guide activities associated with nursing practice, research, education and administration” (Butts & Fawcett, 2012, p. 152).

Haigh (2008) stated that a theory-practice gap indicates that the discipline is changing and evolving. It signifies that new theories and new techniques are being developed and tested in practice. As such, it reflects a dynamic profession that is vibrant and growing to meet the challenges of the changing health care environment. Therefore, a certain degree of tension created by theory-practice gap is not necessarily a bad thing. Haigh's position was consistent with Rafferty et al. (1996) as they postulated that tension can be viewed as indispensable for changes in clinical practice to occur.

However, conflict may occur only when some nurses are resistive to change or when lack of collaboration is evident. Despite efforts being made to address the problem, the issue of theory and practice remains a central problem in nursing practice and education (Bendal, 2006; Clark & Holmes, 2007; De Swardt et al., 2012; Maben et al., 2006; Sedgwick & Yonge, 2008).

Contributory Factors of Theory-Practice Gap

Given that the theory-practice gap in nursing has been discussed, analysed and debated in the literature for approximately 40 years, it is remarkably that it remains such a central issue in nursing education today. However, closer examination of the contributory factors to the theory-practice gap reveals the sheer complexity of the gap. Seemingly, it is this complexity that makes the theory-practice gap more manifest in nursing education and practice. Beneath presents an examination of some of the contributory factors of theory-practice gap identified in the literature.

One reason put forward as been a contributory factor to the theory-practice gap is the relatively recent increase in research output and the focus on an evidence-based practice agenda for nursing. Undoubtedly, there has been an exponential increase in the volume of nursing research over the past ten years (Gardner, 2006). The author stated, "nursing research increasingly matters in the world of health care practice" (p. 7).

However, Gardner (2006) intimated that findings from nursing research are not regularly utilised in clinical practice, they only serve the purpose of an interesting read. Gardner stated, "The work excites us and usually elicits the

phenomenological nod in that we recognise the truth, value and relevance of the findings" (p. 7). According to Gardner, although evidence-based practice intends by definition to be a gap-closer, to a certain extent, the reverse is true. The evidence-based practice movement focuses on issues of direct clinical significance; however, an underlying assumption is that clinical practitioners are equipped with the knowledge and skills needed to participate not only in clinical research but in the application of the evidence. Research has demonstrated that this is not always the case.

Webber (2010) in a study to determine language usage consistency among nursing texts and nurse educators, noted that although the professional literature is rife with the importance of theory, research and reasoning, it is equally rife with barriers to implementation in practice. The findings demonstrated that there was significant variability in definitions of key words among nursing texts and in nursing educators' ability to match any defining words used in the texts and by each other.

Webber (2010) emphasized the essential role language consistency plays in promoting competency and desirable behavioural outcomes and argues that it is logical to assume that practitioners who do not understand a language will be unable to demonstrate competency in applying that language. So therefore, it could be further assumed that the application of theory and evidence to practice will be limited. Recognizing that today's practitioners may be tomorrow's educators, it is understandable how the theory-practice gap may continue. If

educators are not using a consistent language, practitioners cannot be expected to understand and socialize students to the professional role.

Additionally, Gardner (2006) confirms that nursing researchers and clinicians in direct care of patients, use very different language. Moreover, nursing research should inform and drive the development of nursing interventions (Gardner). If nursing is to mature as a discipline, then all nurses, including both clinicians and clinical researchers must adequately respond to the need for change and develop an effective strategy and language that can link theoretical research to clinical context.

Gardner (2006) recommends the use of translation research to achieve this goal. According to Gardner, translation research will ensure a bridge of communication between nursing theorist and clinicians thereby fostering the implementation of the findings of exploratory and theoretical nursing research in clinical context. Translation research involves the collaborative effort of theoretical researchers, clinicians and clinical researchers, who extend the findings of their research to develop, fine tune and test nursing interventions that are theoretically based and usable in clinical practice (Gardner, 2006). This approach, if adopted, will contribute significantly in bridging the theory-practice gap in nursing.

Another factor contributing to the theory-practice gap is related to the need for nursing theory to be practice-based. However, it appears that often researchers develop theories without thinking about the practical implications. Several studies have indicated that, not all the theories taught in nursing education

are practised in reality (Duchscher, 2001; Evans, 2001; Heslop, McIntyre, & Ives, 2001; Kilstoff& Rochester, 2004; Maben et al., 2006; Oermann& Garvin, 2002; Ross & Clifford, 2002).

Besides, it has been argued elsewhere that the failure of practicing nurses to read or use the research could not be blamed for the theory-practice gap, but that the research carried out was not suited to current nursing practice (Rolfe, 1996). Rolfe (2002) argues that, the theory-practice gap is more manifest as a result of outdated theoretical concepts. Research is viewed as being removed from practice by many practitioners because of the failure to ask research questions which practicing nurses think are important. Hence, educationists are often regarded as creators of the theory-practice gap, teaching the ideals of nursing impossible to implement in practice (Corlett, 2000; Ousey& Gallagher, 2007).

On the contrary, Upton (1999) commented that the inability of nurses in the clinical setting to utilise theory and research findings are not only related to issues of relevance to clinical practice but the complexities of the clinical setting. Some authors argued that, the theory-practice gap is not as a result of outdated theoretical concepts, but rather an issue of poor socialisation of these theories into the clinical setting and the inability to integrate current literature into contemporary nursing practice (Maben et al., 2006; Ousey&Gallager, 2007; Sharif &Masoumi, 2005). Moreover, it has been argued that, the inability of nurses to link theory to practice should not be blamed on the education and training systems, but rather the complexities of the clinical settings (Ousey& Gallagher, 2007).

The clinical environment is constantly changing and regardless of effective classroom teaching, it is difficult to make provision for the complexities of the clinical situation (Chan, Chan & Liu 2012; McCaugherty, 1991). Environmental and organizational diversity in clinical settings influence the development of clinical expertise (White & Ewan, 1991). Ousey and Gallagher (2007) opined that though the students may well have been taught the research and evidence underpinning nursing procedures in school, the culture of ritualistic practice existing in the clinical setting hinders their ability to implement the theory in practice. Restricting nursing practice to merely following rigid procedures rather than adapting to the latest research findings (evidence-based) that could improve nursing interventions, patient safety, and outcomes contributes significantly to the theory-practice gap.

Maben et al. (2006) completed a longitudinal study in the United Kingdom to determine the extent to which the ideals and values of preparatory nursing courses are adopted by graduates upon entering practice. It was established that nursing students emerge from clinical training with a strong set of nursing values. However, the authors determined that the concept of professional-bureaucratic work conflict had the potential to serve as an explanatory model for the theory-practice gap.

The findings demonstrated that a number of professional and organizational factors sabotaged the implementation of those ideals and values; thereby, perpetuating the theory-practice gap. The authors identified professional sabotage to include obeying covert rules, lack of support, and poor nursing role

models. Furthermore, the organisational sabotage included structural and organizational constraints such as time pressures, role constraints, staff shortages, and work overload.

Consequently, synchronizing nursing principles as taught in the classroom with the real, actual and evolving clinical context becomes difficult. This may result in some students being better equipped than others to integrate theory and practice based on the characteristics of the clinical setting to which the student might have been exposed. This position is supported by findings of Maben and Macleod (1998). In a study conducted by the authors to establish Perceptions of Project 2000 Diplomates' experiences of transition from student to staff nurse, it revealed inconsistencies in their practice readiness. The findings of the study suggested that while the students mastered the theoretical content, the practical aspect such as administration of medication, patient needs prioritisation, critical decision making and clinical skills were variable (Maben & Macleod, 1998).

The authors attributed the variability of the nurses' experiences and abilities to the differing levels of exposure provided by the different clinical settings. Amidst an increased workload, scarce resources, stress, and a tense ward atmosphere where routines and rituals prevail, learning, creativity, and initiative are inhibited (Craddock, 1993; Landers, 2000; Maben et al., 2006; Ogier, 1989; Ousey & Gallagher 2007). Consequently, nursing students become confused and frustrated (Killam & Heerschap, 2013; Maben et al., 2006).

The relationship between registered nurses and nursing students had an influence in the quality of clinical learning experience and professional

socialization of the nursing student (Dahlke&Hannesson, 2016; Hossein, Fatemah, Fatemah, Katri, &Tahereh, 2010; O'Mara et al., 2014). The criticism directed at nurses in clinical practice for being ignorant and having unrealistic expectations of nursing students or newly qualified graduates still in their formative stages of learning is replete in the literature (Kellehear, 2014).

Nursing students have always had to play a dual role of learning and delivering nursing care to patients (Allan et al., 2011; Papathanasiou, Tsaras, &Sarafis, 2014). This increase in professional responsibility and accountability has been established to be a major cause of stress in newly qualified nursing graduates (Dahlke&Hannesson, 2016; Killam&Heerschap, 2013; O'Kane, 2012).

Moreover, the hierarchical relationship between students and nursing staff does not facilitate ingenuity and creativity. Eggertson (2013) observed that instead of nursing students being treated as partners of the health-care team, they are often silenced when they query something they have observed being done wrongly or archaically in patient care. Indirectly, staff conveys an unspoken message to the students that, their job is to follow orders rather than influence a change of the status quo. The poor professional socialisation with its ramifications of increased anxiety in nursing students and reality shocks, also place a barrier on the implementation of theory in clinical practice, hence contributes to the theory-practice gap phenomenon.

Another explanation of the theory-practice gap contained in the literature is the shift of nursing education into the university/college setting, albeit this occurred at different rates globally. Gallagher put forward that, the conceptual

separation of theory and practice was reinforced with the move of nursing education from its traditional hospital base into colleges and universities (Ousey& Gallagher, 2007).

With the exponential growth of the body of nursing knowledge, especially in the 1990s and beyond, to meet health care needs, a different level of preparation for the entry practitioner was required. Despite the movement of nursing to higher education, providing a new approach aimed at preparing students to meet health care needs, Andrews and Reece (1996); Hewison and Wildman (1996); and Ousey and Gallagher (2007) argued that those changes have not had much positive influence in bridging the theory-practice gap.

They contended that the progression of nursing into higher education demonstrated, in a tangible way, the dichotomy between theory and practice in that learning occurs in two separate institutions which hitherto was considered as one. Lee (1996) postulated that, it seemed impossible for clinicians to adopt an efficient clinical role in the university system where teaching occurs in two separate institutions.

Sullivan (2010) wonders how nurse educators will be able to update and maintain their clinical competency without employment in the practice setting. Apparently, without employment in the clinical setting, nurse educators find it difficult updating their clinical competencies. It is difficult juggling the full time role as a nurse educator with the need to maintain clinical contact.

Furthermore, providing clinical supervision often presents the nurse educators as being visitors to the health care organisation as opposed to being

members of the health care team (Sullivan, 2010). Sullivan concluded that models of clinical experiences adopted by nursing departments/colleges of universities appeared to preclude nursing students from gaining a realistic view of the patient's experiences as in most cases students are left to function alone in the clinical area. Consequently, nursing education is often blamed for the perceived lack of competence demonstrated by low levels of confidence shown by nursing students and newly qualified nurses in clinical settings (Clark & Holmes, 2007; Mooney, 2007; O'shea & Kelly, 2007).

According to Taiwan Nursing Accreditation Council (TNAC), the greatest challenges in nursing education hindering the training of competent nurses include the following: faculties' lack of core capacity and clinical experiences; ineffective teaching methods adopted by some faculty members; and ineffective theory-practice integration (Chang & Yu, 2010; Rich & Nugent, 2010; Young & Diekelmann, 2002; Yordy, 2006).

In a qualitative survey of nursing students by Sharif and Masoumi (2005), findings revealed that, some students experienced stress for not being well prepared for practice. Corroborating this, Baille (2001) identified an antiquated theory whereby learning skills in the classroom setting was out of favour rather than a contemporary approach to theory-practice integration. The author asserted that on the job training approach was the preferred choice. The results of this theory echo the experiences of students interviewed in Sharif and Masoumi's (2005) study in which the students reported a feeling of unpreparedness and lack of confidence in the absence of classroom-based practical skills learning.

The incorporation of practical skills teaching in the classroom setting has been found to increase nursing students' clinical competence, reduce their anxiety levels, and increase their confidence level, thereby enhancing patient safety (Baille, 2001; Pender & Looy, 2004; Sharif & Masoumi, 2005). Given that adequate classroom teaching of practical skills can help bridge the theory-practice gap, there is the need for adequate practice time for nursing students in simulation rooms.

The Implications/Effects of Theory-Practice Gap in Nursing Practice

The negative implication of theory-practice gap in nursing is replete in the literature. First, it adversely impacts the socialization of nursing students to their professional roles (Spouse, 2001; Maben et al., 2006). The effective facilitation of theory-practice integration ensures that novices accumulate experiences that aid them in the building of professional competencies resulting in the increase in confidence and job satisfaction (Courtney-Pratt, FitzGerald, Ford, Marsden, & Marlow, 2012; Yang et al., 2013). Competency enables one to deal with different situations by drawing on concepts, knowledge, information, procedures, and methods (Goudreau et al., 2009).

However, the existence of a theory-practice gap in nursing impedes the development and training of competent and responsible professional nurses (Yang et al., 2013). In a qualitative longitudinal study carried out by Ross and Clifford (2002) to establish how the last year of an advanced nursing course could be improved to increase students' readiness for practice, findings revealed that,

nurses felt unprepared and struggled through a time of intense stress during the transition period from nursing students to staff nurses.

The disparity between what nursing students are taught and what they experience in the clinical setting can result in reality shock in assuming professional duties as newly qualified nurses after graduation (Baxter, 2006). Theory-practice gap is often considered a major cause of the reality shock or stress experienced by newly qualified graduates (Al Awaisi, Cooke, & Prymachuk, 2015).

It is imperative to note that newly qualified graduate nurses recover from the reality shock (Cowan & Hengstberger-Sims, 2006). However, the pervasive nature of the theory-practice gap with its negative impact of excessive stress associated with reality shock and its adverse impact on job satisfaction, a few newly qualified graduate nurses usually drop out leading to increased rates of professional attrition (Altier & Krsek, 2006; Bowles & Candela, 2005; Chao, 2004). In a study by Yang et al. (2013) in Taiwan; using action research and confucian tradition to close the gap, it was established that of about 18,000 nurses trained each year in Taiwan, only 57-60% of them register and practice as nurses. The authors avowed that the number that register to practice, even diminishes more quickly upon assuming duty.

Furthermore, the gap hinders the implementation of evidence-based nursing practice (Scully, 2010; Webber, 2010). This ultimately influences the delivery of competent nursing care and patient outcomes. Grounding clinical practice in evidence and research is fundamental in evidence-based nursing

practice. Upton (1999) asks how there could be evidence-based nursing practice when a theory-practice gap exists. Theory-practice gap compromises the delivery of competent nursing care. Newly qualified nurses are expected to deliver autonomous, contemporary and culturally competent nursing care based on evidence and best practice principles at the time of registration (Kellehear, 2014; NMC, 2008). However, inadequate theory-practice integration results in medication errors and poor nursing care decisions (Gregory, Guse, Davidson, Davis, & Russel, 2009; Jones & Treiber, 2010).

Attempted Solutions to the Theory-Practice Gap

It is obvious that the theory-practice gap presents a huge challenge to nursing education and practice, however, given the complexity of the gap it is difficult finding appropriate solution. Issues of the theory-practice gap have a long-standing history in nursing education and practice, and are a chronic source of controversy to which there is no easy or perfect solution. Watson and Foster (2003) opined that resolving issues between theory and practice is important to the profession's existence and survival during the millennium. Several different approaches to solving the theory-practice gap have been proposed in the literature with varying degrees of success. Beneath is an exhaustive presentation of the attempted solutions.

Rafferty et al. (1996) identified three key strategies that have been used in the past by Western countries in an attempt to bridge the theory-practice gap. The first two focused on reconstructing the resource base and reorganizing the training

program for nurses. These strategies brought about the change from an apprentice type of learning to a model where students were treated as students.

Role clarity, between students, staff nurses and nurse assistants is recommended in solving the problem of intra-professional workplace conflict (Eagar, Cowin, Gregory, & Firtko, 2010). This will preclude hospitals from using nursing students as service providers (Ajani & Moez, 2011). With clearer role boundaries, nursing students will be able to focus on competencies earmarked for attainment during clinical placements hence building on their clinical competence.

In re-organising training the authors recommended the need for nursing students to be taught by qualified and specialised nurse educators (Rafferty et al., 1996). Novice nurse faculty often adopt pedagogical strategies that are not efficient in facilitating learning and practical skills acquisition (Rich & Nugent, 2010; Young & Diekelmann, 2002). However, one wonders how many countries will be able to implement this strategy, given the fact that such specialised nurse educators are lacking in most countries. The last strategy dealt with the roles of teachers and practitioners which has been exhaustively discussed earlier.

The design and implementation of educational programmes to achieve theory practice integration has been a challenge for nurse educators and other stakeholders in nursing education (Patersen & Grandjean, 2008; Rich & Nugent 2009; Spitzer & Perrenoud 2006a; Wynaden, Orb, McGowan, & Downie, 2008). Goodfellow (2004) has forwarded the suggestion that, to bridge the theory-practice gap, it is imperative that nursing students learn to use research as a basis for making clinical decisions.

Schools of nursing can adapt the current models of teaching and learning which promote self directed and problem-based learning approaches. These modes of curriculum enhance critical thinking in the students and make them more independent (Halstead, 2007). The assessment criteria of the curriculum can also integrate case based scenarios and practical examples, so that theory is tied up with the practice. Due to the advancement in technology, there is more need that change in nursing practice should originate with change in the educational curriculum of the nursing programmes with the aim of improving nursing practice (Halstead, 2007).

In reviewing the literature, the attempted solutions are organised under the following headings: simulation; guided reflective practice; collaboration between educators and clinicians; clinical practice placement and supervision.

Simulation

The incorporation of practical skills teaching in the classroom setting has been found to increase nursing students' clinical competence, reduce their anxiety levels, and increase their confidence level, thereby enhancing patient safety (Baille, 2001; Pender &Looy, 2004; Sharif &Masoumi, 2005). Given that adequate classroom teaching of practical skills can help bridge the theory-practice gap, there is the need for adequate practice time for nursing students in simulation rooms.

However, Baille (2001) claimed that the lack of teaching of practical skills in the classroom setting negatively affected theory-practice integration. Moreover, the use of outmoded teaching practice whereby the teaching and acquisition of

clinical skills is thought to be limited to only the clinical setting rather than the use of a contemporary pedagogical approach which promotes the teaching of clinical skills in both classroom and the clinical setting appears to hinder theory-practice integration.

This clearly demonstrates that an eclectic approach to theory-practice integration rather than on the job training alone adopted by most nursing schools will better help in bridging the theory-practice gap. This position of Baille echoes the experiences of students interviewed in Sharif and Masoumi's (2005) study in which the students reported a feeling of unpreparedness and lack of confidence in the absence of classroom-based practical skills learning.

Stimulation provide attempts to mimic the real environment of nursing practice. This is to facilitate the acquisition of adept practical skills in readiness to practice in the real clinical environment (Morton, 1995). The National League for Nursing [NLN] (2007) described simulation along a continuum, from low-fidelity to high-fidelity, regarding the degree to which they mimic reality. On the low-fidelity end of the simulation spectrum are experiences such as using case studies to educate students about patient situations or using role-play to immerse students in a particular clinical situation. Farther along the continuum are partial task trainers, such as IV cannulation arms or low-technology mannequins, that are used to help students practice specific psychomotor skills integral to patient care.

The use of simulation as a strategy to bridge theory-practice gap and improve nursing students' confidence level and practical skill preparation has seen a rise in the United Kingdom (Monaghan, 2015). Nonetheless, opinions are varied

as to whether its use can significantly impact nursing students' ability to competently implement clinical skills upon qualification (Monaghan, 2015).

In a two phased cross-sectional mixed method study conducted by Hope, Garside, and Prescott (2011) in a university within North England to explore if clinical skill acquisition could be enhanced through the use of simulation, eight themes were identified from the qualitative aspect of the study. The themes included: enjoyment/fun, learning styles, safe environment, confidence, professionalism, being observed; recruitment and theory to practice. During the focused group discussions, students intimated that simulations were more effective than lectures in facilitating learning, because they were more engaging and full of fun.

Corroborating findings from Berragan (2014), several participants in Hope et al. (2011) study affirmed that simulations boosted their confidence by making them relaxed and feeling at home. Additionally, students were of the opinion that simulations offered them the opportunity to practice clinical skills under direct supervision before going into the actual clinical setting which they indicated facilitated their ability to implement learnt clinical skills in practice (Monaghan, 2015). According to the author, the students reported that the use of simulation addressed the inefficacies of their mentors/preceptors as they rarely had time to teach and supervise them in their supernumerary role. The authors, however, warned that while the use of simulation appears to facilitate skill acquisition they must be targeted to specific learning outcomes to avoid confusing the students.

This can be achieved by limiting simulation activities to specific procedures with specific outcomes.

Guided Reflective Practice

One of the aims of nursing education is to produce competent students capable of making decisions rooted on critical thinking and clinical judgment in patient care. It appears that one challenge faced by both nurse faculty and clinicians responsible for the training of nursing students is the ability to assist the students to develop beliefs, values, critical thinking and problem based decision making skills in the practical setting (Spitzer & Perrenoud, 2006a; Spouse, 2001).

In the search for an appropriate strategy for adequate theory-practice integration, Jerlock, Falk and Severinsson (2003) conducted a study aimed at developing educational guidelines for use as tools to facilitate theory-practice integration. The findings of the study revealed that problem solving and reflection are foundational to the learning process. The authors, therefore, recommend the use of reflection as the basis of contemporary nursing education. Reflection is necessary to facilitate theory-practice integration aimed at improving nursing practice (Baille, 2001; Jerlock et al., 2003).

The issue of theory-practice integration and skill acquisition revolves around psychomotor, cognitive and effective skills development. Guided reflection, therefore, is aimed at enabling nursing students to learn from experiences in such a way that both cognitive and affective changes are enhanced so that the student makes a conscious effort to integrate theory into practice (Boyd & Fayles, 1983).

The concept of reflective practice, learning by reflecting on past practical experiences was first proposed by Dewey in 1933 (Foster & Greenwood, 1998). Some authors emphasised that reflection is not merely the recalling of events, but a purposeful cognitive and affective exploration of experiences with the aim of learning from those experiences (Baille, 2001; Chapman, Dempsey & Warren-Forward, 2009; Greenwood, 2001; Rolfe, 2002).

There are several different approaches to reflection including; reflective diaries or journals; reflective group discussions; and guided reflection (De Swardt, Toit, & Botha, 2012). Guided reflection by definition is a form of a well structured process of reflection that occurs between a clinically skilled professional nurse acting as a facilitator and a less skilled nurse (a newly qualified nurse or a student) (De Swardt et al., 2012). Guided reflection seems the right approach to socialise novices (nursing students or newly qualified nurses) to their professional role. It is difficult for these novices who cannot reflect autonomously on their learning experiences without guidance (Duffy, 2009). Reflection offers novices the opportunity to do an introspection and establish the why's of some nursing actions and provides the opportunity to develop knowledge from experience, ensuring theory-practice integration (Baille, 2001; Greenwood, 2001; Jerlock et al., 2003; Rolfe, 2002).

In a study conducted to establish the influence of guided reflection on critical care nursing students, it was found that the use of guided reflection provided solutions for complex clinical experiences such as drug administration, operation of clinical appliances and some current evidence-based nursing

interventions. The researchers concluded that guided reflection offered participants the opportunity to deal with complicated experiences, which resulted in enhancing theory-practice integration.

An attitude of seriousness, open mindedness, flexibility and a sincere intent to reflect are key prerequisites for a successful reflection (De Swardt et al., 2012). A guided reflection facilitator should be approachable and demonstrate trustworthiness. To achieve the objective of guided reflection, the facilitator needs to give up his/her position of authority as a clinical facilitator during the process of reflection and assume common grounds with the nursing student or newly qualified nurse (Foster & Greenwood, 1998). A non-threatening environment is key to ensuring that a meaningful reflection occurs.

However, this approach to bridging the theory-practice gap has faced several challenges. Identified barriers of reflection include, time constraints, possible anxieties related to painful previous encounters, and possible ethical issues that might be revealed (Duffy, 2009). It follows that if these barriers of reflection are well controlled, guided reflection could be used as a tool to train nursing students to become competent in nursing care delivery.

Collaboration between educators and clinicians

Ineffective communication and collaboration between schools of nursing and the practice settings hindered theory-practice integration (Dahlke&Hannesson, 2016; Killam&Heerschap, 2013). Scully (2010) suggested that the theory and practice components of nursing education will remain disjointed insofar as nursing students are being taught and supervised by people

who are not effectively communicating with each other. Evans (2009) agrees, highlighting the lack of collaboration and close working ties between hospitals and universities as contributing to the theory-practice gap.

