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The Investigation of Collaboration Among First-Year Bachelor of Science Nursing Students

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This is to certify that the doctoral study by

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has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2024

Abstract

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MSN, Walden University, 2013

BSN, Delta State University, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Education

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Abstract

Despite the benefits of collaboration, first-year nursing students prefer not to work together. It was important to find out why nursing students do not want to collaborate. The purpose of this study was to discover first-year nursing students' and faculty's perceptions of how instructor-created opportunities for collaboration contributed to first-year nursing students' collaboration. Using Wenger's communities of practice (CoPs) model as a lens, the data were explored using a qualitative explanatory case study approach. This study consisted of individual interviews of 12 first-year nursing students and nursing faculty. Inclusion criteria included students enrolled in or faculty teaching first year of nursing school courses, and in a bachelor of science nursing program in the United States.. The data were analyzed using inductive open code thematic analysis and the results revealed that students and faculty had new perceptions of how to successfully implement collaborative opportunities. The results revealed from faculty participants' perceptions were that they should make an effort, rotate group members, provide a rubric, and model collaboration themselves. Student participants' themes found were smaller group sizes, be allowed to choose group members, roles should be assigned, faculty should randomize groups, allow students to evaluate groups, and schedule time for group work. These new perceptions of implementing successful collaborative experiences in nursing education are implications for positive social change by improving nursing education delivery for students, improving educational outcomes, and producing nurses who can work together intra professionally to produce positive patient outcomes and increase job satisfaction.

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Dedication

I dedicate this work to all the nurses who chose to become educators.

Acknowledgments

I would like to recognize my husband, Leo, and my children, Jessica, Sarah, Mason, and Jordan and my son-in-law, Quin. You were my cheerleaders from the moment I stated I was going back to school to the day I hung my diploma on the wall. I would also like to dedicate this work to all the nurses who I had as students. You are my inspiration.

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Chapter 1: Introduction to the Study

For nursing students to be successful, they must learn to collaborate while obtaining their education. Collaboration is defined as the ability of two or more people to work together to create a solution to a problem while retaining individual responsibilities for the outcomes (Ellis & Han, 2021). Successful collaboration leads to deeper learning, communication skills, positive peer relationships, retention of material, and problem-solving ability (De hei et al., 2020; Maddison & Strange, 2018; Palsson et al., 2021).

Faculty Inability to Teach Collaboration

Unfortunately, not all faculty are able to successfully design collaborative opportunities that produce good outcomes. The majority of nursing faculty do not have the training and knowledge to foster collaboration among their students (Berghout, 2021; Fathi et al., 2019). Nurses who become educators are often not taught andragogy in their graduate education that would support collaboration in the classroom (Bullin, 2018). A graduate degree is the required educational preparation for a registered nurse to teach BSN students in a university. Graduate degrees in nursing are usually research or practice focused and did not adequately prepare a nurse to educate adults (Bullin, 2018). Nurse educators must be able to assist nursing students to obtain cognitive, affective, and psychomotor skills they will need in their future practice as a registered nurse (Neilson et al., 2019). To effectively reach these domains, the nurse educator will need the skill of using effective andragogy among the nursing students by designing group tasks, managing class time, and promoting productive collaboration (Arian et al., 2018).

Nursing Students and Collaboration

According to Buckley and Trocky (2019), nursing students voiced their concerns about doing group work due to past experiences with collaboration in group assignments and projects that were unsuccessful, therefore leading to a decreased desire to work together. Students in higher education, outside of nursing, also reported reasons for not desiring to collaborate as having a lack of collaboration skills, a few people doing all the work assigned among group members, lack of self-competence in contributing to the group, and friendships among group members that led to wasting time by sharing social life stories (Lee et al., 2018).

Nursing students also preferred not to collaborate with each other. Student nurses were exposed to ineffective collaboration in a variety of ways, including faculty bullying students, preceptors giving unfair patient assignments to preceptees, and other student nurses demonstrating rude and discourteous behaviors (Crawford et al., 2019). These incivil behaviors have become a normalized trend as nursing students and young nurses were often subjected to a "nurses eat their young" mentality (Aebersold & Scholville, 2020, p 27). Students and nurses new to the profession who have difficulty coping with the pressures of being a nursing student or nurse and not working collaboratively with colleagues often prematurely leave school or the profession (Crawford et al., 2019). By investigating the perceptions of instructor-created collaborative opportunities among first-year nursing students, I identified solutions and interventions that can be applied to foster effective collaboration among first-year nursing students.

Need for Collaboration in Nursing Practice

Poor collaboration among nurses in practice has been linked to poor patient outcomes (Institute of Medicine [IOM], 2011; Lankshear & Limoges, 2018). Nurses must work together in teams for lengthy periods of time to implement current care delivery models (Berghout, 2021). Nurses who participate and experience improved intra-professional collaboration will positively impact the nursing profession by reducing burnout, producing better patient health outcomes, and increasing nursing's contribution to healthcare (Lankshear & Limoges, 2018).

A Look Ahead

In this chapter, I explored the background, problem statement, and purpose of the proposed study. Then, I stated the research questions, identified the conceptual framework, and expounded on the name of the study. I then looked at definitions of key concepts, assumptions, scope, and delimitations. Finally, I explored the limitations and significance of this study.

Background

Nurses working in today's patient care practice are required to work collaboratively with other health professionals and with each other (Boothby et al., 2019; Crawford et al., 2019, Digregrio et al., 2019). The American Nurses Association (ANA) and the American Organization of Nurse Executives (AONE) (2020) released a joint white paper on *The Principles of Collaborative Relationships* to heighten the necessity for nurses to work together to foster highly effective practice settings and improve patient care. Despite the need for nurses to work together, Crawford et al. (2019) reported a lack

of teamwork and nurse-to-nurse incivility that led to the identification of eighty-four distinct negative outcomes. Crawford et al. (2019) also stated that this lack of intra-professional collaboration begins when the nurse was in nursing school.

Due to the need to place smaller numbers of nursing students in practice environments, students in nursing programs were inherently placed in groupings in clinicals, labs, and classroom activities (Maddison & Strange, 2018; Terry et al., 2018; Zhang & Cui, 2018). However, just placing nursing students in groups does not guarantee successful collaboration will take place (Berghout, 2021). A skilled nurse educator must design collaborative opportunities to achieve desired educational outcomes (Garner & Bedford, 2021; Nielson et al., 2019;). Often, nurses in academia do not possess these collaborative skills.

Nurses who desire to teach in a BSN program at a university must have a graduate degree (American Association of Colleges of Nursing [AACN], 2021). Nursing graduate majors often do not include andragogy for educating nursing students, but instead a focus on research or advanced nursing practice (Bullin, 2018; Garner & Bedford, 2021). This deficit in andragogical education by nursing faculty was often reflected in the inability of the nurse educator to design successful collaborative opportunities and group design (Crawford, 2018). This results in the nursing student experiencing an expectation to learn to function in a group on their own.

In a research study by Kirkpatrick et al. (2018), nursing students exhibited peripherality and marginality when placed in groups for learning. Bakir et al. (2020), reported in their study of higher education including 12 different majors that students did

not want to work together in groups despite collaboration's benefits. I found the current literature gap was unclear on the reasons first-year nursing students did not want to work together nor have nursing faculty been asked their perceived reasons of lack of collaboration among nursing students. Discovering the perceptions of first-year nursing students and faculty of instructor-created opportunities for collaboration could result in interventions to overcome barriers to nursing student collaboration and thereby produce nurses who can collaborate in practice care settings.

Problem Statement

The problem was first-year nursing students' and faculty's perceptions of how instructor-created opportunities for collaboration contributed to first-year nursing students' collaboration was unknown. The literature contained research regarding why collaboration among students in higher education was important to their success in obtaining their degree and as a future employee (Berghout, 2021). Collaboration is defined by Ellis and Han (2021) as two or more people working together to achieve a common goal while respecting the contributions of each member of the group. Students working together collaboratively promoted improved academics, higher-level thinking skills, social skills, personal responsibility, and allowed for self-awareness (Buckley & Trocky, 2019; Lankshear, 2018). Elements of successful collaboration identified in the current literature included effective communication (Lankshear, 2018), rubrics written to motivate and evaluate contributions of individuals (Buckley & Trocky, 2019), instructors that can facilitate effective collaboration (Neilson et al., 2019), emotional regulation (Jarvenoja et al., 2019), and diversity of students (Awang-Hashim et al., 2019).

Nursing students also prefer not to collaborate when placed in groups (Berger et al., 2019; Stenberg et al., 2022). Nursing faculty and accreditation bodies, who currently structure nursing education, insist that nursing students be placed in small groups in their learning during their labs, classes, clinicals, and simulated experiences (George et al., 2019). Nursing students acquire educational benefits by learning how to collaborate successfully. These benefits include enhanced problem-solving abilities (Maddison & Strange, 2018), teamwork skills (Al-Hammouri et al., 2020), self-efficacy (Palsson et al., 2021), and effective communication skills (Buckley & Trocky, 2019; Neilson et. al., 2019). Also, nursing students need to learn to successfully collaborate while in school because as a registered nurse they will need to work intra and inter professionally to promote good patient outcomes (Berghout, 2021). Despite the need and benefits of collaboration, there were no current literature available that asks first-year nursing students nor first-year nursing faculty their thoughts on instructor-created opportunities to collaborate.

Purpose of the Study

The purpose of this study was to discover first-year nursing students' and faculty's perceptions of how instructor-created opportunities for collaboration contributed to first-year nursing students' collaboration. Using a qualitative explanatory case study method approach, I conducted individual interviews of first-year nursing students and faculty in BSN programs in the US to ask students and faculty to describe their perceptions of instructor-created opportunities for collaboration while in nursing school.

The phenomenon of interest was first-year nursing students' collaboration while in nursing school. Collaboration is an essential skill needed to be successful in nursing school coursework and healthcare organizations desire this skill when hiring nurses to provide quality patient care in dynamic environments (AACN & American Organization of Nursing Executives, 2020).

Research Questions

I used the following research questions to guide this study:

Research Question 1 (RQ1): What were the perceptions of first-year nursing students of instructor-created opportunities for collaboration?

Research Question 2 (RQ2): What were the perceptions of first-year nursing faculty of instructor-created opportunities for collaboration?

Conceptual Framework

The CoPs model developed by Erline Wenger was the framework for this study. Wenger's CoPs model was built on situated learning theory from his earlier work in 1998 where people learn better in their own communities of practice (Wenger, 1998). CoPs are groups of people who are brought together due to shared interests and learn more about their shared interests as they work together on a regular basis (Wenger-Traynor, & Wenger-Traynor, 2014). The three characteristics of the CoPs model were the domain, the community, and the practice (Wenger, 1998). The domain was a shared commitment to an area of interest. The community involves members with the same domain interacting and engaging in shared activities, helping each other, and sharing information with each other. The practice was the shared tools the group must use to engage in the

community. Members in the community needed the three constructs of the model to successfully collaborate to learn. I selected this framework for this study because it related to the process needed for collaboration among nursing students to learn.

Nursing students were admitted by a university to a program of study and enrolled in the same didactic courses, attended laboratory, simulation, and clinical experiences together. They shared a commitment (domain) to become a registered nurse and work and learn within the cohort. The community involves members with the same domain interacting and engaging in shared activities, helping each other, and sharing information with each other (Wenger, 1998). The practice was the shared tools the group must engage in the community. In nursing school, students' shared tools were their past experiences, learning resources, instructor-created collaborative learning opportunities, and existing knowledge to build new knowledge. Therefore, nursing school was a desired community of practice (CoP) where this model was applied to inform the study.

Nature of the Study

The purpose of this study was to discover first-year nursing students' and faculty's perceptions of how instructor-created opportunities for collaboration contributed to first- year nursing students' collaboration. I chose a qualitative explanatory case study approach because I wanted to know what faculty and students thought about opportunities for students to collaborate. I used a qualitative explanatory case study method that enabled me to find out how participants perceive a phenomenon in a real-world setting (Yin, 2016). In this study, the cases were the first-year nursing students and faculty's perceptions about opportunities for collaboration while in nursing school.

Definitions

In this section, I provided definitions used in this study.

BSN: A university offers this four-year bachelors' degree to a student that prepares them to practice as a nurse in all healthcare settings (AACN, 2021).

Collaboration: Two or more people working together jointly, especially toward and intellectual endeavor, offering unique contributions to solve a problem (Nielson et al., 2019)

First-year nursing faculty: A masters' or doctorally prepared nurse who teaches initial nursing courses in a BSN program (National League of Nursing [NLN], 2018)

First-year nursing student: A student attending a BSN program in their first year of nursing courses (Neilson, 2019)

Prelicensure: A nursing student before they pass their state board exam, National Council Licensure Exam-Registered Nurse (NCLEX-RN) (National Council of State Boards of Nursing, 2022).

Assumptions

In this study, I assumed that the participants would volunteer willingly. I assumed there was no need for an incentive to participate. I assumed that nurse educators were interested in best practices in teaching nursing students. I assumed that nursing students and nursing faculty would give honest responses to the questions I asked. I assumed that a nursing student wants to become a successful registered nurse. These assumptions were necessary to conduct this research study in full faith of providing raw, rich data in response to the research questions asked in this study.

Scope and Delimitations

In the scope of this study, I involved 12 first-year nursing students and 12 first-year nursing faculty in BSN programs in the US, and their perceptions of instructor-created opportunities for collaboration. The participants were randomly selected through snowball sampling using social media to strengthen the generalizability of the research findings. Generalizability was defined as the application of research findings based on a sample to an entire population (Yin, 2016). The problem in this study was the perceived barriers for collaboration for first-year nursing students.

In examining perceptions of nursing students and nursing faculty, I determined how nurse educators prepared for collaboration opportunities. This data showed how the students perceived these opportunities for collaboration so that negative perceptions were addressed, and positive perceptions were strengthened. To limit my study, I chose first-year nursing students and faculty in the US that were currently enrolled or teaching in a BSN program.

Limitations

I was the sole researcher who was collecting these data. As a sole researcher, I brought a research lens to the study that was not free of bias. No research lens is free of bias, therefore the best way to manage this was to look inwardly and realize those biases (Yin, 2016). I brought the following potential biases to this study. I am from the US, and I was a first-year nursing faculty who taught first-year nursing students at a university that awards BSN degrees. I became interested in this topic as I sought to teach collaboratively to my students and encountered resistance from students and faculty alike.

By stating my biases in my research notebook and interviewing students and faculty from unfamiliar universities of higher learning, then any action on these potential biases were diverted.

<div align="center">**Significance**</div>

Through this study, I discovered contributions for positive social change. First, to the discipline of education, I provided an avenue for faculty to foster the soft skill of collaboration while their students were in nursing school, increased socialization students need for learning, and made a path for students to attain higher educational outcomes. Second, to advance the practice of nurse educators, I revealed barriers to student collaboration, best practices for successful collaboration, and revealed the need for andragogical training of practice-focused nurses who become educators. Finally, positive social change consistent with the scope of this study by removing barriers to successful collaboration, nursing students can embrace collaborative opportunities given while they were in school. Then, they can become nurses who were able to practice successfully intra professionally to reduce errors, increase job satisfaction, and improve patient outcomes.

