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Undergraduate Nurse Educator Perceptions of Preparation to Teach Interprofessional Collaboration

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This is to certify that the doctoral study by

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Abstract

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MSN, Weber State University, 2011

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Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

If nurse educators do not teach students to function in interprofessional teams, students may lack communication and teamwork skills, which can result in patient harm; however, nurse educators do not always understand the concept of interprofessional collaboration (IPC) and may, therefore, fail to teach it to students. The purpose of this multiple case study was to understand how undergraduate nurse educators prepared to teach IPC and how their preparation informed their teaching. The theory of transformative learning and the Interprofessional Education Collaborative core competencies of IPC framed this study. Data included semistructured interviews and associated documents from 9 nurse educators representing 3 different schools of nursing. Transcribed interviews and associated documents were coded for emergent themes. The 5 key themes that emerged related to nurse educator preparation to teach IPC were academic IPC preparation was limited, lack of formal preparation and an incomplete understanding, interprofessional communication: positive perceptions and perceived barriers, previous IPC exposure influenced instruction, and educators taught IPC informally. The results of this study may influence positive social change by inspiring educational leaders to consider the possibility that nurse educators may need IPC-specific faculty development. Research suggests that when educators know how to teach IPC, they can prepare students to practice in interprofessional teams. Most importantly, when new nurses know how to work in interprofessional teams, this may result in a decrease in the incidence of unintentional patient injuries.

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Acknowledgments

Completing a dissertation is a long, difficult, and sometimes lonely process. My journey has been challenging and time consuming. I am convinced that I could not have done it on my own. I therefore want to express my thanks to the many people who have helped me on my way. I am very grateful to my dissertation chair, Laurel Walsh. Dr. Walsh has provided me with wisdom, patience, and encouragement in my journey. Likewise, I am grateful to the other members of my committee, Dr. Emily Green and Dr. Shannon Decker. Their talents and attention to detail helped me to complete the writing of this paper. I am also thankful to my friends, many of them colleagues; their support and listening ears are greatly appreciated.

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The process of earning a doctoral degree has been eye opening and motivating for me. I have developed a true love of scholarship. I did not realize it at the time, but my journey to this point began when I started nursing school many long years ago. I will always be grateful that I because a nurse and later an educator. I could not ask for a better vocation in life; serving others has made my life full and purposeful. Finally, I believe that my life has been guided by a power beyond my own, and I am grateful for that influence and love in my life.

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Chapter 1: Introduction to the Study

Interprofessional communication and collaboration are essential skills for all nurses to possess; when healthcare teams do not interact successfully, patient outcomes are negatively impacted (James, 2013; Joint Commission [JC], 2016; Makary & Daniel, 2016). Interprofessional collaborative (IPC) practice is a team-based approach to patient care that occurs when multiple healthcare professionals work together purposefully to provide patient-centered, safe, and high-quality care (World Health Organization [WHO], 2010). The best time for nurses to begin learning IPC skills is in an academic setting, which places a high level of responsibility on educators (National League for Nursing [NLN], 2015; Sexton & Baessler, 2016; WHO, 2010). In this study, I investigated the experiences and perceptions of nine full-time undergraduate nurse educators working at three different nursing schools within the western United States. Because IPC practice contributes to safer patient care, positive social change implications of the study include improved patient outcomes and a potential reduction in new nurse clinical errors.

IPC practices encompass both an understanding of the value of teamwork and communication and the willingness to depart from past practices that did not encourage a team-based approach to patient care (WHO, 2010). Even though many guidelines exist describing IPC education best practices, little is known about how nurse educators have been prepared to teach IPC and how their academic and professional preparation informed their teaching. Many nurse educators did not learn about IPC when they were students and continue to display a lack of understanding about the concept today (Baessler, Best, & Sexton, 2016; Bigbee, Rainwater, & Butani, 2016; Bleich, 2016). In

addition, IPC has not always been encouraged in healthcare settings, and past relationships between various disciplines were not always team based or respectful; this situation left many professionals with less than optimal attitudes about working with other disciplines (NLN, 2015; Pardue, 2015). To remedy any gaps in knowledge and to change noncollaborative ways of thinking, stakeholders have recommended that all healthcare educators receive training to prepare them to teach IPC to students (American Association of Colleges of Nursing [AACN], 2012; NLN, 2016). Gaining an understanding of the academic and professional training that contribute to nurse educator IPC educational practices could help academic leaders to tailor professional development to the needs of nurse educators.

In the past, nurse educators were not trained to teach IPC, and it would be valuable to learn more about how current nurse educators describe their academic and professional preparation (Baessler et al., 2016; Bigbee et al., 2016; Bleich, 2016). The remainder of this chapter contains a more detailed introduction to the study, including a definition of the topic and a description of the background of IPC and IPC education. Next, I will provide the problem, purpose, and a research overview. A synopsis of the research approach, theoretical framework, definitions of the applicable concepts, and assumptions are then discussed. The remainder of the chapter includes an explanation of the study scope, limitations, delimitations, and the potential significance that the results may hold for future stakeholders. I will end this chapter with a synopsis and an introduction to Chapter 2.

Background

IPC education has been described as a group of students representing two or more healthcare professions who participate in educational experiences together (WHO, 2010). The goal of IPC education is to help students to gain a clear and respectful understanding of individual clinical roles and to learn valuable teamwork and communication skills to provide quality patient care (WHO, 2010). Formal IPC education typically begins with interprofessional didactic courses, moves on to simulated team-based activities, and concludes with a supervised clinical application activity (NLN, 2015). Each pedagogical approach to teaching IPC is valuable and contributes to a student's preparation for the highly complex healthcare world that they will enter upon graduation.

The rationale for IPC education lies in the evolution of the delivery of patient care and the resulting flaws. In the healthcare industry, medical errors that result in patient harm are an unfortunate reality (Kohn, Corrigan, & Donaldson, 2000). While the results of some errors are minor, others cause serious injury or loss of life (James, 2013; Makary & Daniel, 2016). Although exact numbers are difficult to determine, in a report, the Institute of Medicine (IOM; 2001) suggested that poor communication contributed to more than 70% of all medical errors in the United States. More recently, the JC (2016) reported that during the year 2015, at least 1,744 patient deaths in the United States were attributed to medical errors caused by communication breakdowns.

Inadequate communication occurs not because professionals are careless but because modern healthcare is a complex and multiprofessional process (IOM, 2001). In the current model of care, every member of the highly skilled team has been educated to

focus on different aspects of a patient's overall care. In a hospital, for example, patients might receive care from nurses, physicians, physical therapists, pharmacists, social workers, laboratory professionals, radiology professionals, nutritionists, and respiratory therapists. The challenge with so many disciplines all contributing to a patient's care is to ensure that everyone has the same goals and that each provider communicates all necessary information to the entire team (NLN, 2015; WHO, 2010). Strong team communication is especially important for nurses, who often act as the team intermediary, especially in inpatient settings (Interprofessional Education Collaborative [IPEC], 2011).