Deductively, the key solution for bridging the theory-practice gap in nursing is to foster an effective collaboration and communication among academics and clinicians. While clinicians depend on nursing faculty to produce competent and highly skilled nurses for the delivery of effective and safe nursing care, nurse faculty equally rely on clinicians to assist in fostering nursing students clinical learning (Myall, Levett-Jones, & Lathlean, 2008). The relationship between theory and practice is inevitably enmeshed and is of great importance in nursing education. Theory and practice are two parts of the same process. It is therefore, absolutely imperative for all stakeholders to capitalize on each other's expertise to ensure the training of competent nurses (Haigh, 2008).

In the absence of effective partnership between nurse faculty and clinicians, students are exposed to different approaches of delivering nursing care which confuses nursing students. According to Scully (2010) "the methods of patient assessment taught at my university differed from those utilised by the clinical placement educator, this disparity contributed to my unsatisfactory encounter, demonstrating the importance of partnership between university and clinical education" (p. 96).

Many recent approaches aimed at equipping nursing students with the necessary practical skills have focused on establishing strong relationships between nurse faculty and clinicians. Despite the pessimists' position that

teachers are teachers and belong to the classroom while clinicians are clinicians and belong to the clinical setting, the collaborative strategy whereby clinicians are brought to the academic setting to introduce students to the world of practice before embarking on clinical placement helps to bridge the theory practice gap (Kellehear, 2014). This could include involving patients and other nurses to present their real stories, experiences and expectations of nursing and nursing care.

Several research studies have confirmed the effectiveness of collaboration and closer working ties between academics and clinicians in the pursuit of effective strategies in bridging the pervasive theory-practice gap in nursing. Corlett et al. (2003) conducted a study to identify factors influencing theoretical knowledge and practical skill acquisition in student nurses. The findings of the study revealed that effective collaboration between academics and clinicians of the nursing profession would result in a uniformity of clinical and classroom teachings, reflecting better service perspectives of nursing students' knowledge and needs.

Effective collaboration also assuages nursing students' anxieties and ensures that they are competent to deliver safe and autonomous nursing care (Baltimore, 2004; Corlett et al., 2003; Jerlock et al., 2003; Monaghan, 2015; Spouse, 2001). In an action research project (Munnukka, Pukuri, Linnainmaa, & Kilku, 2002) conducted in Finland, two major institutions were brought together, an institute of nursing and health care and a university hospital. The students had both theory classes and practical training sessions in the clinical

setting. The findings revealed that the project evaluations were positive as students demonstrated competency in integrating theory to practice.

Similarly, Boardman (2007) conducted a study in which a joint academic and clinical faculty engaged students in the clinical setting for the teaching of both theory and practical skills. He established that, through efficient collaboration and sharing of responsibilities between the clinical and academic staff, the students reported gaining greater access to the clinical staff, enhanced relationship with patients, health staff and colleagues, greater insight into nursing procedures, high levels of satisfaction, and above all very successful rates of employment on graduation.

Despite the time consuming nature of collaboration, most authors recommend the adoption of a collaborative approach for theory-practice integration (Boardman, 2007; Monaghan, 2015; Munnukka et al., 2002). Synchronizing the teachings of nursing faculty and clinicians through effective collaboration and responsibility sharing is instrumental in bridging the theory-practice gap. Furthermore, the involvement of all stakeholders; nurse faculty, clinicians, and students in curriculum development, implementation, and monitoring ensures a curriculum that acknowledges cultural and contemporary practice (Kellehear, 2014). However, it is worth noting that effective collaboration requires careful planning, implementation, monitoring, and commitment.

Clinical practice placement and supervision

The development of clinical skills is the basis of nursing practice; this makes clinical practice an essential component of nursing education. The acquisition of practical skills is vital in assuming the role of a registered nurse (Anderson & Kiger, 2008; Andrews & Roberts, 2003; Ohrling & Rahm Hallberg, 2000a). In nursing curricula, the world over, clinical practice is a key prerequisite in the education and training of competent nurses (Bisholt, Ohlsson, Engstrom, Johansson, Gustafsson, 2014; Papathanasiou et al., 2014).

Clinical practice provides the opportunity for nursing students to experience the realities of patient care. It offers nursing students the opportunity to directly implement content learnt in classroom to practice, acquiring and polishing their clinical skills (Ironside, McNelis & Ebright, 2014; Papp, Markkanen, & von Bonsdorff, 2003; Sharif & Masoumi, 2005; Ulfvarson & Oxelmark, 2012). Moreover, clinical practice facilitates the development of nursing students' professional identity through the establishment of effective interpersonal relationships and communication (Brown, Stevens & Kermode, 2012; Jonsen, Melender, & Hilli, 2013; Ellis, Stringer, & Cockayne, 2007). Effective clinical practice undoubtedly aids in the socialisation of nursing students to the professional nursing role.

Anderson and Kiger (2008) established that nursing students had a feeling of fulfilment for practising nursing in reality; they learned to provide nursing care for patients; and gained new insight into nursing care. In a study conducted by Espeland and Indrehus (2003) among 276 nursing students in three university

colleges in Norway to evaluate students' satisfaction with nursing education, the findings revealed that the students scored a general satisfaction (70%) with clinical practice. Similarly, the findings of a phenomenological study by Papp et al. (2003) among 16 nursing students revealed that clinical placement offered them various possibilities in their pursuit of becoming a professional nurse.

Some qualitative enquiries involving clinicians and nursing students (Lofmark&Wikblad, 2001; Saarikoski&Leino-Kiipi, 2002; Andrews, Brodie, Andrews, Wong, & Thomas, 2005) have been carried out to establish the essentials of successful and positive learning in clinical practice settings. The findings revealed that the core elements of positive clinical learning are connected to the students' own passion to learn, their acceptance of learning, and the positive attitude of the health care team members.

Corroboratively, the findings of another qualitative study by Lundberg and Boonprasabhai (2001) revealed compassion, competency, comfort, and communication as central for nursing students learning in clinical practice. Other studies have reported the expression of a feeling of belongingness in clinical practice settings by students. Papp et al. (2003) stated that a soothing environment in clinical practice was established through good collaboration between authorities of the nursing school and clinical staff. Welcoming clinical leaders; and accepting and supportive clinical staff are vital to ensuring an effective clinical practice (Levett-Jones &Lathlean, 2007)

Happel (2008) in a study to explore factors that promote positive clinical experience found that student perceptions of a positive clinical experience were

related to the duration of the clinical placement and the time spent with the clinical educator. The positive experiences of clinical practice boost the acquisition of clinical skills, critical thinking and problem-solving abilities of nursing students, promote competence, inspire confidence, and enhance professionalism (Blomberg et al., 2014; Courtney-Pratt et al., 2012; Levett-Jones & Lathlean, 2008). Conversely, negative experiences with clinical practice exposure could cause frustrations, disillusionment, alienation, and debased self-esteem (Brown Stevens, & Kermode, 2012; Dahlke & Hannesson, 2016; Matilla, Pitkajarvi & Eriksson, 2010).

Both positive and negative experiences of clinical practice are a result of the nature of collaboration between nursing school authorities and clinical staff particularly preceptors (Jonsen Melender, & Hilli, 2013; Lofmark, Thorkildsen, Raholm, & Natvig, 2012). Therefore, the development of conducive clinical environments and effective collaboration between nursing schools and hospitals are pivotal in optimising clinical practice for nursing students.

Effective evaluation of clinical practice provides insight for the development of effective teaching strategies to enhance the integration of theory-practice (Sharif & Masoumi, 2005). Consequently, the effectiveness and influence of each clinical practice session on students must be investigated and appropriate changes effected to ensure the maximisation of clinical outcomes. Criteria for assessing both written work and performance on practical placements should include evaluation of the degree to which the student has integrated theoretical learning with practical experience. Careful consideration and proper

understanding of the attitudes of nursing students toward clinical practice and an incorporation of these results in planning and evaluating clinical practice are the linchpins to attaining clinical learning objectives. This will enable nursing students to reap and appreciate the importance of nursing care in the clinical setting.

Effective clinical supervision is integral in achieving the objectives of clinical practice in nursing education. The objectives of clinical supervision include: to ensure the provision of safe nursing care guaranteeing patient safety; to ensure students' attainment of competence and confidence; to provide opportunity for students to master clinical nursing skills; to socialise students to the clinical setting and subsequently professional role; to foster theory-practice integration; and to promote the advancement of the nursing profession through role-modelling (Charleston & Happell, 2005). In the literature, several models have been adopted by various countries to ensure effective clinical supervision and adequate fostering of theory-practice integration.

Different personnel assume the role of socialising nursing students to the professional role in clinical practice in various countries. In Turkey the role is played by lecturers (Addis & Karadag, 2003) whereas the clinically based Clinical Facilitators are used in the Irish Republic (Lambert & Glacken, 2006). In Melbourne clinical teachers are used (Manias & Aitken, 2005), while in the United Kingdom it is a shared responsibility between mentors, link tutors, and lecturer practitioners (United Kingdom Central Council for Nursing Midwifery

and Health Visiting, 1999). A detailed literature review on some of these models is provided below:

Preceptorship

The use of support programmes in facilitating theory-practice integration and socialising nursing students to their professional role abound in literature. Registered nurses with full employment in clinical settings play a critical role in mentoring nursing students on clinical placement (Astin, Newton, Mckenna, & Moore-Coulson, 2005). Clinical preceptorship refers to an interpersonal process whereby a registered professional nurse supervises and offers on-the-job clinical training for a novice professional particularly a nursing student to obtain professional skills and abilities appropriate to the nursing role (Jokelainen, Turunen, Tossavainen, Jamookeah, & Coco, 2011).

In the United Kingdom the term mentor is used in place of a preceptor (Duffy & Watson, 2001). Registered nurses assuming the role of clinical preceptors for nursing students is rife in nursing literature (Holmlund, Lindgren, & Athlin, 2010; Omansky, 2010). The clinical preceptor role entails guiding and supervising nursing students to implement the theory of nursing in real practice in the clinical setting. Additionally, the preceptors also function as role models, teaching practical nursing skills as well as critical and reflective thinking (Jonsen et al., 2013).

The benefits of preceptorship as an approach to facilitating theory-practice integration are enormous. A study from the United Kingdom (Gidman, McIntosh, Melling, & Smith, 2011) among 15 first year nursing students within their first six

months of training described preceptorship as a vital source of support in clinical practice. Preceptorship smoothens the otherwise herculean transition process from nursing student to a qualified nurse contributing to the reduction in professional nurse attrition rate (Sharples&Elcok, 2011). In another study, 70% of preceptees confirmed that preceptorship increases role satisfaction, while 55% averred that preceptorship increases competency towards health and safety issues (Sharples&Elcok, 2011).

In a cross-sectional mixed method evaluative research study by Marks-Maran et al. (2013) to ascertain the value and sustainability of preceptorship within a clinical setting in the South West of London, findings revealed that preceptee engagement in the programme was high and preceptorship was highly valued by majority (85%) of preceptees, 73% of preceptees believed preceptorship helped reduce stress and anxiety, while 66% believed that preceptorship makes the transition from nursing student to qualified nurse more manageable.

Corroboratively, findings of Muir et al. (2013), a cross-sectional mixed method study parallel to that of Marks-Maran et al. (2013) conducted to ascertain the sustainability of the preceptorship programme from the preceptors own viewpoint revealed that 95% of the preceptors believed that clinical preceptorship was useful particularly to new students on clinical placement. Results confirmed 75.6% and 80% of preceptors equally felt that clinical preceptorship was instrumental in improving preceptees drug calculations and easing their transition into the professional nurse's role respectively. The positive impact of clinical

preceptorship is not limited to preceptees only, preceptors also felt an improvement in their knowledge, clinical, and teaching skill levels (Muir et al., 2013). Deducting from the willingness of newly qualified nurses to act as preceptors in the future, Marks-Maran et al. (2013) concluded that the preceptorship programme may be sustainable. Seemingly, the positive impact of clinical preceptorship on both preceptors and preceptees makes it a sustainable option in facilitating theory-practice integration in nursing. Conversely, one could argue that the desire for newly qualified nurses to act as preceptors will decline in the future.

Given the supernumerary role assumed by preceptors, they often focus exclusively on patient care to the neglect of facilitating student learning (Dahlke&Hannesson, 2016; Ohrling&Hallberg, 2000b; Papathanasiou et al., 2014; Rayn-Nichols, 2004). Lofmark and Wikdad (2001) claimed that the experiences of Swedish nursing students with clinical preceptorship was not all that smooth. According to the authors, nursing students reported experiencing a lack of feedback from preceptors on their clinical performance, a lack of reflecting opportunities, failure of preceptors to give them assigned roles, and an erratic preceptorship.

It appears that, the inability of preceptors to create enough time to engage nursing students is related to staff shortages, exponential increase in nursing student numbers and the supernumerary role assumed by preceptors (Allan, Smith, &O'Driscoll, 2011; Corlett, 2000; Marks-Maran, et al., 2013). This appears

to render the preceptor programme ineffective for facilitating theory-practice integration.

In a related piece, Marks-Maran et al. (2013) found that despite the positive impact of preceptorship, the difficulty in scheduling meetings between preceptors and preceptees was highlighted by a large majority (82%) of preceptees. The need for regular meeting times between preceptors and preceptees to be given higher priority was expressed by 93% of preceptees. Corroborating this, Coates and Gormley (1997) asserted that preceptors requested for the need for protected time to engage with nursing students when they were asked what additional resources they felt were needed to work as preceptors. These findings challenge the sustainability of preceptorship as a model for theory-practice integration.

Other challenges of the preceptorship model of practical supervision include the fact that preceptors do not incorporate research findings into clinical practice. Swedish preceptors limit clinical practice to only the acquisition of clinical skills in carrying out nursing procedures and other ward routines without any link to theoretical underpinnings (Ehrenberg & Haggblom, 2007). The authors postulated that preceptors do not read and apply findings of nursing research into clinical practice. The same findings were revealed in a cross-sectional qualitative Finnish-Swedish study (Hilli, Melender, & Jonsen, 2011) to establish preceptors' experiences of the theory-practice gap, and the challenges of bridging the gap. This approach of clinical preceptorship perpetuates the theory-practice gap rather than bridge it.

The above shortfalls of clinical preceptorship notwithstanding, some researchers postulated that the ability of preceptorship to improve communication and clinical skills, and effectively socialise nursing students to the professional role makes it a success (Marks-Maran, et al., 2013). However, the researchers recommend an improvement in certain aspects of preceptorship particularly preceptors making time to meet preceptees to enhance its effectiveness. Despite the fact that clinical preceptorship is gaining recognition as a long term sustainable way to integrate theory into practice, it is yet to be adopted by most countries as a mandatory requirement for the training of nurses. It is the view of this researcher that, clinical preceptorship be modified to cater for some of its shortfalls and adopted as a mandatory approach to theory-practice integration in the training of nurses in most countries.

Lecturer practitioner

For an improved theory-practice integration in nursing, one of the suggested ways is to have nursing faculty who are both theoretically and clinically competent. It is presumed that a theoretically and clinically competent nurse faculty is better placed to adequately facilitate theory-practice integration among nursing students (Ajani & Moez, 2011). The authors, therefore, suggested the need for nurse faculty to spend time in clinical practice updating their clinical skills and re-experiencing the realities of nursing practice.

Furthermore, other authors suggested the need for nurse faculty to be actively involved in nursing students' clinical supervision (Edwards, 2002). Considering the difficulty in assuming the full role as a lecturer and creating time

for re-experiencing the realities of nursing practice in the clinical setting, the concept of lecturer practitioner seems ideal, as they are well placed to adequately facilitate theory-practice integration.

The lecturer practitioners role was developed in the 1980s to ensure adequate theory-practice integration, aimed at training competent nurses for the delivery of safe nursing care to clients and patients (Lathlean, 1995). It gained prominence in the late 1990s when it was endorsed by both clinicians and students following the broadening of its roles (Day, Fraser, & Mallik, 1998).

The role of the lecturer practitioner can be described as a joint appointment between a hospital and a university with a shared responsibility in both academia and practice (Camsooksai, 2002). The lecturer practitioner has both teaching and clinical roles. The educational roles include: classroom teaching, curriculum planning, including implementing and reviewing modules (Elcock, 1998); staff development (Vaughan, 1987); and assessing students. The clinical roles of lecturer practitioner include delivering direct patient care (Burke, 1993); assisting registered nurses to develop preceptor skills; counselling staff on career progression and promoting innovation and evidenced-based practice (Wright, 2001); teaching nursing students and nurses on clinical skills (Humphreys, Gidman, & Andrews, 2000).

Lecturer practitioners often have a flexible duty system. They are free to decide how to share their time and juggle between the hospital and the universities; some of them decide to work half time in education and half time in practice (Carson & Carnwell, 2007). The fact that lecturer practitioners are more

immersed in clinical practice than lecturers, they are better placed in understanding the complexities of the clinical environment (Lathlean, 1995). They are equally better placed to embrace clinical, management, educational and research issues because of their dual role (Humphreys et al., 2000).

However, this approach to bridging the theory-practice gap is saddled with a number of challenges. The lack of role clarity for lecturer practitioners was a major issue following its introduction. For the concept of lecturer practitioner to achieve its intended objective there was the need for role clarity (Fairbrother & Ford, 1997; Williamson, Webb & Abelson-Mitchell, 2004). Without clearly defined roles, the scope and demands of the lecturer practitioner's role appeared daunting and seemingly insurmountable. Consequently resulting in stress and its related ramifications on lecturer practitioners' well being (Lathlean, 1995).

Amid lack of role clarity, role conflict was a key challenge confronting the lecturer practitioner's concept. However, available evidence suggest a diminished role conflict as lecturer practitioners have become more clear with what their role entails. The findings of a study conducted by Nelson and McSherry (2002) revealed that lecturer practitioners became more assertive with time as they gained more experience, hence smoothly juggling their dual role without stress. The authors indicated that lecturer practitioners were able to efficiently manage time in the clinical setting, or refused to honour teaching appointments that appeared to increase stress. Corroborating this finding, Williamson et al. (2004) survey established that, lecturer practitioners were no longer stressed as compared to other groups following the development of role clarity for their position.

Lack of support and understanding of the lecturer practitioner's role by both hospital and university managements has also been identified. This is demonstrated in the fact that lecturer practitioners are considered an extra pair of hands during periods of staff shortage to the neglect of their students (Lathlean, 1995; Williamson & Webb, 2001). There is therefore, the need for clinicians and managers of both the university and hospital to offer lecturer practitioners the needed support in fulfilling their role (Nelson & McSherry, 2002; Williamson, 2004; Williamson & Webb, 2001; Williamson et al., 2004).

Adequate communication and collaboration between academic and clinical settings will enable staff of both institutions to appreciate the responsibilities of the lecturer practitioner in either side. This will enable both academic and clinical setting staff accord lecturer practitioners the needed understanding and support for the realisation of objectives of their role. Available evidence points to the fact that this kind of collaboration between academia and the clinical setting is lacking (Nelson & McSherry, 2002). With effective communication and collaboration the lecturer practitioner's role appears promising in helping socialise newly qualified nurses and student nurses into their professional role.

Link tutors

The link tutor concept of fostering theory-practice integration is widely used in the United Kingdom (United Kingdom Central Council for Nursing Midwifery and Visiting, 1999). It is aimed at formalising the clinical role of nurse faculty by giving them the responsibility of supporting students' learning in the

clinical setting (Day et al., 1998; Ramage, 2004). Link tutors are lecturers with a shared responsibility of providing nursing students with both theoretical and clinical knowledge in nursing (Duffy & Watson, 2001). The clinical aspect of their role entails supporting and monitoring preceptors (Welsh Assembly Government [WAG], 2002) and assisting nursing students in exploring their learning needs (Lindgren, Brulin, Holmlund, & Athlin, 2005).

Moreover, visiting and supporting nursing students on clinical placements, providing nursing care for patients during shifts, and taking part in clinical evaluation of students are also inherent in the link tutor's role (Duffy & Watson, 2001; Gilmore, 1999). Despite the fact that the concept of link tutor role is intended to facilitate adequate theory-practice integration, a number of studies have identified factors that limit its effectiveness.

Similar to challenges confronting the nurse practitioner's role, the link tutor's role is also saddled with ill defined roles (Gilmore, 1999; Clifford, 1999). Without role clarity, how are link tutors expected to socialise nursing students to the professional role? The lack of role clarity results in role conflict causing enormous stress with its debilitating effect on lecturers' well being (Gilmore, 1999; Clifford, 1999). This is even further exacerbated by time constraints on the part of link tutors (Landers, 2000; Murphy, 2000; Pegram & Robinson, 2002).

A visit to the clinical setting often presents link tutors as mere visitors. This impedes the effectiveness of link tutors in the discharge of their duties. Findings of a number of research studies revealed that link tutors reported a feeling of being unwelcomed, alienated, and even excluded in an attempt to

access clinical practice (Landers, 2000; Ramage, 2004). Seemingly, effective collaboration between the authorities of both academia and clinical setting will help staff of the clinical setting understand, appreciate and accept the role of the link tutors in the clinical environment.

However, because of the seemingly insurmountable challenges faced by the link tutors in the clinical settings, it appears that a number of universities have developed the role of personal supervisors or clinical instructors to enhance the clinical remit of lecturers. Personal supervisors assume a pastoral responsibility for a limited number of nursing students for the entire course (Gidman, 2001). However, some models of the personal supervisor (clinical instructor) sees the clinical instructor assuming the role of a clinical teacher, supervisor and an assessor during clinical placements (Humphreys et al., 2000). The personal supervisor or clinical instructor's model, though a good concept for fostering theory-practice integration and adequately socialising nursing students to their professional role, is faced with a geographical and clinical placement diversity challenge. According to Gidman (2001) the logistical constraint of teaching and assessing nursing students attributable to the geographical and clinical placement diversity precludes the personal supervisor or clinical instructor from effectively teaching, monitoring, and assessing the students.

Despite the use of lecturer practitioners, link tutors, personal supervisors, and clinical instructors to facilitate theory-practice integration, there is still a debate as to the role of nurse faculty in the teaching of clinical skills (Day et al., 1998). The individual desire of nurse faculty to play a clinical role appears high.

Carlisle, Kirk, and Luker (1997) conducted a survey to identify the clinical role of nurse teachers within a Project 2000 course framework. The findings of the study revealed that over 80% of nurse faculty expressed a desire to increase their clinical role. The authors averred that, some lecturers have developed individual work schedules aimed at enhancing their presence in practice to promote their clinical role. Bentley and Pegram (2003) supported the need for lecturers to update their clinical competency regularly. The authors indicated that their ability to embark on regular clinical shifts as part of their nurse lecturer's role had a positive impact on their professional development, and reported positive feedback from nursing students and clinicians.

Though the individual strategies adopted and reported by lecturers seem effective in maintaining the clinical skills of nurse lecturers and appear popular with clinicians and students, there is limited evidence of their benefits in theory-practice integration. Moreover, time constraints as a result of work overload in delivering classroom teaching and responding to other academic commitments is a sufficient barrier to the adoption and implementation of this approach on a large scale in nursing education.

Summary of Literature Review

In conclusion, the literature highlights the need to find an appropriate solution to bridge the theory-gap in nursing. It emphasises the factors contributing to the theory-practice gap which need to be considered when attempting to find a suitable solution to bridge it. The theory-practice gap in nursing has existed for over four decades and it is projected to continue in some manner. Many initiatives

like preceptorship, lecturer practitioner and link tutors have been introduced in an effort to bridge the theory-practice gap. Most of these initiatives have evolved in geographic areas such as the USA, UK, and other developed nations. Little research addressing the issues is evident in sub-Saharan Africa (SSA). Given the unique context of nursing and health care in Ghana and other nations of SSA, identification of the nature and scope of the theory-practice gap needs to be undertaken. Without this requisite knowledge, effective strategies to address the theory-practice gap may not be developed.

CHAPTER THREE

RESEARCH METHODS

This study is aimed at exploring the understanding of theory-practice gap from the perspective of nurse faculty, clinicians and nursing students. In this chapter the researcher outlines the methodologies used to accomplish the purpose of the study. The researcher provides a rationale for choosing those methodologies and discusses the study settings, study population, sampling procedure, inclusion and exclusion criteria. The chapter also provides details of the data collection instrument, method and procedure. Finally, it outlines any ethical considerations which were pertinent to the study and discusses the data analysis process.