Literature Gap

There was a gap in the literature about the perceptions of nursing students and nursing faculty as to all opportunities for collaboration in nursing education. Researchers have looked at perceptions of specific learning strategies that require collaboration such as team-based learning and collaborative testing, but this narrow focus left out perceptions of all the opportunities found in nursing education to collaborate. I examined

all collaboration opportunities in nursing education and provided nursing education programs valuable interventions to promote effective collaboration to improve nursing education outcomes in nursing curricula and better patient outcomes once the student becomes a nurse.

Summary

In this chapter, I explored the research design and rationale, the purpose of the study, and the research questions for this study. I discussed the conceptual framework, nature, definitions of terms used in this research, and identified assumptions. Finally, the scope, delimitations, and significance were incorporated.

To provide nursing students with a skill that fosters leadership, responsibility, teamwork, effective communication, and new knowledge, they need to learn collaboratively (Kirkpatrick et al., 2018; Neilson et al., 2019). Nursing faculty can improve their students' education by successfully orchestrating collaborative experiences that create nurses that have the skill of collaboration. Collaboration is needed among nurses so that patients have better health outcomes (Kohn, 2000).

Chapter 2: Literature Review

In this study, I identified the perceptions of first-year nursing students and faculty of instructor-created opportunities to collaborate that contributed to a lack of collaboration of first-year BSN students in the US. Green et al., (2018) defined collaboration as people working together to make joint decisions and share collective ownership for outcomes. According to De hei et al., (2020) successful collaboration in learning can lead to acquiring new knowledge, higher order thinking skills, metacognition, and teamwork.

Collaboration among nursing students was important to their success in obtaining their degree and as a future nurse (Al-Hammouri et al., 2020). Despite the importance of collaboration, students in nursing education prefer not to work together (Buckley & Trocky, 2019; Lankshear, 2018). Stover and Holland (2018) revealed that 49% of nursing students disliked collaboration activities offered in the classroom. Collaboration opportunities in nursing education would include, but were not limited to, peer-to-peer learning, group assignments, lab groups, and clinical groups. Also, nursing faculty were often not taught andragogy in their graduate education that would support presenting student collaboration opportunities in the traditional classroom and virtual (Bullin, 2018). A dislike of collaboration among nursing students and lack of a skillset of nursing faculty to orchestrate a collaborative learning environment leads to student resistance to collaboration (Stover & Holland, 2018; Wong et al., 2022). Lack of collaboration skills by nursing students leads to lower level thinking skills, poor social skills, lack of personal responsibility, and lack of self-awareness (Buckley & Trocky, 2019; Lankshear, 2018).

Therefore, since collaboration was beneficial to the nursing student and as a future nurse, it was imperative to nursing education to find out students' and faculty's perceptions of collaboration in nursing courses while they were in their first year.

In all professional settings, nurses must work together collaboratively to achieve the best outcomes possible for patients. The clinical environment is becoming more complex, and nurses prefer to work in silos (Zhang & Cui, 2018). Nurses need to achieve the skill of collaboration while in school to demonstrate it successfully in their career as a nurse. Peer collaboration and inter professionalism were linked to increased patient safety (Neilson et al., 2019). According to the IOM report, *To Err is Human*, ineffective collaboration and communication among nurses and with other disciplines was a leading cause of medical errors (Kohn et al., 2000).

Learning how to effectively collaborate within the profession and with other healthcare workers begins while the nurse was a student by watching other nurses and nurse faculty model and teach these behaviors (Crawford et al., 2019). Unfortunately, only 25% of nurses have doctoral degrees, and of those programs, nurses were prepared to be advanced-practice focused or nurse scientists, and not educators (NLN, 2018). Nurses with graduate degrees were the ones who choose to become nursing faculty, and there was a need for them to learn to create dynamic curriculum and innovative teaching strategies that facilitate nursing students to work together.

The purpose of this study was to discover first-year nursing students' and first-year nursing faculty's perceptions of how instructor-created opportunities for collaboration contributed to first-year nursing students' collaboration. To address this

problem, the approach was to conduct a qualitative explanatory case study method. I interviewed first-year nursing students and faculty about their opportunities for student collaboration. In this chapter, I discuss the literature search strategy, conceptual framework, literature review of key variables and concepts, summary, and conclusions.

Literature Search Strategy

I searched seven databases to obtain current literature on the topics included in the literature review: CINAHL, ERIC, PsychInfo, Business Source Complete, Google Scholar, ProQuest Multisearch, and the Walden University Library. The reviews were linked to collaborative opportunities for first-year nursing students along with instructor preparation to foster collaboration. The inclusion criteria entailed all articles that were peer-reviewed, published between 2018-2023, and full-text articles. The exclusion criteria included studies that were not available in English or full text. I used the following keywords to search for the literature on the topics included in the literature search: *nursing students, collaboration, barriers, team-based learning, teamwork, nursing education, first-year students, freshman, group learning, intra professional, teamwork, communities of practice, undergraduates, active learning, nurse educators, teachers, instructors, faculty, higher education, professors, collaborative instructional strategies,* and *obstacles.* This exploration of the literature led to finding additional sources and searches related to the concepts.

In searching for information about collaboration among first-year nursing students in BSN programs, I decided to first use CINAHL, a nursing literature search engine. The first articles I found were focused on nursing students and their opportunities for

collaboration such as team-based learning, collaborative learning, group work and simulation. Nursing faculty were also mentioned and their educational training for teaching. These searches led to finding more terms that I used in subsequent searches.

The searches with ERIC database revealed 222 hits for articles related to freshman students in higher education. In these articles, I discovered that collaboration issues were not reserved for nursing education. Active learning strategies were frequently mentioned in relation to group work and team-based learning. This database also listed eighteen hits for first-year higher education nursing faculty and their lack of preparedness for collaborative andragogy.

A search with PsychInfo gave 154 hits on the theory of CoPs. In addition to the use of this theory in corporations, there were 37 recent articles about this theory's use in higher education. In the literature, I found several versions of Wenger's CoPs model to include one in 1991, 1998 and 2001 (Awang-Hashim et al., 2018). All versions described CoPs as groups of people with a common language and shared goals. In ERIC database, there were three hits that included the search terms of *communities of practice* AND *student first year* OR *freshman* and *group learning* that included the theory of CoPs.

The final database I searched was ProQuest. There, using the terms *nursing students*, *collaboration,* and *barriers* I found 21 results. In this dissertation database, I saw there were no similarities to the purpose of this thesis in the past five years.

Conceptual Framework

The conceptual framework which underpinned this study was the CoPs model developed by Erline Wenger (2008). CoPs were groups of people who share a common

goal and learn more effectively to accomplish their goal by social interaction (Wenger-Traynor & Wenger-Traynor, 2015). I selected this framework to guide the research to study a group of people (nursing students) who shared a passion (graduating nursing school and becoming a nurse) and led to success (as a nursing student and as a nurse) through collaboration (interacting regularly). First-year nursing faculty were a part of the community being studied also. Three characteristics of the CoPs model include the domain, the community, and the practice. The three constructs of the model were three elements needed for nursing students to successfully collaborate. Lastly, it was by combining and developing these three distinct characteristics that a CoP was created by a teacher and functions for situated learning (Wenger-Treynor & Wenger-Traynor, 2014).

The domain was a shared commitment to an area of interest. Nursing students were admitted by a university to a program of study as a cohort. They enroll in the same didactic courses and attend laboratory, simulation, and clinical experiences together. They learn together under a shared group of first-year nursing faculty. The students and faculty share a commitment for students to pass nursing school, learn to care for patients, and become registered nurses.

The community involves members within the same domain interacting and engaging in shared activities, helping each other, and sharing information with each other (Wegener-Traynor & Wegener-Traynor, 2014). The communities for nursing students were their shared opportunities for learning, face-to-face classrooms, laboratories, discussion boards, group projects, interactions with faculty, and clinical experiences. It was with discovering and removing barriers to collaboration in these

communities, nursing students were asked to engage in activities, work together in groups, and share information with each other, that there will be successful collaboration.

Finally, the practice was the shared tools the group uses to engage in the community. In their communities, students' shared tools were their past experiences, learning resources, instructor-created collaborative learning opportunities and previous knowledge to build new knowledge. In the three constructs of the model, I postulated three elements needed for nursing students to successfully collaborate. I examined the data gathered from this qualitative study through the lens of each of these three characteristics: the domain, the community, and the practice, so first-year nursing students and faculty can begin to develop and function as successful CoPs to better prepare nurses.

Theory's Origin

The conceptual model known as CoPs was created by Lave and Wenger (1991) to describe a group of people that solve problems to generate new knowledge. In 1998, Wenger suggested that the social part of the groups was the cornerstone of learning. Through informal interactions, novices consult with more advanced members of the groups to identify gaps in knowledge, alter their practice from the experiences shared, solutions were discussed, and outcomes were brought back to the group to complete a social loop. Lave and Wenger's (1991) research was able to explain how new knowledge was created while people were working within their everyday professions. These authors created what is now known as social learning theory, a process by which perception and action occur before conceptualization within a sociocultural process.

This model was chosen because CoPs form the basis of the process of learning that occurs among groups. The model provided a useful perspective on knowing and learning. The CoPs model was a social theory of learning that looks at learning as a process of interacting with others, has no definite beginning and end, does not assume intentionality, and was a result of the dynamics of group interaction and activities (Wenger, 1998). The purpose of using the CoPs model was as a key to improve performance of individuals through shared interactions as a group.

The CoPs model was designed to improve the education and collaboration of a shared workforce. Nursing education needs to change so that students, a future shared workforce, can collaborate to build new knowledge and solve problems. This model, through its theoretical presuppositions of working together toward a greater outcome than one person can accomplish alone, was appropriate for this study. Three distinct parts of CoPs must be present that include the domain, the community, and the practice. Nursing students, within a cohort, represent an example of a CoP in that they exist and function together. Cohorts were formed when the student officially enters a professional nursing program, and these students take the same courses until graduation. Nursing students often share a common interest and passion for learning patient care and graduating nursing school. These student cohorts contain the three elements of the CoPs model: the domain, the community, and the practice. The domain for nursing students was the shared experiences, stories, and relationships they form with like goals. They had an identity as nursing students who were-matriculating together with the same end goal in mind. The community was formed by pursuing their interest in the domain by engaging in activities

together (lab, clinical, learning groups), discussions, helping each other, and sharing information. The students build relationships within the community with other students and nursing faculty. Finally, nursing students comprise a practice by finding ways to solve problems together. Shared conversations, group projects, discussion boards, clinical assignments, study groups, and lab groups become a way to learn from each other and develop a shared repertoire for the nursing student's practice. In these three elements, the student nurses can develop a CoP to improve their performance and learning.

Past Application of Theory

The CoPs model has been used to foster social learning within practice disciplines for the past three decades to include meat cutters, midwives, and tailors. Wenger (1998), one of the founders of the model, stated that it was social participation within the groups that was the basis for learning. Lave and Wenger (1991) used situational learning theory to form this model, where learning and doing occur before conceptualization. The following authors used the CoPs model in their research studies of students learning together.

Marcolino et al. (2020) saw a need for occupational therapists to meet to discuss their care of patients in the processes of becoming ill, receiving treatment, and requiring hospitalization. These authors had noted that occupational therapy students had grown in their knowledge of caring for patients with mental health illness by interacting with other occupational therapists caring for these types of patients. These authors used the CoPs model to allow the students to critically reflect on their situated practices as occupational

therapists. In the study, nursing students and nursing faculty were able to critically reflect on their collaborative experiences.

Kim et al. (2018) surveyed students in higher education, including nursing students in the colleges of health sciences, to assess student satisfaction with CoPs activities instituted at three distinct levels: organizational level, group level, and individual level. The data were only collected from students throughout the university who were engaged in CoPs activities such as problem-based learning, collaborative learning environments, and group activities. The purpose of their research was to investigate core factors in these activities that facilitate learning so that a systematic CoPs model for higher education could be proposed. Kim et al. (2018) revealed that the same conceptual components of the CoPs model activities facilitated collaboration among the students and were met with elevated levels of satisfaction among students and faculty.

Terry et al. (2019) performed a systematic review and meta synthesis of eight previous research articles that studied nursing students' interaction with novice nurses in the clinical setting using the CoPs model. This review comprised perceptions of ninety-three nursing students and 9 first-year registered nurses working together and its impact on the nursing students' clinical education. The articles in this systematic review contained three themes: enablers of successful CoPs, barriers to successful CoPs, and success in action. The authors stated the results of this review could be used to help health care agencies and educational institutions implement strategies to create an environment where novice nurses and nursing students can learn together successfully.

Why This Theory Relates to This Study

This study was to discover first-year nursing students' and faculty's perceptions of working together collaboratively in their studies for the goal of learning. The CoPs model seeks to explain how groups of people can work together to expand their knowledge within their current setting. Using the CoPs model allowed a framework in which to hang the domain (shared experiences), the community (first-year nursing students and faculty), and the practice (shared nursing assignments) on.

According to Terry et al. (2019), the CoPs model exhibits situational learning in which learning was grounded by daily activities where knowledge was applied, requires ongoing negotiation, problem solving with others, and recognizes that knowledge was acquired through experience. The same situational learning of a cohort of nursing students with each other in their opportunities for collaboration (lab groups, clinical groups, active learning groups, team-based learning, and collaborative testing) was a key element to their academic success. The success of functioning elements of the CoPs model was imperative to nursing students' learning and to their career once they become a registered nurse.

Therefore, the CoPs model was a social learning model that when functioning with all its elements, can foster learning in a community of people with a shared practice. First-year nursing students and nursing faculty were a social community with a shared practice that desires to grow and learn. Finding out their perceptions of opportunities to function within a shared community, (i.e., collaboration, and comparing them to a healthy

CoPs) revealed what was functioning well, and what was not. This facilitated the discovery of opportunities for improvements in collaboration efforts in nursing education.

<div align="center">**Literature Review Related to Key Variables and Concepts**</div>

A synthesis of the literature was necessary to review what was previously written about the constructs of interest for this research. These constructs included *nursing students, collaboration, barriers to collaboration, team-based learning, teamwork, nursing education, first-year nursing students, freshmen, group learning, inter* and *intra professional collaboration, undergraduates, active learning, nurse educators, instructors, faculty, problem based learning,* and *higher education.* It was in this endeavor I uncovered what has been studied, what has yet to be studied, and the gap this research contributed to.

Lack of Collaboration Skills

Nursing students do not enter school with the skills they need to work together collaboratively (Buckley & Trocky, 2019; Digregrio et al., 2019; Lankshear & Limoges, 2018). These students have not experienced the socialization and engagement that working together provides to master course content, develop team-building skills, and foster collaborative skills (Ellis & Han, 2021; Siah et al., 2019). When in groupings to complete a collaborative activity, nursing students exhibit peripherality and marginality (Kirkpatrick et al., 2018). Nursing students have not been previously challenged to participate was social learning activities that would foster relationships, increase learning and thinking skills, and provide the external motivation needed to study to bring learning to their part in the group (Crawford et al., 2019; Neilson et al., 2019). Therefore, there

was a need to provide this essential collaboration training so nursing students will be prepared to start working together upon graduation.