With the increase in healthcare complexity and the high incidence of medical errors in mind, the WHO (2010) called for a revolution in the way that healthcare professionals practice and in how students are educated. In their report, the WHO suggested that healthcare providers must develop a more coordinated approach to patient care. The concept of IPC is based on the conviction that optimal patient care can only be achieved when each member of the healthcare team works collaboratively and communicates openly (Becker, Hanyok, & Walton-Moss, 2014). The WHO also indicated that to learn to function interprofessionally, students must have opportunities to learn and engage with multiple disciplines.

Research has supported the value of good teamwork in healthcare (Boev & Xia, 2015; Eppich, 2015). For example, Boev and Xia (2015) found that better IPC among healthcare teams resulted in a lower incidence of central line infections and ventilator-associated pneumonia among hospitalized patients when compared with teams who did

not collaborate well. Even though IPC education is considered the ideal, there have been challenges to implementing IPC education, and institutions have been slow to change (Cahn, 2014; Hall & Zierler, 2015; Loversidge & Demb, 2015). Yet, change is essential because students who do not have the opportunity to interact with other disciplines may not comprehend what others do, learn successful communication skills, or understand how to work cooperatively (Banks, Stanley, Brown, & Matthew, 2019; WHO, 2010).

There are many reasons that IPC instruction has been challenging. Traditionally, healthcare students were educated within their separate professional *silos* without significant interaction with other disciplines (Becker et al., 2014; Speakman & Arenson, 2015; Sullivan, Kiovsky, Mason, Hill, & Dukes, 2015); this system still exists, to some extent, in many institutions (NLN, 2015). Additionally, past power differentials between nurses, physicians, and hospital administration often inhibited collaborative relationships and attitudes (Bell, Michalec, & Arenson, 2014; Meleis, 2016). Current research still indicates that negative relationships or attitudes exist in some situations (Reid, Fielden, Holt, MacLean, & Quinton, 2018). The result of past isolated educational practices and power differentials were educators who were unprepared to teach IPC (NLN, 2015). Because traditions can be challenging to overcome, the not-to-distant past must be considered when examining nurse educator preparation because past attitudes can cloud present behaviors (Bell et al., 2014).

Other challenges that have prevented educators from implementing IPC educational initiatives include insufficient institutional support, lack of resources, and difficulty in fitting more information into an already saturated curriculum (Becker et al.,

2014; Bressler & Persico, 2016). One additional barrier to IPC education is a lack of understanding of what IPC is or how to teach the topic to students (Bressler & Persico, 2016; Greer, Clay, Blue, Evans, & Garr, 2014). If educators do not have a clear vision of IPC, they are less likely to see past the many challenges required to implement lasting change (Davis, Clevenger, Posnock, Robertson, & Ander, 2015; Loversidge & Demb, 2015; Olenick & Allen, 2013). Because nurse educators cannot teach what they do not clearly understand, they need the opportunity to learn about IPC best practices and how to teach it to students.

While many researchers have investigated how IPC education affects students, few have examined the preparation that nurse educators received to teach IPC to students. Within nursing education, researchers have demonstrated that well-planned IPC educational interventions can enhance a student's ability to successfully communicate and collaborate (Fewster-Thuente & Batteson, 2016; Rhodes, 2016). IPC education might include a variety of teaching strategies, such as case studies, problem-based learning, role-play, discussions, and simulation (Grace, McLeod, Streckfuss, Ingram, & Morgan, 2016; Lie, Forest, Kysh, & Sinclair, 2016; Sullivan et al., 2015). At a minimum, IPC education should encompass the concepts of interprofessional communication and teamwork, a consideration of each discipline's roles and responsibilities, and a respectful acknowledgment of shared ethics and values (IPEC, 2011, 2016). Most importantly, IPC education should include opportunities for students from multiple disciplines to come together to interact and to practice positive teamwork (NLN, 2015; Pardue, 2015).

Sexton and Baessler (2016) observed that when teaching IPC, educator abilities and attitudes play an important role in student outcomes. While researchers have suggested that well-prepared faculty are considered a necessity for teaching IPC (Cransford & Bates, 2015; Davis et al., 2015; Kahaleh, Danielson, Franson, Wesley, & Umland, 2015), many found that nurse educators did not consistently receive formal training to prepare them to teach IPC (Bigbee et al., 2016; Chen, Rivera, Rotter, Green, & Kools, 2016; Loversidge & Demb, 2015). Researchers have also found that when educators are not sufficiently prepared to teach IPC well, student outcomes were adverse (Becker et al., 2014; Delunas & Rouse, 2014; Reid et al., 2018). Because IPC faculty development was not always provided and IPC was not always taught, the purpose of this study was to ascertain how educators prepared to teach IPC and to understand how their preparation informed their teaching.

Investigators who have examined nurse educator IPC faculty development indicated promising results (Davis et al., 2015; Hall & Zierler, 2015; Shrader, Mauldin, Hammad, Mitcham, & Blue, 2015). The best IPC faculty development seemed to involve a long-term, broad approach and include mentoring (Blakeney, Pfeifle, Jones, Hall, & Zierler, 2016; McMorrow & Huber, 2017; Poirier & Wilhelm, 2014). Published incidence of IPC faculty development were limited. Learning more about undergraduate nurse educators in the western United States helped to clarify the experiences and perceptions of those educators and may help stakeholders to determine if further preparation may be necessary.

Problem Statement

To provide safe patient care, nurse educators must teach students the concepts of interprofessional communication and collaboration (Foronda, MacWilliams, & McArthur, 2016; Sexton & Baessler, 2016; Sullivan et al., 2015). Even though IPC is important, many nurse educators had a knowledge gap regarding IPC education and could benefit from faculty development or other kinds of resources or support (Baessler et al., 2016; Dalrymple, Martin, & Smith, 2013; Djukic et al., 2015). Although faculty development has been considered by many to be the key to successful IPC educational initiatives, it is unclear if nurse educators have consistently obtained sufficient preparation to teach IPC (Baessler et al., 2016; Bigbee et al., 2016). It is clear that if nurse educators do not understand IPC, they are less likely to include it in their curriculum (Coogle, Hackett, Owens, Ansello, & Mathews, 2016; Hemmings, 2015; Sorinola, Thistlewaite, Davies, & Peile, 2015). If nurse educators fail to teach IPC, new graduates may enter the workforce unprepared to practice interprofessionally (IOM, 2001), which is a patient safety issue that should be addressed.

The results of this study may contribute to positive social change by motivating stakeholders in nursing to consider how educators prepared to teach IPC and to evaluate how educator preparation may inform teaching. My hope in undertaking this study was that learning more about this phenomenon could lead to adequately prepared educators who could then teach students how to work as part of the types of interprofessional teams that deliver safe patient care. This research is distinctive because it addresses an under

researched area of nursing education that could lead to improved patient outcomes (see Bigbee et al., 2016; Davis et al., 2015).