Research Design

The purpose of this study was to gain an understanding of theory-practice gap, from the perspective of diverse key players (nurse faculty, students, and clinicians) of nursing in University for Development Studies and Tamale Teaching Hospital. To achieve this aim, a descriptive phenomenological qualitative design was used.

The choice of research design and method are suggested by the view of the researcher on the nature of reality, logic and rationale of the research, and the data collection tools (Denzin& Lincoln, 1998). With the purpose of this study hinged on understanding theory-practice gap from the perspective of key players, the study was designed to facilitate the understanding of theory-practice gap as the phenomenon of interest. The research design links the questions to the data

collection approaches, subsequent analysis and interpretation of data; hence the alignment between design and questions determine the overall validity of the research (Punch, 2005).

The motivation of quantitative and qualitative research is in two different paradigms; positivism and constructionism or post-positivism (Gerrish, & Lacey, 2010; Yilmaz, 2013). Derived from the biomedical sciences, positivism, the philosophical underpinning of the quantitative methods, assumes that there is a single objective reality which can be empirically ascertained using the systematic and rigorous processes of research (Bowling, 2009). Quantitative research designs are focused on describing and developing generalisable findings or laws by manipulating and controlling the environment in varying degrees, and using standardised measurements in an objective, value-free and reductionistic process (Punch, 2005; Yilmaz, 2013). The emphasis in quantitative research method is on measurement, searching for standardisation, reproducibility and the understanding of the relationship between variables (Cause and effect) (Lincoln, 2003). Although quantitative designs may elicit concise and comprehensive and generalisable findings, depth and insight seems to be sacrificed to achieve this end.

In contrast, qualitative research focuses on words instead of numbers, on understanding and giving meaning to a phenomenon or an event. Derived from the social sciences, qualitative research method is rooted in interpretivism in which reality is perceived as multiple and subjective, largely determined by the meaning and understanding individuals create or make of their interaction with

the environment (social experiences) using value-laden, constructive and flexible processes (Bowling, 2009; Punch, 2005; Yilmaz, 2013). Instead of testing, measuring, and experimenting as quantitative research does, qualitative research is rather focused on a deep process of seeking meaning in social experience and is aimed at understanding, describing or interpreting behaviours, contexts, and interrelations of participants (Burton, 2010).

Qualitative research is more exploratory and inductive, while quantitative research aims to reach conclusions by deduction and hypothesis testing (Schmidt & Brown, 2009). The main strength of qualitative research is its ability to create knowledge about new phenomenon and complex interrelations that have not yet been researched thoroughly or at all (Streubert& Carpenter, 2011). A qualitative research design is appropriate when the aim of the research is to explore perceptions of the participants (Polit& Beck, 2012). This makes the choice of a qualitative study design appropriate for this study as it sought to investigate perceptions of nurse faculty, clinicians and nursing students about theory-practice gap.

Qualitative research consists of four major types: phenomenology, grounded theory, ethnography, and historical (Schmidt & Brown, 2009). While grounded theory is the method of choice when discovering new dimensions with the primary purpose of developing a theory, ethnography entails the work of describing a culture (Streubert& Carpenter, 2011). Historical research is based on the use of archives to retrospectively examine events or people with the goal of explaining or understanding the past. Whereas phenomenology is the method of

choice in describing a particular phenomenon, or the appearance of things as lived experience (Schmidt & Brown, 2009). The authors averred that, the goal of phenomenology is to achieve understanding of an experience from the perspective of the participants. This position is supported by Lester (1999) as he opined that, the purpose of phenomenological approach is to illuminate or identify a particular phenomenon through how they are perceived by the actors in the situation.

Theory-practice gap may be considered as a phenomenon largely experienced by nursing students and newly qualified nurses, and constructed through the interaction of nurse faculty clinicians and nursing students. This makes the choice of phenomenology suitable for this study as it is aimed at understanding theory-practice gap from the perspective of participants. The use of phenomenology, both as a philosophy and a research approach to explore subjective experiences and describe phenomena of importance in nursing is rife in the literature (Arrigo& Cody, 2004; Beck, 1994; Caelli, 2001; McConnell-Henry, Chapman, & Francis, 2009; Ortiz, 2009; Todres& Wheeler, 2001; Van der Zalm&Bergum, 2000).

Approaches of phenomenology

Phenomenology consists of two main approaches: the descriptive phenomenology of Husserl and the interpretive/hermeneutic phenomenology of Heidegger (Spiegelberg, 1975). Descriptive phenomenology also known as Husserlian phenomenology is commonly referred to as the direct investigation and description of phenomena as consciously experienced (Spiegelberg, 1975). It is widely recognised that Husserl's phenomenology is concerned with a rigorous

and unbiased study of things as they appear in nature in order to arrive at an essential understanding of conscious human experience (Dowling, 2007; Paley, 1997; Ray, 1994; Spiegelberg, 1971; Valle, King & Halling, 1989).

The main aim of Husserl's phenomenological philosophy is to reach the essence of the individuals' lived experience of the phenomenon while exploring and defining the phenomenon (Cilesiz, 2010). Essences are concepts or themes that illuminate a phenomenon under investigation (Streubert & Carpenter, 2011). Essences represent the basic units of common understanding of a phenomenon. To reach the true essence of a phenomenon, Husserlian phenomenology employs the concept of bracketing. Bracketing is the approach in which a researcher declares personal biases, assumptions, and presuppositions and puts them aside (Gearing, 2004; Valle et al., 1989). The aim of bracketing is to isolate what is already known about the theory-practice gap by the researcher from participants' description. Bracketing ensures the validity of data collection and analysis processes and helps to maintain the objectivity of the phenomenon (Speziale & Carpenter, 2007).

Interpretive/hermeneutic phenomenology in contrast, is a critical approach that does not only describe but give meaning to otherwise concealed meanings of a phenomena of interest and acknowledges the influence existing theories and preconceptions may have on the conclusions of the researcher (Spiegelberg, 1975). This position illuminates Husserl's philosophy that, pure phenomenological research seeks essentially to describe rather than explain, and to start from a perspective free from hypothesis or preconceptions (Husserl,

1970). With this study aimed at gaining understanding of the theory-practice gap from the perspective of participants in a resource constrained setting where it has not been studied, it was key, gathering uncontaminated and unprejudiced information (Dowling, 2007; Koch, 1999) about theory-practice gap. The choice of descriptive phenomenological design therefore aided in accomplishing this objective.

However, with emphasis on subjectivity and description central to Husserl's phenomenological framework, generalisations are limited (Dowling, 2007; Spiegelberg, 1975). It is not the intention of the research study to generalise the findings, but to explore and describe perceptions of faculty, clinicians and nursing students on theory-practice gap. Indeed, the concept of generalisation is not a key aspect of qualitative research traditions, and phenomenology is no exception. It is the transfer or application of the understanding to another situation, context or point in time by the person reviewing the findings that is paramount (Rapp, 2011; Spiegelberg, 1975).

Study Setting

The study setting consisted of two sites. The data for this study were collected in University for Development Studies and Tamale Teaching Hospital, both in Tamale. They are both state funded institutions. The Department of Nursing of University for Development Studies was established in the year 2009. Its establishment was aimed at improving nursing care by increasing the qualification and competence of nurses in practice. Currently, the University for

Development Studies (Tamale campus) is one of the youngest public funded institutions offering Bsc nursing in Ghana.

From an insider's perspective the Department has a total number of 11 nurse faculty, an average class size of 176 and an average student population of 704 (faculty student ratio of 1:64) at the time of the study.

The Department depended on the services of adjunct faculty to help augment the staff shortage. This was contained in narrations of a senior lecturer of the department of nursing UDS. Located in a predominantly resource constrained region (Northern Region), the Department is faced with a myriad of challenges. Educational resources were limited (Talley, 2006). Nursing faculty and students do not have access to the wealth of data available online to benefit from. The school does not have an electronic library system and their wireless connection was erratic. The Department does not have a library. Simulation room was poorly supplied and some equipment were outdated. Disposable nursing supplies were simply inadequate or not available to facilitate teaching. Students were usually not supervised by Department staff during clinical placements. In spite of these obstacles faced by the department of nursing UDS, nursing faculty managed to prepare professional nurses. It was therefore interesting investigating how they maneuvered these herculean obstacles to produce professional nurses.

Tamale Teaching Hospital is the primary site for clinical placement for the nursing students of the University of Development Studies and other students from Nursing Training Colleges within the Region and beyond. The hospital was established in the year 1974 as a Regional Hospital in Tamale in the Northern

Region of Ghana. It serves as a referral hospital for the three northern regions of Ghana. It cooperates with the University for Development Studies in Northern Ghana to offer undergraduate and graduate programs in medicine, nursing and nutrition. It is the third teaching hospital in Ghana after the Korle Bu Teaching Hospital and the KomfoAnokye Teaching Hospital. It gained its current status as a teaching hospital in the year 2008. The hospital had a total number of 579 professional nurses (528 Registered General Nurses, 8 Psychiatric Nurses and 43 Midwives) and a nurse-inpatient ratio of 1:170 (Tamle Teaching Hospital [TTH], 2016).

Study Population

The target population for this study consisted of three categories: (1) Full-time nurse faculty of University for Development Studies, Tamale campus with a minimum qualification of master's degree and three years teaching experience. (2) Level 400 postsecondary bachelor of nursing students of the University for Development Studies, Tamale. (3) Clinicians with a minimum of a bachelor's degree in nursing and at least three years clinical working experience and acting as a preceptor or a clinician with a diploma degree in nursing and a minimum of five years working experience and acting as a preceptor in Tamale Teaching Hospital.

These restrictions were to help identify persons capable of providing rich data based on their experience and years of work. These diverse groups were selected mainly because they are the key players with regards to nursing education and practice in Ghana. For example, clinicians usually have the

responsibility for guiding and facilitating the socialisation of nursing students and newly qualified graduate nurses into their new role of professional nurses. Whereas Nurse faculty are responsible for teaching nursing students both theoretical and practical content to prepare them for the role of a qualified nurse. On the other hand, nursing students are central in nursing education and practice, as they appear to be both the sufferers or beneficiaries of a widened or bridged theory-practice gap. Therefore, their perceptions of the theory-practice gap will enable a complete understanding of the phenomenon to emerge.

Sampling Procedure

The sample consisted of 32 participants, comprising eight nurse faculty, 12 clinicians (six in each discussion session) and 12 nursing students (six in each discussion session). The sample size was determined based on reaching data saturation.

With respect to the number of participants in a focus group session, the usual approach is to use groups of moderate sizes, six to ten people (Schmidt & Brown, 2009; Streubert& Carpenter, 20011). Focus groups must be large enough to ensure a diversity of perspectives, and small enough to ensure everybody has a chance to contribute effectively in the discussions (Gerrish&Lacey, 2010).

Consistent with phenomenological inquiries, purposive sampling was used in selecting participants for this study (Streubert& Carpenter, 2011). Nonprobabilistic sampling techniques such as purposive and convenience sampling are usually used because the intention of phenomenological studies is to

gain deeper understanding of a phenomenon, not to provide evidence directly generalisable to a wider population (Gerrish&Lacey, 2010).

This method of sampling aided in the selection of individuals based on their particular knowledge of theory-practice gap for the purpose of enriching the discussion. The logic and essence of purposeful sampling lies in selecting information-rich sources for in depth study (Streubert& Carpenter, 2011). The sample size and sampling technique for this study does not intend to represent all clinicians, nurse faculty or nursing students as it is selectively biased, but was considered adequate and feasible within the time constraint of the study (Cohen, Manion& Morrison, 2000).

Participants were contacted individually after permission had been obtained from the heads of the institutions (University for Development Studies, Tamale Campus and Tamale Teaching Hospital). A detailed list of nursing faculty, including their qualifications and years of work and a list of students in the Department of Nursing was obtained. The list was used to confirm that participants selected belonged to the study population and met the inclusion criteria. All nurse faculty who participated in this study also participated in a workshop organized by the university and the researcher then took opportunity to meet and hold the focused group discussion with them. Information had earlier been sent round through a senior faculty member pre-informing all potential participants about the decision to hold the discussion after the workshop.

The researcher did not use the list available to select students himself to participate in the study given that he had limited knowledge and interaction with

the students. For the purpose of obtaining rich data, a faculty member was contacted to identify and select based on his knowledge and interactions with the students, 12 level 400 postsecondary students who could best express themselves in the English language. Also, a list of preceptors in Tamale Teaching Hospital with detailed information about their qualifications and years of work was obtained. The list helped in confirming that selected participants belonged to the study population and met the inclusion criteria of the study. The leader of the preceptor group of Tamale Teaching Hospital aided in identifying and selecting 12 clinicians per the inclusion criteria who could contribute effectively on theory-practice gap. Eligible participants were personally contacted for inclusion. Participation in the study was strictly voluntary.

Inclusion Criteria

The study participants included: (1) Only full-time nurse faculty of the University for Development Studies (UDS) with three years teaching experience and a minimum qualification of a master's degree. (2) Level 400 postsecondary student nurses of UDS (3) Clinicians with a minimum of a bachelor's degree in nursing and at least three years clinical working experience and acting as a preceptor, or a clinician with a minimum of diploma in nursing and five years working experience and acting as a preceptor in Tamale Teaching Hospital (TTH).

Exclusion Criteria

The study excluded nurse faculty, clinicians and nursing students who did not meet the above inclusion criteria.

Data Collection Instruments

A focus group discussion approach was used in collecting the data with the aid of a topic guide. A topic guide consisting of nine open ended questions was used in moderating the focus group discussions. A topic guide typically consists of 5 to 10 questions (Gerrish&Lacey, 2010). The topic guide was developed based on the literature review and the aim of the research, elucidating the understanding of participants on theory-practice gap. The aims and literature review of the research informed the development of the topic guide (McLafferty, 2004). The guide is intended to create a smooth and purposeful progression through the topic areas, stimulate and coordinate group discussion without influencing the responses. The use of the topic guide ensured consistency across the groups, enabling comparisons to be made between the groups. (See topic guide in appendix A).

The use of focus group discussions promoted elaborations, sharing of, and clarification of ideas. Differing opinions were explored and a consensus reached (Freeman, 2006). Focus groups are particularly suitable for the collection of qualitative data because they have the advantages of being inexpensive, flexible, stimulating, cumulative, elaborative, assistive in information recall, and capable of producing rich data (Fontana & Frey, 1994; MacDougall & Baum, 1997). Given the limited research studies exploring theory-practice gap from this setting, the use of focus group discussion was ideal as compared to individual interview. Focus groups has the ability of revealing a wealth of detailed information and

deep insight into a topic about which little is known (Freitas, Oliveira, Jenkins, & Popjoy, 1998).

However, one striking disadvantage of focus group discussion is groupthink. Groupthink is a phenomenon that occurs when outspoken members of a group have major control or influence over the submissions of other group members (Carey & Smith, 1994). This phenomenon was adequately checked in this study, the spontaneous interactions and positive group dynamics facilitated rich data collection. Moreover, the moderator constantly encouraged all group members to make submissions based on their understanding of theory-practice gap. The semi-structured format of the focus group discussions created an accepting environment that kept participants at ease, allowing them to elaborate on the issues and thoughtfully contributed to the discussions. Important ideas and insights were noted during the discussions enabling further probing and clarifications. The use of probing, clarifications and paraphrasing to facilitate the discussions contributed to effectively verifying the emerging themes (McLafferty, 2004).

The use of both phenomenology and focus groups in the pursuit of knowledge development in nursing is replete (Dowling, 2007; McLafferty, 2004). However, the use of a combination of the two is often faced with divergent opinions. While others think the use of phenomenology and focus groups are methodologically compatible (Bradbury-Jones, Sambrook & Irvine, 2009), others have argued on the contrary (Webb & Kevern, 2001; Webb, 2003). Webb and Kevern (2001) argued that the goal of phenomenological research is to illuminate

the essence of a phenomenon. Hence, they opined that a phenomenological approach requires an individual to describe their experiences in an uncontaminated way. Thus, they concluded that focus groups are not compatible with phenomenological research.

Conversely, Giorgi (2000) posited that, it is the researcher, not the participants who bracket. This calls into question the need to separate participants for the purpose of data collection. Similarly, Spiegelberg (1975 p. 25) proposes a "cooperative phenomenology". He argued that, nothing in the phenomenological approach restricts it to an isolated practice. Group approach to phenomenology holds the same benefits as focus groups, in that, they stimulate discussions, open up new perspectives, encourages information exchange, enriching and complementing data (Spiegelberg, 1975). Phenomenological focus groups enhance data cross-checking and clarification of understandings (Cote-Arsenault & Morrison-Beedy, 2001; Spence, 2005).

The interaction of participants in focus group discussions ensures the collection of rich data. In a manner that is not possible in individual interviews, focus groups allow participants to hear each others' views, enabling them to add their own perspectives and insights as the search for essence of the phenomenon unfolds (Sorrell & Redmond, 1995). A combination of these advantages of focus groups enhances rather than hinder methodological rigour (Cote-Arsnault et al., 2001). Hence, the choice of focus group as a data collection method, facilitated a richer understanding of theory-practice gap.

Validity and Reliability of the Instrument

The focus group discussion guide was submitted to expert nurse educationists for review. This helped establish face validity and content validity. The face validity by these experts helped ensure that the instrument elicited what it was expected to elicit (Polit& Beck, 2012). Likewise, the content validity relates to the extent to which a tool is measuring adequately what it intended to measure (Polit& Beck, 2012). The evaluation of the experts helped the researcher address some aspects that were initially left out in the topic guide.

Additionally, pretests were conducted, one for each of the three groups. Strictly adhering to the inclusion criteria, six nurse faculty, six nursing students, and six clinicians participated in the focus group discussions. The above settings were chosen for the pretest study because contextually they bore the same characteristics with the main study settings. UCC is a public university offering bachelor of science in nursing and midwifery. CCTH is also a public institution with a fairly new status of a teaching hospital, effective 2015. Permission was sought from the heads of the School of Nursing and Midwifery University of Cape Coast and Cape Coast Teaching Hospital before participants were recruited for the pretest. The expert review of the instrument and the pretest aided in ensuring the topic guide elicited the appropriate data. This also ensured consistency in the data gathered within each respective group. Some of the questions were reworded to ensure validity and reliability of the instrument.

The researcher and research assistant were trained in the moderation of focus group discussions by an experienced qualitative researcher. The services of the research assistant aided in operating the tape recorder.

Data Collection Procedures

Data for this study was collected using focus group discussions with the aid of a topic guide designed by the researcher. The data was collected from March to June, 2016 in the two research sites. With the aid of an ethical clearance letter and an introductory letter from the Institutional Review Board and School of Nursing and Midwifery of University of Cape Coast respectively, permission was sought from the University for Development Studies and Tamale Teaching Hospital.

Prior to the focus group discussions, participants were comprehensively briefed about the nature and purpose of the study and issued with a consent form. The focus group discussions began after measures to protect participant anonymity were explained and consent forms were signed. The study participants were categorised into three different groups based on professional qualification and shared experience to ensure homogeneity (Morgan, 1997). Morgan opined that ensuring homogeneity in focus groups promotes free discussion and cross-group comparisons. Five focus group discussion sessions were held, one for nurse faculty comprising of eight participants, two for clinicians comprising of six participants in each discussing session, and two for students comprising of six participants in each discussion session.

The number of discussion sessions held depended on reaching data saturation, that is, when no new themes or essences were emerging from the participants and the data were repetitive (Glaser & Strauss, 1967; Streubert& Carpenter, 2011). Each discussion session lasted from 70-80 minutes. Ideally, focus group discussions last between 60-90 or 120 minutes (Freitas, Oliveira, Jenkins, &Popjoy, 1998; Green &Thorogood, 2005).

The researcher adopted the approach of Spiegelberg (1975), and Sorell and Redmond (1995), and each participant was given time to provide his/her unique description of theory-practice gap during the focus group discussions.

This ensured that individual perspectives on theory-practice gap were not lost. The discussions were held in the conference halls of the University of Development Studies and Tamale Teaching Hospital. The environment of both conference halls was quiet and conducive for the discussions.

To ensure the accuracy of data collection, the discussions were tape recorded and transcribed verbatim (Streubert& Carpenter, 2011). High quality tape recording equipment was used. The researcher recruited an assistant researcher who aided in operating the voice recorder. This offered the researcher an opportunity to moderate, observe the nature of the interactions, and engage in note taking. Handwritten notes were taken by the researcher. Streubert and Carpenter (2011) opined that, adding handwritten notes to verbal transcribed accounts helps to achieve the most comprehensive and accurate data description.

Ethical Considerations

Ethical approval for the study was given by University of Cape Coast Institutional Review Board (see appendix B). Additionally, a letter of introduction was issued by the School of Nursing and Midwifery of UCC for the researcher (see appendix C). Tamale Teaching Hospital, upon review of the proposal, also issued the researcher with a certificate of authorisation to engage participants of the hospital (see appendix D).

Participants were briefed comprehensively about the aim and procedures of the study before a written informed consent was obtained from each of the participants (see inform consent form in appendix E). They were all informed about their rights to refuse participation in the study or to leave at any point in time without giving any reason. Additionally, they were informed that their refusal to participate in the study would not be used against them in any form. The confidentiality and anonymity of participants were enforced, and they were assured that the data was to be transferred onto a pass worded computer earmarked only for the purpose of the research and was to be destroyed a year after the research work. Data were strictly used only for the purpose of the research. The study process did not entail any harmful effects on participants.

Data Processing and Analysis

In phenomenological studies, data collection and analysis are inseparable, hence, in this study the two occurred concurrently. Consistent with phenomenological studies, bracketing the researcher's subjective views about theory-practice gap continued throughout the study. After gathering and

successfully transcribing participants' life world descriptions of theory-practice gap, the data were analysed for meanings by the researcher. These meanings were formulated into a coherent story of interrelated themes and insights. The transcripts were read several times in search of meaning. The articulation and explication of the meanings in the text, both explicit and implicit, requires thorough reading to get a narrative sense of the text as a whole (Gerrish&Lacey, 2010; Giorgi, 1985; Giorgi&Giorgi, 2004)). The study adopted Colaizzi's process for phenomenological data analysis (cited in Sanders, 2003; Speziale& Carpenter, 2007). A summary of this data analysis process is provided in figure 4.

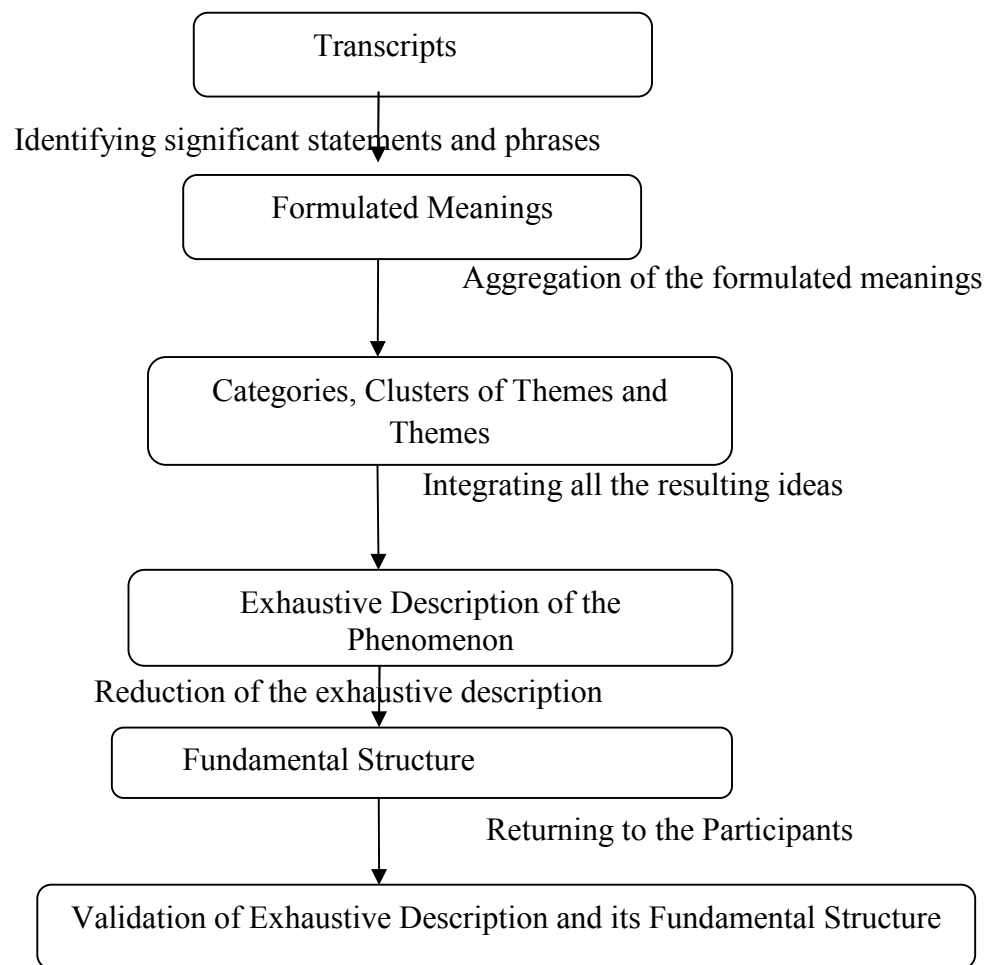


Figure 4: Summary of Colaizzi's (as cited in Shosha, 2010) Strategy for Phenomenological Data Analysis Adopted for the Study.