Positive Educational Outcomes

Collaboration is a skill that leads to positive educational outcomes for undergraduate students. Collaborative learning, one andragogy that was often viewed as synonymous with collaboration, leads to higher student motivation, higher-order thinking, meta-cognitive skills, and shared knowledge acquisition (De hei et al., 2020; Lee et al., 2018; Saqr et al., 2018; Zhuang & Cui, 2018). Working in groups enables the students to gain knowledge constructively through reflection on actions (Maddison & Strange, 2018), social interaction, motivation to learn (Falcione et al., 2019) and increased self-efficacy (Kirkpatrick et al., 2018; Palsson et al., 2021), collaboration, improved communication, leadership, and teamwork skills that students need to be successful in higher education (Badowski, 2019, Goh et al., 2020; Kirkpatrick et al., 2018). These positive factors surrounding the outcomes of fostering collaboration in undergraduate education support the importance of having researched why collaborative andragogy was not being utilized successfully.

Barriers to Collaboration for Undergraduate Students

Despite the benefits of collaboration, there were noted barriers to implementing collaboration with undergraduate students. According to Stover and Holland (2018), nursing students verbalize resistance to working in small groups. Reasons found in the literature for obstacles to working collaboratively together for non-nursing undergraduates include dysfunctional groups, communication," free riding",

dominant personalities, unequal task distribution, and lack of collaborative skills among members (Ferdous & Karim, 2019; Ghufron & Ermawati, 2018; Lee et al., 2018). These studies, however, did not mention nursing students or nursing faculty, who have governing outcomes to meet set by accrediting bodies such as the AACN, 2021, IOM, (2010), World Health Organization (2021), and the NLN (2018) requiring the incorporation of collaboration in undergraduate nursing education. These studies of non-nursing faculty have educators who were trained in collaborative andragogy (Ferdous & Karim, 2019).

Team-Based Learning

Nurse educators used team-based learning (TBL) as another andragogy practiced to institute collaboration among nursing students. It was a specific active learning strategy that involves students working together cooperatively. Cooperative learning was different from collaborative learning in that each person in the group has a specific piece they were to bring to the group activity (Buckley & Trocky, 2019). TBL has been shown to improve student performance on exams (Al-Hammouri et al., 2020; Cooke et al., 2019; Crawford, 2018), teach teamwork principles (Al-Hammouri et al., 2020, Crawford, 2018), improve application of content (Currey et al., 2018; Siah et al., 2019;), shift student from passive to active learning (Alharbi et al., 2018; Goh et al., 2020), improve communication (Currey et al., 2018; Zhuang & Cui, 2018), and decrease future medical errors made upon graduation (Al-Hammouri et al., 2020; Berghout, 2021). Although TBL has its' benefits, it was an often-underutilized learning strategy used by nursing educators (Nielson et al., 2019).

Academic Preparation of Nurse Educators

Nurse educators are often not prepared for teaching undergraduate nursing education. The terminal degree required for a nurse educator was a doctoral degree in philosophy (PhD) or an advanced-practice degree in nursing (APRN) (AACN, 2016). Both of which do not contain coursework for learning to be an effective teacher. Nurse educators lack andragogical training of strategies that promote collaboration and teamwork (Bullin, 2018; George et al., 2019; NCSBN, 2008). Also, there were a lack of qualified nursing faculty available to teach as the older generation of educators retire and the nurse educator shortage grows thereby advancing more practice-focused faculty into the role of nursing educator (Garner & Bedford, 2021; George et al., 2019). This omission of educational training for nurse educators and lack of qualified faculty leads to a need of best practices of how to teach collaboration andragogy to new nurse educators and advocate for educational andragogy reform in graduate nursing education that overcomes identified barriers through this research.

Support

Another finding was that undergraduate faculty were hesitant to enact collaborative learning strategies due to lack of support from their institution. Facilitating collaboration in an undergraduate course requires extra time, increased workload, andragogical support from other instructors, and a need for andragogical training in active learning (Alharbi et al., 2018; Falcione et al., 2019). When other faculty, or administration, do not possess the tools to support collaborative learning then that would become a barrier that was difficult to overcome (Ghufron & Ermawati, 2018). These

findings also reflected undergraduate teachers, instructors, and professors that were non-nursing in background. This research provided information from educators about their perceived barriers to enacting collaboration in education.

Problem-Based Learning

Small group problem-based learning was more effective than traditional lecture-based instruction. Mavri et al. (2020) found that students that participated in cross-organizational small problem-based groups enhanced the learning and outcomes of students in higher education. Ghufron and Ermawati (2018) discovered that small-group collaborative learning raised students' responsibility in learning and students reported it made it easier to grasp the material. Problem-based learning was one type of collaborative learning where a group of students work together to solve a problem with each contributing their part. Nursing students need to be actively involved in the process of small group problem-based learning. This literature did not show the activity of nursing students in this effective collaborative endeavor.

Teamwork Training

There needs to be a process to look at how nursing students work together. Teamwork training was one approach. Fathi et al. (2019) in their integrative review instated an interpretive structural modeling technique to map interrelationships among participants from various higher education tracks. Kim et al. (2018) built a model for building communities of practice activities to investigate how higher education students work together and learn. De hei et al. (2020) designed and implemented group learning activities for the purpose of focusing on how business and management students

interacted during the process of collaborative learning. Falcione et al. (2019) found five themes of three professors' and five higher education students' successful collaborative activities and found that prior participants with effective collaboration experience had previous successful collaboration. So, these authors exposed the process of how non-nursing students work together collaboratively since these were studies involving higher education students, but not nursing students.

Student Need for Collaborative Skills

Collaborative skills were an expectation of higher education graduates' future employers. According to Ellis et al. (2019), only 39% of 400 employers surveyed reported that they believed graduates were prepared to work in teams effectively to solve problems upon hire. Boothby et al. (2019) research shows that practice environments will require nursing students to work inter and intra-professionally to provide safe patient care. Working in silos or nurse-to-nurse incivility leads to workplace violence and patient care being compromised (Crawford et al., 2019; Lankshear & Limoges, 2018). These expectations of employers led to a need to practice collaboration while in school for nursing students.

Need for Intra-Professional Collaborative Skills

Nursing students should have opportunities to develop intra-professional collaborative skills. Boothby et al. (2019) research study included near-peer teaching between graduate and undergraduate nursing students' interaction through case-based simulations to develop intra-professional skills. Crawford et al. (2019) integrative review revealed that nurse-to-nurse incivility, bullying, and workplace violence started with

modeling of incivil relationships of student-to-student and student-to-instructor. Lankshear and Limoges (2018) stated there was not enough emphasis to assist nursing students to work with each other and called for entry-to-practice educational reform. Kirkpatrick et al. (2018) study shows that intra-professional nursing student peer-to-peer learning activities can enhance students' self-efficacy. Ma et al. (2018) stated that successful intra-professional care among nursing staff led to higher job satisfaction and less likely to make mistakes in patient care. These studies did not elaborate on barriers to collaboration.

Active Learning

The literature revealed that active learning strategies were effective to promote collaboration. Active learning was a term used to identify teaching strategies that require students to be actively involved in the learning process. Murphy and Green (2020) stated that active learning promotes collaboration among students by asking them to participate together actively in their learning process. Murphy and Groen (2020) studied the use of first-year undergraduate student's perceptions of using active learning classrooms (ALCs) and found students reported increased interaction and engagement while working together.

Currey et al. (2018) found that active learning in groups led to teamwork and problem-solving skills. Comber and Bos (2018) created a flipped classroom, a form of active learning, which led to benefits from group discussion from peer reading. This study revealed the need to look at active learning's use to promote collaboration in nursing students.

Instructor-Created Collaboration Opportunities

Lee et al. (2018) interviewed 19 preservice teachers and 23 students. The teachers encountered difficulties in creating and facilitating collaborative activities to include designing appropriate roles for each group member, managing the class time, providing relevant materials, establishing collaborative beliefs, and enhancing and producing effective collaboration. The authors findings from eleven out of nineteen teachers concluded that instructions given to their students were about the assignment and nothing about collaboration (Le et al., 2018). This study differs from the proposed study in that it was pre-service educational instructors in Vietnam instead of first-year nursing instructors in the US, and the focus was on collaboration during collaborative learning activities only. Also, the research questions asked were about obstacles and antecedents to those obstacles instead of perceptions of instructor-created opportunities for collaboration.

In a study by Falcione et al. (2019), 5 university professors and 6 chemistry students reflected on two collaborative experiences. Themes that emerged after the authors performed open thematic coding were support needed by faculty for students to have a successful collaborative experience, lack of andragogical training in faculty's education to design collaborative experiences, and ability to define expectations and norms of a collaborative experience were essential. Falcione et al. (2019) study differs from this study in that these perspectives were of chemistry teachers and students and utilized an auto ethnographical case study approach. This study was conducted outside of the US, whereas my study was limited to the US.

Missing Themes

One of the themes missing from the topic of collaboration among first-year nursing students was how they perceived instructor-created collaborative experiences in their education. The literature results from studies supported that inclusion of collaborative instruction was needed to enhance students' academic outcomes (Al-Hammouri et al., 2020; Boothby et al., 2019; Lima & Siebra, 2021; Zhang & Cui, 2018), learn collaborative skills (Ellis and Han, 2021; Visker et al., 2020), prepare for future collaboration in the workplace (Fathi et al., 2019; Hora et al., 2019) and avoid future workplace errors (Berger et al., 2019; Stover & Holland, 2018). The literature was also clear that students do not prefer to collaborate (Dindar et al., 2020; Kirkpatrick et al., 2020; Le et al., 2018; Stover & Holland, 2018) and prefer to work alone. Finding out why students resisted collaborative experiences in their studies was essential to promoting successful collaborative assignments.

Another missing theme was how first-year nursing faculty perceive their created collaborative experiences designed for their nursing students. In the literature review, I revealed that nurses who obtain graduate education and become faculty members lack the educational training to design successful collaborative learning assignments (Fathi et al., 2019; Garner & Bedford, 2021; Lankshear & Limoges, 2018). Also, the faculty member must be andragogically trained to orchestrate successful collaborative experiences (Falcione et al., 2019; Le et al., 2018). With this generational situation of lack of obtaining educational andragogy instruction, the faculty members may not have ever experienced for themselves successful collaboration in which to model to their students.

Therefore, a gap in the literature was how nursing faculty perceived collaborative experiences offered to their students.

Summary and Conclusions

This research problem was to find perceptions of first-year nursing students and faculty of instructor-created opportunities for collaboration. These findings were beneficial to nursing education in that they provided insight to overcome barriers to collaboration and strengthen successful collaborative experiences for students. This was not only applicable to nursing education but to nursing practice.

In this study, I provided a picture of how first-year nursing students and faculty see collaborative assignments and experiences. By exploring qualitatively, the perceptions by nursing students and faculty of student collaboration led to addressing gaps in educational theory and instruction. This information was essential to regulatory bodies of graduate nursing education and mentorship of new faculty by institutions of higher learning.

Chapter 3: Research Method

The purpose of this research study was to discover what factors perceived by first-year nursing students and nursing faculty contributed to a lack of collaboration of first-year BSN students. To address this problem, I conducted a qualitative explanatory case study to investigate the perceptions first-year nursing students and faculty had about collaboration opportunities in nursing education.

In professional settings, nurses must work together collaboratively to achieve the best outcomes possible for patients. Intra-professional communication and collaboration has been linked to increased patient safety (Neilson et al., 2019). Student nurses were exposed to a lack of effective collaboration strategies in a variety of ways that include faculty bullying students, preceptors giving unfair patient assignments to preceptees, and witnessing other student nurses demonstrating rude and discourteous behaviors (Crawford et al., 2019). These behaviors have become a normalized trend as nursing students and young nurses were subjected to a "nurses eat their young" mentality (Crawford et al., 2019, p. 140). Learning how to effectively collaborate within the profession and with other healthcare workers began when the nurse was a student by watching other nurses and nursing faculty model these behaviors (Crawford et al., 2019).

Students and nurses new to the profession who have difficulty coping with the pressures of being a nursing student or nurse, and not collaborating with other students or colleagues often, prematurely leave school or the profession (Crawford et al., 2019). Nursing faculty try to implement collaborative activities, but their attempts were often

not successful due to lack of education in andragogy (Bullin, 2018) which can lead to poor instructor evaluations by the students (Stover & Holland, 2018).

My study was unique because the research data were from first-year nursing students and faculty about their perceptions of instructor-created opportunities for collaboration in nursing education. I followed Walden University's mission of social change by discovering the keys to successful collaboration, students were to be better prepared while in nursing school and able to transfer successful collaborative skills to the workplace when they graduate to produce better patient outcomes (Walden University, 2022).

This chapter contains the research design used, rationale, and the role of the researcher in this study. The methodology section includes participant selection, instrumentation, procedures for recruitment, participation, data collection, and a data analysis plan. Trustworthiness of the study was also explored in Chapter 3, including credibility, transferability, dependability, and confirmability. Finally, the next chapter will also contain the ethical procedures used in this study when dealing with human participants.

Research Design and Rationale

I conducted this study using a qualitative explanatory case study research design. I chose this design because the variables I wanted to examine were a small case of students and faculty in a real-world context to extrapolate rich, verbal data that explained the phenomenon of lack of collaboration among first-year BSN students (Yin, 2016). The sample included 12 first-year nursing students and nursing faculty. Qualitative

methodology allowed for students' and faculty's perceptions to be revealed through interviews. It was only through understanding the thoughts from nursing students and faculty regarding collaboration that the appropriate interventions were discovered and could be applied.

Research Questions

The central concept in this study was the lack of student collaboration in nursing education. The research questions were:

RQ1: What were the perceptions of first-year nursing students regarding instructor-created opportunities for collaboration?

RQ2: What were the perceptions of first-year nursing faculty regarding instructor-created opportunities for collaboration?

The research convention chosen for this study was a qualitative explanatory case study design. The reason this study lends itself to this research convention was because I asked perceptions of first-year nursing students and faculty of a phenomenon (student collaboration). This design was best suited for perceptions of a phenomena.

Role of the Researcher

My role as a researcher in this study was that of the observer. I conducted interviews of the first-year nursing students and faculty members, transcribed the data, extracted the themes, and interpreted the results. I did not have any relationship to the nursing students or faculty as that was part of the exclusion criteria when choosing who to interview. There was no one chosen who was under my authority or supervision.

Field Notes

I also kept field notes that became part of my database. These handwritten notes were a result of my interviews and field observations. These notes were organized, completed, categorized, and were available for access. This notebook was important for storage and retrieval, but also so future researchers can inspect and use the database (Yin, 2018).

Bias

I managed research bias by realizing first, that I was a first-year nursing student, and I was a first-year nursing faculty who taught first-year nursing students in a BSN program. That put me in a position to have preconceived ideas and a personal stake in the outcome of this study. I was a nursing faculty member in the US and had no supervisory role over the selected participants. I obtained participants using social media and had no faculty members or students in the study whom I worked with or taught. My interview questions were scrutinized for bias through my dissertation committee and the Institutional Review Board (IRB). My interview questions were developed based on the conceptual framework and the literature review. I also kept a researcher's notebook that gave me an opportunity to explore my thoughts throughout the research process to reveal implicit biases I had so that I was aware of them.

The incentive to participate was advertised to contribute to a study that has implications for nursing education and future nursing practice. Those who participated in the study were given a $25 Amazon electronic gift card.

Methodology

Participant Selection

The first population sampled were first-year BSN students. First-year refers to the student's beginning year of taking nursing courses, which in a traditional BSN program was their junior year and in an accelerated BSN program was their first semester. The second population that was sampled were first-year nursing faculty. Their first year referred to those who taught in corresponding semesters of first-year nursing students.