While research on IPC education exists, most investigators did not describe how or if educators received appropriate preparation to teach the topic. Several investigations on IPC educational initiatives indicated that faculty did not fully understand IPC and needed training to be able to teach it to students (Baessler et al., 2016; Bigbee et al., 2016; Loversidge & Demb, 2015; NLN, 2015). Researchers have also observed that the apparent unfamiliarity with the topic may have contributed to adverse student learning outcomes (Dalrymple et al., 2013; Delunas & Rouse, 2014; Reid et al., 2018). While many investigators concluded that educators needed to be well prepared (i.e., Gordon, Lasaterm, Brunett, & Dieckmann, 2015; Hall & Zierler, 2015), few had examined IPC educator preparation. Also, little was known about how educator preparation informed teaching. Because nurse educator preparation can impact the future performance of students who will become nurses, it is ultimately a patient safety issue that requires further consideration.

Purpose of the Study

The purpose of this qualitative case study was to gain an understanding of how nurse educators were prepared to teach IPC and how their preparation informed their teaching. The phenomenon of interest for this study was full-time, undergraduate registered nurse (RN) educators' preparation to teach IPC. Because of the focus on the experiences and perceptions of nurse educators, I employed a qualitative approach in this study.

Research Questions

The following questions guided this study:

Research Question 1: How do undergraduate nurse educators describe their preparation to teach interprofessional collaboration?

Research Question 2: How does the preparation that undergraduate nurse educators experience inform their teaching practice?

Conceptual Framework

Because the focus of this study was on both how educators prepared to teach IPC and how their preparation informed their teaching, I combined two different frames of reference to create a conceptual framework for this study. First, I selected the IPC core competencies, as defined by the IPEC (2016). Second, I chose Mezirow's (1994, 1997, 2003) adult theory of transformative learning (TLT). The combination of the two concepts provided the academic context necessary to determine what is considered important in educator preparation and provided a lens through which to explore the qualitative data.

The IPC core competencies (IPEC, 2016) specify what information educators should teach students and what information educators themselves need to know (Legros, Amerongen, Cooley, & Schloss, 2015). The competencies include mutual respect, an acknowledgment of shared values/ethics, the development of teamwork and communication skills, and an understanding of the roles and responsibilities of all team members (IPEC, 2011). The core competencies are the recognized basis for IPC education-related activities and research in the United States and aided in focusing this

study by guiding the questions I developed about what educators have learned to be prepared to teach IPC. In addition to the focus on knowledge, I felt that it was also important to bring in theory that explains how nurse educators operationalize their knowledge.

I also used Mezirow's TLT (1994, 1997, 2003) as a part of the conceptual framework in this study to focus on how nurse educators applied their knowledge to teach. TLT seeks to describe how adults learn, not only knowledge, but also how their learning has the power to change attitudes and behaviors (Mezirow, 1997). The distinction between gaining knowledge and transformative learning was key in my study. Although educators must possess the requisite knowledge to teach IPC, knowledge alone may not be enough (Davis et al., 2015; Loversidge & Demb, 2015; Olenick & Allen, 2013). Nurse educators must also use their knowledge to transform how they think and act.

Addressing foundational misunderstandings about the role of the nurse in modern clinical settings is often necessary when educators are called upon to teach IPC. To be successful in teaching these crucial competencies, educators must often challenge traditions, overcome barriers, and develop new ways of thinking and teaching (NLN, 2015). Mezirow (1994, 1997, 2003) proposed that the process of transformation involves experiential learning, followed by self-reflection. Mezirow also suggested that transformative learning is a social as well as an individual endeavor. For these reasons, TLT was well suited to IPC education, which also acknowledged the need to reflect on

personal attitudes and learn through social experiences (Barr, 2013; Hean, Craddock, & Hammick, 2012).

The conceptual framework for this study was focused on what is considered essential knowledge and on how learning changes attitudes and behaviors. The process of self-reflection and change within a social context described in TLT (Mezirow, 1994, 1997, 2003) and the competencies identified by IPEC (2016) helped me focus the interview questions and the evaluation of data in this study. The competencies guided me in the creation of the questions about what nurse educators had learned to prepare to teach IPC. In addition, TLT helped me to focus on how what educators learned influenced their teaching practices. The combination of the concepts described in this section corresponded well with a qualitative research paradigm because the focus of this study was to understand educators' experiences. The connections between TLT, the core competencies, and this study will be more thoroughly discussed in Chapter 2.

Nature of the Study

The purpose of this study was to examine nurse educators' experiences and perceptions of their preparation to teach IPC and how it informed their teaching. I chose a qualitative approach to this study because I intended to explore participant perceptions. Qualitative research, as described by Merriam (2009) is focused on individual interpretations of a phenomenon, making a qualitative design was an ideal way to gain an understanding of nurse educators' perceptions regarding their preparation. Within the qualitative design, a case study methodology was selected for this investigation because I was interested in learning about multiple individuals. The case study method involves the

examination of a bounded group (see Merriam, 2009), making it a useful method for learning about multiple nurse educators. In this study, the group, or case, was identified as full-time, undergraduate RN educators.

To lend strength and validity to the study results, and to analyze across multiple settings, I employed a multiple case study approach. I chose to interview nine nurse educators from three different institutions located in the western United States to strengthen my findings. Additionally, I also examined documents illustrating nurse educator preparation to provide a fuller picture of nurse educator experiences. I anticipated that the data gathered from interviews and documents would provide rich information that could illuminate the participants' preparation to teach IPC.

Definitions

In this section, I provide definitions for the terms associated with IPC and nursing education that were used in this study.

Collaboration: "Both parties work together to find a mutually agreeable solution … to maintain the ongoing relationship and achieve win-win results. Collaborative negotiation also incorporates the idea of innovative thinking that leads to finding new opportunities that benefit both parties" (Frankel, Haraden, Federico, & Lenoci-Edwards, 2017, p. 15).

Faculty development: The development of faculty should center on the IPEC-identified IPC competencies of teamwork, communication, values, and roles and responsibilities. Faculty development should involve active learning and also include facilitation strategies, tools, and any specialized resources that are available. Finally,

faculty development activities should be social and include time to reflect on possible biases and attitudes related to IPC (IPEC, 2016; National Advisory Council on Nurse Education and Practice [NACNEP], 2015).

Interprofessional collaboration: "When multiple health workers from different professional backgrounds work together with patients, families, and communities to deliver the highest quality of care" (WHO, 2010, p. 13).

Interprofessional education: "When students from two or more professions learn about, from, and with each other to enable effective collaboration and improve health outcomes" (WHO, 2010, p. 13).