In analysing the data for this study, these steps were strictly followed:

Step one

Each transcript was read thoroughly to gain an understanding of the whole content. All preconceived thoughts and ideas held by the researcher concerning theory-practice gap were added to the bracketing diary. This facilitated the exploration of theory- practice gap as perceived by participants themselves devoid of any prejudice.

Step two

This stage of the analysis entailed the extraction of significant statements and phrases from the transcripts pertaining to theory-practice gap. The statements were then written in separate sheets and coded based on transcript, page, participant's code and line numbers. Two hundred and forty seven significant statements were extracted from the five focus group discussion transcripts.

Step three

Meanings were formulated from the significant statements. Each formulated meaning was coded in line with its significant statement as they represented a detailed description of the significant statements. Two hundred and forty-seven formulated meanings were constructed from the 247 significant statements. Both significant statements and their meanings were crosschecked by an expert researcher who established that the significant statements and their formulated meanings were congruent.

Step four

Following the formulation of meanings for all the significant statements, the process of clustering all the formulated meanings into various unique categories representing distinct cluster of themes was started. Each cluster of theme was coded to include all formulated meanings related to that group of meanings. Following that, various clusters of themes with common meanings or emerging issues were fused together to form a distinctive construct of theme. All the themes were internally convergent and externally divergent, each formulated meaning fell only in one theme cluster that was different in meaning from other theme clusters (Mason, 2002). Nineteen theme clusters emerged and were grouped into five emergent themes. For sample of the clustering process (see Appendix F).

Step five

All emergent themes were defined into an exhaustive description of the phenomenon. After merging all the study themes, the complete structure of the phenomenon "theory-practice gap: perceptions of clinicians, nurse faculty and nursing students" had been extracted.

Step six

Through free imaginative variation, the researcher established connections between statements obtained in the focus group discussions on the theory-practice gap (Streubert& Carpenter, 2011). Free imaginative variation is a phenomenological analysis process that follows phenomenological reduction (Yuksel&Yildirim, 2015). It is aimed at arriving at a structural description of

theory-practice gap as perceived by participants. The task of free imaginative variation is to seek possible meaning of theory-practice gap through the utilization of purely the researcher's imagination rather than empirical data (Moustakas, 1994). It involves varying the frames of reference, employing polarities and reversals' and approaching theory-practice gap from diverse perspectives, roles or functions (Moustakas, 1994). The free imaginative variation process aided in removing irrelevant features in the pursuit of finding a possible meaning of theory-practice gap (Beech, 1999). The process continued until the shared meaning of theory-practice gap was established, sufficient enough to address the research questions.

Step seven

This step focused on validating the study findings using member checking technique. It was accomplished by returning the research findings to the participants and discussing the results with them. This was done by the researcher following advanced approval granted by participants in the initial focus group discussions. All participants confirmed that the results were a true reflection of their perceptions on theory-practice gap.

Trustworthiness of the study results

In other to ensure rigor of the study, a number of strategies were employed. Member checking was carried out by returning the emerged results to the participants for confirmation (Creswel, 2009; Marshall & Rossman, 2006; Speziale & Carpenter, 2007). Additionally, the researcher reflected his own preconceived notions about theory-practice gap using bracketing.

Bracketing is the approach in which a researcher declares personal biases, assumptions, and presuppositions and put them aside (Gearing, 2004; Valle, King, & Halling, 1989). This enabled the researcher to eradicate any bias inherent in the researcher's beliefs (Creswel, 2009; Marshall & Rossman, 2006). The transcripts, codes, significant statements, formulated meanings, cluster themes and emergent themes were submitted to a qualitative research expert and the study supervisor to crosscheck for nearness and appropriateness.

Chapter Summary

In conclusion, the research method employed to address the research questions of the study was the use of a descriptive phenomenological study and this proved to be an effective methodology. Five separate focus group discussions were conducted in two different sites with each group consisting of six participants except the faculty group, which consisted of eight participants. A purposive sampling technique was used in recruiting participants for the study. The study adopted Colaizzi (as cited in Sanders, 2003; Speziale & Carpenter, 2007) descriptive phenomenology data analysis process. It provided in-depth insight into perceptions of participants on theory-practice gap. Every effort was made to ensure the validity of the data collected particularly through bracketing, and member checking. Data collection and analysis were done simultaneously in an attempt to find an exhaustive list of themes. In the next chapter the researcher examined and discussed the results obtained by this data collection process.

CHAPTER FOUR

RESULTS AND DISCUSSION

The purpose of this study was to gain an understanding of theory-practice gap, from the perspective of diverse key players (nurse faculty, students, and clinicians) of University for Development Studies and Tamale Teaching Hospital Ghana respectively. A descriptive phenomenological qualitative study design was used. The sample consisted of 32 participants, comprising eight nurse faculty, 12 clinicians (six in each discussion session) and 12 nursing students (six in each discussion session). A purposive sampling technique was used in recruiting participants for the study. The study adopted Colaizzi's (as cited in Sanders, 2003; Speziale& Carpenter, 2007) descriptive phenomenology data analysis process. In the following sections, after presenting the demographic details of participants and the final thematic map, the results were examined under

the headings of the identified themes. The results were supported with quotes of participant voices. The themes were:

- System Inadequacies
- Resource Constraints
- Challenges of the Clinical Learning Environment
- Clinical Placement and Supervision
- Nurse Faculty Factors.

Results

Table 4 – *Demographic Characteristics of Participants*

Variables	Nurse Faculty	Clinicians	Students
Gender			
- Male	1	7	4
- Female	7	5	8
Age group			
- 21 – 30 years	1	1	12
- 31 – 40 years	5	11	-
- 41 – 50 years	1	-	-
- 51 years and above	1	-	-
Level of education			
- Diploma	-	-	-
- First degree	-	8	-
- Masters degree	8	4	-
- Doctorate degree	-	-	-
Educational level discipline			
- BEd Health Sciences	1	-	-
- General Nursing	-	-	-
- B.Sc Nursing	2	7	-
- MSc Nursing	-	4	-
- Mphil Nursing	2	-	-
- MPH	2	-	-
- Others	1	1	-
Rank/Position			
- Senior nurse faculty	2	-	-
- Junior nurse faculty	6	-	-

- DDNS	-	4
- Principal Nursing Officer	-	8
- Senior Nursing Officer	-	-
- Nursing Officer	-	-
- Senior Staff Nurse	-	-
- Staff Nurse	-	-
Number of years of work		
- 3 – 5 years	6	1
- 6 – 8 years	-	9
- 9 – 11 years	1	2
- 12 years and above	1	-

Of the 32 participants who took part in this study, most of them were female and within the ages of 31-40 years. The highest level of education of most nurse faculty members was a masters degree. Whereas that of clinicians was a first degree. Majority of the nurse faculty members were junior lecturers with three-five years of teaching experience. A majority of the clinicians were principal nursing officers with six-eight years working experience.

From the analysis of data from all focused group discussions, 247 significant statements were extracted. Formulated meanings were constructed for all of the statements. Following the formulation of meanings for all the significant statements, the process of clustering all the formulated meanings into various unique categories representing distinct cluster of themes was started. Each cluster of theme was coded to include all formulated meanings related to that group of meanings. Following that, various clusters of themes with common meanings or emerging issues were fused together to form a distinctive construct of theme.

All the themes were internally convergent and externally divergent, each formulated meaning fell only in one theme cluster that was different in meaning from other theme clusters (Mason, 2002). Nineteen theme clusters emerged. Five

distinct yet interrelated emergent themes were derived from the 19 theme clusters. The emergent themes included; system inadequacies, resource constraints, challenges of the clinical learning environment, clinical placement and supervision, and nurse faculty factors. The overall thematic map for this study is illustrated in figure 5.

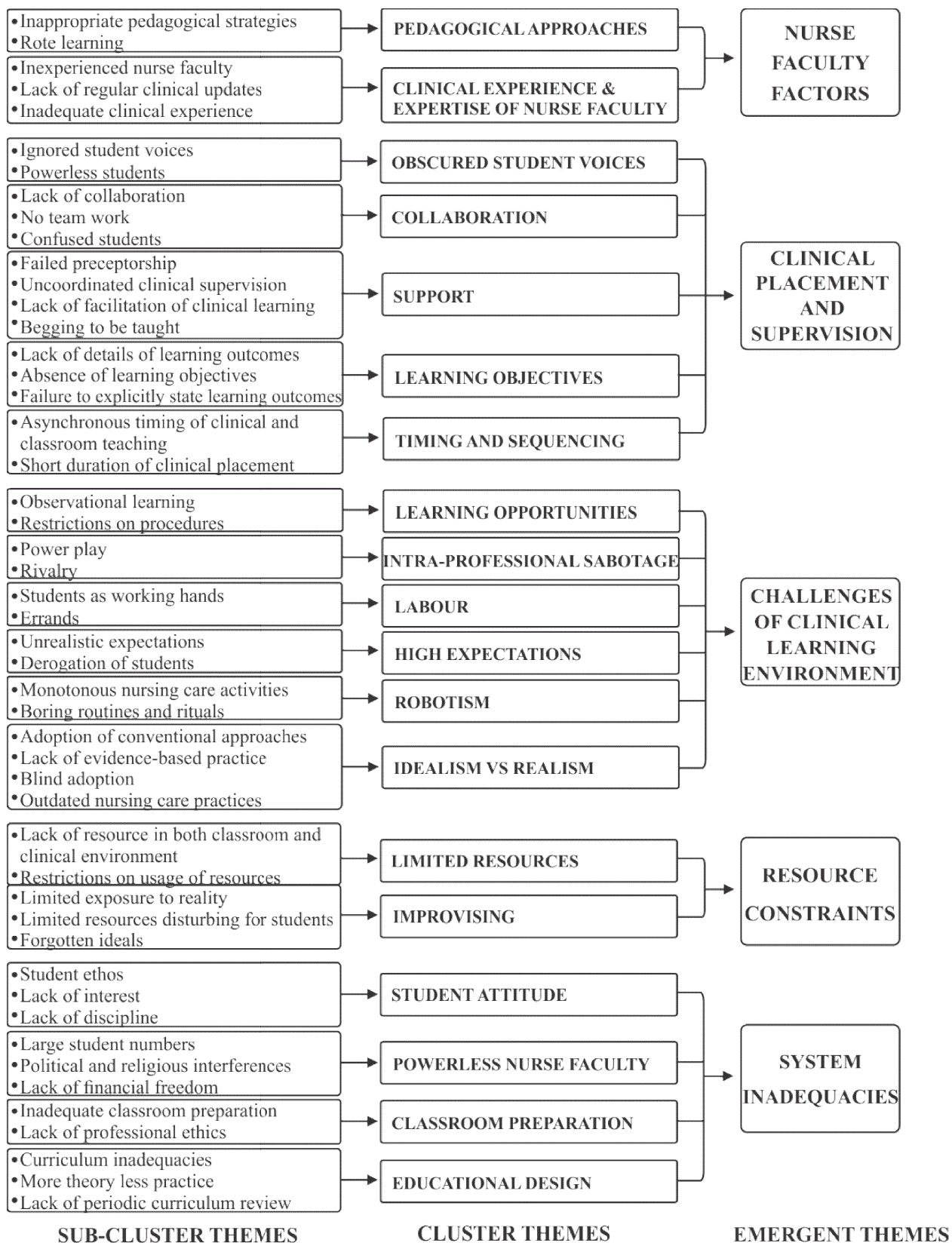


Figure 5: The Final Thematic Map

Theme One: System inadequacies

The existence of the theory-practice gap in this setting revolved around inadequacies of fundamental issues regarding nursing education. Participants felt that the design and implementation of nursing education programmes did not promote practical skills acquisition and preparation of the nursing student to face the realities of clinical nursing practice. This emergent theme is summarized in the observation of a final year student nurse of the University for Development Studies;

... at the A&E we were working with these white people and people who study in China and there was a group from Germany, when I saw them, I even thought they were doctors because the way and manner in which they were working, not that we were being lazy but they knew what to do at what time. They take a patient and then they all bring ideas and those things. That thing I see it only among doctors like a doctor is working on a patient and he can consult his co-doctor and they put heads together in trying to solve the problem but here, we don't see that. So I asked one of them where are they from and they said they are from Germany, medical students? and they said No! they are nurses in their final year and I was like waw!. And some were blacks so I realized okay, it doesn't have to do with the white colour but then is the training. Our colleagues from Ghana here they went to Germany to study nursing and they are that competent. They are that good. So it has to actually and seriously do with the training (Student).

Educational design

The educational curriculum adopted by the University for Development Studies for the training of graduate nurses was not designed to promote theory-practice integration. Although this view was largely shared by students, some faculty members did not share a similar view. Challenges with the implementation of the curriculum recommendations rather than its adequacy were perceived by some nurse faculty members as the main issue contributing to the existence of the theory-practice gap. Below are narrations from students, nurse faculty and clinicians respectively supporting the finding.

It is the curriculum that does not favour us, because they feature in more of the theory than the practical and that is why degree students or us at UDS, that is where our short comings come in (Student).

... much of our education is theoretical, so much of it is theoretical and then, the skills component is inadequate, roughly inadequate” (Nurse faculty)

I see most of the time we are interested in giving academic knowledge to students, but this is a profession and we are professionals and for that matter, while we are giving the academic knowledge, we should as well as possibly also give the professional knowledge to the students because, they are coming out to be professionals as to how to behave with regards to ethics (Clinician)

The number of credit hours allocated to nursing practice (clinical placement) in the curriculum was described as low. Both students and nurse

faculty observed that a greater chunk of the trimester was spent in the classroom or on other activities that had no direct bearing on practical skills acquisition, leaving limited time for clinical placement. This finding is supported by the following student narrations.

The credit hours allocation, you see that in the whole trimester, if you are doing about 21 credit hours, nursing practicals is just 1 credit hour ... so you will rather be reading a three credit hour course more than the practical aspect. So the way the curriculum is structured it does not give more attention to the practicals (Student).

... a student can make a D in a three credit hour paper and you want to cry. Meanwhile like practicals you got D, but because it is a one credit hour course you are okay, it won't reflect that much. But how can you get a D in practicum? you are going to be a nurse (Student).

The practice of scheduling clinical placement such that students concurrently do course work and clinical placement activities, from the view point of students, also contributed to the widening of the theory-practice gap. Some students mentioned that in such instances, the motivation to concentrate largely on course work (theory) is higher since nursing practice is relatively allocated a very low number of credit hours. This is illustrated in the student participant's voice below.

... it is boxed together and you know students, when there is practical and there is theory, we turn to read more, even at times you go to the ward and you realise that students are rather reading lecture notes for a mid-

trimester they have the following day. And with that, it brings a very big gap between theory and practice because we focus much on the theoretical aspect instead of the clinical side (Student).

Some clinicians and nurse faculty remarked that the curriculum was not reviewed periodically and attempted reviews did not make any significant changes to the content.

If you look at the curriculum that probably 10-20 years ago we were using at the nursing training colleges, it is still the same curriculum they use in training our students today. Which may not be relevant in today's modern science, because things are changing and we expect that the curriculum be revised regularly to meet the needs of the patient today (Clinician).

Classroom preparation of students

The classroom preparation of nursing students in theoretical knowledge and simulation-room-derived skills which served as the basis and basics of clinical placement for nursing students were insufficient or completely absent in some instances.

Some of them just admit the students they do not sit in the classroom and they are brought to the ward for clinicals (Clinician).

They have not even sat in the classroom and they are shipped to the ward for clinicals, you do not even know how to treat this person, this person has not even being taught what vital signs is, so the clinician turns to be the tutor-clinician and it creates a lot of problem, you do not want to be

taking care of a patient and you have to be taking someone through the basics (Clinician).

The tutors are not giving the students the kind of preparation they need and they just bring them to the clinical area expecting that clinicians do all the work (Clinician).

Facilitating clinical learning of students without basic classroom preparation was perceived by clinicians as daunting and frustrating.

... if you come and you do not know how to even put a thermometer to check a patient's vital signs, then I think you are rather coming to be a burden on us because, already we have a lot of work to do, so just give the basic knowledge and we will also build on that. If not it will make our work so difficult (Clinician).

On that basis if you even just decline been a preceptor and do your normal nursing duties is better (Clinician).

Clinicians and nurse faculty believed that large student numbers at the school was responsible for the inadequate classroom preparation perpetuating the theory-practice gap.

If the numbers are not controlled, I do not see how the facilitation of clinical placement is going to be effective, honestly. Because if they are small we will get time for them (Clinician).

Powerless nurse faculty

Nurse faculty at the University for Development Studies had little to no control over the pertinent issues related to the training of undergraduate nurses to

meet the standards expected of a newly qualified nurse. The upper level university administrator's perception of nursing to be like any other programme without reference to its professional aspect appeared to be the underlying cause of this problem. This view was shared by a nurse faculty as contained in the narration below;

This gap can be bridged if the university is also concerned about training of professional nurses. I see this university as for them they are training graduates and not professionals and so sometimes when the department stands up to talk about training professionals, then the university doesn't have the documents that brings out the professionalism in what we want to do (Nurse faculty).

Budgetary allocations and financial support to the department of nursing were limited. Some faculty members observed that this coupled with unnecessary bottlenecks regarding the utilization of the limited funds hampered the department's ability to train competent nurses.

We also need support (funding). The department is spending money but they do not control all the money. If the university as a whole will agree that we are training graduate professional nurses, then all the funds we need, to train them must be provided including the transportation involved, any motivation for lecturers because we are over burdened and so for a lecturer to leave two, three, four lectures in a week, to then get up and follow up students on clinical placement, I mean, it's so much work (Nurse faculty).

The department of nursing had no control over the number of nursing students admitted and issues regarding the socialisation of nursing students to the professional role such as dress code and discipline.

There are certain lapses in terms of the numbers which to some extent will not be our fault because we do not determine what numbers are admitted and all that (Nurse faculty).

Large numbers of students were always admitted, making it more difficult for faculty to socialize the students to the professional role.

The numbers too are so large, hitherto when the numbers were small you can control them, but now I think the numbers are so large (Clinician).

The student-nurse faculty ratio increases with large student admissions and learning opportunities become limited in the classroom, simulation rooms and clinical environment due to overcrowding hence, widening the theory-practice gap.

... the fact that we have this very big student population against, you know the lecturer population. The ratio is that big. We are not able to do so much, especially practical work, we are not able to do it (Nurse faculty).

... in the skills lab, for you to do the effective skills training, the numbers need to be smaller. The students need to have on hand training. They need to really feel what we are teaching them. But then, if we take our situation here, because of the huge numbers ... most students become passive, they just stand and watch, hoping that just watching, they have learnt the skill like that but that is not possible (Nurse faculty).

Both nurse faculty and clinicians blamed political and religious interferences for these occurrences.

... we have realised that political influences is even hindering us as nurse lecturers to be able to start these students for them to think like professionals (Nurse faculty).

Student attitude

Both nurse faculty and clinicians observed a decline in the enthusiasm and general attitude of nursing students towards learning contributing to the theory-practice gap. This decline in attitude was explained by the primary or initial motive of the student to choose nursing as a career or profession. Some prospective nursing students were thought to be influenced by the brighter job opportunities and financial rewards associated with nursing. The lack of passion for nursing from the onset contributed to the lack of discipline, disinterest and apathy of nursing students towards learning.

I see contemporary nursing in Ghana, currently to be an issue of “I am looking for a job” and this is where I have found myself to work, the students are basically looking for a job and they are seeing anywhere at all that they get, they want to go there (Nure faculty).

It is about their attitude on the ward, when they come they are not interested in learning, they are interested for the day to just fly by and they will go back to the school (Clinician).

In some instances, this perception of disinterest and apathy, among nursing students, especially during clinical placement, were related to the

inappropriate clinical scheduling (inter-semester clinical placement) which placed multiple demands on the attention of the student.

... it is boxed together and you know students, when there is practical and there is theory, we turn to read more, even at times you go to the ward and you realise that students are rather reading lecture notes for a mid-trimester they have the following day. And with that, it brings a very big gap between theory and practice because we focus much on the theoretical aspect instead of the clinical side (Student).

Theme Two: Resource constraints

The general lack of resources, in an atmosphere of systemic inadequacies, was another main contributor to the theory-practice gap as confirmed by participants. This had pervasive implications on the activities of nurse faculty, clinicians and students in terms of promoting theory-practice integration. Some participants reported teaching and learning activities in the classroom, simulation labs, and clinical environment became restricted to whatever was available for facilitating learning and practical skills acquisition. The narrations of one particular clinician described the magnitude of the problem with a feeling of hopelessness.

Like it or not we are not going to get to a situation where you will come to the ward and you will have one nurse to a patient, and you will not get into a situation where you will have all the resources to be able to make a bed, a suitable simple unoccupied bed for a patient to be admitted into (Clinician).

Limited resources

Aside the limited number of nurse faculty and clinicians, simulation rooms and the clinical environment lacked most equipment and utilities needed to promote effective demonstration of concepts and procedures discussed in the class/simulation room and the clinical learning environment.

... our demonstration room and skills lab as you will call it, there's nothing that you can do. We don't even have a single dummy so if you're talking about turning of patient, if we are talking about giving injection, you don't have anything to demonstrate. So it's just theory, theory, theory (Nurse faculty).

The gap will continue to even widen if what they are taught there, they come here sometimes the resources are not there and then the motivation is not even there to take the students through (Clinician).

I cannot blame them, you know Ghana we are still developing you improvise from the classroom and you come to the hospital too where you are supposed to see it you keep improvising (Student).

The general lack of resources precluded students from performing some procedures and also influenced how certain procedures were performed by students and clinicians. This introduced some form of disparity between what is taught in the class/simulation room and happenings in the clinical environment.

At times with the resources, let's say today for instance I was supposed to perform a procedure on my client, even how to get water they will tell you that TTH there is always water shortage. You will come at times the in-

charge is not around. You will want to perform a procedure even gloves at times they are not even available. And all those things they restrict the way we do things (Student).

The gap will continue to even widen if what they are taught there, they come here sometimes the resources are not there and then the motivation is not even there to take the students through (Clinician).

Improvising

Nurse faculty, clinicians and students had to navigate clinical procedures by improvising for unavailable equipment or items.

That improvising stuff is just killing us, I remember last time we went to a particular hospital they claim they have some stuff, so one day they asked a colleague of mine to go and bring a tourniquet, the colleague went and it was lying, but he has never seen it always they are improvising with a giving set. They are improvising you have never seen it before ... even drip stand, they improvise (Student).

The act of improvising almost everything amidst apparent resource constraints, prevented the students from experiencing the ideal realities of the procedures or skills with the ideal equipment or items.

Aside the clinicals we come to do here, we are supposed to do maybe classroom demonstration and stuffs, and we are always improvising, they will tell you okay, colostomy care fine, there is not even colostomy bag, you have never seen it before, you come to the hospital and the hospital is also improvising, so many things during the four year course of study we

just assume or we see pictures of it on our phones, on the internet and stuff
(Student).

Students described this experience as disturbing especially with the knowledge that unavailable equipment may be made available during their final practical examination. The act of improvising almost everything causes students to forget the right ways of carrying out the procedure contributing to the theory-practice gap.

Those items you will be looking for them you will not get them but during the exams day you will not know where they will miraculously come from, you will just see them and they will just be blinking into your eyes
(Student)

... practice makes you perfect, it can either perfect you or make you get used to a bad habit. So if you are always used to improvising and not following the right protocol because you have to manage, because there are no resources, at the end, you come out and you forget the right procedures you have to use to carry out a nursing procedure ... you never see top sheet, you never see mackintosh... nothing (Student)

Theme Three: Challenges of the clinical learning environment

A combination of system inadequacies and resource constraints helped in introducing challenges for nursing students attempting to acquire practical skills and to experience the realities of patient care.

Idealism versus realism

Narrations of students indicated that the ideals taught in the class/simulation room were very different from what was observed or done in the ward by practicing nurses. Clinicians adopted conventional and often simple approaches to procedures and patient care activities which were not in consonance with textbook dictates or class/simulation room discussions or demonstration sessions.