Procedures for Recruitment

The sampling strategy I chose to recruit participants was called snowballing. This was a technique of sampling where qualified participants recruit other participants to participate in the study to create a snowball effect (Yin, 2016). I chose Facebook groups aimed at nursing students and nursing faculty. I filled out the online request form to ask permission to join the group to submit my flyers (Appendix A). These specific nursing social media webpages ensured eliciting a group of participants who met criteria. The qualified participants were encouraged to reach out to their peers. This sampling strategy helped to ensure that the inclusion criteria was met for being a first-year nursing student or nursing faculty in the US.

I interviewed 12 first-year nursing students and 12 first-year nursing faculty from a variety of BSN schools. The rationale for this number was in the use of purposeful sampling. Purposeful sampling was the identification of information rich cases related to a phenomenon of interest that can provide a lot of information for the most effective use of limited resources (Pilankas et al., 2016).

First-year nursing faculty were recruited through social media via nurse educator group pages. First-year nursing students were recruited through student nurse social media sites for student nurse organizations. The participants were asked in the flyer (Appendix A) regarding their school of nursing providing a BSN in the US, 18 or older, and whether they were a student taking first-year nursing courses or a faculty teaching first-year nursing courses. Once these criteria were met, then the participant received a consent form via email to which they replied, "I consent." Then they received an email link to pick a date and time to be interviewed. Participants received a Zoom link and a verified date and time to be interviewed via Zoom.

Instrumentation

To collect data, I used a set of interview questions (Appendix B) an observation sheet for field notes, interview protocol (Appendix B), Family Educational Rights and Privacy Act (FERPA) protected Zoom and Zoom audio recordings on a password protected laptop. The interview questions and interview protocol were researcher created. Each participant who met criteria through the questionnaire on the flyer and replied "I consent" to the consent form via email were individually interviewed by me via FERPA protected Zoom.

I performed individual interviews for the proposed research questions. Individual interviews allowed participants to answer at their own pace and depth to provide richer data (Yin, 2016). Individual interviews, as opposed to group interviews, were also not affected by the dynamics of a group.

Procedures for Recruitment, Participation, and Data Collection

I recruited nursing faculty participants by using a flyer (Appendix A) posted on a nurse educator page on Facebook entitled *Teachers Transforming Education* to participate in this study. In the flyer, I included the purpose of my study, inclusion criteria for participating, and a request to participate. Interested participants were encouraged to email me with their name, contact information, and verification that they met the inclusion criteria.

For recruitment of the first-year nursing students, a flyer was posted on a Facebook page for student nurses entitled *Nursing Tribe RN.* In the flyer (Appendix A), I included the purpose of my study, inclusion criteria for participating, and a request to participate. Interested participants were encouraged to email me with their name, contact information, and a verification they met the inclusion criteria.

The participants that responded to both flyers and met inclusion criteria were sent a detailed email that explained the study and given a consent form. I offered to speak by phone or email to further discuss the study, the interview process, and the consent form if desired by the participant. Participants were thus able to ask questions before agreeing to the research study. Once the participant replied "I consent" to the consent form via email, I gave the participant a link via Calendly to sign up for an interview time. Calendly was an app that allowed people to see available times for interviews and sign up for them. The interview consisted of semi structured questions and was recorded and transcribed via Zoom.

Interview Questions

The interview questions for this study were developed from the literature review performed and the CoPs model (Appendix D and E). There were two research questions for this study, so the interview questions were divided into two sets: one set for interviewing first-year nursing students and one set for interviewing first-year nursing faculty. These interview questions were viewed by two colleagues with over twenty years of experience in nursing academia for content validity.

In the literature review, I revealed that the definition of collaboration was unclear or linked to active learning strategies such as team-based learning or collaborative learning, so it was important to first delineate what collaboration means to each participant in Question 1. The next two interview questions pertain to the participants past experiences with collaboration were related to the theme from my literature review that exhibits poor experiences with opportunities to collaborate by students or orchestrate collaboration by faculty in non-nursing education. The next set of questions (5 through 7) were derived from the CoPs model used in this study. The CoPs model postulates that learning occurs in a social context of day-to-day participation in their respective community (Wenger, 1998). These questions were therefore formed to ask participants about the collaboration that would occur by the structure of their lab, class, and clinical groupings in their nursing education. The remaining interview questions (8 through 10) were created to elicit data about the participants' experience with the instructor-created collaborative opportunities from the purpose statement of this study.

Interviews

The day before the scheduled Zoom interview, I sent the participant a Zoom link and reminded them of the date and time scheduled. Each interview began with a reminder of the purpose of the interview and demographic questions according to the designed interview protocol (Appendix B). I proceeded with the interview with Zoom recording the audio of the participant upon receiving consent from the participant through Zoom. The interview questions were covered one by one. I confirmed the participants had completed their answer to each question before I proceeded to the next one. Clarifying questions were added if their answer called for more depth or further conversation. At the end of the interview, the participant was debriefed, thanked for participating, and asked if I may contact them again with their transcript via email to allow them to clarify any words or themes. I informed the participants that follow up emails of the transcripts would be sent.

I conducted the interviews via Zoom twice a week for 8 weeks. The interview questions were slightly different for faculty as for students based on their role. The interview questions were developed using the gaps noted from the literature review and the three parts of the CoPs model. The interviews lasted 45 to 60 minutes according to a planned interview protocol (Appendix B) and existed as a Zoom recording on a Family Educational Rights and Privacy Act (FERPA) protected zoom on a password-protected laptop.

Data Analysis Plan

For this study, the strategy for data analysis was based on the CoPs model, literature review, and on the questions for this study. Data from interviews were audio recorded via Zoom, transcribed, and saved on secure digital password protected computer. I created all documents in Microsoft Word 2016. Before I transcribed the data, all identifiable information was removed, and a pseudonym was given to the participant using a letter and a number. To avoid potential for researcher bias, I implemented member checking by sending a completed transcript by email to the participant for them to modify and verify the interview transcript contents. I saved each transcription in a separate computer file on a password protected computer.

Once the interviews were completed, the transcribed interview documents and field notes were searched for statements that answered my research questions. Field notes included descriptions, interpretations, and reflections that I took note of as I performed the interviews. Field notes were important to document descriptive information regarding factual data such as date and time and include behaviors, settings, and actions that the researcher tends to forget over time (Yin, 2018). These field notes were transcribed and became part of the data. I summarized the data and then began an in vivo coding process by highlighting relevant words and phrases that answered my research questions. Procedures for coding the research data caused me to look at the variables of the research questions to include perceptions of collaboration, barriers to collaboration, and perceptions of instructor-created opportunities for collaboration. I identified initial data codes for each question. I then placed the codes on a separate word document to examine

for relationships. I found patterns among the codes that I then categorized. Reading the categories, I then assigned a theme that best described each category. I repeated this process twice, adjusting as necessary for the second round. I remained open to alternative themes and interpretations as not to presume upon the outcome of the data (Bloomberg & Volpe, 2012).

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Trustworthiness

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Rigor was important to demonstrate in a qualitative study, so the results were trustworthy. There were four aspects of trustworthiness that qualitative researchers must present: credibility, transferability, dependability, and confirmability. Each category was necessary to present the qualitative study as being of high quality. These strategies were used in this study and were described below.

Credibility

Credibility refers to how accurately the researcher collected and portrayed the data (Yin, 2016). Creswell et al., (2007) stated that the word credibility was the same as accuracy. I employed several measures to ensure credibility in this study to include prolonged contact, triangulation of sources, and member checks. Prolonged contact involved spending time with the participants and taking note of the environment, their facial expressions, gestures, emotions, and language. Triangulation of sources was using several ways to obtain data or obtain from several data sources. Member checking allows the participants to further share in the study's findings by reviewing their transcript.

I did not finish finding themes until I reached saturation. Saturation was a point in which the data yielded no new information in the data collection process (Yin, 2016). After transcribing the interviews, they were sent back to the participant to recheck for accuracy and clarity. I used triangulation of sources by talking to first-year nursing students and faculty about collaboration opportunities. Also, sufficient time was spent doing the interviews with the participants for 45 to 60 minutes at a time over eight weeks.

Transferability

Transferability was synonymous with generalizability and provides the reader with evidence that the results could apply in another context (Yin, 2016). I demonstrated transferability with thick description and variation in participant selection. This research obtained thick descriptions by asking open ended and follow-up questions. Selection of a variety of participants through snowball sampling who met the selection criteria helped to ensure transferability, also.

Dependability

Dependability was the ability of the reader to duplicate my study. Dependability also refers to ensuring transparency in the research process. To ensure this study had dependability, I employed triangulation in my research. Triangulation refers to observing convergent data points to confirm a finding (Yin, 2016). This was accomplished by having my committee members look at my process of reviewing and coding data and obtaining information about collaboration from two sources: first-year nursing students and faculty. I also ensured transparency of the research process by including audit trails of data collection and analyzing data.

Confirmability

Confirmability was verifying the accuracy of the meaning attributed to the data I have collected, thereby decreasing bias. Confirmability involves reflexivity which was acknowledging a specific time and place that was common between the participants and the researcher (Yin, 2016). To ensure that the research data were from the purpose of this study and achieved through the research questions, I acknowledged my biases in a notebook. I employed intracoder reliability by allowing myself to thematically analyze and code my data several times to see if comparable results were obtained (Yin, 2016).

Ethical Procedures

Research involving human participants requires that the researcher maintain integrity and behave ethically. Walden University requires a formal review process of this proposal for a research study to ensure ethical conduct. I included the IRB approval number on my informed consent document. I did not conduct any part of this study until IRB approval was obtained. I complied with the IRB requirements of Walden University while conducting this study.

Potential Risks

The potential risks to human participants in this study were considered low. The faculty invited to participate were adults, not a vulnerable population, and participation was kept confidential. Nursing students, on the other hand, were a vulnerable population when they were in a position of being under authority. To prevent harm to this population, I declined to interview any students at my own institution. Also, I posted a flyer in a nursing student Facebook group allowing for individual students to volunteer

their participation outside of their institution, instead of recruiting them from individual schools of nursing.

Faculty recruits responded to a flyer posted on a nurse educator page on Facebook. They would then view the flyer (Appendix A) which described inclusion criteria for this study, nature and reason for the study, and the email address of the researcher. If they met the inclusion criteria and were interested, they emailed me at my walden.edu email. Then I sent them the consent form and if they agreed then they replied to the email "I consent". Then they were sent a Calendly link to select a date and a time for the Zoom interview.

When it was time for the Zoom interview, I read aloud the interview protocol sheet (Appendix B) and asked the participant if they had any questions. I also let them know that they were free to stop the interview at any time. The questions were not personal in nature, so they did not cause the participant any undue stress. I informed the participants that they were being audio and video recorded on FERPA protected zoom kept on a password protected computer. I then informed them that only the audio would be saved and the transcript. The data was kept until the field notes and transcription process was complete and then stored for five years.

There were no proper names used in the research study. If the participant used a proper name in the interview, it was removed, and a blank placed there. Also, each participant received an alphanumeric label to protect individuals and ensure anonymity. As a nurse educator and once a nursing student in the US, it eliminated bias for me not to know which institution the participant was affiliated with.

Coding and thematic analysis was done on Microsoft Word 2016. It was kept on a password protected computer in a locked office. This data will be destroyed upon keeping for five years. I took measures to comply with the ethical research standards of Walden University. These measures include not knowing the participants, handling of audio and video recording, allowing participants to decide their level of participation, keeping participants information confidential, and not having any authority over any participant.

Summary

This section included the research design and rationale to include viewing the main concept, research tradition, and rationale for the tradition. I also explored my role as a researcher in this study. Participant selection, instrumentation, procedures for recruitment, participation, data collection, and data analysis plan were expounded upon in the methodology section. Finally, I examined how this study exhibited trustworthiness, and ethical procedures used. In the next section, I will share the results of the research study.

Chapter 4: Results

The purpose of this qualitative, explanatory case study was to discover what factors perceived by first-year nursing students and faculty contributed to a lack of collaboration of first-year BSN students. My goal for this study was to discover the perceptions of first-year nursing students and faculty regarding instructor-created opportunities for collaboration. In this chapter, I explored the setting, demographics of participants, data collection details, data analysis, evidence of trustworthiness of the data collected, the results of the study, and concluded with a summary.

Setting

The setting of this study was universities throughout the US that taught nursing students in a BSN program. The participants were chosen by their response to flyers posted on social media and those they recruited. The participants met inclusion criteria of being 18 years or older, living in the US, and were either a first-year nursing student or faculty member that I did not know. Each participant was interviewed individually via Zoom at a distant location of their choosing.

Demographics

There were two paths in a BSN program to obtain a nursing degree. These paths include a traditional and an accelerated path to completion. Accelerated programs finish at 1 to 1.5 times the rate of a traditional program (AACN, 2022). The ratio of traditional to accelerated for the first-year nursing students interviewed was 7-5. There were no males and 12 female student participants. As to which semester of nursing school they identified with, five said they were in or just finished their first semester of nursing

courses, and seven said they were in their first or second semester which would equate to their first year in nursing courses (Figure 1).

Of the faculty, six had masters' degrees in a nursing related field and six had doctorates. Of the doctoral prepared faculty, one was advanced practice focused, four had PhDs, and two had doctoral degrees outside of nursing. More than half of the faculty had a graduate degree with a specialty in nursing education. The faculty had varied years of experience in academia to include three with 0 to 4 years, three with 5 to 9 years, five with 10 to 15 years, and one with over 16 years of experience teaching (Figure 2).

Figure 1

Student Participant Demographics

Pseudonym	Male/Female	Semester	Accelerated/Traditional
S 1	Female	Second	Traditional
S 2	Female	First	Accelerated
S 3	Female	Second	Traditional
S 4	Female	First	Traditional
S 5	Female	First	Accelerated
S 6	Female	Second	Traditional
S 7	Female	First	Traditional
S 8	Female	Second	Accelerated
S 9	Female	Second	Accelerated
S 10	Female	Second	Accelerated
S 11	Female	Second	Accelerated
S 12	Female	Second	Accelerated

Figure 2

Faculty Participant Demographics

Pseudonym	Years Teaching	Highest Degree/Track	Academic Rank
F 1	3 years	MSN/Nursing Ed	Assistant Professor
F 2	8 years	MSN/Nursing Ed	Associate Professor
F 3	3 years	MSN/Nursing Ed	Assistant Professor
F 4	12 years	PhD/Research	Instructor
F 5	10 years	PhD/Nursing Ed	Assistant Professor
F 6	3 years	MSN-FNP/Acute	Assistant Professor
F 7	10 years	MSN/Nursing Ed	Associate Professor
F 8	7 years	PhD/Research	Assistant Professor
F 9	8 years	MSN/Nursing Ed	Assistant Professor
F 10	12 years	EdD/Higher Ed	Associate Professor
F 11	20 years	PhD/Psychology	Professor
F 12	15 years	PhD/Nursing Ed	Assistant Professor

Data Collection

After receiving approval from IRB in June 2023, I began recruitment via social media with the IRB approved flyers. The participants contacted me through social media and through my walden.edu email. I then emailed the approved consent form to each participant which included the inclusion criteria, and they would reply "I consent" to the email if they agreed to the inclusion criteria and to be interviewed individually via Zoom. The participant was given a Calendly link to schedule an interview. Once a date was chosen on the Calendly app by the participant, I sent a Zoom link with the date and time the participant chose. A reminder email with the individual Zoom link was sent to the participant the day before the interview was scheduled. On the date and time of the interview, I logged onto the Zoom link and admitted the participant when it was time to start. The participant was sent a message via Zoom that asked if they agreed to be

recorded. The settings on the Zoom were set to transcribe the audio interview automatically. I collected data through individual participant interviews using Zoom and the standardized interview protocol questions created (Appendix B). Data collection took place over 15 weeks. Each interview lasted less than 60 minutes with the average being around 42.6 minutes.