Preparation: The process of developing the knowledge, skills, attitudes, and behaviors necessary to expertly model and teach IPC to students. To be prepared, educators must reflect on their attitudes and teaching practices and adopt the embodied professional ideals regarding the importance of IPC in providing high-quality healthcare outcomes (NLN, 2015).

Teamwork: *"*Hallmarks of a strong team include working together to plan forward, reflect back, communicate clearly, and manage risks" (Frankel et al., 2017, p. 14).

Assumptions

In this study, my assumption that participants would answer questions willingly and honestly was foundational. I also believed that the information obtained from interviews and the review of artifacts would help to answer the questions posed in this study. I likewise assumed that nurse educators were invested in teaching students and

wanted to align their practices to national guidelines. Finally, I assumed that teaching IPC would benefit students and that educators would be better teachers if they were well prepared. Without these assumptions, it would have been impossible to make meaning of the information that nurse educators shared.

Scope and Delimitations

The scope of this study concerned the perceptions of nine full-time nurse educators who taught undergraduate RN students from three different brick-and-mortar schools of nursing. I interviewed three participants from each school to strengthen the generalizability of the findings. Documents were also examined to gain an understanding of the teaching practices of the interviewees and their programs as well as to shed light on any training activities in which they may have participated. Potential documents were identified as course syllabi, course descriptions, program course requirements, faculty development documents, and journal articles or books. I anticipated that the documents would provide information that could assist in answering the questions posed in this study. The problem identified for this study was that nurse educators must be prepared to teach students to practice interprofessionally for the safety of future patients, but, many lacked the knowledge and attitudes that were considered necessary for teaching IPC (Baessler et al., 2016; Bigbee et al., 2016; Bleich, 2016).

The goal of examining nurse educator perceptions was to determine how they prepared to teach IPC and how their preparation informed their teaching. I selected nurse educators from a specific geographic location within the western United States to limit the scope of the study. A combination of Mezirow's (1994, 1997, 2003) TLT and the

IPEC (2016) IPC core competences made up the conceptual framework for this study. While I considered other adult learning theories, the TLT was most suitable with the intent of this study.

Limitations

I identified several limitations concerning this study. First, even though three different schools of nursing were included in the study, the small sample size limits the generalizability of the study. Three different nurse educators from three schools of nursing were interviewed to mitigate this limitation. Additionally, I examined documents illustrating nurse educator faculty preparation and teaching to triangulate the findings.

A limitation to using qualitative interviews and reviewing documents was that I was the sole collector of data, which provided the potential for researcher bias. To limit the potential for researcher bias, I allowed each participant to review their transcript to ensure that I had represented their thoughts accurately. In addition to interviews, documents were also examined to add dimension to the data.

Other limitations of the study included accessibility to potential interviewees and documents and their willingness to participate. To address this limitation, I elicited participation from multiple nurse educators and interviewed the first three from each school that indicated their willingness to participate. Further strategies used to address these limitations are discussed in Chapter 3.

Significance

The findings from this study have the potential to increase patient safety by improving nursing education. The results also contribute to the discipline of nursing

education by providing insight into how nurse educators were prepared to teach IPC. Knowing how nurse educators prepared to teach IPC is valuable because they can only fulfill their responsibility to teach students if they fully understand the concept and know how to teach the topic to students. The results of this study could assist stakeholders in nursing education to identify potential areas of concern that could influence nurse educators, nursing students, and future patients.

Summary

In this chapter, I have discussed the study topic and background of nurse educator preparation to teach IPC. I then described the problem and purpose of the study along with the research questions. Following the research questions, I introduced the conceptual framework and described the nature of the study. I then provided the term definitions, study assumptions, scope, delimitations, and limitations of the study. I concluded this chapter by discussing the significance and potential for social change for this study.

In summary, to prepare students to provide safe patient care, nursing educators have been charged with teaching IPC to students (NLN, 2015). Even though educators have an obligation to teach IPC, there was evidence that IPC education had not always been included in the curriculum (NLN, 2015; Sullivan et al., 2015). There was also evidence that many educators had not learned IPC while students and did not fully understand what IPC was, why it may be necessary, or how to teach it (Baessler et al., 2016; Bigbee et al., 2016; Loversidge & Demb, 2015). Experts agree that if IPC educational initiatives are to succeed, educators must be adequately prepared to teach IPC (Christofilos, DeMatteo, & Penciner, 2015; Hermann, Head, Black, & Singleton, 2016;

Lennen & Miller, 2017). However, it is not clear that nurse educators always received preparation to teach IPC (Bigbee et al., 2016; Hall & Zierler, 2015).

Because nurse educator preparation is an essential element to successful IPC educational initiatives, it was important to understand how nurse educators are prepared. It was also valuable to ask how preparation has informed teaching practices to gain greater insight into how educators were teaching IPC to their students. To gain a greater understanding of the experiences and perceptions of nurse educators regarding their preparation to teach IPC, I interviewed nurse educators and examined documents describing any preparation they may have received as well as how their preparation informed their teaching.

Using multiple forms of data provided insight into the experiences and perceptions of nurse educators regarding their preparation to teach IPC. The results of this study could guide those in leadership to make informed decisions regarding the possibility of future faculty needs. Additionally, the results of this study could help leaders to ensure that educators fully understand how to prepare RN students to participate in interprofessional teams. Ultimately, this study could have direct implications for positive social change that could result in ensuring that new nurses have the knowledge they need to provide safe patient care.

In Chapter 2, I will present a literature review on the phenomenon of nurse educator preparation to teach IPC. The search strategy for relevant research will be explained. In addition, research on the theoretical lens for this study, Mezirow's (1994, 1997, 2003) theory of TLT and the IPEC's (2016) IPC core competencies will also be

described. Because there are only a few extant studies focused on how nurse educators were prepared to teach IPC, I also reviewed research on how nurse educators taught IPC to determine if faculty preparation was discussed.

Chapter 2: Literature Review

The problem I identified in this study was that although they are responsible for teaching students how to function in interprofessional teams, little was known about how nurse educators prepared to teach IPC or how their preparation informed their practice (see Bigbee et al., 2016; Bleich, 2016). The purpose of this qualitative case study was to gain an understanding of how nurse educators were prepared to teach IPC and how their preparation informed their teaching practices. The nurse educators under focus in this study were nine educators who worked full time and taught didactic courses at undergraduate nursing programs in the western United States.

The high incidence of medical errors in the United States during the late 1990s prompted stakeholders to reassess how patient care was delivered and how healthcare professionals prepared for practice (IOM, 2001). Recognizing the need for educational reform, the WHO (2010) urged teaching institutions to place a greater emphasis on teaching students how to function in team-based situations. The call for change was supported by multiple professional organizations, such as the IOM (2010), the Josiah Macy Jr. Foundation (2013), and the AACN (2012). In response to the WHO's appeal, the IPEC (2011) was established to formulate a path for educational transformation. The IPEC identified four core competencies to serve as the basis for IPC education and recommended that all health professions faculty receive training to understand both what and how to teach IPC to students (AACN, 2012).