I want to assume without admitting that the students have been taught what they are required to be taught. But when they come to the field, what they have been taught is not what they see there and I am insisting that for no fault of clinicians because it is either the resources are not there or the workload is so much that you cannot go by the dictates of the procedure. Let me say for admission, let us say three people come for admission the same time, it is supposed to be some kind of a procedure but, the workload will not allow you to go through that, so what the students have learnt in theory cannot be practiced here (Clinician).

You learn the right thing but you come, they are not even there, what would you do? like what! and then you get used to it because you have been practicing like that when you come out there's no way you can know the right thing because throughout your practice you just follow what everyone does (Student).

The disharmony between what was practiced in the clinical environment and what was demonstrated or taught in the classroom was related to the blind

adoption of practices or recommendations from other cultures and settings without any modification to suit the context and the needs of the patient. Due to the implementation challenges associated with adopted practices, clinicians either ignored such practices or devised conventional approaches of carrying out these procedures. Some participants also attributed this to the failure of evidence based practices in the hospital setting.

The gap also exist because, we as Ghanaians, let me put it that way, in our setting, we are relying on what people have written about those things in their setting and the context is different, so once we are relying on that one to teach our students and our setting is so different so when they get there, is not going to be the same, so you will see it as a gap (Nurse faculty).

Robotism

Students also observed that clinical activities were routine, ritualistic and monotonous, causing students to become disinterested and apathetic in clinical learning activities.

...we go is one way, you are always following, vital signs, medication, is just a one way thing we keep doing" (Student)

And always when you come you will be doing dusting, vitals, dusting, vitals so for about one month you will be doing dusting and vitals, so it makes you feel bored, you don't learn any new thing (Student).

High expectations

Students were expected by clinicians to demonstrate high levels of practical or clinical competence without regard to their level or year of training.

Students who fell short of these unrealistic expectations were ridiculed and spoken of in derogatory terms.

... they were just in year one, their first clinicals in the hospital, male ward, the way they were treating them, they were expecting them to know things they can't even know. That was just their first clinicals, you expect them to give injections and the likes accurately meanwhile it is just their first time. So most of them were frustrated because they don't know anything and when they can't do they will be insulting them and talking to them as if they don't know (Student).

Labour

Students on clinical placement were considered as additional working hands rather than students who needed to learn. Students were expected to assume full duties and work like regular staff. Most students reported being used by regular nurses to accomplish personal and non-clinical tasks including being sent on errands during clinical placement.

...he will just tell you go and buy food ... it is more or less like it's a responsibility we are just here to do. It is not like we are learning... (Student).

When you come to the ward, you are part of the staff, they treat you like you are part of the staff, you are expected to work ... it is just that you do not get paid, that is the only difference (Student).

Intra-professional sabotage

There appeared to be a power play and rivalry between university undergraduate students and graduates from Nurses' Training Colleges (NTC) who formed the majority of nurses in the clinical environment. This rivalry is thought to arise from the relatively higher ranking the undergraduates attain immediately after completion of the undergraduate nursing programme. Products of the NTCs stereotyped the university students as practically inept and arrogant, and hence were unwilling to assist and facilitate their clinical learning.

... there's that kind of rivalry we don't know where it started from but it has been there, so even when we go to the ward, at times it's just the few degree nurses sometimes the in-charge if he is very friendly ...when it comes to the staff nurses, those who have just finished their diploma and the certificate, I think they have that rivalry with the degree students at times even though you try to be as calm as possible but they just see it that you are a degree student. I don't know whether they expect us to know too much or they see us to be arrogant something but in reality, you can calm yourself down as much as possible but some will still not teach you...
(Student).

Learning opportunities

Large student numbers coupled with the unavailability of resources ensured that students had limited learning opportunities to acquire practical skills. The number of students in a class/simulation room or a particular clinical area

always exceeded the capacity of the class/simulation room or clinical area to promote adequate skills acquisition.

There is the problem of student-patient ratio. You go to the ward now at the TTH ... now they are running cubicle system ... we have heard of stories of in-charges telling some of the students to go back because they are so many and this is a patient who is sick or chronically ill, who needs some rest ... they are also trying to perform one thing or the other on the patient but in that way too, we might be stressing the patient (Nurse faculty).

Theme Four: Clinical placement and supervision

The organization of activities of clinical placement and supervision of students also had challenges that contributed to the widening of the theory-practice gap.

Timing and sequencing

Clinical placements were not organized to be in synchrony with theoretical content taught or discussed in the classroom. Improper sequencing of theory and practice was a major worry for students. As a result of space and/or poor organization, students had to endure placement in clinical units that were not directly related to the content discussed in the classroom prior to the placement.

... the condition in the hospital is not favourable, like there should be a connection between the hospital and our institution, whatever we study in school you come and then throughout the four (4) years you won't even see certain cases in the hospital ... we study let's say TB in school for the

trimester and we come to do clinicals they put you in medical ward, surgical, like we don't actually in real sense practice what we studied that trimester because when we come we are many so they have to divide us, everybody go here, this go there, go there, so even what we really studied in the class we don't get to practice it at all (Student).

Conversely, the theory may have been taught sometime previously, in which case they might have forgotten it. Some students cited situations in which they had learnt about a group of conditions or clinical problems in the second year of the programme only to encounter these problems in the clinical area either in the third or final year of the programme. According to the students, it became increasingly difficult to relate theory and practice after such a long period of time.

Students also felt the time allocated for clinical placement was always too short to follow interesting clinical cases and to promote clinical learning.

... our clinical system is not all that good, because we go to the hospital once a week ... the client you have, you will not get the client to follow up with the cases ... you go this week, you meet a client with a condition the following week by the time you go the client has been discharged (Student).

Learning objectives

The objectives and learning outcomes during a clinical placement were perceived as vague; lacking in detail and explicitness. Accompanying learning outcomes or objectives were delayed in some instances, clinicians and students observed they had to decide on the details of the clinical placement. This also

contributed to the poor sequencing of clinical placement as clinicians placed students in clinical units without reference to their clinical learning needs.

Most of them come to the hospital and they do not even know what they are coming to learn, some schools do not accompany any competencies to the hospitals (Clinician).

But once you have a competency list that you take them through from the school, when they come to the clinical area they know what is expected of them, they know that by the end of this 2 or three weeks they are supposed to learn ABCD, but if that is not at the back of their minds, they do not even know what they are coming to learn, they come to the clinical area they roam around and no preceptor will want to waste so much time on them (Clinician).

Support

Although both faculty and clinicians identified the preceptorship system as the approach adopted by the university and hospital to provide support for students and to help bridge the theory-practice gap, students' narrations did not confirm the existence of preceptors and their interaction with students. According to the students, they were mostly left to their own fate during clinical placement.

Moderator: Are you assigned to preceptors?

Student: No no

Moderator: Do preceptors handle you when you come on clinicals?

Student: no nono.

They just assign you, you are suppose to go to male ward, you just go there, at times if you go and you are not even the one looking for the in-charge you will even finish the clinicals and the in-charge won't know (Student).

I don't know whether there are preceptors but we are not seeing that kind of connection between the school and then the hospital (Student).

The main thing is the fact that we teach the students, we sit back and say go (Nurse faculty).

Faculty also asserted the ineffectiveness of the preceptorship system because of lack of preceptor training and the supernumerary role preceptors assume.

... when it comes to that area, the clinical placement, another problem that I think the students are facing is the preceptorship. I think there should be people in the wards, I mean people identified and trained to handle these students when they come for clinical, but not just like coming oh sister our students are here and they are left in vain. They are not with anybody (Nurse faculty).

Clinicians who participated in this study were mostly ward managers and also doubled as preceptors. However, there was no formal agreement or engagement between this group (the preceptor group of the hospital) and any school. The preceptor group was an initiative by the hospital to facilitate the training of nursing students.

That is why we have taken it upon ourselves to develop this preceptorship system ... we are really making sure that our preceptor system is working efficiently well and we are linking up with the various training institutions so that they recognise our effort as such then we will be able to bridge the gap (Clinician).

Due to a lack of a formal engagement between the university and the preceptors, the preceptors did not feel obliged to facilitate the clinical learning of students. The responsibility to facilitate clinical learning was perceived as personal and discretionary by clinicians. Another reason cited for the inability of clinicians to teach students was the multiplicity of roles played by preceptors and the associated stress of playing dual role.

As clinicians whatever you do, you are doing it on your own volition. I am paid to nurse clients. I am not paid to teach students (Clinician)

I believe this is a teaching hospital so if for anything at all, there should be teaching and learning going on in the wards. But then they are relaxed, thinking okay you are the student - you need the knowledge so you have to ask me if you don't ask me I take it as you are not ready to learn but this is a teaching hospital, they don't do that to the medical students, when they come here, they go round with their doctors we see them; and then they lecture them they move from patient's bed to patient's bed (Student).

We also have the issue on the ward where clinicians are stressed and so, they do not really have time for who is ready to learn and who is not ready

to learn, so those who are ready to learn are the people who will get some information (Nurse faculty).

... we have to re-enforce our preceptorship training, make it very effective. But that calls for money too. Until the institution is ready to release money ... you cannot come here and spend the whole time here, you are training the person, the person is doing work for you not paid. It will take somebody with passion to continue (Nurse faculty).

Students had to establish personal relationships with clinicians to facilitate their own clinical learning. Students who failed to establish these relationships were perceived as arrogant or disinterested in clinical learning.

It is more or less like it depends on the individual student's rapport he establish with the nurse that indicate that he will teach you or not (Student).

... in terms of the nursing it's more or less like we just come, is if you ask that they will then teach you if you do not ask that is just all (Student).

Collaboration

The university appeared to have failed in collaborating effectively with the hospital to promote clinical learning and practical skills acquisition.

... in as much as the students are supposed to motivate the staff, to teach us, but if the school also try in a way possible to establish that strong link to help them to train us, I think that one will also help us. But it is more or less like that link is not there between the school and then the staff of the

hospital, so that one also prevents us from achieving some of the competencies (Student).

There was no established way of ensuring uniformity in procedural details often leaving students confused as to which approach to adopt.

There is a dichotomy between the clinicians and then the lecturers. We teach the students something, they go to the clinical side, and it is done differently. Sometimes the clinicians have got some updates than we in the classroom because we have not been getting updates, we are still holding onto the old ways of doing things ... a case in point is this tepid sponging, they say it should be from the feet upwards, but there are some of us still in the classroom who haven't seen this in practice, and so how do you teach it? (Nurse faculty).

The supervision of students on clinical placement was also uncoordinated. Nurse faculty were perceived as being apathetic towards clinical supervision.

They also have evaluation forms we do fill for them and I wonder what the tutors do with the evaluation forms, because I have a lot of them sitting in my office. At the end of the clinicals some of them do not even come to work so they will not even pick up the evaluation forms to send back to school. So at the end of the day, how do you even know about what the student came to do, where he or she is falling short? (Clinician).

The communication in spelling out expectations and responsibilities was very poor, some nurse faculty members observed.

The fact that there is no communication between the clinicals side and then, the academic side. It seems to be like, you are doing a different thing here and then a different thing there. So sometimes students, even the serious ones, they get confused. Because some come back asking, you told as we should do this, that, that, but when we went to the ward, this is not what was done (Nurse faculty).

Obscured student voices

In the midst of these challenges in the pursuit of attaining clinical competence, the concerns of students were not considered and acted on to promote change.

... you try to lodge the complaint, we have tried several times we will go and then is like they will tell you students like complaining they will tell you we don't stay in the ward when you are trying to address an issue they will also be trying to use your negative side to combat it. At times you go to address the issue that we don't get more time to learn in the clinical area. ... once you try to lodge a complaint, they use your negative sides to combat what you are even trying to gain (Student).

Theme Five: Nurse faculty factors

Clinical competence derived from extensive clinical experience was identified by both nurse faculty and clinicians as a key requirement to effectively teach as a nurse faculty and to facilitate practical skills acquisition.

The nursing tutors that are even employed to teach the students in fact the least said about some of them the better. This is a profession, you will

have to teach what you have learnt, what you have practiced, if you have finished whether university or nursing training college and you go straight into the classroom, there is no doubt about the fact that you cannot be a better teacher than somebody who would have practiced for four or five years, because in teaching you will bring up the scenarios , the patients you have nursed the cases you have encountered (Clinician).

Clinical experience and expertise of nurse faculty

Some clinicians raised concerns regarding the clinical experience and expertise of nurse faculty suggesting that most nurse faculty were either inexperienced or had lost touch with the realities of nursing practice due to prolonged absence from active clinical work. The ability of some faculty members to effectively impart knowledge and practical skills were thus in serious doubt.

The other thing has to do with educators themselves updating themselves in clinical practice. ...Maybe it is a long time some of the educators have stepped foot in the wards, they do not know what is happening in the wards and so what do they teach the students in the school? (Clinician).

Nurse faculty observed that they were consistently left out of fora organized by various agencies to provide updates on clinical issues and procedures for clinical practice. This observation suggested that nurse faculty were not actually in direct contact with the realities of nursing practice.

That miscommunication between, that gap between the clinical side and we. So sometimes to help improve these things, when there are new

updates in any of the clinical skills I believe that when they are training the clinicians, we should be involved. That is the only way we can bridge that gap else we will be saying different things here, and on the ground, the real things are different so either we are saying the wrong things based on the passed things we learnt before we got here. And it may not be up to date with the current things and so we end up confusing the students (Nurse faculty).

Pedagogical approaches

Pedagogical approaches used by some nurse faculty members promoted rote learning and was devoid of innovations to facilitate critical thinking and problem solving skills. Nurse faculty and clinicians contended this approach contributed to the students' seeming lack of interest in clinical placement since assessment and evaluation predominantly centred on recognition and recall.

You go and read on the internet, read the books and come and pour to them, and they are forced to chew, and so you will find them thinking that there is no need to go to the ward because I can chew, the lecturer has given us a handout, so I will chew and give it back to them (Clinician).

... lecturers have to adopt more practical ways of teaching. We should shift more and more away from the theory kind of thing and do practical teaching (Nurse faculty).

Discussion

Findings of this study confirmed the existence of the theory-practice gap in the Ghanaian context of nursing education and practice. The recognition of the

complexity of healthcare delivery systems and the need for parallel improvements in nursing roles prompted the introduction of major reforms in nursing education in some parts of the world (Marrow, 2009; Rich & Nugent, 2010; Salminen et al., 2010; Spitzer & Perronoud, 2006a). These reforms are based on an understanding of the theory-practice gap and are intended, among other things, to help bridge the gap between theory and practice. This study presents the nature and scope of the theory-practice gap from the perspective of faculty and students at the University for Development Studies, and clinicians at the Tamale Teaching Hospital.

Two main understandings of the theory-practice gap emerged from the findings of this study (1) the inability of student nurses to wholly relate, and translate theory and simulation-derived skills into actual clinical skills or competencies in the real clinical environment (2) the failure of clinicians to utilise the best available evidence in the care of patients. These definitions of theory-practice gap appear very similar to that of other authors and commentators (Baxter, 2007; Carson & Carnwell, 2007; Corlett et al., 2003; Higginson, 2004; Landers, 2000; Maben et al., 2006; Rolfe, 1996; Rolfe, 2002; Scherer & Scherer, 2007; Spouse, 2001; Wolf, Bender, Beitz, Weiland, & Vito, 2004). The second definition of theory-practice gap as failure of clinicians to utilise the best available evidence in this study was rather uncommon among participants. Perhaps, this alignment to the former definition of theory-practice gap can be related to the self-explanatory tone associated with the term. Therefore, this finding does not necessarily imply the participants had prior, conscious knowledge of the existence and understanding of the theory practice gap.

The participants' belief of adequate classroom preparation and extensive clinical experience as prerequisites for clinical learning and classroom teaching respectively, suggested that theory and practice are perceived as inseparable in this setting. This finding is in contravention to Sellman (2010) assertion of theory as belonging in the classroom and practice in the ward.

In a setting with limited resources, large student numbers and a very low lecturer-student ratio, inadequate classroom teaching and learning may not be a surprise finding. Experiences from the European region also suggested that higher educational institutions will always be more inclined towards increasing student enrolments when financial resources become limited (Spitzer & Perrenoud, 2006b). In other resource constrained settings, nursing and medical schools have invested in electronic learning systems to simultaneously provide greater educational opportunities for students, and to enhance faculty effectiveness and efficiency (Frehywot et al., 2013).

Findings of the present study also related to the concept of a 'professional-bureaucratic work conflict' as an explanatory model for the existence of the theory-practice gap (Maben et al., 2006). Bureaucracies within the university setting rendered nurse faculty powerless, and by extension restricted the professional socialization and clinical learning of student nurses.

Faculty members in universities and other higher education institutions are expected to hold a doctoral level qualification to assume teaching, research and managerial roles, and to rise in the hierarchy of the institution. Experiences from nursing educational reforms across Europe showed that rapid integration of

nursing programmes into higher educational institutions had a negative impact on (1) nursing faculty members adjustment to their new roles in the higher educational settings (2) student competencies and (3) content and structure of the nursing curriculum (Spitzer & Perrenoud, 2006a; Spitzer & Perrenoud, 2006b).

Low academic qualification was identified as a key factor interfering with faculty adjustment to the integration process (Jackson & Butterworth, 2007; Spitzer & Perrenoud, 2006b; Turale, Ito, & Nakao, 2008). Faculty members with low academic qualifications experienced difficulties in conducting research independently and ensuring career advancement. The powerlessness of faculty identified in this study may be related to the low academic qualification and preparation of faculty for their new roles within the university setting. Only one faculty member at the department of nursing held a doctoral level qualification at the University for Development Studies at the time of writing.

Although there has not been a formal recognition and endorsement of the need for integration of nursing programmes into higher educational institutions in Ghana, most universities are now offering undergraduate nursing programmes without any road map to guide the integration process. Major stakeholders need to recognize the challenges associated with this move and put in place measures to boost the productivity and independence of nursing faculty. In settings where nurse faculty qualifications are not major issues, political interferences in nursing education activities usually occur at the national level as part of wider healthcare reforms to adjustments in economic trends (Rich & Nugent, 2010). The religious and political interferences cited in this study occurred at the level of the

university, exposing nursing faculty as powerless and significantly hindered the role of faculty in ensuring professional socialization and clinical learning of the student.

Clinical placement offers the student the opportunity to experience the complexity of the clinical environment, integrate theoretical nursing knowledge into actual nursing care, build a repertoire of skills in clinical judgement and decision making, and establish a professional identity (Papp et al., 2003; Pollard, Ellis, Stringer, & Cockayne, 2007). A positive clinical learning experience increases the confidence and competence of the student (Courtney-Pratt et al., 2012) and allows the student to envision the patient as a unique individual (Henderson, Cooke, Creedy, & Walker, 2012).

Happell (2008) in a survey to identify the determinants of a positive clinical experience found that student perceptions of a positive clinical experience were related to the duration and location of the clinical placement, and the time spent with the clinical educator. Findings of this study revealed that clinical placements were short and asynchronous with the clinical learning needs of the student, and without any built-in student support system. Challenges of clinical placements in relation to duration, appropriateness for clinical learning needs of the student and student support are well noted in the literature (Killam & Heerschap, 2013; Spitzer & Perrenoud, 2006a).

As in other studies (Dahlke & Hannesson, 2016; Killam & Heerschap, 2013; Papp et al., 2003), poor communication and collaboration between schools of nursing and practice settings is largely accountable for the challenges related to

clinical placement and learning. The total lack of support for students in this study, even after numerous complaints from students, has not been reported in the literature.

However, this may be related to the powerlessness of nursing faculty within the university setting. For effective integration of theory into practice, the university and the clinical setting must be seen as the separate institutions of learning the two really are, and deliberate measures put in place to provide support for student learning in both institutions.

Faculty members with close collaborative and communication ties are needed in both the university and clinical setting to ensure theory-practice integration. A full time clinical coordinator may also be needed to address issues of clinical sequencing, communication and collaboration, and clarification of student learning objectives. Although nurse faculty in this study recognized the need for student support within the clinical learning environment, weak collaboration and issues related to reward or appreciation of the preceptor's role, precluded the utilization of the preceptorship system the hospital had put in place.

The tendency of staff nurses and preceptors to focus almost exclusively on patient care to the neglect of the learning needs of student nurses has been reported in the literature (Dahlke&Hannesson, 2016; Ohrling&Hallberg, 2000b; Papathanasiou et al., 2014; Ryan-Nichols, 2004). Despite working in a teaching hospital and having a professional obligation to support the clinical learning of student nurses (Ghana Health Service [GHS], 2006), staff nurses in this study perceived patient care as their prime responsibility. They therefore felt no

obligation to support the clinical learning of students due to the lack of reward or appreciation from the university.

Preceptors can feel motivated and appreciated in several ways including receiving positive feedback from students, issuance of a letter of appreciation from the nursing school, and opportunity for participation in a professional development activity related to their area of practice (DeWolfe, Laschinger, & Perkin, 2010).

As part of deliberations on reforms in nursing education in the Ghanaian context in the future, approaches to establishing good working relationships between the university and the practice setting needs to be considered to ensure theory-practice integration and clinical learning. In addition to the general lack of student support, learning outcomes for clinical placements were often delayed and or inaccessible to the student. Students had to learn by re-inventing the apprenticeship system through the establishment of personal relationships with clinicians and becoming subservient to staff nurses.

The relationship between staff nurses and student nurses is a key determinant of the quality of the student clinical learning experience and professional socialization (Dahlke&Hannesson, 2016; Hossein et al., 2010; O' Mara, McDonald, Gillespie, Brown, & Miles, 2014). Students' experiences of the clinical learning environment in this study indicated that staff nurses held high expectations of the students and used students as an additional source of labour to accomplish nursing care activities.

Student nurses have always had to hold a dual role of combining learning, and active involvement and contribution to patient care (Allan et al., 2011; Papathanasiou et al., 2014). When staff nurses or preceptors have high expectations of students, the potential for fear of embarrassment and ridicule to push students out of their scope of practice and compromising of patient safety will always exist (Dahlke&Hannesson, 2016; Killam&Heerschap, 2013). In O' Mara et al. (2014), student nurses perceived the high expectations of a demanding staff nurse as a demonstration of trust by the staff nurse in the abilities of the student. Such students felt motivated and encouraged to take personal initiative for clinical learning. Support and supervision packages for students should therefore be tailored to the needs of the individual student.

Students experience a sense of belonging and a positive clinical learning experience when working within a team of nursing staff in a nursing unit or ward (O' Mara et al., 2014; Papathanasiou et al., 2014). In this study, although students were working in nursing wards as team members, the element of intra-professional sabotage had a toll on their clinical learning experience. A thin line exists between the roles and scope of practice of diploma nurses from the traditional nursing training colleges and graduate nurses from the university.

Eagar, Cowin, Gregory, and Firtko (2010) suggested that the lack of clarity and understanding of the roles and scope of practice of nursing team members has the potential to cause intra-professional workplace conflict. Such conflicts often involve students and can affect the self-esteem and clinical learning of the student (Algozo& Peters, 2012; Woefle& McCaffrey, 2007).

Currently, students from both programmes are required to take the same licensing examination and the curriculum used for their training is only slightly varied.

The design and implementation of educational programmes to achieve and maintain a balance between theoretical knowledge and practical skills has been a challenge for nurse educators and other stakeholders in nursing education (Patersen&Grandjean, 2008; Rich & Nugent 2009; Spitzer &Perrenoud 2006a; Wynaden, Orb, McGowan, &Downie, 2008). The curriculum and educational design adopted by the University for Development Studies was perceived as inadequate in promoting practical skills acquisition by students. In contrast, faculty perceived the curriculum as adequate in promoting both knowledge and skills acquisition but limited due to implementation challenges. Debates on curriculum adequacy are centered on the perception of the ideal profile of a graduate nurse.

Academics and nurse educators favour a graduate nurse with a broad academic profile equipped with the knowledge and skills for lifelong learning such as critical thinking, relevant information searching, high level analysis and synthesis of information, and decision making (Spitzer &Perrenoud, 2006a). Graduates with a competency-based profile are prepared for immediate clinical practice and capable of applying knowledge, understanding and skills in patient care activities. Although there is evidence showing that graduates with a broad academic profile become fully competent within three to six months of full time clinical work, employers, hospital administrators and clinical nurse managers

preferred graduates with a competency-based profile (Clark, Maben & Jones, 1997; Kelly, 1996; Spitzer & Perrenoud, 2006a).

The desired graduate profile, based on the curriculum adopted by the University for Development Studies, is not very clear. The university policy of mandatory community field work restricted faculty from fully implementing the recent NMC (2015) curriculum recommendations. The curriculum stipulates 6 hours per week of intra-semester clinical placement for a 16 weeks semester and 4 consecutive weeks of inter-semester clinical placement. It is only the former of the two recommendations which is implemented.