Twelve first-year nursing faculty and 12 first-year nursing students were interviewed via Zoom with audio transcription on. The students and faculty were interviewed weekly individually two to three times a week for 40 to 60 minutes each. The interview was audio recorded via Zoom with transcription recording on. The only variation of data collection from the ones previously was the transcription recording. Zoom has a closed captioning capability that allows for a transcript of the interview to be retrieved upon completion of the Zoom recording. There were two unusual occurrences that happened during the data collection process. I had 36 faculty members contact me to be interviewed in the first month of releasing my flyer, but I had no student interest after six weeks of posting my flyer on social media. Therefore, I edited my IRB to include an e-gift card from Amazon for $25 for previous and future participants. This led to 86 emails of possible student participants in two days. After reaching out to the first 12 with my consent form and appointment link, the first student participant was not able to answer any of the interview questions correctly and therefore I ended the interview and sent the participant the $25 Amazon gift card. This participant then signed up multiple times under different emails and tried to get me to send another Zoom link for a second interview. The fraudulent participant then began to email me at my

workplace and tried to contact me on social media. This led to me asking each participant to use their school email address to sign up on the Calendly appointment link. I had no further issues with participants pretending to be nursing students after the school email requirement.

Data Analysis

In this study, I took an in-depth look at first-year nursing students and faculty's perceptions of instructor-created opportunities for collaboration. I revealed the relationship between perceptions of collaborative opportunities and the phenomenon of a lack of desire to collaborate among nursing students.

I explored the data in this study using Wenger's CoPs model as a lens. The CoPs model explores how a group of people who share a concern or passion for something learn as they interact regularly (Wenger, 1998). Instructor-created opportunities for collaboration were the primal point of interaction among students while they matriculate through nursing school. Looking at the data through how a community of nursing students interact with each other and further triangulating sources by also finding out what faculty also perceive of this interaction, provided valuable data to utilize.

Coding

After conducting each interview and obtaining the transcribed documents of the conversation with the use of Zoom, I corrected the transcribed document and sent each transcript via email to the participant to review, add to, or subtract as to enact member checking. Upon the transcript return, I made the corrections noted by the participant. After each interview, I wrote my feelings, assumptions, and thoughts in a separate

notebook to reveal any implicit biases I have that would affect my lens as I looked at the data. As I read the transcripts, I looked for direct quotes that answered my research questions and numbered them as codes. Codes were words or short phrases of what the participants said during the interview process and were the link between data collection and making meaning of the information (Suldana, 2016). I used in vivo coding in this study. In vivo coding takes direct quotes from the transcripts as codes (Suldana, 2016). Upon finishing the first round of in vivo coding, I then proceeded to do it a second time and adjusted as needed. The codes were labeled by numbers.

Next, I organized the codes into categories that had similar meaning. I looked for themes and subthemes to emerge from the categorized codes until I reached saturation. According to Suldana (2016), saturation is when no new meaning emerges from the data. The themes inductively emerged from the categorized data. I then did this same process a second time and made necessary adjustments that were needed.

Results

The research questions for this study were:

RQ1: What were the perceptions of first-year nursing students of instructor-created opportunities to collaborate?

RQ2: What were the perceptions of first-year nursing faculty of instructor-created opportunities to collaborate?

I asked semi structured interview questions (Appendix B) of 12 first-year nursing students and 12 first-year nursing faculty individually who met the inclusion criteria

identified in the consent form. The faculty member interviews revealed 133 in vivo codes while the student interviews provided 175 at the end of the second round of coding.

Discrepant Cases

Discrepant cases were the data from an interview that was nonconforming and may challenge the researcher's and reader's conclusions. Identifying discrepant cases was a crucial step in validity testing in qualitative research (Maxwell, 2010). Upon reviewing the data, I found no codes or themes that fit into this category. Each theme was represented by multiple participants' quotes. If I had identified discrepant cases, then these cases would have been in the data set and identified as such in the data analysis.

Themes

According to Suldana (2016), there were four steps to in vivo coding of data to find themes. First, I found short phrases or words that answer their research questions. Then code again to find longer phrases. Next, find patterns of coded text to create categories, and finally assign themes to the categories found. This process led to six themes that emerged from the coded transcripts of 12 faculty members regarding instructor-created collaborative activities to include lack of motivation, is difficult, depends on the group members' characteristics, be intentional, important to student learning, and important to becoming a nurse. From the theme of offering collaborative activities must be intentional, four subthemes emerged.

The first-year nursing students coded transcripts revealed seven themes regarding instructor-created opportunities to collaborate to include it was a necessary skill to becoming a nurse, depends on group dynamics, was not for every student, should be

better structured, was effective for learning, and was important for socialization. It also

revealed 7 subthemes under should be better structured as I will elaborate on in the next

sections.

Faculty Participants and Themes

Faculty teaching first-year nursing students presented rich information regarding

their instructor-created opportunities for collaboration. The first theme to emerge from

the coded data was that the faculty expressed that they felt the students had a lack of

motivation to participate in instructor-created collaborative activities. Participant F1

stated "(it was) hard to motivate students to participate," "students want to be passive,"

and "students only wanted to do minimal work." F6 added "there's a lot less whining if

they are performing alone," and that "a lot of times students don't like to do group work."

Finally, F12 added, "they are not buying into it, you know. So, the students look at it as

busy work" and "they don't want to work in teams."

The second theme that was uncovered from interviewing the faculty was that they

felt offering collaborative activities is difficult. F2 contributed "I just don't have the time

to do it." F5 stated that she thought "collaborative activities make my life a lot more

difficult." F12 stated "I think the physical space has just discouraged me from doing it in

large (groups) to a large degree."

The third theme that emerged from faculty interviews was that effective

collaboration depends on the group members' characteristics. Faculty expressed that

some groups worked together well, and some did not, depending on who was in that

group. F1 expressed that "effective collaboration depends upon the personality of the

cohort." Another participant, F3, stated that "If there is a Type A person and they get stuck with other people who don't contribute, it can cause discourse and anger," and they felt it was important to "understand different personalities and learning about your class when you were first starting (collaborative activities)." F6 stated she assigned "a group project with them and it did not go well because the group dynamics were horrific." F2 stated that "competitiveness hinders effective collaboration" in their experience. Finally, F8, stated "the dynamics area is a little bit tough when you don't put them in their groups."

The fourth theme extracted from the faculty interviews was that the teacher must be intentional about fostering collaboration. Four subthemes emerged from this data to include faculty should be intentional, rotate group members, provide a rubric, and model it themselves. Each subtheme was explored in more detail.

For the first subtheme under to be intentional, faculty stated that they should make an effort. Participant F6 stated that faculty often feel "...they (students) can get it (collaboration) on their own somehow," and "I think we need to come up with all different ways for them (students) to collaborate together." Finally, F5 stated "I need to spend some time trying to help them know what (collaboration) means."

The second subtheme of the theme faculty must be intentional was that faculty felt they should rotate student group members. F2 stated "we rotate groups" and F6 specified "I make them work with a different person each time." F4 added "I want them to collaborate with different students in class and not always the same 2-3 buddies."

Finally, F10 stated "their first-year students need mixing up the groups rather than having them find their own groups."

The third subtheme under the theme faculty must be intentional involves providing a rubric that includes collaboration. F5 stated that the students knew they had to collaborate "....because the group gets a rubric." Another participant, F4 stated on her rubric the students "get credit for participation." F6 felt that it was important to "provide a couple of leading questions and a very informal rubric" with their collaborative assignments.

Finally, the fourth subtheme, under faculty must be intentional, was that faculty need to model collaboration themselves. F5 said "Don't just teach it. Live it yourself first." Another participant, F8, added, "I think if you want students to collaborate, then you should be willing to collaborate with them." Lastly, another participant, F9, shared that "I think we have to get buy-in, not just from the students, but from the faculty as well" in speaking about faculty believing and using collaborative teaching methodology.

The second theme uncovered was that collaborative opportunities are important to student learning. The first participant, F1, indicated that with this type of activity for learning that "Students all walk away with the same information." F9 stated that "The learning can be faster because you do share those lived experiences." F8 stated that "I think they learn more and get more out of it when they work together."

The third theme was that faculty felt that collaborative opportunities were important to becoming a nurse. Participant F1 shared "If you can't learn to collaborate as a student, or find the benefit in that, you're going to struggle when you get out into

practice." F9 shared that she thought "collaboration is like one of those soft skills, kind of like communication" and further stated that both were important to practicing as a nurse. Finally, F8 shared that nursing "is not a solitary profession."

Student Participants and Themes

Student participants offered interesting answers when asked questions about their perceptions of instructor-created collaborative opportunities. There were six themes and seven subthemes uncovered from the coded transcripts. The themes, subthemes, and example statements with participant pseudonyms were given to support each theme found.

The first theme found from the student interviews was that collaboration was a necessary skill to becoming a nurse. The participants expressed in eighteen excerpts taken that they understood collaboration was an essential skill students needed to be a nurse. S6 shared that "...to be a nurse everything you do has to be with collaboration." "Participant S3 added that "As a nurse, you're not an island. You have a team." Finally, participant S12 added "I understand the importance of working together...as a nurse, you're gonna have to work with other people."

The second theme was that faculty felt collaborative opportunities depend on the group dynamics. S2 voiced that "(Some groups) are very cliquey. I was excluded from the group, me, and a couple of other people." Participant S4 added "Sometimes the groups become more personality clashing than idea collaboration". Finally, S5 said "Sometimes I feel that you get people in a group that aren't actually doing their work and are spending a lot of time gossiping".

The third theme found from the coded interviews was that collaborative opportunities are not effective for every student. S9 stated "I tend to work more efficiently by myself". Then S5 added "That form of learning isn't effective for most of us and was taking away the opportunity to gain experience in a way that is effective for us". Finally, S2 contributed "...not everybody can work well with others".

The fourth theme uncovered was that students felt that collaborative opportunities should be structured differently by faculty. This theme was found to have seven subthemes that further defined how the students felt that these opportunities could be structured differently. The subthemes include smaller group sizes, allowing students to choose group members, roles should be assigned, randomizing groups often, allowing students to evaluate group members, scheduling time for group work, and seeking ways for it to be purposeful. Each subtheme will be explored next with example codes.

Subthemes

The first subtheme found in the theme to be structured differently by faculty was that students expressed that they would like to see smaller group sizes assigned. Participant S1 stated that faculty "...maybe (should) keep the numbers down in groups". S4 stated "I like to work with small groups" and then further defined small groups as "3-4 people". Participant S7 contributed this statement, "...when it's like 3 people or less, I feel like it's a really good opportunity to actually work together and think through things".

The second subtheme uncovered in this category was students shared they should be allowed to choose group members in collaborative opportunities. S2 stated "I was

paired with just the group I was sitting with...I didn't feel that I participated". One other student participant said, "I think when I get to pick the group that I'm in, we usually end up working and communicating together so much more smoothly like" Another example of this subtheme came from participant S11 when they contributed "As a student, I would enjoy if we could always pick our groups".

A third subtheme evolved from the students under the theme of should be structured differently by faculty was that roles should be assigned when placed in groups for collaborative experiences. Participant S1 stated "sometimes I think there should be a leader assigned". Participant S2 added "Sometimes when we have a (group) assignment, there are certain roles that need to be assigned". Finally, another example code came from participant S11 when they stated, "As a student, I would enjoy it (collaborative experiences) if we could always pick our groups".

The fourth subtheme discovered was the students thought faculty should randomize groups when assigning collaborative opportunities. S10 stated that faculty should "...have different groups all the time so you are working with different people". S9 expressed that faculty should "Randomize it every time. Don't have the same people working together". Finally, S10 gave another thought that stated, "I think there is a lot of value in forcing students to regularly work with different people".

The fifth subtheme of collaborative opportunities should be structured differently by faculty revealed students thought faculty should schedule time for group work. Students felt that different faculty scheduled group work on the same weeks, did not break up the work into due dates, or allow time in class to meet with their group. S3

stated that "It always seems that every single professor would make every single group project due the same week". Participant S11 added "...if there were like due dates along the way...at least in making the group work on it more frequently". Finally, S12 added "we had assignments due every week as a group, so if we could meet for 5 or 10 minutes on Zoom or during lecture it would help".

The final subtheme extracted from the data in this theme was that students felt faculty should seek ways for it to be purposeful. Students felt they could get more from collaborative opportunities if they could just see the reasoning behind it. S4 said "I believe there is a lot of busy work that comes with it". Another participant (S8) contributed "...getting buy-in from the students I think lends to an increased engagement". Finally, S8 stated faculty should "...like giving kind of real examples of how it would tie back into clinical practice".

A sixth theme emerged from categorizing the codes was students felt that collaborative opportunities were effective for learning. Participant S1 stated "Sometimes we can learn it a different way with other students". S2 added "I think I did better doing it in a group. If there was something I was stuck on, I had someone else there to explain it to me" Finally, S3 said "Personally, I've learned something and gained something every single time" they worked with other students.

The last theme I found from the data was that students felt that collaborative opportunities were important for socialization. Participant S1 stated "It made me get to know everyone in my class, instead of only sticking to certain people...". S7 added that from participating in collaborative opportunities that "it felt like we were automatically

within a family". Finally, S8 contributed "You kind of learn new friends when you are forced together in groups".

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Evidence of Trustworthiness

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Trustworthiness of a qualitative study was ensured by looking at credibility, transferability, dependability, and confirmability. Each category was necessary to present the qualitative study as being of high quality (Yin, 2016). These strategies were used in this study and will be further discussed next.

Credibility

Credibility refers to how accurately the researcher collected and portrayed the data (Yin, 2016). Creswell et al., (2007) stated that the word *credibility* has the same meaning as the word *accuracy*. I employed measures to employ credibility in this study to include prolonged contact, triangulation of sources, and member checking. I spent time with the participants during the interview, asked demographic questions such as their rank and field of study for the faculty, and for the students I asked what semester they were in and whether they were in a traditional or accelerated nursing program at their institution. Triangulation of sources was using several ways to obtain data, evaluate data, and allow another person to evaluate data. To involve triangulation of data I not only asked first-year nursing students their perceptions but also asked faculty that teach first-year nursing students. I also sent the transcripts to the participants to allow them to look over the transcript to correct or add anything they would like. Member checks allow the participants to share in the study's findings. Finally, I did not finish finding themes until I

reached saturation. Saturation was a point in which the data yielded no new information in the data collection process (Yin, 2016).

Transferability

Transferability was synonymous with generalizability and provides the reader with evidence that the results could apply in another context (Yin, 2016). I demonstrated transferability with thick description and variation in participant selection. This research used thick description by keeping and sharing explicit details of the social and cultural contexts surrounding the data collection. Thick description was a term coined by Clifford Geertz in 1973 to describe richness of collected data in a qualitative interview. To get such depth and detail, I structured the interview questions with main questions, probing questions, and follow-up questions. Selection of a variety of participants who meet the selection criteria helps to ensure transferability, also. The solicitation of participants was performed using a snowballing technique via social media. This ensured a variety of participants who were interviewed.