IPC education includes the teaching of communication and collaboration skills to healthcare students from multiple professional disciplines (WHO, 2010). The aim of

teaching IPC is to prepare healthcare professionals to work as cohesive teams that communicate in ways that encourage safe, effective, and patient-centered care (Bleich, 2016; Crouch, Fillmore, Fly, & Ukot, 2015; Foronda et al., 2016). When professionals demonstrate strong IPC skills, medical errors decrease and patient safety is improved (Boev & Xia, 2015; Eppich, 2015; JC, 2016). The optimal way to ensure student success is to begin with well-prepared educators (Kahaleh et al., 2015; NLN, 2015). Despite the recommendations of many professional organizations, nurse educators do not consistently obtain IPC faculty development (Bigbee et al., 2016; Bleich, 2016). Exploring how nurse educators prepare to teach IPC may help to inform those involved in nursing education and provide insight into what nurse educators need to know to teach IPC.

In this chapter, I will provide a comprehensive review of current literature in an attempt to shed further light on the phenomenon of nurse educator preparation to teach IPC. This chapter is divided into four sections to organize and explain the findings from this review of research exploring nurse educator preparation. The first section contains a description of the process used to search for and find relevant literature. Next, I have described the IPEC (2016) core competencies for IPC education and the TLT (Mezirow, 1994, 1997, 2003), which served as the conceptual framework for this study. The third section consists of a critical overview of the research conducted within the last 5 years concerning both IPC education in nursing and nurse educator preparation to teach IPC. I end this chapter with a summary of the major themes I discovered in the literature.

Literature Search Strategy

I conducted a comprehensive literature review to explore current knowledge about the identified problem, purpose, and research questions. The literature for this search was located in peer-reviewed academic journals specializing in nursing, healthcare, and IPC. The focus of my investigation was to find research that examined how nurse educators prepared to teach and have taught IPC. Applicable research on IPC published within the last 5 years that demonstrated scholarly work was selected for consideration. Literature describing the IPEC (2016) core competencies and literature related to TLT (Mezirow, 1994, 1997, 2003) were also reviewed.

Using the Walden University Online Library, I searched nursing-focused databases for appropriate research. Academic Search Complete, CINAHL, ProQuest, Medline, and Ovid databases were accessed in the literature search process. The key search terms used in the databases included *nursing, nursing education, interprofessional collaboration, interprofessional collaborative education, teamwork, faculty development, higher education, theory,* and *transformative learning*; I used these terms individually and combined using the Boolean phrase "AND" as applicable. In the search for information on Mezirow's (1994, 1997, 2003) TLT, I searched the Sage database to find both current and historical research. My goal in conducting the literature search was to identify information that was relevant, current, and provided a broad background on the topics.

Along with the many nursing-specific journals containing articles on IPC, I also identified three journals that specialized in the topic of healthcare IPC. Even though there

were multiple possibilities, I was only able to locate a few studies on educator preparation to teach IPC. Because of the lack of research on IPC educator preparation, I also reviewed studies examining how nurse educators taught IPC. I determined that saturation had been reached when the manuscripts in the various databases became repetitious. I also reviewed articles discussing the history of IPC, the need for IPC in the healthcare industry, and the importance of teaching IPC to nursing students in the background section in Chapter 1.

I developed several criteria to focus the search. First, I excluded non-English items. Additionally, I rejected any IPC studies that did not include nursing educators. I also eliminated research on IPC from other countries from consideration because of the many differences between the United States healthcare system and educational systems with those of other countries. My considerations for inclusion were further determined through an examination of the abstracts and a deliberation on the relevance of each article to the purpose of this study. I excluded some of the remaining articles because they did not meet the WHO's (2010) IPC definition, which stipulates that IPC learning activities consist of representatives from at least two different disciplines.

All resulting studies published within the last 5 years that examined faculty development to teach IPC and how faculty taught IPC were included in this review. In addition, I also examined many articles that outlined the history of IPC education. This analysis included a combination of qualitative, quantitative, and mixed-methods research. It was considered beneficial to include all of the research found on IPC regardless of methodology employed because each method assists in creating a picture of the situation

of how educators prepared to teach IPC and how IPC was taught. In the search for literature on the conceptual framework, I also reviewed research discussing the use of theory in IPC education, original seminal works on TLT (Mezirow, 1994, 1997, 2003) and the IPEC (2011) core competencies, and research that had used TLT or the IPEC core competencies as a theoretical foundation.

Conceptual Framework

Experts have recognized the value of building IPC educational initiatives around a theoretical framework to assist in the articulation of the concept and aide in the development and implementation of teaching and learning activities (Hean et al., 2012; IPEC, 2016). Several investigators suggested that because IPC education is a complex and multidimensional topic, no single theory was sufficient in all circumstances (Barr, 2013; Hean et al., 2012). I carefully considered the nature of the phenomenon to determine how to frame educator preparation to teach IPC. First, I acknowledged that preparation occurs in many ways and may encompass a range of experiences, including formal faculty development events or informal on-the-job (i.e., clinical) experiential learning. Preparation, as described by the NLN (2015), focused on attitudes as well as the development of the knowledge and skills that are necessary to enable educators to both teach and model IPC behaviors for students.

Changing ways of thinking and doing was the primary rationale for implementing IPC education and was of interest to me when examining how educators prepared to teach IPC (IPEC, 2016; NLN, 2015; WHO, 2010). The perceptions of educators regarding their preparation to teach IPC in this study concentrated both on what they

learned and on how what they learned shaped them as educators. To focus this study, I used a combination of the IPEC core competencies, which experts have identified as essential knowledge for students and educators, and Mezirow's (1994, 1997, 2003) adult TLT.

Interprofessional Communication Core Competencies

Understanding what nurse educators teaching IPC are expected to know can provide a context when attempting to examine nurse educator preparation. The IPEC (2011) recommended a set of competencies that were designed to define and underpin all IPC education. The IPEC expert panel identified four overarching domains that were determined to embody IPC practice, and these competencies included:

1. Values and ethics: Healthcare professionals must embrace and model IPC values and ethical ideals that are respectful, team based, and patient centered; this is in contrast with past traditions that are now viewed as profession-centric, self-serving, and prohibitive of change (IPEC, 2011).
2. Roles and responsibilities: Healthcare professionals must understand and articulate their professional roles and responsibilities as well as those of all other team members (IPEC, 2011). The IPEC (2011) explained that when all members of the team understand the unique and complimentary abilities of each discipline, as well as their place within the team, patients receive better care.
3. Communication: Healthcare professionals need to communicate effectively. Good team-based communication includes respectful, active listening; timely

feedback, and the use of negotiation and conflict resolution skills (IPEC, 2011). Best practice also involves using standard communication tools, jargon-free language, and the sharing of information using technology (IPEC, 2011). Good communication also encompasses the recognition that differences in power and expertise can influence what others are comfortable saying, which in turn can affect patient safety (IPEC, 2011).