The timing of the intra-semester clinical placement does not also appear to facilitate clinical learning and practical skills acquisition due to the tendency of students to focus on assessment tasks rather than clinical learning. In a study by Tiwari et al. (2005), nursing students' learning during clinical practicum was found to be influenced by their perceptions of the assessment task. Students in this study were more likely to devote more time and attention to the acquisition of theoretical knowledge when clinical practicum was interspersed with classroom teaching sessions. The assessment task in this situation is always in the form of quizzes or examinations. To achieve a balance between theoretical knowledge and practical skills acquisition, future curriculum recommendations should emphasize the inter-semester clinical placement and ensure time is allocated solely for intra-semester clinical placement.

All three groups of participants in this study were aware of the differences that exist between the ideals of nursing care taught in the classroom and reality of

nursing care in the wards or clinical settings. Students reported of nursing care being routine and monotonous, with clinical staff adopting conventional, simplistic approaches to nursing care. Maben et al. (2006) concluded that the professional-bureaucratic work conflict restricted newly qualified nurses from implementing the ideals and values of preregistration nursing courses. Staff nurses unconsciously served as the socialization messengers of covert rules which emerged from structural and organizational constraints such as time pressure, role constraints, work overload, and a task-oriented approach, as opposed to patient-oriented approach, to the organization of nursing care. The covert rules encouraged prioritisation of physical over psychological care activities and speed during care activities, and discouraged students from questioning existing care in an attempt to influencing change.

Clinicians in this study also identified some elements of organizational sabotage such as time constraints, work overload and role constraints, which encouraged the reduction of nursing care to monotonous, routines. The consequence of this observed differences between theory and practice, as in other studies (Killam&Heerschap, 2013; Maben et al., 2006), is a confused and frustrated student. Blind adoption of foreign and culturally inappropriate nursing, models, theories and practices was also cited by participants as a contributory factor to the differences observed between the ideals and realities of nursing care. Models, theories and practices adopted from foreign cultures are often poorly understood and utilized (Izumi, 2006; Turale, Ito, Nakao, 2008). These observed

differences may serve as a challenge for Ghanaian nurses to develop culturally appropriate nursing knowledge, theories, philosophies and ethics.

A prolonged clinical career has long been regarded as a prerequisite for a successful academic career and also as a contributory factor to nursing faculty shortages (Yordy, 2006). Novice nurse faculty have also been found to be inadequately prepared in pedagogical approaches such as lecturing (Rich & Nugent, 2010; Young & Diekelmann, 2002) and for the challenges of teaching nursing. It is worth emphasizing that the skills set required to excel as a clinician and a faculty member are separate and may not necessarily occur together in one person (Costa & Figueredo, 2008; Johnsen, Aasgaard, Wahl, & Salminen, 2002). The difficulty experienced by new nurse faculty has a tendency to increase stress, frustration and dissatisfaction within the work environment.

Narrations of both clinicians and faculty members questioned the pedagogical approaches and clinical expertise of nurse faculty, linking nurse faculty pedagogical approaches and clinical expertise to the perpetuation of the theory-practice gap. This is quite understandable in a context of severe resource constraints. However, interventions designed to support and enhanced the preparedness of new nurse faculty, with or without extensive clinical experience, may reduced stress, frustration and work place dissatisfaction.

Innovative approaches to participatory learning may boost student attitudes towards learning. The disinterest and apathy of students towards learning identified in this study may be related to the traditional pedagogical approaches utilized by nurse faculty. Traditional approaches such as lecturing, predominantly

promote rote learning rather than critical thinking and problem solving (Turale et al., 2008). Problem base learning, compared with the traditional lecture method, has been shown to be a more effective approach in increasing the level of knowledge and attitudes of students towards learning (Arthur, 2001; Dehkordi&Heydarnejad, 2008; Hwang & Jang, 2004).

Although job security and personal rewards are amongst the foremost reasons for choosing nursing and other healthcare related professions as a career (Boughn, 1994; Boughn, 2001; Miers, Rickaby, & Pollard, 2007; Williams, Wertenberger, &Gushuliak, 1997), the long term impact of decisions rooted to these motivations on student conduct and attitudes towards learning has not been established. The perception of the ideal prospective student nurse as caring may not be unique to nursing. Students who chose other healthcare related professions such as medicine, radiography and physiotherapy cited their caring attitude as an influence on their choice (Miers et al., 2007). Nurse faculty therefore need to find innovative pedagogical approaches and provide positive clinical experiences to socialize the students attracted to the profession of nursing.

Chapter Summary

In this study the researcher sought to explore the understanding of theory-practice gap in nursing from the perspective of nurse faculty, students, and clinicians. The results of the study are revealing. The results support and are supported by the work of other researchers in nursing practice and education about the existence and scope of the theory-practice. Key themes identified include System Inadequacies, Resource Constraints, Challenges of the Clinical

Learning Environment, Clinical Placement and Supervision, and Nurse Faculty Factors. However, given that purposive sampling technique was used to select information rich participants, the perceptions of theory-gap elaborated in this study may be limited to only the views of participants. Findings might not be transferable to a larger group. Limitations of this study will be discussed further in the next chapter. In the next chapter researcher will also identify the conclusions that can be drawn from the results of the study and make recommendations for nursing education, practice and further research.

CHAPTER FIVE

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

This study set out to explore the understanding of theory-practice gap from the perspective of diverse key players (nurse faculty, students and clinicians) within nursing education in Tamale-Ghana. The researcher sought to answer the following research questions:

1. What is the understanding of theory-practice gap by faculty?
2. What is the understanding of theory-practice gap by clinicians?
3. What are the efforts of faculty in bridging the theory-practice gap?
4. What are the efforts of clinicians in bridging the theory-practice gap?
5. What are the perceptions of generic bachelor of nursing students with regards to the theory-practice gap?

Considering the magnitude and persistence of the theory-practice gap globally, and given the unique context of nursing and healthcare in Ghana and other nations of SSA, identification of the nature and scope of the theory-practice gap needed to be undertaken. Without this requisite knowledge, effective strategies to address the theory-practice gap may not be developed. A descriptive phenomenological approach proved a successful approach in addressing and shedding light on these research questions. In this chapter the researcher summarises the study process,

and main findings obtained, outlines the strengths and limitations of the study and provides recommendations for practice, education and further research.

Summary

A descriptive phenomenological method of enquiry was used. Data were collected using focus group discussions with the aid of a topic guide. A purposive sampling technique was used in recruiting the study participants. The sample consisted of 32 participants, comprising eight nurse faculty, 12 clinicians (six in each discussion session) and 12 nursing students (six in each discussion session). Five focus group discussion sessions were held, one for nurse faculty, and two each for students and clinicians. The study adopted Colaizzi's (cited in Sanders, 2003; Speziale & Carpenter, 2007) descriptive phenomenology data analysis process.

Key findings

The study identified five major themes:

- System Inadequacies
- Resource Constraints
- Challenges of the Clinical Learning Environment
- Clinical Placement and Supervision
- Nurse Faculty Factors.

Corroborating the findings of other researchers in nursing practice and education, participants in this study confirmed the existence of a theory-practice gap in the research setting. They indicated that theory-practice gap presents a huge challenge to nursing practice and education in Ghana. The continuity of the

theory-practice gap has implications for the individual nurse, nursing students, patients and the profession of nursing. These include low staff confidence and morale, low nursing staff satisfaction, poor quality of nursing care and poor public perception of nursing.

Though preceptorship appears to be the most predominant model consciously adopted by both nurse faculty and clinicians to promote theory-practice integration in this setting, there are serious challenges to its implementation. Other models of theory-practice integration suggested included the use of lecturer practitioner and an exchange programme between clinicians and faculty.

Conclusions

The theory-practice gap in nursing has existed for over four decades and it is projected to continue in some manner. Findings of this study confirmed the existence of the theory-practice gap in the Ghanaian context of nursing education and practice, and add to the growing literature acclaiming theory-practice gap as a global phenomenon. In the context of Ghana the existence of theory-practice gap revolves around system inadequacies; resource constraints; challenges of the clinical learning environment; clinical placement and supervision; and nurse faculty factors. The total lack of support for nursing students on clinical placement, intra-professional sabotage, blind adoption of foreign nursing protocols and practices, improvising amid obvious resource constraints were some of the new findings relating to the contributory factors of theory-practice gap. This new perspective on the nature and scope of theory-practice gap from the

context of Ghana (Africa) adds to the world of knowledge contained in literature on theory-practice gap.

The theory-practice gap is recognised as a major threat to the proficiency of nursing as a profession to cope with the ever evolving and increasingly complex health care needs of the individual and society. In Ghana, stakeholders in nursing education and practice are yet to realise the realities of the implications of the theory-practice gap and its associated challenges on contemporary nursing education and practice. This study presents the initial understanding of the nature and scope of the theory-practice gap in this setting. It may also serve as the basis for developing strategies to address the gap and for further research.

Strengths and Limitations of the Study

The study is the first of its kind to provide information on the understanding of theory-practice gap from the perspective of diverse key players (nursing students, nurse faculty, and clinicians) in nursing education and practice in Ghana.

Despite several attempts to ensure rigour, and a reflection of the understanding and perceptions of participants on theory-practice gap, this study has some limitations. Because of time constraint, the study was conducted in only the University for Development Studies and Tamale Teaching Hospital. Therefore, transferability of findings presented in this study may be limited by the choice of participants and the settings. The selection criteria and sampling technique ensured the selection of information rich participants.

Considering that the department of nursing in the University for Development Studies is a relatively new department, some of the concerns and issues raised could be related to the obvious challenges of growth as a department. Because most hospitals and nursing schools share common operational factors such as regulatory guidelines and resource availability, findings of this study may, nonetheless, appear similar to the realities in other parts of Ghana. Since clinicians of Tamale Teaching Hospital interact with students from various nursing schools (including the University for Development Studies), the perceptions of clinicians may be formulated from their collective interaction with all nursing students and not only nursing students from the University for Development Studies. Same can be said of the experiences of the students from the University who might have experienced placements at other hospitals or clinics.

Recommendations

The following recommendations were made concerning nursing education and practice, and further research.

Recommendations for nursing education

- The development of strong and meaningful partnerships among educational programmes, practice and other stakeholders to ensure the training of competent nurses.
- Involvement of all stakeholders; nurse faculty, clinicians and nursing students, in the development and review of curricula in departments and

schools of nursing to produce content relevant to the needs of students and the evolving clinical learning environment.

- The researcher also recommends the use of an eclectic approach, classroom teaching of nursing practice, simulation sessions, and a formal support programme (preceptorship, clinical instructor, link tutor) to facilitate practical skills acquisition.
- Nurse faculty and clinicians should adopt innovative evidence-based contemporary pedagogical approaches such as problem-based learning to facilitate the learning of students in both clinical and non-clinical learning environments.
- New and existing faculty members need to be sponsored to undertake refresher courses to enhance their teaching and research skills to fit into the culture of higher educational institutions.

Recommendations for practice

- Hospital administrators, nurse faculty and clinicians should be abreast with the positive implications of theory-practice integration on the quality of nursing care and education.
- Effective monitoring teams/committees should be formed within the various hospitals in Ghana and tasked with the responsibility of supervising the activities of nurses and other health staff towards student learning needs
- Future development of policies and protocols for nursing care should be based on research evidence

Recommendations for further research

- Considering that the sites chosen for this study are relatively new and some of the challenges they face might be genuine challenges of growth and development, the study could be replicated in one of the traditional universities and teaching hospitals.
- Based on the findings of this study, an intervention may also be developed and piloted to ascertain its effectiveness in bridging the gap between theory and practice.
- Further research is needed to understand how the relationship between departments or schools of nursing in the universities and hospitals could be fostered.

REFERENCES

- Addae, S. (1996). *The evolution of modern medicine in developing country: Ghana 1880—1960*. Edinburgh: Durhan Academic Press.
- Addis, G., & Karadag, A. (2003). An evaluation of nurses' clinical teaching role in Turkey. *Nurse Education Today*, 23, 27-33.
- Ajani, K., & Moez, S. (2011). Gap between knowledge and practice in nursing. *Social and Behavioural Sciences*, 15, 3927-3931.
- Akiwumi, A. (1994). *Nursing education in Ghana for the 21st century*. Accra: Woeli Publishing Services.
- Al Awiasi, H., Cooke, H., & Pryjmachuk, S. (2015). The experiences of newly graduated nurses during their first year of practice in Sultanate of Oman: A case study. *International Journal of Nursing Studies*, 52, 1723-1734.
- Algozo, M., & Peters, K. (2012). The experiences of undergraduate Assistants in Nursing (AIN). *Nurse Education Today*, 32(3), 197-202.
- Allan, T.H., Smith, P., & O'Driscoll, M. (2011). Experiences of supernumerary status and the hidden curriculum in nursing: A new twist in the theory-practice gap? *Journal of Clinical Nursing*, 20(1), 847-855.
- Altier, M.E., & Krsek, C.A. (2006). Effects of a 1-year residency program on job satisfaction and retention of new graduate nurses. *Journal of Nurses Staff Development*, 22(2), 70-77.
- Anderson, E., & Kiger, A. (2008). "I felt like a real nurse": Student nurses out on their own. *Nurse Education Today*, 28(4), 443-449.

- Andrews, G.J., Brodie, D.A., Andrews, J.P., Wong, J., & Thomas, B.G. (2005). Placement matters: students' clinical experiences and their preferences for first employers. *International Nursing Review*, 52(2), 142-153.
- Andrews, M., & Reece, P. (1996). Problem-based learning in an undergraduate nursing programme: a case study. *Journal of Advanced Nursing*, 23, 357-365.
- Andrews, M., & Roberts, D. (2003). Supporting student nurses learning in and through clinical practice: The role of the clinical guide. *Nurse Education Today*, 23(7), 474-481.
- Arringo, B., & Cody, W.K. (2004). A dialogue on existential-phenomenological thought in psychology and in nursing. *Nursing Science Quarterly*, 17(1), 6-11.
- Arthur, D. (2001). The effects of the problem-based alcohol early-intervention education package on the knowledge and attitudes of students of nursing. *Journal of Nursing Education*, 40(2), 63-72.
- Astin, F., Newton, J., McKenna, L., & Moore-Coulson, L. (2005). Registered nurses' expectations and experiences of first year students' clinical skills and knowledge. *Contemporary Nurse*, 18(3), 279-291
- Baille, L. (2001). *Developing Practical Nursing Skills*. London, England: Arnold.
- Baltimore, J. (2004). The hospital clinical preceptor: essential preparation for success. *The Journal of Continuing Education in Nursing*, 35(3), 133-140.

- Bandman, E., & Bandman, B. (2002). *Nursing ethics through the life span* (4th ed.). New York: Prentice Hall.
- Baxter, P. (2006). Second-Year Baccalaureate nursing students' decision making in the clinical setting. *Journal of Nursing Education, 45*(4), 121-127.
- Baxter, P. (2007). The CCARE model of clinical supervision: Bridging the theory-practice gap. *Nurse Education in Practice, 7*, 103-111.
- Beck, C.T. (1994). Phenomenology: Its use in nursing research. *International Journal of Nursing Studies, 31*(6), 499-510.
- Beech, I. (1999). Bracketing in phenomenological research. *Nurse Researcher, 6*(2), 33-35.
- Bell, S.A., Rominski, S., Bam, V., Donkor, E., & Lori, J. (2013). Analysis of nursing education in Ghana: Priorities for scaling-up the nursing workforce. *Nursing and Health Sciences, 15*, 244-249.
- Bendal, E. (2006). Learning for reality. *Journal of Advanced Nursing, 53* (1), 3-9.
- Benner, P. (1984). *From novice to expert: Excellence and power in clinical nursing*. San Francisco, CA: Addison-Wesley.
- Benner, P., Sutphen, M., Leonard, V., & Day, L. (2010). *Educating nurses: A call for radical transformation*. San Francisco, CA: Jossey-Bass.
- Bentley, J., & Pegram, A. (2003). Achieving confidence and competence for lecturers in a practice context. *Nurse Education in Practice, 3*, 171-178.

- Berragan, E. (2014). Learning nursing through simulation: A case study approach towards an expansive model of learning. *Nurse Education Today*, 33(8), 1143-1148.
- Biggs, J. (1996). Enhancing teaching through constructive alignment. *Higher Education*, 32, 347–364.
- Bisholt, B., Ohlsson, U., Engstrom, A.K., Johansson, A.S. & Gustafsson, M. (2014). Nursing students' assessment of the learning environment in different clinical settings. *Nurse Education and Practice*, 14(3), 304-310.
- Blomberg, K., Bisholt, B., KullénEngström, A., Ohlsson, U., Sundler Johansson, A., Gustafsson, M. (2014). Swedish nursing students' experience of stress during clinical practice in relation to clinical setting characteristics and the organisation of the clinical education. *Journal of Clinical Nursing*, 23(15-16), 2264-2271.
- Boardman, J. (2007). Focus mental health. *Australian Nursing Journal*, 14, 36.
- Botma, Y., Van Rensburg, G.H., Coetzee I.M., & Heyns, T. (2015). A conceptual framework for educational design at modular level to promote transfer of learning. *Innovations in Education and Teaching International*, 52(5), 499-509.
- Boughn, S. (1994). Why do men choose nursing? *Nursing and Health Care*, 15(8), 406-411.
- Boughn, S. (2001). Why women and men choose nursing. *Nursing Education Perspectives*, 22(1), 14.

- Bowles, C.E., Candela, L.E. (2005). First job experiences of recent RN graduates: Improving the work environment. *Journal of Nursing Administration, 35*(3), 130-137.
- Bowling, A. (2009). *Research methods in health; investigating health and health services* (3rd ed.). Berkshire, England: Open University Press.
- Boyd, E.M., & Fayles, A.W. (1983) Reflective learning: The key element to learning from experience. *Journal of Humanistic Psychology, 23*(2), 99-117.
- Bradbury-Jones, C., Sambrook, S., & Irvine, F. (2009). The phenomenological focus group: an Oxymoron? *Journal of Advanced Nursing, 65*(3) 663-671.
- Brandon, A., & All, A. (2010). Constructivism theory analysis and application to curricula. *Nursing Education Perspectives, 32*, 89-92.
- Brown, J., Stevens, J., & Kermode, S. (2012). Supporting student nurse professionalisation: The role of the clinical teacher. *Nurse Education Today, 32*(5), 606-610.
- Brown, M. (Ed.). (1992). *Nursing Management: Issues and ideas*. Accra: Aspen Publishers.
- Bruce, J., Klopper, H., & Mellish, J. (2011). *Teaching and learning the practice of nursing* (5th ed.). Cape Town: Pearson Education.
- Burke, L.M. (1993). The future of the specialist nurse teacher: Two different models explored. *Nurse Education Today, 13*, 40-44.

- Burton, J. (2010). Can firms develop a service-dominant organisational culture to improve CRM? *International Journal of Customer Relationship Marketing and Management*, 1(1), 48-67.
- Butts, J. B., Rich, K. L., & Fawcett, J. B. (2012). The future of nursing: How important is discipline-specific knowledge? A conversation with Jacqueline Fawcett. *Nursing Science Quarterly*, 25(2), 151-154.
- Caelli, K. (2001). Engaging with phenomenology: Is it more of a challenge than it needs to be? *Qualitative Health Research*, 11(2), 273-281.
- Camsooksai, J. (2002). The role of the Lecturer Practitioner in inter-professional education. *Nurse Education Today*, 22, 466-475.
- Carey, M., & Smith, M. (1994). Capturing the group effect in focus groups: A special concern in analysis. *Qualitative Health Research*, 4, 123-127.
- Carlisle, C., Kirk, S., & Luker, K. (1997). The clinical role of nurse teachers within a Project 2000 course framework. *Journal of Advanced Nursing*, 25, 386-395.
- Carson, A., & Carnwell, R. (2007). Working in the theory-practice gap: the lecturer practitioner's story. *Learning in Health and Social Care*, 6(4), 220-230.
- Chan, E.A. , Chan, K. & Liu, Y.W. J . (2012). A triadic interplay between academics, practitioners and students in the nursing theory and practice dialectic. *Journal of Advanced Nursing*, 68(5), 1038-1049.

- Chang, M., & Yu, Y.M. (2010). *Nurse Workforce and Nurse Practitioner System: Vision and Challenges*. Taipei, Taiwan: National Health Research Institutes
- Chao, C.C. (2004). Taiwan nursing accreditation for nursing education. *Journal of Nursing Taiwan*, 51(4), 22-26.
- Chapman, N., Dempsey, S.E. & Warren-Forward, H.M. (2009). 'Workplace diaries promoting reflective practice in radiation therapy'. *Radiography*, 15, 166-170.
- Charleston, R., Happell, B. (2005). Coping with uncertainty within the preceptorship experience: The perceptions of nursing students. *Journal of Psychiatric and Mental Health Nursing*, 12, 303-309.
- Cilesiz, S. (2010). A phenomenological approach to experiences with technology: Current state, promise, and future directions for research. *Educational Technology Research and Development*, 59(4), 487-510.
- Clapper, T. C., & Kardong-Edgren, S. (2012). Using deliberate practice and simulation to improve nursing skills. *Clinical Simulation in Nursing*, 8, 109-113.
- Clark, J. M., Maben, J., & Jones, K. (1997). Project 2000. Perceptions of the philosophy and practice of nursing: preparation for practice. *Journal of Advanced Nursing*, 26(2), 246-256.
- Clark, T., Holmes, S. (2007). Fit for practice? An exploration of the development of newly qualified nurses using focus groups. *International Journal of Nursing Studies*, 44(7), 1210-1220.

- Clark, R., & Harrelson, G. L. (2002). Designing instruction that supports cognitive learning processes. *Journal of Athletic Training, 37*, 152-159.
- Clifford, C. (1999). The clinical role of the nurse teacher: A conceptual framework. *Journal of Advanced Nursing, 31*(1), 179-185.
- Coates, V. E., & Gormley, E. (1997). Learning the practice of nursing: Views about preceptorship. *Nurse Education Today, 17*, 91-98.
- Cohen, L., Manion, L., & Morrison, K. (2000). *Research methods in education*. (5th ed.). London, England: Routledge
- Corlett, J. (2000). The perceptions of nurse teachers, student nurses and preceptors of the theory-practice gap in nurse education. *Nurse Education Today, 20*, 499-505.
- Corlett, J., Palfreyman, J., Staines, H., & Marr, H. (2003). Factors influencing theoretical knowledge and practical skill acquisition in student nurses: An empirical experiment. *Nurse Education Today, 23*(3), 183-190.
- Costa, A., & Barbieri Figueredo, M. (2008). *The Bologna Process: Nurse educator competences*. Paper presented at the European Federation of Nurse Educators, 7th European Conference of Nurse Educators, Plovdiv, Bulgaria, 9-10 October 2008.
- Cote-Arsenault, D. & Morrison-Beedy, D. (2001). Women's voices reflecting changed expectations for pregnancy after perinatal loss. *Journal of Nursing Scholarship, 33*(3), 239-244.

- Courtney-Pratt, H., FitzGerald, M., Ford, K., Marsden, K., & Marlow, A. (2012). Quality clinical placements for undergraduate nursing students: A cross-sectional survey of undergraduates and supervising nurses. *Journal of Advanced Nursing*, 68(6), 1380-1390.
- Cowin, L.S., & Hengstberger-Sims, C. (2006). New graduate nurse self-concept and retention: A longitudinal survey. *International Journal of Nursing Studies*, 43(1), 59-70.
- Craddock, E. (1993). Developing the facilitator role in the clinical area. *Nurse Education Today*, 13, 217-224.
- Creswell, J. (2009). *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*, (3rd ed.). Los Angeles, USA: SAGE Publication Ltd.
- Dahlke, S., & Hannesson, T. (2016). Clinical Faculty Management of the Challenges of Being a Guest in Clinical Settings: An Exploratory Study. *Journal of Nursing Education*, 55(2), 91-95.
- Day, C., Fraser, D., & Mallik, M. (1998). *The Role of the Teacher/Lecturer in Practice* (Research Report Series No. 8). London, UK: English National Board
- Dehkordi, A. H., & Heydarnejad, M. S. (2008). The impact of problem-based learning and lecturing on the behavior and attitudes of Iranian nursing students. *Danish Medical Bulletin*, 55(4), 224-226.
- Denzin, N.K. & Lincoln, Y.S. (1998). *Strategies of qualitative inquiry*. Thousand Oaks, CA: Sage Publications.