Dependability

Dependability was the ability of the reader to duplicate my study. For another researcher to duplicate this study, I included transparency in the research process. Each step was recorded and included in this research study. To ensure this study has dependability, I will employ a peer reviewer in my research process. This will be accomplished by having my dissertation chair look at my process of interviewing, reviewing, coding data, establishing themes, and analyzing data. I also ensured

transparency of the research process by including audit trails of data collection and analyzing data.

Confirmability

Confirmability was verifying the accuracy of the meaning attributed to the data I have collected thereby decreasing bias. Confirmability involves reflexivity which was acknowledging a specific time and place that was common between the participants and the researcher (Yin, 2016). To ensure that the research data were from the purpose of this study and achieved through the research questions, I acknowledged my biases in a separate notebook. Intra coder reliability was the process of allowing myself to thematically analyze and code my data several times to see if comparable results are obtained (Yin, 2016). I performed coding, categorizing, and finding themes twice and was able to find on the second-round several themes that I could merge themes and found codes that belong in other categories.

Summary

In this chapter, I revealed the findings of the answers to my research questions: "What are the perceptions of first-year nursing students of instructor-created opportunities to collaborate?", and "What are the perceptions of first-year nursing faculty of instructor-created opportunities to collaborate?" The perceptions of first-year nursing students were it was a necessary skill to becoming a nurse, depends on group dynamics, not for every student, should be better structured, was effective for learning, and important for socialization. The perceptions of 12 faculty members regarding instructor-created collaborative opportunities include a lack of motivation among students, was

difficult, depends on group characteristics, must be intentional, important to student learning, and important to becoming a nurse. From the theme of offering collaborative opportunities must be intentional, four subthemes emerged from first-year nursing faculty include they should be intentional, rotate group members, provide a rubric, and model it themselves. The first-year nursing students revealed seven themes regarding instructor-created opportunities to collaborate to include: necessary skill to becoming a nurse, depends on group dynamics, not for every student, should be better structured, and was effective for learning and socialization. The students' theme of should be better structured offered seven subthemes to include smaller group sizes, allow to choose group members, roles should be assigned, randomize groups often, allow students to evaluate group members, schedule time for group work, and seek ways for it to be purposeful. Also, this chapter will explain the setting, process, analysis of the data, and the collection process. Finally, I explored the evidence of trustworthiness by looking at how credibility, transferability, dependability, and confirmability was ensured. In the next chapter, I provided the discussion, conclusions, and recommendations of these research findings.

Chapter 5: Discussion, Conclusions, and Recommendations

Limited research has been performed regarding the perceptions of instructor-created collaborative opportunities of nursing students. A review of the literature revealed that students in nursing education do not wish to collaborate while in school. The purpose of this qualitative explanatory case study research was to discover what factors perceived by first-year nursing students and faculty contribute to a lack of collaboration of first-year nursing students.

I conducted a qualitative explanatory case study, which was used in studying a phenomenon within its specific context (Yin, 2016). I examined the phenomenon of collaboration in the nursing school context. I chose qualitative methodology because I wanted to know what students and faculty thought about instructor-created collaborative opportunities, therefore I needed to hear what they had to say about the topic.

Key Findings

Using semi structured open ended interview questions, from faculty interviews I found six themes and four subthemes. Faculty perceived regarding instructor-created collaborative opportunities a lack of motivation among students, are difficult, depends on the group members' characteristics, faculty must be intentional, are important to student learning, and they are important to becoming a nurse. Four subthemes emerged from the theme be intentional to include faculty need to make an effort, rotate group members, provide a rubric, and model collaboration themselves.

From the students' interviews, I found six themes and seven subthemes. The six themes regarding instructor-created opportunities to collaborate are a necessary skill to

becoming a nurse, depend on group dynamics, are not effective for every student, should be structured differently by faculty, are effective for learning, and are important for socialization. There were seven subthemes found under the theme of should be structured differently by faculty which include smaller group sizes, allow to choose group members, roles should be assigned, randomize groups often, allow students to evaluate group members, schedule time for group work, and seek ways for them to be purposeful.

Interpretation of the Findings

The conceptual framework that I used to underpin this study was the CoPs model developed by Erline Wenger (1998). CoPs are groups of people who share a common goal and learn more effectively to accomplish their goal by social interaction (Wenger-Traynor & Wenger-Traynor, 2015). I selected this framework to study a group of people (nursing students) who shared a passion (graduating nursing school and becoming a nurse) and led to success (as a nursing student and as a nurse) through collaboration (interacting regularly). First-year nursing faculty are a part of the community being studied, also. It was through efficient interaction (collaboration) within the CoPs (nursing school) that the community members (nursing students) learn, grow, and thrive.

The results of this study confirmed that nursing students do not like to work collaboratively. According to Stover and Holland (2018), nursing students verbalize resistance to working in small groups. Despite the importance of collaboration, students in nursing education prefer not to work together (Buckley & Trocky, 2019; Lankshear, 2018). Stover and Holland (2018) revealed that 49% of nursing students disliked collaboration activities offered in the classroom. Students and faculty agreed on this in

that a theme from student data was that collaborative opportunities were not for every student and from faculty there was a perceived lack of motivation (of students) to engage in collaborative opportunities.

Another finding from this research study that agreed with the literature was that nursing faculty are not prepared to teach collaboration. Nursing faculty are often not taught andragogy in their graduate education that would support presenting student collaboration opportunities in the traditional classroom and virtual (Bullin, 2018). Only 25% of nurses have doctoral degrees, and of those programs, nurses are prepared to be advanced practice focused or nurse scientists, not educators (NLN, 2018). From the themes found in the faculty member data, collaborative activities were difficult to orchestrate and there were intentional changes they felt needed to be included as evidenced by the subthemes such as making an effort, rotating group members, providing a rubric, and modeling collaboration themselves. The student themes were also indicative of their perceptions that faculty needed to make changes in their collaborative opportunities to include smaller group sizes, being allowed to choose group members, assigning roles, randomizing groups, allowing students to evaluate group members, scheduling time for group work, and making the collaborative opportunities purposeful.

Both the students and the faculty agreed with each other and the literature that collaborative opportunities are important to student learning. Collaboration was a skill that leads to positive educational outcomes for undergraduate students. Collaborative learning leads to higher students' motivation, higher-order thinking, meta-cognitive skills, and shared knowledge acquisition (De hei et al., 2020; Lee et al., 2018; Zhuang &

Cui, 2018; Saqr et al., 2018). A theme that emerged from both the students and the faculty was that participating in collaborative opportunities was essential to their learning.

Another theme found that agreed with the literature for the faculty members answers was it was difficult to orchestrate collaborative opportunities. According to the literature, facilitating collaboration in an undergraduate course requires extra time, increased workload, andragogical support from other faculty, and need for andragogical training in active learning (Falcione et al., 2019; Alharbi et al., 2018). This difficulty was consistent with statements made by the first-year faculty members of instituting collaborative opportunities.

The final theme found among the students and faculty that agreed with the literature regarding collaborative opportunities was that it depended on group characteristics and dynamics. In the literature review some obstacles to working collaboratively together for non-nursing undergraduates included dysfunctional groups, communication, "free riding," dominant personalities, unequal task distribution, and lack of collaborative skills among members (Ferdous & Karim, 2019; Ghufron & Ermawati, 2018; Lee et al., 2018). This dependence on group characteristics and dynamics was confirmed with the literature regarding non-nursing undergraduate students.

Disconfirming Findings

An interesting theme that challenged the literature review was that students felt that collaborative opportunities were important for their socialization. According to the literature, nursing students have not experienced the socialization and engagement that

working together provides to master course content, develop team-building skills, and foster collaborative skills (Ellis & Han, 2021; Siah et al., 2019). When in groupings to complete a collaborative activity, nursing students exhibit peripherality and marginality (Kirkpatrick et al., 2018). Students reported "learning new friends" (S8) and feeling like they were "...within a family" (S7) due to collaborative opportunities.

Another finding that emerged that was different from my literature review was a subtheme found under the students' theme of collaborative opportunities should be structured differently by faculty. This subtheme reflected from the students thought that they should be allowed to choose their own group members and conversely also have their groups randomized often. The consensus on how to properly form groups for collaboration was not found in my literature review, but upon a new search, Johnson et al. (2014) and Wever & Strijbos (2022) stated in formal group learning it was helpful for the instructor to form groups that are diverse regarding skills, abilities, and personalities. This preference to choose their own group members was different from what literature suggests for best practices in higher education, however the literature does support intentional randomizing to create heterogeneous groups.

Knowledge

The most fascinating discovery that can offer new knowledge from this research study are the subthemes not found in the literature review that emerged from both faculty and students under the themes related to how faculty should structure collaborative opportunities. The students' subthemes that were not found in the original literature review were smaller group sizes, roles should be assigned, allow students to evaluate

group members, schedule time for group work, and seek ways for it to be purposeful. For faculty, the sub themes not found in the literature review were make an effort, provide a rubric, and model it themselves. These are self-perceived barrier themes to first-year nursing student collaboration found from this research study.

The first subtheme that I inducted from the students' data was that they wanted smaller group sizes when offered collaborative opportunities. The literature review performed did not indicate appropriate group size numbers. There were no reported barriers to higher education, non-nursing, students regarding this subtheme found. However, a new literature search about group sizes revealed that large group sizes reduce students' involvement as well as their efforts and motivation (Ahmad et al., 2021).

The second theme was that students wanted roles to be assigned when interacting within a collaborative activity. They specified that assigning roles would assist with engagement of the group members. Lee et al. (2018) interviewed 19 teachers and 23 students from pre-service. The teachers encountered difficulties in creating and facilitating collaborative activities to include designing appropriate roles for each group member. Giving specific roles for each group member would enable the group to divide the task and each contribute to the collaborative activity.

The third subtheme was that the students wanted to be able to evaluate their group members when assigned a collaborative opportunity. The literature review performed did not include anything about evaluating peers during collaborative activities. There were no reported barriers to higher education, non-nursing, students regarding this subtheme found.

The fourth subtheme that was not in my literature review was that students wanted the faculty member to schedule time for group work. They asked if the faculty would stagger due dates, not assign group work in every class on the same week, and wanted to know if they could have class time to meet with their group. The literature review I performed did not specify anything about scheduling time for group work during collaborative activities. There were no reported barriers to higher education, non-nursing, students regarding these themes found.

The fifth subtheme that was not in my literature review was the students wanted faculty to seek ways for collaborative activities to be purposeful and to share that with them. Nursing students are adult learners and therefore need to know why they are being assigned a collaborative activity and what was the goal of the project (Bakir et al, 2019). Included in this subtheme, the students reported feeling like collaborative opportunities were just busy work and therefore they were not motivated to participate.

The sixth subtheme derived from the faculty's interviews was to make an effort with collaborative activities. One faculty member said they would like to try harder to implement more collaborative activities in their classroom. Good collaboration does not just happen; faculty must be intentional. Students frequently encounter group work in academic classes but are often not led to facilitate effective group collaboration and left to "figure it out on their own." (Bakir, 2020, p 75). The literature review I performed did not include anything about faculty making an intentional effort to implement collaborative activities. There were no reported barriers to higher education students regarding this subtheme found.

The seventh subtheme that emerged from the faculty's interviews was to make a rubric that has collaboration as a part of it. One faculty stated that she would make participation a part of their grade. Elements of successful collaboration include rubrics written to motivate and evaluate contributions of individuals (Buckley & Trockey, 2019). Faculty who create a rubric ensure students know what to do and how they are going to be graded. It also assists in dividing up the work and could allow points for participation or group collaboration. The literature review performed did not specify anything about faculty making a rubric to implement collaborative activities. There were no reported barriers to higher education students regarding these themes found.

Finally, faculty interviews led to the eighth subtheme of modeling collaboration themselves. This finding was not found in my literature review. Learning how to effectively collaborate within the profession and with other healthcare workers begins while the nurse was a student by watching other nurses and nurse faculty model and teach these behaviors (Crawford et al., 2019). Lee et al. (2019) stated with the situation of lack of obtaining educational andragogy instruction of nurse faculty, the faculty members may not have ever experienced for themselves successful collaboration in which to model to their students. Faculty are models and mentors to their students. The students want to be like their faculty members when they become nurses. So, faculty should be demonstrating and fostering effective collaboration for their students in all collaborative opportunities.

Limitations of the Study

Study limitations represent flaws within a research design that may impact outcomes and assumptions of the research (Ross and Bibler, 2019). There were several

such weaknesses in this study that will be discussed here. More than half of the faculty participants (67%) who contributed to this study had nursing education as the focus of their degrees and therefore did not represent the national average (25%) of doctoral and masters prepared nurses who teach and do not have andragogical training from their degree (NLN, 2018).

Another limitation was that this study had an inclusion criterion of being accepted into a BSN program in the US. This prevented any students or faculty in an associate degree in nursing (ADN) program from participating or being an international student or faculty member. Students obtaining their degree in nursing in the US can receive an ADN or a BSN and sit for the same NCLEX-RN exam to become a registered nurse. Also, students in 12 other countries outside the US have similar nursing education and are offered the same regulatory exam as those students in the US (National Council State Board of Nursing [NCSBN], n.d.).

<div align="center">Recommendations</div>

This research study led me to several recommendations for future research in this area. First, a deductive mixed method Delphi study with the subthemes found from both the students and faculty to see which they thought nursing education should keep, keep with recommendations, or discard. This method would give quantitative data to support the qualitative findings of this study and qualitative data from their comments and recommendations. Another idea for further study regarding collaboration was to widen this study to include ADN faculty and students and international participants to see if the results are similar and to make the results more generalizable. Finally, the problem

statement for this study could be adapted and used with graduate nursing students focusing on collaboration in their online education and residencies. Finally, this study leads me to recommend interviewing faculty regarding their educational background to see how they were taught to enact collaborative andragogical principles in their own educational practice.

Implications

This research study followed Walden University's mission of social change to create a diverse group of professionals to become scholar-practitioners so that they can influence positive social change (Walden University, n.d). In finishing my dissertation and obtaining my doctoral degree, I will join the ranks of the career professionals who are scholar-practitioners. I plan to continue educational research around collaboration of nursing students. In discovering the keys to successful collaboration, students will be better prepared while in nursing school by collaboration equipped faculty. These findings will help to establish equitable collaborative experiences for nursing students. This preparedness of students with better educational outcomes and faculty with efficient collaborative skills will lead to nurses who can work intra-professionally and produce better patient outcomes.

Conclusion

Collaboration was an important soft skill needed for a successful nursing student education, and in a future career as a registered nurse. Where those two factors coincide and need to perform efficiently was while a student was in their first year of nursing school. Unfortunately, that was not always the scenario as found in the literature and in

this research study. Nursing students prefer not to collaborate, and nursing faculty find themselves unprepared to teach collaboration, or find that it was just too difficult.

Using a qualitative, explanatory case study design and the CoPs model, this research study was planned to discover barriers to collaboration by asking first-year students and faculty their perceptions of collaborative opportunities in nursing school. Some findings agreed with the literature review, such as collaborative opportunities are important to becoming a nurse, being successful in learning, and dependent on group characteristics and dynamics. But there was also new knowledge that I revealed from both students and faculty such as smaller group sizes, a rubric for collaboration, faculty effort, assigning roles, scheduling time for group work, making it purposeful, and giving students an opportunity to evaluate other team members. These findings will inform educational practices to make equitable collaborative experiences for nursing students.