4. Teams and teamwork: Healthcare professionals must know how to work in interprofessional teams. Good teamwork is not easy, and learning how to function in interprofessional teams requires individuals who are willing to relinquish their professional autonomy in favor of a better way (IPEC, 2011).

The IPEC (2011) recommended that students be exposed to the concepts at all levels of education and that learning should involve active opportunities for students from all disciplines to learn together the knowledge, skills, and attitudes that comprise IPC. Experts also suggested that IPC education is not a one-time event but rather a long-term cultural and curriculum change (IPEC, 2011). Extant research using the core competencies was limited due to the specificity of the topic but did provide a basis for how others had used them in the research process.

Only one investigation specifically stated that the core competencies were part of the framework of their study. In their evaluation of a student assignment, Titzer, Swenty, and Wilson (2015) employed a survey to evaluate if the IPC activity met the four IPEC (2011) competencies. In other research, the IPEC core competencies were also used as the foundation of IPC investigations. Rossler, Buelow, Thompson, and Knofczynski

(2017) grounded their student IPC educational activity on two of the core competencies: roles and responsibilities and teamwork. The authors found that students' comfort with working in interprofessional teams increased after the activity (Rossler et al., 2017). Sexton and Baessler (2016) also used the core competencies as the basis for their education and found that students learned more about IPC and believed that they had an improved ability to communicate and work as teams. West et al. (2015) evaluated how well their student learning activities met the core competencies through the use of a checklist and were able to determine which activities best met all of the competencies.

I located one study that utilized the IPEC (2011) core competencies and focused on an IPC faculty development activity. Hall and Zierler (2015) concluded that the competencies provided a foundation in guiding curricular development and ensured overall alignment. The authors also noted that the core competencies employed to teach students should also be used when preparing faculty to teach IPC (Hall & Zierler, 2015). The studies described above lead me to believe that although few investigators have utilized the core competencies as a framework, there is sufficient information to conclude that when used, the competencies provide a suitable foundation to link them to educator preparation to teach IPC.

Transformative Learning Theory (TLT)

Mezirow's (1994, 1997, 2003) TLT emphasizes not only how adults learn but also how they internalize knowledge to change both attitudes and behaviors. Transformative learning involves the dismantling and subsequent rebuilding of an individual's attitudes and beliefs and implies more than simply gaining new knowledge or skills (Meijer,

Kuijpers, Boei, Vrieling, & Geijsel, 2016). TLT incorporates the concepts of experiential learning, critical reflection, social learning, and deep change (Mezirow, 1994, 1997). According to Mezirow, the kind of learning that is most powerful involves real-life experiences; this corresponds with IPC education, which also places a heavy emphasis on experiential learning (IPEC, 2016). Transformative learning also involves challenging current ways of thinking and reflecting on how personal beliefs may contrast with new information (Mezirow, 1994). Negative attitudes are one of the barriers associated with the implementation of IPC education; this suggests that there is value in focusing on educators' beliefs and values and how preparation may influence mindsets (Barr, 2013; Hean et al., 2012).

Because TLT describes how adults learn in ways that encourage change, the theory can be used to examine how educator preparation influenced practice (Barr, 2013; Hean et al., 2012). A transformation of attitudes may be required when teaching IPC, because educators may find it necessary to break down barriers, challenge traditions, and develop new ways of thinking and teaching (NLN, 2015; Prentice, Engel, Taplay, & Stobbe, 2015). According to Mezirow (1994, 1997, 2003), the process of transformation begins with the learning of new ideas and is followed by a critical reflection on personal beliefs, a realization that change is needed, and a consideration of how to change. Personal reflection is recognized as an important part of IPC education (Lie et al., 2016; Pardue, 2015). Mezirow also suggested that a transformation of perspectives may not happen without social support. Learners who reflect and then revise their views often need opportunities to discuss the possibility of change with others and rely on social

support when changes are enacted (Taylor, 2007). Because learners begin with personal reflection and then move to shared interactions to process new ideas, significant learning is considered both an individual and a socially constructed endeavor. The idea of shared learning also fits well with IPC education, which places a heavy emphasis on the interprofessional social aspects of learning (NLN, 2015). My review of current research revealed the recent application of the principles of TLT in studies related to the phenomenon under examination in this study.

I identified several studies that exemplified how TLT can be used as a theoretical framework. TLT has been employed as a lens for exploring many of the issues involved in this study, including nursing education (Fletcher & Meyer, 2016; Kear, 2013; Kuennen, 2015; Pepin et al., 2017) and IPC education (King et al., 2013). Two of the studies examining IPC had used TLT as the theoretical foundation of their research.

In both studies, researchers asked if IPC education could be transformative. King et al. (2013) employed TLT as a framework to base the creation, implementation, and evaluation of their IPC educational endeavor and concluded that IPC education could be a transformative learning event. The authors noted positive changes in learner attitudes regarding IPC and improved communication skills after the experience (King et al., 2013). Similarly, another study utilizing TLT as a research framework also indicated that students altered their perspectives and behaviors after participating in an educational activity where students learned through real-world learning experiences (Bergh, Bac, Hugo, & Sandars, 2016). Although both studies examined students rather than educators,

the findings strengthen the idea that IPC education has the potential to change attitudes and behaviors.

Researchers also asked what kind of learning experiences enable transformation. In a study focused on a nursing program, researchers used TLT to examine student narratives after an educational event (Kear, 2013). Kear's (2013) study confirmed that experiential learning appeared to have the power to affect learner attitudes. Kear also determined that social interactions could influence personal beliefs. Fletcher and Meyer (2016) concluded that the use of reflection in learning situations was instrumental in constructively altering previously held opinions. Fletcher and Meyer used the TLT as a framework for planning education for nursing students. The authors determined that TLT was applicable for use in nursing education and suggested it be employed to design educational experiences (Fletcher & Meyer, 2016).

In another example, Pepin et al. (2017) tested a competency-based approach to teaching to see if learners experienced changes in opinions. Pepin et al. concluded that reflection after learning experiences contributed to the transformation of attitudes. Echoing the findings of the previous studies, Kuennen (2015) used TLT as a framework to examine graduate nursing students' abilities to use critical reflection to enhance their understanding of a topic. Kuennen's findings indicated that learners were able to apply critical reflection to alter their perspectives and apply their new understanding to practical situations. The Kuennen study also supported the use of TLT as a framework for teaching and learning in nursing education.