- Deloughery, G. L. (1991). *Issues and trends in Nursing*. St. Louis, London: Mosby Yearbook, Inc.
- De Swardt, H.C., Du Toit, H.S., & Botha, A. (2012). Guided reflection as a tool to deal with the theory-practice gap in critical care nursing students. *Health SA Gesondheid, 17*(1), 591-600.
- DeWolfe, J. A., Laschinger, S., & Perkin, C. (2010). Preceptors' perspectives on recruitment, support, and retention of preceptors. *Journal of Nursing Education, 49*(4), 198-206.
- Donkor, N. (2009). 21st Century Nursing Practice in Ghana: Challenges and Opportunities. *International Nursing Review, 58*, 218-224.
- Donkor, N. T., & Andrews, L. D. (2011). 21st century nursing practice: challenges and opportunities. *International Nursing Review, 58*, 218-224.
- Doolittle, P. E., & Camp, W. G. (1999). Constructivism: The career and technical education perspective. *Journal of Career and Technical Education, 16*(1), 23-46.
- Dowling, M. (2007). From Husserl to van Manen. A review of different phenomenological approaches. *International Journal of Nursing Studies, 44*, 131-142.
- Duchscher, J.E.B. (2001). Out in the real world: Newly graduated nurses in acute-care speak out. *Journal of Nursing Administration, 31*(9), 426-439.

- Duffy, A. (2009). Guiding students through reflective practice; the preceptors experiences: A qualitative descriptive study. *Nurse Education in Practice, 9*, 166-175.
- Duffy K. & Watson H. (2001) An interpretive study of the nurse teachers' role in practice placement areas. *Nurse Education Today, 21*, 551-558.
- Eagar, S. C., Cowin, L. S., Gregory, L., & Firtko, A. (2010). Scope of practice conflict in nursing: A new war or just the same battle? *Contemporary Nurse, 36*(1-2), 86-95.
- Edwards, S. (2002). Nursing knowledge: Defining new boundaries. *Nursing Standard, 17*(2), 40-4.
- Eggertson, L. (2013). *The gap between clinical practice and education*. Retrieved from <http://canadiannurse.com/en/articles/issues>.
- Ehrenberg, A. C., & Hagglom, M. (2007). Problem-based learning in clinical nursing education: Integrating theory and practice. *Nurse Education in Practice, 7*(2), 67-74.
- Elcock K. (1998) Lecturer Practitioner: A concept analysis. *Journal of Advanced Nursing, 28*, 1092-1098.
- Espeland, V., & Indrehus, O. (2003). Evaluation of students' satisfaction with nursing education in Norway. *Journal of Advanced Nursing, 42*(3), 226-236.
- Evans, K. (2001). Expectations of newly qualified nurses. *Nursing Standards, 15*(41), 33-38.

- Evans, M. (2009). Tackling the theory-practice gap in mental health nursing training. *Mental Health Practice, 13*, 21–24
- Fairbrother, P., & Ford, S. (1997) It's a duet not duel. *Nursing Times, 93*, 32-34.
- Fontana, A., & Frey, J. H. (1994). Interviewing: the art and science. In N. K. Denzin, & Y. S. Lincoln (Eds), *Handbook of qualitative research* (pp. 361-376). Thousand Oaks, CA: Sage.
- Forsberg, E., Georg, C., Ziegert, K., & Fors, U. (2011). Virtual patients for assessment of clinical reasoning in nursing: A pilot study. *Nursing Education Today, 31*, 757–762.
- Foster, J. & Greenwood, J. (1998). Reflection: A challenging innovation for nurses. *Contemporary Nurse, 7*(4), 165-172.
- Freeman, T. (2006). Beat practice in focus group research: making sense of different views. *Journal of Advanced Research, 56*(5), 491-497.
- Frehywot, S., Vovides, Y., Talib, Z., Mikhail, N., Ross, H., Wohltjen, H., . . . Scott, J. (2013). E-learning in medical education in resource constrained low- and middle-income countries. *Human Resources for Health, 11*(1), 1-15.
- Freitas, H., Oliveira, M., Jenkins, M., & Popjoy, O. (1998). *The Focus Group, a qualitative research method*. University of Baltimore: ISRC, Merrick School of Business. Retrieved from http://gianti.ca.ufrgs.br/files/artigos/1998/1998_079_ISRC.pdf.
- Gardner, G. (2006). New perspectives on old debates: Re-engineering the theory practice gap. *Australian Journal of Advanced Nursing, 24*(2), 7-8.

- Gearing, R. (2004). Bracketing in research: A typology. *Qualitative Health Research, 14*(10), 1429-1452.
- Gerrish, K. & Lacey, A. (2010). *The Research Process In Nursing* (6th ed.). Chichester, West Sussex, United Kingdom: Wiley-Blackwell.
- Ghana Health Service (2006). *Job Description for Nurses and Midwives*. Accra, Ghana: Author
- Ghana Registered Nurses' Association (2011). *Closing the gap: Increasing access and equity*. Retrieved from <http://www.ghananurses.org/ind.pdf>.
- Gidman, J. (2001). The role of the personal tutor: A literature review. *Nurse Education Today, 21*, 359-365.
- Gidman, J., McIntosh, A., Melling, K., & Smith, D. (2011). Student perception of support in practice. *Nurse Education in Practice, 11*(6), 351-355.
- Gilmore, A. (1999). *Report of the Analysis of the Literature Evaluating Pre-registration Nursing and Midwifery Education in the United Kingdom*. London, United Kingdom: UKCC.
- Giorgi, A. (1985). *Phenomenology and Psychological Research*. Pittsburgh, Pennsylvania: Duquesne University Press.
- Giorgi, A. (2000). The status of Husserlian phenomenology in caring research. *Scandinavian Journal of Caring Sciences, 14*, 3-10.

- Giorgi, A., & Giorgi, B. (2004). The descriptive phenomenological psychology method. In P.M.Camic, J.E.Rhodes, & L. Yardley(Eds.), *Qualitative Research in Psychology: expanding perspectives in methodology and design*(pp.243-274)Washington, DC: American Psychology Association.
- Glaser, B. G., & Strauss, A. (1967). *The discovery of grounded theory: strategies for qualitative research*. New York, NY: Aldine.
- Glen, S. (2009). Nursing education: Is it time to go back to the future? *British Journal of Nursing, 18*(8), 498-502.
- Goodfellow, L. M. (2004). Can a journal club bridge the gap between research and practice? *Nurse-Educator, 29*(3) 754-61.
- Goudreau, J., Pepin, J., Dubois, S., Boyer, L., Larue, C., & Legault, A. (2009). A second generation of the competency-based approach to nursing education. *International Journal of Nursing Education Scholarship, 6*(15) 1685.
- Greenwood, J. (2001). Writing nursing, writing ourselves. In E.Chang,& J. Daly (Eds.), *Transitions in nursing: Preparation for professional practice* (pp. 263-277). Sydney, Australia: Libby Houston.
- Green, J. & Thorogood, N. (2005). *Qualitative Method for Health Research*. London, United Kingdom: SAGE Publications Ltd.
- Gregory, D., Guse, L., Davidson, D., Davis, P., & Russell, C.K. (2009). What clinical learning contracts reveal about nursing education and patient safety. *Canadian Nurse, 10*(8), 20-25.

- Haggman-Laitila, A., Eriksson, E., Meretoja, R., Sillanpaa, K., & Rekola, L. (2007). Nursing students in clinical practice: Developing a model for clinical supervision. *Nurse Education in Practice*, 7(6), 381-391.
- Haigh, C. (2008). Embracing the theory/practice gap. *Journal of Clinical Nursing*, 18, 1-2.
- Halstead, J. (2007). *Nurse educator competencies: Creating an evidence-based practice for nurse educators*. New York, NY: National League of Nursing.
- Happell, B. (2008). Clinical experience in mental health nursing: Determining satisfaction and the influential factors. *Nurse Education Today*, 28(7), 849-855.
- Henderson, A., Cooke, M., Creedy, D. K., & Walker, R. (2012). Nursing students' perceptions of learning in practice environments: A review. *Nurse Education Today*, 32(3), 299-302.
- Heslop, L., McIntyre, M., & Ives, G. (2001). Undergraduate student nurses' expectations and their self-reported preparedness for the graduate year role. *Nursing Healthcare and Management Issues*, 36(5), 623-626.
- Hewison, A., & Wildman, S. (1996). The theory- practice gap in nursing: A new dimension. *Journal of Advanced Nursing*, 24, 754-761.
- Higginson, R. (2004). The theory-practice gap still exists in nursing. *British Journal of Nursing*, 13(20), 68.

- Hilli, Y., Melender, H.L., & Jonsén, E. (2011). The experience of being a preceptor for nurse students in clinical practice: a cross-sectional qualitative study. *International Journal of Learning in Social Contexts, 1*, 84-99
- Holmlund, K., Lindgren, B., & Athlin, E. (2010). Group supervision for nursing students during their clinical placements: Its content and meaning. *Journal of Nursing Management, 18*(6), 678-688.
- Holton, E. F., Bates, R. A., Bookter, A. I., & Yamkovenko, V. B. (2007). Convergent and divergent validity of the Learning Transfer System Inventory. *Human Resource Development Quarterly, 18*(3), 385-419.
- Hope, A., Garside, J., Prescott, S. (2011). Rethinking theory and practice: pre-registration student nurses experiences of simulation teaching and learning in the acquisition of clinical skills in preparation for practice. *Nurse Education Today, 31*(1), 711-715.
- Hossein, K. M., Fatemeh, D., Fatemeh, O. S., Katri, V.-J., & Tahereh, B. (2010). Teaching style in clinical nursing education: A qualitative study of Iranian nursing teachers' experiences. *Nurse Education in Practice, 10*(1), 8-12.
- Humphreys, A., Gidman, J., & Andrews, M. (2000). The nature and purpose of the nurse lecturer in practice settings. *Nurse Education Today, 20*, 311-317.

- Husserl, E., (1970). *The Idea of Phenomenology*. Nijhoff, The Hague Ironside,
- P.M., McNelis, A.M., &Ebright, P. (2014). Clinical education in nursing: Re-thinking learning in practice settings. *Nursing Outlook*, 62(3), 185-191.
- Hwang, S. Y., & Jang, K. S. (2004). Development and implementation of problem-based learning packages on the respiratory and cardiac system. *Journal of Korean Academy of Adult Nursing*, 16(4), 636-647.
- Ironside, P.M., McNelis, A.M., &Ebright, P. (2014). Clinical education in nursing: Re-thinking learning in practice settings. *Nursing Outlook*, 62 (3), 185-191.
- Izumi, S. (2006). Bridging Western Ethics and Japanese Local Ethics by Listening to Nurses' Concerns. *Nursing Ethics*, 13(3), 275-283
- Jackson, C., & Butterworth, T. (2007). Every-one's business, no-one's responsibility; reporting clinical academic research activity by nurses in the United Kingdom. *Journal of Research in Nursing*, 12(3), 213-223.
- Jerlock, M., Falk, K., &Severinsson, E. (2003). Academic nursing education guidelines: Tool for bridging the gap between theory, research and practice. *Nursing and Health Sciences*, 5(2), 219-228.
- Johnsen, K. O., Aasgaard, H. S., Wahl, A. K.,&Salminen, L. (2002). Nurse educator competence: a study of Norwegian nurse educators' opinions of the importance and application of different nurse educator competence domains. *Journal of Nursing Education*, 41(7), 295-301.

- Jokelainen, M., Turunen, H., Tossavainen, D., Jamookeeah, D., & Coco, K. (2011). A systematic review of mentoring nursing students in clinical placements. *Journal of Clinical Nursing*, 20(19/20), 2854-2867.
- Jones, J.H., & Treiber, L. (2010). When the 5 rights go wrong medication errors from the nursing perspective. *Nursing Care Quality*, 25(3), 240-247.
- Jonsen, E., Melender, H.L., & Hilli, Y. (2013). Finnish and Swedish nursing students' experiences of their first clinical practice placement: A qualitative study. *Nurse Education Today*, 33(3), 297-302.
- Kellehear, K. J. (2014). The theory-practice gap: Well and truly alive in mental health nursing. *Nursing and Health Sciences*, 16, 141-142.
- Kelly, B. (1996). Hospital nursing: It's a battle! A follow-up study of English graduate nurses. *Journal of Advanced Nursing*, 24(5), 1063-1069.
- Killam, L. A., & Heerschap, C. (2013). Challenges to student learning in the clinical setting: A qualitative descriptive study. *Nurse Education Today*, 33(6), 684-691.
- Kilstoff, K., & Rochester, S. (2004). Hitting the floor running: Transitional experiences of graduates previously trained as enrolled nurses. Aust. *Journal of Advanced Nursing*, 22(1), 13-17.
- Koch, T. (1999). An interpretive research process: Revisiting phenomenological and hermeneutical approaches. *Nurse Researcher*, 6(3), 20-34.
- Landers, M. (2000). The theory-practice gap in nursing: the role of the nurse teacher. *Journal of Advanced Nursing*, 32(6), 1550-1556.

- Lambert, V., & Glacken, M. (2006). Clinical education facilitators and post-registration paediatric perceptions of the role of the clinical education facilitator. *Nurse Education Today*, 26, 358-366.
- Lathlean, J. (1995). *The Implementation of Lecturer Practitioner Roles in Nursing*. Oxford, UK: Ashdale Press.
- Lauder, W. Sharkey, S. & Both, S. (2004). A case study of transfer of learning in a family health nursing course for students in remote and rural areas. *Nurse Education in Practice*, 4, 39-44.
- Lee, D. (1996). The Clinical role of the nurse teacher: a review of the dispute. *Journal of Advanced Nursing*, 23, 1127-1134.
- Lester, S. (1999). *An introduction to phenomenological research*. Taunton UK, Stan Lester Developments. Retrieved from:
www.sld.demon.co.uk/resmethv.pdf.
- Levett-Jones, T., & Lathlean, J. (2007). Belongingness: A montage of nursing students' stories of their clinical placement experiences. *Contemporary Nurse*, 24(2), 162-174.
- Levett-Jones, T., & Lathlean, J. (2008). Belongingness: A prerequisite for nursing students' clinical learning. *Nurse Education and Practice*, 8(2), 103-111.
- Lincoln, Y. S. (2003) *Naturalistic Inquiry*. Newbury Park, California: Sage Publications.

- Lindahl, B., Dagborn, K., & Nilsson, M. (2009). A student-centered clinical educational unit: Description of a reflective learning model. *Nurse Education in Practice, 9*(1), 5-12.
- Lindgren, B., Brulin, C., Holmlund, K., & Athlin, E. (2005). Nursing students' perception of group supervision during clinical training. *Journal of Clinical Nursing, 14*, 822-829.
- Lofmark, A., & Wikblad, K. (2001). Facilitating and obstructing factors for development of learning in clinical practice: A student perspective. *Journal of Advanced Nursing, 34*(1), 43-50.
- Lofmark, A., Thorkildsen, K., Råholm, M.B., & Natvig, G.K. (2012). Nursing students' satisfaction with supervision from preceptors and teachers during clinical practice. *Nurse Education and Practice, 12*(3), 164-169.
- Lugina, H. (2009). Theory and practice: is the gap growing wider? *African Journal of Midwifery and Women's Health, 3*(3), 13.
- Lundberg, P.C., & Boonprasabhai, K. (2001). Meanings of good nursing care among Thai female last-year undergraduate nursing studies. *Journal of Advanced Nursing, 34*(1), 35-42.
- Maben, J., & Macleod, C. (1998). Project 2000 diplomates' perceptions of their experiences of transition from student to staff nurse. *Journal of Clinical Nursing, 7*(2), 145-153.
- Maben, J., Latter, S., & Clark, J. (2006). The theory-practice gap: Impact of professional-bureaucratic work conflict on newly qualified nurses. *Journal of Advanced Nursing, 55*(4), 465-477.

- MacDougall, C., & Baum, F. (1997). The devil's advocate: a strategy to avoid group think-think and stimulate discussion in focus groups. *Qualitative Health Research*, 7(4), 532-541
- Manias, E., & Aitken, R. (2005). Clinical teachers in specialty practice settings: Perceptions of their role within postgraduate nursing programs. *Learning in Health and Social Care*, 4, 67-77.
- Marks-Maran, D., Ooms, D., Tapping, J., Muir, J., Phillips, S., & Burke, L. (2013). A preceptorship programme for newly qualified nurses: A study of preceptees' perceptions. *Nurse Education Today*, 33, 1428-1434.
- Marrow, C. (2009). Developing nurse education and practice across the European Union. *Journal of Research in Nursing*, 11(4), 289-290.
- Marshall, C. and Rossman, G. B. (2006). *Designing Qualitative Research*, (4th ed.). London, UK: Sage Publications, Inc.
- Mason, J. (2002). *Qualitative Researching* (2nd ed.). London, UK: Sage Publication Ltd.
- Matilla, L.R., Pitkajarvi, M., & Eriksson, E. (2010). International student nurses' experiences of clinical practice in the Finnish health care system. *Nurse Education and Practice*, 10(3), 153-157.
- McCaugherty, D. (1991). The theory-practice gap in nurse education: Its causes and possible solutions, findings from an action research study. *Journal of Advanced Nursing*, 16, 1055-1061.

- McConnell-Henry, T., Chapman, Y., & Francis, K. (2009). Unpacking Heideggerianphenomenology. *Southern Online Journal of Nursing Research*, 9(1), 1-11.
- McLafferty, I. (2004). Focus group interviews as a data collecting strategy. *Journal of Advanced Nursing*, 48(2), 187–194.
- McLoughlin, C. (2001). Inclusivity and alignment: Principles of pedagogy, task and assessment design for effective cross-cultural online learning. *Distance Education*, 22, 7-29.
- Merrill, M. D. (2002). First principles of instruction. *Educational Technology Research and Development*, 50, 43-59.
- Miers, M. E., Rickaby, C. E., & Pollard, K. C. (2007). Career choices in health care: Is nursing a special case? A content analysis of survey data. *International Journal of Nursing Studies*, 44(7), 1196-1209.
- Milton, C. (2008). Accountability in nursing: Reflecting on ethical codes and professional standards of nursing practice from a global perspective. *Nursing Science Quarterly*, 21(4), 300-303.
- Monaghan, T. (2015). A critical analysis of the literature and theoretical perspectives on theory-practice gap amongst newly qualified nurses within the United Kingdom. *Nurse Education Today*, 35, 1-7
- Mooney, M. (2007). Facing registration: The expectations and the unexpected. *Nurse Education Today*, 27(8), 840-847.
- Moore, T. W. (1986). *Philosophy of education: An introduction*. London, UK: Routledge and Kegan.

- Morgan, R. (1997). *Focus group as qualitative research*. California, United States: Sage Publications.
- Morton, P. J. (1995). Creating a laboratory that stimulates the critical care environment. *Critical Care Nurse*, 16(6), 76-81.
- Moustakas, C. (1994). *Phenomenological Research Methods*. Thousand Oaks, California: Sage Publications.
- Muir, J., Ooms, A., Tapping, J., Marks-Maran, D., Phillips, S., & Burke, L. (2013). Preceptors' perceptions of a preceptorship programme for newly qualified nurses. *Nurse Education Today*, 33(1), 633-638.
- Munnukka, T., Pukuri, T., Linnainmaa, P., & Kilkku, N. (2002) Integration of theory and practice in learning mental health nursing. *Journal of Psychiatric, Mental Health Nursing*, 9, 5-14.
- Murphy, F. (2000). Collaborating with practitioners in teaching and research: A model for developing the role of the nurse lecturer in practice areas. *Journal of Advanced Nursing*, 31(3), 704-714.
- Myall, M., Levett-Jones, T., & Lathlean, J. (2008). Mentorship in contemporary practice: the experiences of nursing students and practice mentors. *Journal of Clinical Nursing*, 17, 1834-1842.
- National League of Nursing (2007). *Simulation in Nursing Education*. New York, United State of America: Author.
- Nelson, L., & McSherry, R. (2002). Exploring the lecturer practitioner role: Individuals perceptions of the lived experience. *Nurse Education in Practice*, 2, 109-118.

- Nursing and Midwifery Council of London (2008). *The Code-Standards of Conduct, Performance and Ethics for Nurses and Midwives*. London, UK: Author.
- Nursing and Midwifery Council of Ghana. (2015). *Curriculum for the Registered General Nursing (RGN) Program*. Accra, Ghana: Author.
- Oermann, M.H., & Garvin, M.F. (2002). Stresses and challenges for new graduates in hospitals. *Nurse Education Today*, 22(3), 225-230.
- Ogier, M.E. (1989). *Working and Learning*. London, UK: Scutari Press
- Ohrling, K., & Hallberg, I. R. (2000a). Student nurses' lived experience of preceptorship. Part 2: The preceptor–preceptee relationship. *International Journal of Nursing Studies*, 37(1), 25-36.
- Öhrling, K., & Hallberg, I. R. (2000b). Nurses' lived experience of being a preceptor. *Journal of Professional Nursing*, 16(4), 228-239.
- O'Kane, C.E. (2012). Newly qualified nurses experiences in the intensive care unit. *Nursing and Critical Care*, 17(1), 44-51.
- Omansky, G.L. (2010). Staff nurses' experiences as preceptors and mentors: An integrative review. *Journal of Nursing Management*, 18(6), 697-703.
- O'Mara, L., McDonald, J., Gillespie, M., Brown, H., & Miles, L. (2014). Challenging clinical learning environments: Experiences of undergraduate nursing students. *Nurse Education in Practice*, 14(2), 208-213.
- Opore, M., & Mill, J. E. (2000). The evolution of nursing education in a post-independence context-Ghana from 1957 to 1970. *Western Journal of Nursing Research*, 22(8), 936-944

- Ortiz, M. R. (2009). Hermeneutics and nursing research: History, process, and exemplar. *Southern Online Journal of Nursing Research*, 9(1), 6.
- O'Shea, M., & Kelly, B. (2007). The lived experiences of newly qualified nurses on clinical placement during the first six months following registration in the Republic of Ireland. *Journal of Clinical Nursing*, 16(8), 1534-1542.
- Ousey, K., & Gallagher, P. (2007). The theory practice relationship in nursing: a debate. *Nurse Education in Practice*, 7(4), 199-205.
- Paley, J. (1997). Husserl, phenomenology and nursing. *Journal of Advanced Nursing*, 26, 187-193.
- Papathanasiou, I.V., Tsaras, K., & Sarafis, P. (2014). Views and perceptions of nursing students on their clinical learning environment: Teaching and learning. *Nurse Education Today*, 34(1), 57-60.
- Papp, I., Markkanen, M., & von Bonsdorff, M. (2003). Clinical environment as a learning environment: student nurses' perceptions concerning clinical learning experiences. *Nurse Education Today*, 23(4), 262-268.
- Pascoe, M., & Singh, S. (2008). "By the end of this course you should be able to ...": Towards constructive alignment in the speech-language pathology curriculum. *The South African Journal of Communication Disorders*, 55, 91-110.
- Patterson, K.D. (1981). *Health in colonial Ghana: Disease, Medicine, and Socio-economic Change, 1900-1955*. Waltham, USA: Crossroads Press.

- Paterson, M., & Grandjean, C. (2008). The bridge to practice model: A collaborative program designed for clinical experiences in baccalaureate nursing. *Nursing Economics*, 26(5), 302.
- Pegram, A., & Robinson, L. (2002). The experience of undertaking faculty practice. *Nurse Education in Practice*, 2, 30-34.
- Pender, F., & Looy, A. (2004). Monitoring the development of clinical skills during training in a clinical placement. *Journal of Human Nutrition and Dietetics*, 17(1), 25-34.
- Polit, D.F., & Beck, C.T. (2012). *Nursing research: Principles and methods* (7th ed.). Philadelphia, Pennsylvania: Lippincott, Williams, and Wilkins.
- Pollard, C., Ellis, L., Stringer, E., & Cockayne, D. (2007). Clinical education: A review of the literature. *Nurse Education in Practice*, 7(5), 315-322.
- Punch, K.F. (2005). *Introduction to Social Research; Quantitative and Qualitative Approaches*. (2nd ed). London, UK: Sage Publications.
- Rafferty, A., Allcock, N., & Lathlean, J. (1996). The theory/practice gap: Taking issue with the issue. *Journal of Advanced Nursing*, 23, 685-691.
- Ramage, C. (2004). Negotiating multiple roles: Link teachers in clinical nursing practice. *Journal of Advanced Nursing*, 45(3), 287-296.
- Rapp, S. (2011). The director of education as a leader of pedagogical issues: A study of leadership in municipal educational sector activities. *School Leadership and Management: Formerly School Organisation*, 21(5), 47-490

- Ray, M. A. (1994). The richness of phenomenology: Philosophic, theoretic, and methodologic concerns. In J.M. Morse, (Ed.), *Critical Issues in Qualitative Research Methods* (pp. 117–133). Thousand Oaks, California: Sage Publications
- Reaburn, P., Muldoon, N., & Bookallil, C. (2009). Blended spaces, work based learning and constructive alignment: Impacts on student engagement. In *Same places, different spaces. Proceedings of Ascilite Auckland*. (pp. 820-831). Auckland: New Zealand. Retrieved from <http://www.ascilite.org.au/conferences/auckland09/procs/raeburn.pdf>
- Rich, K. L., & Nugent, K. E. (2010). A United States perspective on the challenges in nursing education. *Nurse Education Today*, 30(3), 228-232.
- Roberts, T. V., Gustavs, J., & Mack, H. G. (2012). Becoming an expert: A review of adult learning theory and implications for vocational training in ophthalmology. *Clinical & Experimental Ophthalmology*, 40, 519-526.
- Rolfe, G. (1996). *Closing the Theory-Practice Gap*. Oxford, England: Butterworth-Heinemann.
- Rolfe, G. (2002). *Closing the Theory-Practice Gap*. Edinburgh, Scotland: Elsevier Science Limited.
- Rose, H. (1987). Teaching nursing in Ghana, 1957 to 1964: A personal experience. *Bulletin of History of Nursing*, 2, 4-18.
- Ross, H., & Clifford, K. (2002). Research as a catalyst for change: The transition from student to registered nurse. *Journal of Clinical Nursing*, 11(4), 545-553.