References

Aebersold, M., & Scholville, R. (2020). How to prevent the next generation of nurses from "eating their young". *Clinical Simulation in Nursing.38,* 27-34. https://doi.org/10.1016/j.ecns.2019.10.002

Ahmad, A., Farrukh, Z., Rutab, M., Alia, S., & Sohaib, A. (2021). Does one size fit all? Investigating the effect of group size and gamification on learners' behaviors in higher education. *Journal of Computing in Higher Education, 33*(2), 296-327.https://doi.org/10.1007/s12528-020-09266-8

Al-Hammouri, M., Rababah, J. A., Rowland, M. L., Tetreault, A. S., & Aldalaykeh, M. (2020). Does a novel teaching approach work? A student's perspective. *Nurse Education Today*, *85*, 224-229. https://doi.org/10.1016/j.nedt.2019.104229

Alharbi, N. M., Athauda, R. I., & Chiong, R. (2018). Empowering collaboration in project-based learning using a scripted environment: Lessons learned from analyzing instructors' needs. *Technology, Andragogy and Education*, *27*(3), 381-397. https://doi.org/10.1080/1475939X.2018.1473289

ANA & AONE (2022). *The principles of collaboration.* https://www.nursingworld.org/~4af4f2/globalassets/docs/ana/ethics/principles-of-collaborative-relationships.pdf

AACN. (2020). *PhD*. https://www.aacnnursing.org/Nursing-Education-Programs/PhD-Education

AACN. (2021). *The essentials*. https://www.aacnnursing.org/essentials

Arian, M., Soleimani, M., & Oghazian, M. B. (2018). Job satisfaction and the factors

affecting satisfaction in nurse educators: A systematic review. *Journal of Professional Nursing*, *34*(5), 389-399. https://doi.org/10.1016/j.profnurs.2018.07.004

Awang-Hashim, R., Kaur, A., & Valdez, N. P. (2019). Strategizing inclusivity in teaching diverse learners in higher education. *Malaysian Journal of Learning and Instruction.16*(1), 24.

Badowski, D. (2019). Peer coaching integrated in simulation: Improving intra professional teamwork. *Journal of Professional Nursing*, *35*(4), 325–328. https://doi.org/10.1016/j.profnurs.2018.11.001

Bakir, N., Humphreys, S., & Dana, K. (2020). Students' perceptions of challenges and solutions to face-to-face and online group work. *Information Systems Education Journal.18*(5), 14.

Berger, S., Whelan, B., Mahler, C., Szecsenyi, J., & Krug, K. (2019). Encountering complexity in collaborative learning activities: An exploratory case study with undergraduate health professionals. *Journal of Interprofessional Care*, *33*(5), 490–496. https://doi.org/10.1080/13561820.2018.1562423

Berghout, T. (2021). How are nurse educators prepared to teach interprofessional practice? *Nurse Education Today*, *98*, 104745. https://doi.org/10.1016/j.nedt.2021.104745

Bloomberg, L. D., & Volpe, M. (2012). *Completing your qualitative dissertation: A roadmap from beginning to end.* SAGE Publications, Inc.

Boothby, J., Gropelli, T., & Succheralli, L. (2019). An innovative teaching model using

intra professional simulations. *Nursing Education Perspectives, 40*(3), 184-185.

https://doi.org/10.1097/01.NEP.0000000000000340

Buckley, K. M., & Trocky, N. M. (2019). From cooperative to collaborative learning:

Use of a wiki for a community cultural assessment. *CIN: Computers, Informatics,*

Nursing, *37*(9), 439–443. https://doi.org/10.1097/CIN.0000000000000574

Bullin, C. (2018). To what extent has doctoral (PhD) education supported academic nurse

educators in their teaching roles: An integrative review. *BMC Nursing*, *17*, 1–18.

https://doi.org/10.1186/s12912-018-0273-3

Comber, D. P. M., & Bos, M. B. (2018). Too much, too soon? A critical investigation

into factors that make flipped classrooms effective. *Higher Education Research &*

Development. *37*(4), 683–697. https://doi.org/10.1080/07294360.2018.1455642

Cooke, J. E., Weir, L., & Clarkston, B. (2019). Retention following two-stage

collaborative exams depends on timing and student performance. *CBE—Life*

Sciences Education.*18*(2), 12. https://doi.org/10.1187/cbe.17-07-0137

Crawford, D. (2018). Team testing teaches collaboration. *Nursing Made Incredibly*

Easy!16(4), 52–54. https://doi.org/10.1097/01.NME.0000534120.30023.1c

Crawford, C., Chu, F., Hudson, L. H., Cuenca, E., Jadella, A. A., Tze-Polo, L., Kawar, L.

N., Garvida, R., & Runnels, C. (2019). *An integrative review of nurse-to-nurse*

incivility, hostility, and workplace violence: A GPS for nurse leaders. 43(2),138–

156. https://doi.org/10.1097/NAQ.0000000000000338

Creswell, J. W., Hanson, W. E., Plano Clark, V. L., & Morales, A. (2007). Qualitative

research designs: Selection and implementation. *Counseling Psychologist*, *35*(2),

236–264. https://doi.org/10.1177/0011000006287390

Currey, J., Sprogis, S. K., Burdeu, G., Considine, J., Allen, J., & Oldland, E. (2018). Students perceive team-based learning facilitates development of graduate learning outcomes and professional skills. *Journal of Teaching and Learning for Graduate Employability*, *9*(1), 93–113. https://files.eric.ed.gov/fulltext/EJ1235784.pdf

De hei, M., Tabacaru, C., Sjoer, E., Rippe, R., & Walenkamp, J. (2020). Developing intercultural competence through collaborative learning in international higher education. *Journal of Studies in International Education*, *24*(2), 190–211. https://doi.org/10.1177/1028315319826226

Digregorio, H., Graber, J. S., Saylor, J., & Ness, M. (2019). Assessment of interprofessional collaboration before and after a simulated disaster drill experience. *Nurse Education Today*, *79*, 194–197. https://doi.org/10.1016/j.nedt.2019.05.023

Dindar, M., Järvelä, S., & Järvenoja, H. (2020). Interplay of metacognitive experiences and performance in collaborative problem solving. Computers & Education, 154. https://doi.org/10.1016/j.compedu.2020.103922

Ellis, R., & Han, F. (2021). Assessing university student collaboration in new ways. *Assessment & Evaluation in Higher Education*, *46*(4), 509–524. https://doi.org/10.1080/02602938.2020.1788504

Ellis, R. A., Han, F., & Pardo, A. (2019). When does collaboration lead to deeper learning? Renewed definitions of collaboration for engineering students.

Transactions on Learning Technologies, *12*(1), 123–132.

https://doi.org/10.1109/TLT.2018.2836942

Lima, E.F.C., & Siebra, C. A. (2021). Design of learning objects for collaboration

promotion and their effects on students' behavior. *Informatics in*

Education, 20(1), 85–106. https://doi.org/10.15388/infedu.2021.05

Falcione, S., Campbell, E., McCollum, B., Chamberlain, J., Macias, M., Morsch, L., &

Pinder, C. (2019). Emergence of different perspectives of success in collaborative

learning. *The Canadian Journal for the Scholarship of Teaching and Learning*.

10(2). https://doi.org/10.5206/cjsotl-rcacea.2019.2.8227

Fathi, M., Ghobakhloo, M., & Syberfeldt, A. (2019). An interpretive structural modeling

of teamwork training in higher education. *Education Sciences*, *9*(1), 16.

https://doi.org/10.3390/educsci9010016

Ferdous, T., & Karim, A. (2019). Working in groups outside the classroom: Affective

challenges and probable solutions. *International Journal of Instruction*, *12*(3),

341–358. https://files.eric.ed.gov/fulltext/EJ1220227.pdf

Garner, A., & Bedford, L. (2021). Reflecting on educational preparedness and

professional development for early-career nurse faculty: A phenomenological

study. *Nurse Education in Practice*, *53*, 1-7. https://doi.org.ezp.waldenlibrary.

org/10.1016/j.nepr.2021.10305

George, T. P., Murphy, P. F., DeCristofaro, C., & Hucks, J. M. (2019). Student

perceptions regarding collaborative intra professional nursing education. *Nurse*

Educator, *44*(4), 226–230. https://doi.org/10.1097/NNE.0000000000000584

Ghufron, M. A., & Ermawati, S. (2018). The strengths and weaknesses of cooperative learning and problem-based learning in EFL writing class: Teachers' and students' perspectives. *International Journal of Instruction*, *11*(4), 657–672. https://files.eric.ed.gov/fulltext/EJ1191701.pdf

Goh, S. H., Di Gangi, P. M., & Gunnells, K. (2020). Teaching tip: Applying team-based learning in online introductory information systems courses. *Journal of Information Systems Education*, *31*(1), 1–11. http://jise.org/Volume31/nl/ JISEv31n1p1.html

Goh, S. H., Gangi, P. M. D., & Gunnells, K. (2020). Applying team-based learning in online introductory information systems courses. *Journal of Information Systems Education*, *31*, 1313. https://aisel.aisnet.org/cgi/viewcontent cgi?article=1733&context=jise

Hora, M. T., & Lee, C. (2020). How, if at all, does industry experience influence how faculty teach cognitive, inter-, and intrapersonal skills in the college classroom? WCER Working Paper No. 2020-2. In *Wisconsin Center for Education Research*. Wisconsin Center for Education Research.

IOM. (2011). Future of nursing: *Leading change, advancing health.* National Academies Press.

Jarvenoja, H., Naykki, P. & Tormanen, T. (2019). Emotional regulation in collaborative learning: When do higher education students activate group level regulation in the face of challenges? *Studies in Higher Education. 44*(10), 1747-1757. doi:10.1080/03075079.2019.1665318

Johnson, D.W., Johnson, R.T., and Smith, K.A. (2014). Cooperative learning: Improving university instruction by basing practice on validated theory. *Journal on Excellence in College Teaching 25*, 85-118. https://eric.ed.gov/?id=EJ1041374

Kim, D., & Lim, C. (2018). Promoting socially shared metacognitive regulation in collaborative project-based learning: A framework for the design of structured guidance. *Teaching in Higher Education*, *23*(2), 194–211. https://doi.org/10.1080/13562517.2017.1379484

Kim, J. H., So, B. H., Song, J. H., Lim, D. H., & Kim, J. (2018). Developing an effective model of students' communities of practice in a higher education context. *Performance Improvement Quarterly*, *31*(2), 119–140. https://doi.org/10.1002/piq.21273

Kirkpatrick, A., Ball, S., Connelly, S., Hercinger, M., Hanks, J., Potthoff, M., Banzhaf, S., & McCafferty, K. (2018). Intra professional simulation's impact on advanced practice and baccalaureate student self-efficacy. *Clinical Simulation in Nursing*, *16*, 33–39. https://doi.org/10.1016/j.ecns.2017.11.005

Kohn, L. T., Korrigan, J. M., & Donaldson, M. S. (2000). *To err is human*. National Academy Press.

Lankshear, S & Limoges, J. (2018). Better together: A fresh look at collaboration within nursing. *Canadian Nurse*, *114*(1), 18–20. https://www.researchgate.net/publication/337992525_Better_together_A_fresh_look_at_collaboration_within_nursing

Lave, J., & Wenger, E. (1991). *Situated learning. Legitimate peripheral participation*.

Cambridge. University of Cambridge Press.

Le, H., Jannsen, J., & Wubbels, T. (2018). Collaborative learning practices: Teacher and student perceived obstacles to effective student collaboration. *Cambridge Journal of Education. 48*(1). doi:10.1080/0305764X.2016.1259389

Ma, C., Park, S. H., & Shang, J. (2018). Inter- and intra-disciplinary collaboration and patient safety outcomes in U.S. acute care hospital units: A cross-sectional study. *International Journal of Nursing Studies*, *85*, 1–6. https://doi.org/10.1016/j.ijnurstu.2018.05.001

Maddison, C., & Strang, G. (2018). Do action learning sets facilitate collaborative, deliberative learning? A focus group evaluation of graduate entry pre-registration nursing (GEN) students' experience. *Nurse Education in Practice. Kidlington*, *28*, 285–291. https://doi; 10.1016/j.nepr.2017.10.023

Marcolino, T. Q., Kinsella, E. A., Araujo, A. J., Fantinatti, E. N., Takayama, G. M., Vieira, N. M. U., Pereira, A. J., Gomes, L. D., Galheigo, S. M., & Ferigato, S. K. (2021). A CoP of primary health care occupational therapists: Advancing practice-based knowledge. *Australian Occupational Therapy Journal*, *68*(1), 3–11. https://doi.org/10.1111/1440-1630.12692

Mavri, A., Ioannou, A., & Loizides, F. (2020). A cross-organizational ecology for virtual communities of practice in higher education. *International Journal of Human–Computer Interaction*, *36*(6), 553–567. https://doi.org/10.1080/10447318.2019.1664067

Maxwell, T. (2010). Review of Practical research methods for educators Becoming an

evidence-based practitioner. *Educational Psychology in Practice, 26*(4), 416–418.

Murphy, M. P. A., & Groen, J. F. (2020). Student and instructor perceptions of a first year in active learning classrooms: Three lessons learned. *Collected Essays on Learning and Teaching*, *13*(9). https://files.eric.ed.gov/fulltext/EJ1277162.pdf

NCSBN. (2008). *Nursing faculty qualifications and roles.* Retrieved from https://www.ncsbn.org/Final_08_Faculty_Qual_Report.pdf

NCSBN. (n.d.). *NCLEX-RN and other exams*. Retrieved from https://www.ncsbn.org/nclex.htm

NCSBN. (n.d.). *Licensure of internationally educated nurses*. https://www.ncsbn.org/nursingregulation/licensure/ internationally-educated-nurses.page

NLN. (2018). *Creating community to build a civil and healthy academic work environment.* https://www.nln.org/news/newsroomnln-position-documents/nln-vision-series

Negarandeh, R., & Khoshkesht, S. (2022). Expected roles of PhD graduated nurses: A scoping review. *Florence Nightingale Journal of Nursing*, *30*(2), 202–208. https://doi.org/10.54614/FNJN.2022.21233

Nielson, M. H., Warren, L., & Graham, D. (2019). Promoting collaboration in undergraduate nursing students. *Journal of Nursing Education.58*(11), 657–660. http://dx.doi.org.ezp.waldenulibrary.org/10.3928/01484834-20191021-08\

Palsson, Y., Mårtensson, G., Swenne, C. L., Mogensen, E., & Engström, M. (2021). First-year nursing students' collaboration using peer learning during clinical

practice education: An observational study. *Nurse Education in Practice*, *50*, 102946. https://doi.org/10.1016/j.nepr.2020.102946

Palinkas, L. A. (2016). Purposeful sampling for qualitative data sampling and analysis: A mixed method review. *Administration and Policy in Mental Health and Mental Health Services Research*. https://doi.org/10.1007/s10488-013-0528-y

Ross, P. T., & Bibler Zaidi, N. L. (2019). Limited by our limitations. *Perspectives on Medical Education*, *8*(4), 261–264. https://doi.org/10.1007/s40037-019-00530-x

Saqr, M., Fors, U., & Tedre, M. (2018). How the study of online collaborative learning can guide teachers and predict students' performance in a medical course. *BMC Medical Education*, *18*(1), 24. https://doi.org/10.1186/s12909-018-1126-1

Siah, C., Lim, F., Lim, A., Lau, S., & Tam, W. (2019). Efficacy of team-based learning in knowledge integration and attitudes among year-one nursing students; A pre- and post-test study. *Collegian*, *26*(5), 556–568. https://doi.org/10.1016/j.colegn.2019.05.003

Stenberg, M., Bengtsson, M., Mangrio, E., & Carlson, E. (2022). Collaboration between first-year undergraduate nursing students:A focused ethnographic study. *Elsevier Enhanced Reader*. *64*, https;//doi.org//10.1016/j.nepr.2022.103427

Stover, S., & Holland, C. (2018). Student resistance to collaborative learning. *International Journal for the Scholarship of Teaching and Learning*, *12*(2). https://doi.org/10.20429/ijsotl.2018.120208

Suldana, J. (2016). *The coding manual for qualitative researchers. (3ʳᵈ ed.)* Sage Publications Ltd.