The TLT has also been used to examine how educators learn new knowledge in preparation to teach. Meijer et al. (2016) applied the TLT as a framework to understand the kinds of activities that encouraged educators to experience the deep learning that changes beliefs and actions. Meijer et al. found that the participants were more likely to undergo deep changes in personal perspectives when provided with the opportunity to reflect both individually and within a social context. Many researchers also noted that it was more difficult for educators to change their behaviors than it was their beliefs. This conclusion suggests that even when learners understand the adjustments that they should embrace, it is not always easy to make changes. In their study, Meijer et al. speculated that educators' attitudes might also play a role in whether students felt motivated to change behavior. Because change is often one of the goals of IPC education, attitudes must be taken into account when examining IPC education.

In summary, the IPEC (2011, 2016) core competencies provided a foundation for what IPC education involved, whether for students or faculty. Although few investigators used the competencies as their conceptual lens, many acknowledged the value in planning and teaching IPC and in researching IPC educational issues with the use of the competencies (Barr, 2013; Hean et al., 2012). Current research also confirmed the use of TLT as a viable lens from which to view IPC education in nursing (Kear, 2013; King et al., 2013; Meijer et al., 2016). The conceptual framework for this study was used to guide the gathering and examination of literature and also provided context for the collection and analysis of data.

Literature Related to Interprofessional Collaborative Education

An examination of research from the last 5 years on IPC education in nursing revealed that most authors focused on how it was taught to students rather than how educators prepared to teach IPC. Because studies on IPC educator preparation were rare, I also examined research describing IPC student education. I looked for research on IPC student education to see if nurse educator preparation was discussed and to determine the current state of IPC education in nursing.

Interprofessional Collaborative Education in Nursing

When interprofessional teams work collaboratively, they contribute to better patient outcomes (Boev & Xia, 2015; Eppich, 2015; Padgett, Gossett, Mayer, Chien, & Turner, 2017), and when healthcare professionals fail to work collaboratively, patients errors are more likely (JC, 2016; Makary & Daniel, 2016). To ensure that healthcare professionals know how to work in interprofessional teams, most experts suggest that they begin to learn IPC skills while they are students (Ketcherside, Rhodes, Powelson, Cox, & Parker, 2017; Sexton & Baessler, 2016; WHO, 2010).

When students received IPC education, investigators found that it was taught through assignments, courses, workshops, and practical skills activities (Balogun, Rose, Thomas, Owen, & Brashers, 2015; Krueger, Ernstmeyer, & Kirking, 2017; Motycka et al., 2018). Although IPC education was often a one-time event, occasionally IPC concepts were threaded throughout the entire curriculum (Arenson et al., 2015; Fewster-Thuente, 2014; Hermann et al., 2016). Educators used a variety of methods to teach IPC, including case studies, problem-based learning activities, discussions, individual

reflective assignments, simulated scenarios, and clinical application activities (Beard, Robertson, Pardue, 2015; Semler & Cude, 2015; Titzer et al., 2015). Investigators also described the content of IPC education.

In many studies, those implementing IPC education utilized all four of the IPEC (2016) core competencies to plan their educational activities (Sterrett, Hawkins, Hertweck, & Schreiber, 2015; Turrentine et al., 2016; West et al., 2015). Some chose to focus on one or two of the competencies, such as teamwork/collaboration (Coleman, McLean, Williams, & Hasan, 2017; Park, Hamlin, Hawking, & Hawking, 2014; Saylor, Vernoony, Selekman, & Cowperthwait, 2016), communication (Liu, Poirier, Butler, Comrie, & Pailden, 2015), or roles and responsibilities (Shanahan & Lewis, 2015; Sweigart et al., 2016; Von der Lancken & Levenhagen, 2014). Results of studies on IPC education indicated that in general, students who engaged in well planned IPC education gained knowledge, learned communication skills, experienced positive attitudes, and increased confidence related to interprofessional teamwork (Banks et al., 2019; Fewster-Thuente & Batteson, 2016; Rhodes, 2016; Salam, Saylor, & Cowperthwait, 2015).

I did not find studies that described how frequently United States nursing programs purposefully incorporated IPC into their curricula; however, there is evidence that IPC education was not universally taught (Hickerson, Taylor, & Terhaar, 2016; Hopkins & Bromley, 2016; Sexton & Baessler, 2016). A report from the NLN indicated that in 2014, there were 1,869 accredited registered nursing programs in the United States. In a survey of 68 United States universities with healthcare programs in 2014, 85% of those surveyed reported that they provided some form of IPC education (Greer et

al., 2014). In 2016, Congdon examined 30 United States universities that were known to teach IPC. Congdon indicated that, while all of the 30 offered either voluntary or required IPC education, only 16 of the 30 had IPC embedded in their curriculum. Through a careful study of current research, I did find some reasons that IPC was not consistently taught.

Barriers to Teaching Interprofessional Collaboration

Although it is not always obvious why some educators failed to teach IPC, several barriers were described. One reason was that educators found it challenging to incorporate IPC into an already existing curriculum due to constraints of time and money (Bressler & Persico, 2016; Cahn, 2014; Sterrett et al., 2015). These obstacles may be even more of a problem in smaller institutions that have fewer resources (NACNEP, 2015; NLN, 2015). Another barrier to teaching IPC was a lack of administrative support (Chen et al., 2016; Hinderer, Head, Black, & Singleton, 2016). The barriers that were most relevant to this study were that instructors did not understand or value IPC (Baessler et al., 2016; Bigbee et al., 2016; Doll, Maio, & Potthoff, 2018).

High-quality IPC education has the power to change behaviors and attitudes (Bergh et al., 2016; King et al., 2013). To be prepared to teach IPC in a way that stimulates change, it has been recommended that nurse educators possess a thorough understanding of the concept of IPC, including the IPEC (2016) core competencies (Cransford & Bates, 2015; Davis et al., 2015; Kahaleh et al., 2015). Due to the interprofessional dimensions of IPC education, nurse educators should also know the best ways to teach IPC to students (NACNEP, 2015). Most authors agree that IPC education

should be planned around adult learning principles (Barr, 2013; Berman et al., 2014; Hean et al., 2012). Experts also pointed out that IPC education is not merely placing students from different disciplines in the same classroom; instead, it involves bringing students together so that they may learn to work in respectful and synergistic ways (Bleich, 2016).

Researchers suggested that IPC education should begin with didactic learning and include the underpinning rationale for IPC, which is patient safety (Bleich, 2016; Hall & Zierler, 2015; Lie et al., 2016). IPC education should also involve opportunities to practices interprofessional teamwork and communication skills, first in simulated circumstances, and later in clinical situations (Grace et al., 2016; Lie et al., 2016; Sullivan et al., 2015). Above all, IPC educational activities should end with opportunities to reflect and discuss what was learned, and how things might be improved in the future (Hall & Zierler, 2015; Lie et al., 2016; Sullivan et al., 2015). In addition, IPC education should begin with the collaboration of educators from multiple disciplines to ensure that the education base is broad (Loversidge & Demb, 2015; Poirier & Wilhelm, 2014). Due to the complexity of IPC education, experts frequently expressed the need to provide educators with opportunities to learn about IPC education before they taught it to students (Hall & Zierler, 2015; Lie et al., 2016; Sullivan et al., 2015).