- Royal College of Nursing (2003). *Defining nursing*. England, UK: Author.
Retrieved from <http://www.rcn.org.uk.definingnursing>.
- Rust, C. (2002). The impact of assessment on student learning: How can the research literature practically help to inform the development of departmental assessment strategies and learner-centred assessment practices? *Active Learning in Higher Education*, 3, 145-158.
- Ryan-Nicholls, K. D. (2004). Preceptor recruitment and retention. *The Canadian nurse*, 100(6), 18-22.
- Saarikoski, M., & Leino-Kilpi, H. (2002). The clinical learning environment and supervision by staff nurses: Developing the instrument. *International Journal of Nursing Studies*, 39(3), 259-267.
- Salminen, L., Stolt, M., Saarikoski, M., Suikkala, A., Vaartio, H., Leino-Kilpi, H. (2010). Future challenges for nursing education: A European perspective. *Nurse Education Today*, 30(3) 233-238.
- Sanders, C. (2003). Application of Colaizzi's method: Interpretation of an auditable decision trail by a novice researcher. *Contemporary Nurse Journal*, 14(3), 292-302.
- Scherer, Z., & Scherer, E. (2007). Reflection on nursing teaching in the post-modernity era and the metaphor of a theory practice gap. *Revista Latino-americana de Enfermagem*, 15(3), 498-501.
- Schmidt, N. A., & Brown, J. M. (2009). *Evidence-based practice for nurses: Appraisal and application of research*. Burlington, Canada: Jones and Bartlett Publishers.

- Scully, N. J. (2010). The theory-practice gap and skill acquisition: An issue for nursing education. *Royal College of Nursing, 18*, 93-98.
- Sedgwick, M.G., & Yonge, O. (2008). Undergraduate nursing students' preparedness to "go rural". *Nurse Education Today, 28*, 620-626.
- Sefton, A. J. (2006). New approaches to medical education: An international perspective. Medical Principles and Practice. *International Journal of the Kuwait University, HealthScience Centre, 13*, 239-248.
- Sellman, D. (2010). Mind the gap: Philosophy, theory, and practice. *Nursing Philosophy, 11*, 85-87.
- Sharif, F., & Masoumi, S. (2005). A qualitative study of nursing student experiences of clinical practice. *Biomedical Central Nursing, 4*(1), 6-9.
- Sharples, K., & Elcock, K. (2011). *Preceptorship for Newly Registered Nurses*. (pp. 7). Exeter, England: Learning Matters Ltd.
- Shosha, G. A. (2010). Employment of Colaizzi's strategy in descriptive phenomenology: A reflection of a researcher. *European Scientific Journal, 8*(27), 1857-7431.
- Smith, D. (1991). *Perspectives on clinical teaching*. New Jersey: Springer Publishing.
- Sorrell, J. M., & Redmond, G. M. (1995). Interviews in qualitative nursing research: differing approaches for ethnographic and phenomenological studies. *Journal of Advanced Nursing, 21*, 1117-1122.

- Spence, D. G. (2005). Hermeneutic notions augment cultural safety education. *Journal of Nursing Education, 44*(9), 409–414.
- Speziale, H.J., & Carpenter, D.R. (2007). *Qualitative Research in Nursing: Advancing the Humanistic Imperative*, (4th ed.). Philadelphia, Pennsylvania: Lippincott, Williams and Wilkins.
- Spiegelberg, H. (1971). *The Phenomenological Movement: A Historical Introduction* (2nd ed.). The Hague, Netherlands: MartinusNijhoff.
- Spiegelberg, H. (1975). *Doing Phenomenology*: Dordrecht, Netherlands: MartinusNijhoff.
- Spitzer, A., &Perrenoud, B. (2006a). Reforms in Nursing Education Across Western Europe: From Agenda to Practice. *Journal of Professional Nursing, 22*(3), 150-161.
- Spitzer, A., &Perrenoud, B. (2006b). Reforms in Nursing Education Across Western Europe: Implementation Processes and Current Status. *Journal of Professional Nursing, 22*(3), 162-171.
- Spouse, J. (2001). Bridging theory and practice in the supervisory relationship: A sociocultural perspective. *Journal of Advanced Nursing, 33*(4), 512-522.
- Streubert, H. J., & Carpenter, D. R. (2011). *Qualitative research in nursing: Advancing the humanistic perspective* (5th ed.). Philadelphia, Pennsylvania: WoltersKluwer/Lippincott Williams & Wilkins.
- Sullivan, D. (2010). Connecting nursing education and practice: A focus on shared goals for quality and safety. *Creative Nursing, 16*(1), 37-43.

- Talley, B. (2006). Nurses and nursing education in Ghana: creating collaborative opportunities. *International Nursing Review*, 53, 47-51.
- Tamale Teaching Hospital (2016). Annual performance review. Tamale, Ghana: Author.
- Tiwari, A., Lam, D., Yuen, K. H., Chan, R., Fung, T., & Chan, S. (2005). Student learning in clinical nursing education: Perceptions of the relationship between assessment and learning. *Nurse Education Today*, 25(4), 299-308.
- Todres, L., & Wheeler, S. (2001). The complexity of phenomenology, hermeneutics and existentialism as a philosophical perspective for nursing research. *International Journal of Nursing Studies*, 38, 1-8.
- Tseng, H.C., Chou, F.H., Wang, H.H., Ko, H.K., Jian, S.Y., & Weng, W.C. (2011). The effectiveness of problem-based learning and concept mapping among Taiwanese registered nursing students. *Nurse Education Today*, 31, 41-46.
- Turale, S., Ito, M., & Nakao, F. (2008). Issues and challenges in nursing and nursing education in Japan. *Nurse Education in Practice*, 8(1), 1-4.
- Twumasi, P.A. (1979). A social history of the Ghanaian pluralistic medical system. *Social Sciences and Medicine*, 13(4), 349-365.
- Ulfvarson, J., & Oxelmark, L. (2012). Developing an assessment tool for intended learning outcomes in clinical practice for nursing students. *Nurse Education Today*, 32(6), 703-708.

- United Kingdom Central Council for Nursing Midwifery and Health Visiting.
(1999). *Fitness for Practice. The UKCC Commission for Nursing and Midwifery Education*. London, UK. United Kingdom Central Council.
- Upton, D. (1999). How can we achieve evidence-based practice if we have a theory-practice gap in nursing today? *Journal of Advanced Nursing*, 29(3), 549-555.
- Valle, R.S., King, M., & Halling, S. (1989). An introduction to existential-phenomenological thought in psychology. In R. S. Valle, & S. Halling, (Eds.), *Existential-phenomenological Perspectives in Psychology. Exploring the Breadth of Human Experience* (pp. 3-6). New York, USA: Plenum Press.
- Van der Zalm, J. E., & Bergum, V. (2000). Hermeneutic phenomenology: Providing living knowledge for nursing practice. *Journal of Advanced Nursing*, 31(1), 211-218
- Vaughan, B. (1987). Bridging the gap. *Senior Nurse*, 6, 30-31.
- von Glasersfeld, E. (1984). An introduction to radical constructivism. In P. Watzlawick (Ed.). *The invented reality*, (pp. 17-40). New York, USA: Norton
- Watson, J., & Foster, R. (2003). The Attending Nurse Caring Model: Integrating theory, evidence and advanced caring-healing therapeutics for transforming professional practice. *Journal of Clinical Nursing*, 12, 360-365.

- Webb, C. (2003). Editor's note: introduction to guidelines on reporting qualitative research. *Journal of Advanced Nursing*, 42(6), 544-545.
- Webb, C. & Kevern, J. (2001). Focus groups as a research method: a critique of some aspects of their use in nursing research. *Journal of Advanced Nursing*, 33(6), 798-805.
- Webber P.B. (2010). Language consistency: A missing link in theory, research and reasoning? *Journal of Advanced Nursing*, 66(1), 218-227.
- Welsh Assembly Government. (2002). *Fitness for Practice: All Wales Initiative: Assessment of Clinical Practice*. Cardiff, UK. Welsh Assembly Government.
- White, R., & Ewan, C. (1991). *Clinical Teaching in Nursing*. London, UK: Chapman & Hall.
- Williams, B., Wertenberger, D. H., & Gushuliak, T. (1997). Why students choose nursing. *Journal of Nursing Education*, 36(7), 346-348.
- Williamson, G.R. (2004). Lecturer practitioners in UK nursing and midwifery: What is the evidence? A systematic review of the research literature. *Journal of Clinical Nursing*, 13, 787-795.
- Williamson, G., & Webb, C. (2001). Supporting students in practice. *Journal of Clinical Nursing*, 10, 284-292.
- Williamson, G.R., Webb, C., & Abelson-Mitchell, N. (2004). Developing lecturer practitioner roles using action research. *Journal of Advanced Nursing*, 47, 153-164.

- Wilson, J. (2008). Bridging the theory practice gap. *Australian Nursing Journal*, 16(4), 25. Retrieved from ResearchOnline@ND
- Woelfle, C. Y., & McCaffrey, R. (2007). Nurse on Nurse. *Nursing Forum*, 42(3), 123-131.
- Wolf, Z., Bender, P., Beitz, J., Weiland, D., & Vito, K. (2004). Strengths and weaknesses of faculty teaching performance reported by undergraduate and graduate nursing students: A descriptive study. *Journal of Professional Nursing*, 20(2), 118-128.
- Wombeogo, M. (2015). Research in nursing and midwifery for optimal professionalism: a situational analysis of Ghana. *Journal of Medical and Dental Science Research*, 2(10), 13-17.
- World Health Organisation. (2007). *World Health Statistics*. Geneva, Switzerland: World Health Organization.
- World Health Organisation. (2009). *Global standards for the initial education of professional nurses and midwives*. Geneva, Switzerland: Department of Human Resources for Health. Retrieved from, http://www.who.int/hrh/nursing_midwifery/en/
- Wright, S.M. (2001). Contribution of a lecturer practitioner in implementing evidence-based health care. *Accident and Emergency Nursing*, 9, 198-203.
- Wynaden, D., Orb, A., McGowan, S., & Downie, J. (2000). Are universities preparing nurses to meet the challenges posed by the Australian mental health care system? *Australian and New Zealand Journal of Mental Health Nursing*, 9(3), 138-146.

- Yang, W., Chao, C. C., Lai, W., Chen, C., Shih, Y. L & Chiu, G. (2013). Building a bridge for nursing education and clinical care in Taiwan: Using action research and Confucian tradition to close the gap. *Nurse Education Today*, 33, 199-204.
- Yilmaz, K. (2008). Constructivism: Its theoretical underpinnings, variations, and implications for classroom instruction. *Educational Horizons*, 86(3), 161-172.
- Yilmaz, K. (2013) Comparison of Quantitative and Qualitative Research Traditions: epistemological, theoretical, and methodological differences. *European Journal of Education*, 48(2), 311-325.
- Yordy, K. D. (2006). *The nursing faculty shortage: A crisis for health care*. Princeton, New Jersey, USA: Robert Wood Johnson Foundation. Retrieved From <http://www.rwjf.org/content/dam/web-assets/2006/04/the-nursing-faculty-shortage>.
- Young, P., & Diekelmann, N. (2002). Learning to lecture: Exploring the skills, strategies, and practices of new teachers in nursing education. *Journal of Nursing Education*, 41(9), 405-412.
- Yuksel, P., & Yildirim, S. (2015). Theoretical frameworks, methods and procedures for conducting phenomenological studies in educational settings. *Turkish Online Journal of Qualitative Inquiry*, 6(1), 1-20.

APPENDIX A


Topic Guide for Focus Group Discussion on Theory-practice Gap (TPG)

1. Tell me all that you know about nursing education in Ghana with regards to equipping nursing students with the necessary skills to practice.
2. Tell me all that you know about the theory-practice gap
3. Could you describe situations where you have identified TPG?
4. In your opinion, what do you think brings about TPG?
5. What in your opinion are the positive implications of TPG in nursing?
6. What in your opinion are the negative implications of TPG in nursing?
7. How does the gap affect you as a professional?
8. Tell me what the profession stands to gain in bridging the TPG
9. What can we do to influence changes, if any, in this gap?

APPENDIX B

Ethical Clearance

UNIVERSITY OF CAPE COAST
INSTITUTIONAL REVIEW BOARD SECRETARIAT
TEL: 03321-33172/3 / 0207355653/ 0244207814 C/O Directorate of Research, Innovation and Consultancy
E-MAIL: irb@ucc.edu.gh
OUR REF: UCC/IRB/3/49
YOUR REF:



9TH MARCH, 2016

Mr. Salifu David Abdulai
School of Nursing and Midwifery
University of Cape Coast

Dear Mr. Abdulai,

ETHICAL CLEARANCE –ID NO: (UCCIRB/ CHAS/2015/41)

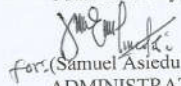
The University of Cape Coast Institutional Review Board (UCCIRB) has granted **Provisional Approval** for implementation of your research protocol titled: **“Theory-Practice Gap; Perceptions of Nurse Faculty and Nursing Students in University for Development Studies and Clinicians in Tamale Teaching Hospital.”**

This approval requires that you submit periodic review of the protocol to the Board and a final full review to the UCCIRB on completion of the research. The UCCIRB may observe or cause to be observed procedures and records of the research during and after implementation.

Please note that any modification of the project must be submitted to the UCCIRB for review and approval before its implementation.

You are also required to report all serious adverse events related to this study to the UCCIRB within seven days verbally and fourteen days in writing.

Always quote the protocol identification number in all future correspondence with us in relation to this protocol.p

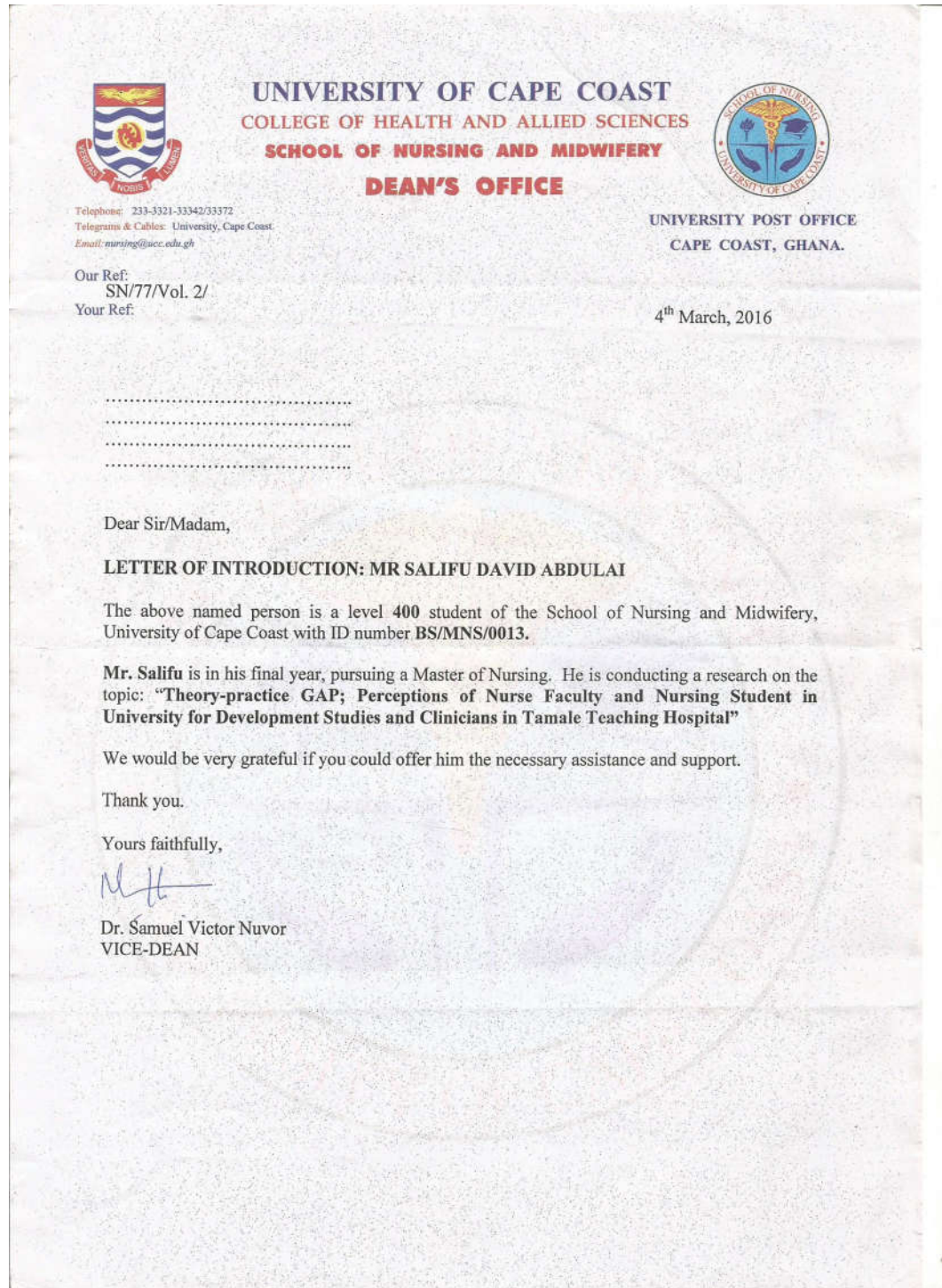
Yours faithfully,

for: (Samuel Asiedu Owusu)
ADMINISTRATOR

cc: The Chairman, UCCIRB

.....
ADMINISTRATOR
INSTITUTIONAL REVIEW BOARD
UNIVERSITY OF CAPE COAST
Date: 09-03-16

APPENDIX C

Letter of Introduction



APPENDIX D

Certificate of Authorisation



Department of Research & Development
Tamale Teaching Hospital

TTH/R&D/SR/16/182
15/04/2016

TO WHOM IT MAY CONCERN

CERTIFICATE OF AUTHORIZATION TO CONDUCT RESEARCH IN TAMALE TEACHING HOSPITAL

I hereby introduce to you **Mr. Salifu David Abdulai**, a student from the University of Cape Coast, School of Nursing and Midwifery. Who has been duly authorized to conduct a study on **"Theory-Practice Gap; perceptions of Nurse Faculty and Nursing students in University for Development Studies and Clinicians in Tamale Teaching Hospital"**.

Please accord him the necessary assistance to be able to complete his study. If in doubt, kindly contact the Research Unit at the second floor of the administration block or on Telephone 0209281020. In addition, kindly report any misconduct of the Researcher to the Research Unit for necessary action, please.

Please note that this approval is given for a period of 3 months, beginning from 15th of April, 2016 to 31st of July, 2016.

Thank You.

ALHASSAN MOHAMMED SHAMUDEEN
(HEAD, RESEARCH & DEVELOPMENT)

APPENDIX E

INFORM CONSENT FORM

Information for participants.

Study title: Theory-Practice Gap; Perceptions of Nurse Faculty, and Nursing Students in University for Development Studies and Clinicians in Tamale Teaching Hospital.

Brief information about the research

The purpose of the study is to explore the theory-practice gap in nursing from the perspective of nurse faculty, clinicians and nursing students. This may help in developing an effective strategy for theory-practice integration in nursing. Hence, promote the delivery of competent nursing care to the citizenry of Ghana.

Procedure

The researcher will adopt a focus group discussion approach in data collection. The focus group discussions will be held in three separate groups (nurse faculty, nursing students and clinicians) consisting of six (6) participants in each group. Discussions will take place in UDS and TTH conference rooms respectively. No one else except participants, the moderator and the principal investigator will be present during these discussions. Although the focus group discussions will be tape recorded, participants' responses will remain anonymous and no names will be mentioned in the report. Additionally, the tape will be kept in a passworded computer and used only for the purpose of the research. The expected duration of each discussion session is about 60 minutes. Approximately, three discussion sessions are expected for each of the groups. There are no right or wrong answers

to the focus group questions. We want to hear many different viewpoints and would like to hear from everyone. We hope you can be honest even when your responses may not be in agreement with the rest of the group. In respect for each other, we ask that only one individual speaks at a time in the group and that responses made by all participants be kept confidential.

Invitation

To find answers to some of these questions, we invite you to take part in this research project. If you accept, you will be required to: take part in a focus group discussion with 5 other persons with similar experiences.

Why are we doing this research?

We want to find out your perceptions regarding the theory-practice gap in nursing practice. Fusing the perceptions of these diverse key players (Nurse faculty, clinicians and nursing students) in nursing would allow a more comprehensive picture of the theory-practice gap to emerge. This may help in the development of an effective strategy for theory practice integration in nursing. This project will be written up by the researcher for a research degree (MN). We hope the research will aid in promoting the delivery of competent nursing care to the citizenry of Ghana.

Why have I been chosen?

You are being invited to take part in this research work because we feel that your experience as a nurse faculty, clinician or nursing student can contribute richly to the attainment of the purpose of the research.

Any risk or discomfort?

The study process will not entail any harmful effects on participants.

All that is needed is the time of participants to participate in the focused group discussions.

Do I have to take part?

No. Participation is voluntary. You can choose whether or not to participate in the focus group and stop at any time without penalty.

What will happen to me if I take part?

You will be required to: take part in a discussion with 5 other persons with similar experiences. We will ask you about your views about the theory-practice gap in nursing.

Will my taking part be confidential?

Yes. Anything you tell us will be used without using your name. We will not use your name if we share anything you tell us.

What will happen to the results of the research study?

Results of the study will be disseminated by way of publication and through conference or seminar presentations with the aim of influencing policy decisions in nursing.

Who is organising and funding this research?

Self

Who has checked or reviewed this study?

This research has been reviewed and approved by the Institutional Review Board of University of Cape Coast (UCCIRB). If you have any questions about your

rights as a research participant you can contact the IRB Office between the hours of 8:00 a.m. and 4:30 p.m. through the landlines 0332135351/0289670793(4) or email address: irb@ucc.edu.gh .

For further information contact:

Principal Investigator: Salifu David Abdulai

Address: School of Nursing and Midwifery, University of Cape Coast-Ghana.

E-mail: salifu.david@ucc.edu.gh

Thank you for agreeing to take part in the study.

VOLUNTEER AGREEMENT

Title of Research Project: Theory-Practice Gap; Perceptions of Nurse Faculty, and Nursing Students in University for Development Studies and Clinicians in Tamale Teaching Hospital.

Name of Researcher: Salifu David Abdulai

Address: School of Nursing and Midwifery, University of Cape Coast-Ghana.

E-mail: salifu.david@ucc.edu.gh

1. I confirm that I have read and understood the information sheet/letter dated 20th October, 2015 explaining the above research project and I have had the opportunity to ask questions about the project.

2. I understand that my participation is voluntary and that I am free to withdraw at any time without giving any reason and without there being any negative consequences. In addition, should I not wish to answer any particular question or questions, I am free to decline.

3. I understand that my responses will be kept strictly confidential.

I give permission for members of the research team to have access to my anonymised responses. I understand that my name will not be linked with the research materials, and I will not be identified or identifiable in the report or reports that result from the research.

4. I agree for the data collected from me to be used in future research

5. I agree to take part in the above research project.

Name of Participant (or legal representative)	Date	Signature
--------------------------------------------------	------	-----------

Name of person taking consent (if different from lead researcher)	Date	Signature
----------------------------------------------------------------------	------	-----------

To be signed and dated in presence of the participant

Lead Researcher	Date	Signature
-----------------	------	-----------

To be signed and dated in presence of the participant

APPENDIX F
SAMPLE OF CLUSTERING PROCESS