Terry, D. R., Nguyen, H., Peck, B., Smith, A., & Phan, H. (2020). CoPs: A systematic review and meta-synthesis of what it means and how it really works among nursing students and novices. *Journal of Clinical Nursing*, *29*(3–4), 370-380. https://doi.org/10.1111/jocn.15100

Visker, J. D., Welker, K., Rhodes, D., Forsyth, E., Melvin, P., & Cox, C. (2020). Effect of a rapid e-learning module and brief interprofessional simulation event on medical and nursing student collaborative attitudes and behaviors. *International Journal of Nursing Education Scholarship*, *17*(1), 20190122.

Walden University (n.d.) *Social Change.* https://www.waldenu.edu/why-walden/social-change

Wenger, E. (1998). *CoPs: Learning, meaning, and identity*. Cambridge University Press.

Wenger-Treynor, E. & Wenger-Treynor, B. (2015). *CoPs model: A brief introduction.* Springer.

Wever, B. & Strijbos, JW. (2021). Roles for structuring groups for collaboration. In Press, Rosé, C., Wise, A.F., Oshima, J. (eds) *International Handbook of Computer-Supported Collaborative Learning.* Computer-Supported Collaborative Learning Series, vol 19. Springer, Cham. https://doi.org/10.1007/978-3-030-65291-3_17.

Wong, F.M.F., Kan, C.W.Y., & Chow, S.K.Y. (2022). From resistance to acceptance in small group work: Students' narratives. *Nurse Educator Today. 11.* https://doi.org/doi.org/10,1016/j.nedt.2022.105317

World Health Organization. (2021) *The WHO global directions for nursing and*

midwifery. https://www.who.int/publications/i/item/9789240033863

Yin, R. K. (2018). *Case study research and applications: Design and methods (6th ed.).*SAGE Publications, Inc.
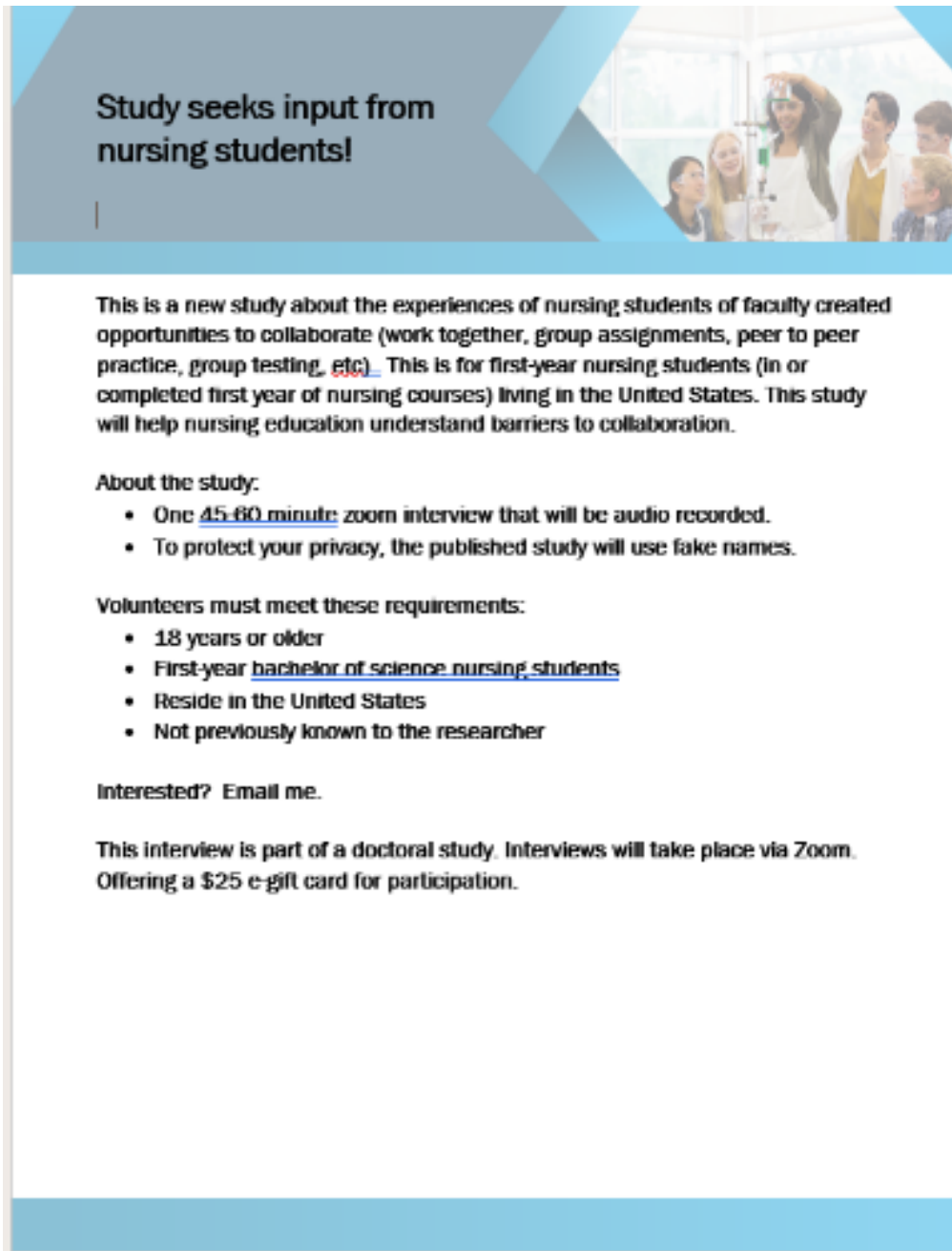
Yin, R. K. (2016). *Qualitative research from start to finish. (2nd ed.).* The Guilford Press.

Zhang, J., & Cui, Q. (2018). Collaborative learning in higher nursing education: A systematic review. *Journal of Professional Nursing*, *34*(5), 378–388. https://doi.org/10.1016/j.profnurs.2018.07.007

Appendix A: Research Study Documents

Social Media Flyer for Nursing Students

Study seeks input from nursing students!

This is a new study about the experiences of nursing students of faculty created opportunities to collaborate (work together, group assignments, peer to peer practice, group testing, etc). This is for first-year nursing students (in or completed first year of nursing courses) living in the United States. This study will help nursing education understand barriers to collaboration.

About the study:
- One 45-60 minute zoom interview that will be audio recorded.
- To protect your privacy, the published study will use fake names.

Volunteers must meet these requirements:
- 18 years or older
- First-year bachelor of science nursing students
- Reside in the United States
- Not previously known to the researcher

Interested? Email me.

This interview is part of a doctoral study. Interviews will take place via Zoom. Offering a $25 e-gift card for participation.

Social Media Flyer for Nursing Faculty

Study seeks input from nursing students!

This is a new study about the experiences of nursing students of faculty created opportunities to collaborate (work together, group assignments, peer to peer practice, group testing, etc). This is for first-year nursing students (in or completed first year of nursing courses) living in the United States. This study will help nursing education understand barriers to collaboration.

About the study:
- One 45-60 minute zoom interview that will be audio recorded.
- To protect your privacy, the published study will use fake names.

Volunteers must meet these requirements:
- 18 years or older
- First-year bachelor of science nursing students
- Reside in the United States
- Not previously known to the researcher

Interested? Email me.

This interview is part of a doctoral study. Interviews will take place via Zoom. Offering a $25 e-gift card for participation.

Appendix B: Interview Protocol Sheet

Interview Protocol for Study of Experiences of First-year Nursing Students and Faculty About Instructor-created Opportunities for Collaboration

Introduction:
Thank you again for agreeing to participate in this interview. I greatly appreciate the opportunity to speak with you in person or via Zoom and get your perspective on collaboration in nursing education.
Your input will assist me in completing my dissertation study. The purpose of my dissertation study is to better understand collaboration among first-year nursing students from the perspectives of first-year nursing students and faculty. For this part of my study, your input is important for me to gain this understanding, and that this interview is the best way to get your input. I would ask that you do not use any proper nouns in your answers. You are free to stop this interview at any time. Do you have any questions before we continue?

Center Aims and Practices:
1. First, I would like to ask some demographic questions as a nursing faculty/nursing student.
   a. How long have you been a nursing instructor/nursing student?
   b. What are your experiences as a nursing instructor/nursing student?
   c. (Faculty) What is your rank as a faculty member? What is your highest level of education?
   d. (Students) What semester are you in nursing school? Are you in a traditional or accelerated program? What is your gender identity?
   e. What interests you in addressing experiences surrounding nursing student collaboration?

2. For nursing students:
   a. What does student collaboration mean to you?
   b. Tell me about past opportunities you have had to collaborate with other students before nursing school?
   c. How did you feel about those past opportunities to collaborate (group projects, group activities in class, lab partners, etc.)?
   d. How did you feel about instructor created opportunities to collaborate with other students in your nursing cohort?
   e. Tell me about the instructor created opportunities you have to collaborate with other students in your nursing labs?
   f. Tell me how did you feel about those instructor-created opportunities to collaborate with other students in your nursing clinicals?

g. Tell me about the instructor-created opportunities you must collaborate with students in your class?

h. Do you feel these opportunities to collaborate in nursing school are effective? Why or why not?

i. Do you prefer to work collaboratively or alone in your nursing education endeavors? Explain why?

j. What changes do you feel are needed to instructor created opportunities for nursing students to successfully collaborate?

3. For nursing faculty:
   a. What does student collaboration mean to you?
   b. Tell me about your past opportunities you have had to create collaborative opportunities for nursing students.
   c. How did you feel about those past opportunities to collaborate (group projects, group activities in class, lab partners, etc.)?
   d. How did you feel about those instructor-created opportunities for nursing students to collaborate?
   e. Tell me about the instructor-created opportunities you must collaborate with other students in their nursing lab?
   f. Tell me about the instructor-created opportunities for collaboration you have created for students in their nursing clinicals?
   g. Tell me about the instructor-created opportunities you have created for students to collaborate with students in their class?
   h. Do you feel the opportunities you have created for nursing students to collaborate are effective? Why or why not?
   i. Do you prefer for your students to work collaboratively or alone in their nursing education endeavors? Explain why.
   j. What changes do you feel are needed to instructor-created opportunities for nursing students to successfully collaborate?

4. Conclusion:
   Thank you for your answers to these questions. I will be in touch with an email and possible follow up questions to make sure that I have captured your intended answers. Do I have your correct email so that I can reach you?

Appendix C: Research Questions and Interview Questions

Research Questions	Interview Questions
What are the perceptions among first-year nursing students of their instructor-created opportunities for collaboration?	1. What does student collaboration mean to you? 2. Tell me about past opportunities you have had to collaborate with other students before nursing school? 3. How did you feel about those past opportunities to collaborate (group projects, group activities in class, lab partners, etc.)? 4. How did you feel about instructor-created opportunities to collaborate with other students in your nursing cohort? 5. Tell me about the instructor-created opportunities you have to collaborate with other students in your nursing labs? 6. Tell me how did you feel about those instructor-created opportunities to collaborate with other students in your nursing clinicals? 7. Tell me about the opportunities you have to collaborate with students in your class? 8. Do you feel that the opportunities in nursing school to collaborate are effective? Why or why not? 9. Do you prefer to work collaboratively or alone in your nursing education endeavors? Explain why. 10. What changes do you feel are needed to instructor created opportunities for nursing students to successfully collaborate?

| What are the perceptions of first-year nursing faculty of their created opportunities for first-year nursing students for collaboration? | 1. What does student collaboration mean to you?
2. Tell me about past opportunities you have had to create collaborative opportunities for nursing students?
3. How did you feel about those past opportunities to collaborate (group projects, group activities in class, lab partners, etc.)?
4. How did you feel about those instructor-created opportunities for nursing students to collaborate?
5. Tell me about the instructor-created opportunities you have created for students to collaborate with other students in their nursing labs?
6. Tell me about the opportunities for collaboration you have created for students in their nursing clinicals?
7. Tell me about the opportunities you have created for students to collaborate with students in their class?
8. Do you feel that the opportunities you created for nursing students to collaborate are effective? Why or why not?
9. Do you prefer for your students to work collaboratively or alone in their nursing education endeavors? Explain why.
10. What changes do you feel are needed to instructor-created opportunities for nursing students to successfully collaborate? |

Appendix D: Student Interview Questions and Source Chart

Student Interview Question	Source
1. What does student collaboration mean to you?	Literature review
2. Tell me about past opportunities you have had to collaborate with other students before nursing school?	Literature review
3. How did you feel about those past opportunities to collaborate (group projects, group o in class, lab partners, etc.)?	Literature review
4. How did you feel about instructor-created opportunities to collaborate with other students in your nursing cohort?	CoPs model and research questions
5. Tell me about the instructor-created opportunities you have to collaborate with other students in your nursing labs?	CoPs model and research questions
6. Tell me how you did you feel about those instructor-created opportunities to collaborate with other students in your nursing clinicals?	CoPs model and research questions
7. Tell me about the opportunities you have to collaborate with students in your class?	CoPs model and research questions
8. Do you feel that the opportunities in nursing school to collaborate are effective? Why or why not?	Research questions
9. Do you prefer to work collaboratively or alone in your nursing education endeavors? Explain why.	Research questions
10. What changes do you feel are needed to instructor-created opportunities for nursing students to successfully collaborate?	Research questions

Appendix E Faculty Interview Questions and Source Chart

Student Interview Question	Source
1. What does student collaboration mean to you?	Literature review
2. Tell me about past opportunities you have had to create collaborative opportunities for nursing students?	Literature review
3. How did you feel about those past opportunities to collaborate (group projects, group activities in class, lab partners, etc.)?	Literature review
4. How did you feel about those instructor-created opportunities for nursing students to collaborate?	CoPs model and research questions
5. Tell me about the instructor-created opportunities you have created for students to collaborate ta with other students in their nursing labs?	CoPs model and research questions
6. Tell me about the opportunities for collaboration you have created for students in their nursing clinicals?	CoPs model and research questions
7. Tell me about the opportunities you have created for students to collaborate with students in their class?	CoPs model and research Questions
8. Do you feel that the opportunities you created for nursing students to collaborate are effective? Why or why not?	CoPs model and research questions
9. Do you prefer for your students to work collaboratively or alone in their nursing education endeavors? Explain why.	Research questions
10. What changes do you feel are needed to instructor-created opportunities for nursing students to successfully collaborate?	Research questions