The Need for Formal Preparation

In addition to the complexity that IPC education brings with it, there were also other reasons that educators may need to learn about the topic. In the past, most nurse educators did not learn about IPC when they were in school (Sullivan et al., 2015).

Several authors found that nurse educators demonstrated a general lack of understanding related to IPC (Djukic et al., 2015; Loversidge & Demb, 2015; New et al., 2015). Some nursing educators faced problems teaching IPC because they did not possess the requisite interprofessional communication skills (Johnson, Lynch, Lockeman, & Dow, 2015). Other authors noted that nursing educators exhibited deficiencies in both knowledge and skills related to how to teach IPC (Clark, Congdon, Macmillan, Gonzales, & Guerra, 2015; Smith, 2014). A lack of understanding is problematic because, in the past, when nursing educators did not understand IPC, they were less likely to teach it to students (Bleich, 2016; Loversidge & Demb, 2015; Olenick & Allen, 2013). Although a consistent theme, lack of knowledge about IPC was not the only issue researchers found.

In addition to deficiencies in knowledge about IPC, there were also indications that nurse educators did not always think IPC education was valuable (Doll et al., 2018; Hinderer et al., 2016; Lash et al., 2014). In connection with not valuing IPC, educators could potentially possess negative attitudes about past relationships with others (Bell et al., 2014; Meleis, 2016; Reid et al., 2018). Attitudes are critical because experts suggest that inaccurate biases may prevent nurse educators from teaching IPC effectively (Becker et al., 2014; Meleis, 2016). Investigators have proposed that educators often needed reinforcement on the impact that teamwork has on patient outcomes to overcome undesirable views (Davis et al., 2015; Mladenovic & Tilden, 2017).

Nurse educators' attitudes also appeared to be associated with student learning. Underscoring this idea, Doucet, Loney, and Brown (2016) found that nurse educator attitudes about IPC made a considerable difference in the quality of a student's learning

experience. Closely related to student experiences, Dalrymple et al. (2013) observed that both educators' attitudes and how they taught the subject could influence student attitudes related to interacting with other professionals. The authors (Dalrymple et al., 2013) concluded their study by emphasizing the role that adequate faculty preparation played in the success of IPC education.

Summary and Conclusions

Several key themes regarding nurse educator preparation to teach IPC emerged during the literature review. First, when students were taught IPC, they expanded their knowledge about interprofessional teamwork, communication, collaboration, and gained a better understanding of the roles and responsibilities of each team member (Fewster-Thuente & Batteson, 2016; Hermann et al., 2016; Rhodes, 2016). Nevertheless, IPC was not universally taught and was a poorly understood concept among some nurse educators (Baessler et al., 2016; Gordon et al., 2015; Loversidge & Demb, 2015). When nurse educators had an inadequate understanding of IPC, they often did not see it as important and either failed to teach the topic or else presented it ineffectively (Coogle et al., 2016; Hemmings, 2015; Sorinola et al., 2015). Additionally, failure to understand the significance of IPC can lead to poor learner outcomes (Chen et al., 2016; Meleis, 2016).

Even though educators often needed to learn how to teach IPC, few studies described if or how nurse educators were prepared to teach IPC. In addition, there was a gap in the literature describing how nursing educators' preparation informed their teaching. I determined that it was important to know if educators were sufficiently prepared to teach IPC because when educators were not prepared, they were less likely to

teach IPC to students (Coogle et al., 2016; Hemmings, 2015). When educators were prepared to teach IPC, new graduates were more likely to learn to function in interprofessional teams, which can lead to safer patient care. The purpose of this study was to provide insight into how nurse educators prepared to teach IPC and how their preparation informed their teaching through a qualitative case study design. I have detailed the study design, methodology, data collection, and analysis procedures, along with the strategies used to ensure validity and ethical conduct in the following chapter.

Chapter 3: Research Method

The purpose of this multiple case study was to understand how full-time, didactic nurse educators who taught RN students in the western United States were prepared to teach IPC and how their experiences informed their practice. The design of this study was selected to elicit data and to answer the research questions. My intent in this study was to contribute to what is known about nurse educator preparation to teach IPC.

In this chapter, I will describe the research design for this study and the rationale for selecting a qualitative paradigm. Next, I will explain my role as the researcher in the process of this study. I then discuss the methodology employed in this study and the process that was used to identify and recruit participants. An account of the data collection and analysis methods is also included. Finally, I address pertinent ethical considerations and the processes that were employed to ensure credibility and dependability in this study. This chapter concludes with a summary.

Research Design and Rationale

In this study, I sought to answer the following research questions:

Research Question 1: How do undergraduate nurse educators describe their preparation to teach interprofessional collaboration?

Research Question 2: How does the preparation that undergraduate nurse educators experience inform their teaching practice?

The phenomenon under study was the experiences and perceptions of nurse educators regarding their preparation to teach IPC. Because experiences and perceptions were the focus of data collection in this study, I determined that a qualitative multiple case study design was the most effective method for gathering the information that would answer the questions raised in this study. A qualitative approach was chosen over a quantitative approach because my intent with this study was to examine subjective rather than objective data. Qualitative research is the most appropriate design to use when a researcher is interested in investigating an issue and how people interpret the situation (Merriam, 2009). A qualitative design was an ideal way to gain an understanding of nurse educator's experiences and perceptions regarding their preparation.

Among the types of qualitative designs available, I determined that case study, rather than other qualitative designs such as phenomenology, ethnography, or grounded theory to be the most appropriate method for data collection and analysis. The case study approach provided me with the opportunity to develop a deep understanding of the phenomenon of interest (see Merriam, 2009). Yin (2003) explained that the case study method is appropriate when examining a contemporary event that is not controlled by the investigator. The questions posed in this study were *how* questions, and according to Yin, case study research is applicable in situations when *how* questions are posed.

Yin (2003) indicated that there are two types of case studies: single-unit or multiple-unit. I chose the multiple-case approach for collecting data in this study. The rationale for selecting a multiple case design was that replication was an ideal way to increase the amount of variation within cases and can improve the strength and validity of

the research findings (see Merriam, 2009). By examining multiple educators from more than one site, I intended to gather rich data that would help me to gain a deeper understanding of the perspectives of nurse educators in the targeted area. Stake (1995) underscored the importance of identifying the case in the process of planning a case study design. For the intentions of this study, the group, or case, was identified as full-time, undergraduate RN educators in the western United States.

Role of the Researcher

In the qualitative research paradigm, the researcher is generally the data collection instrument (Stake, 1995). As the sole investigator, I was responsible for all aspects of this study, including the collection and analysis of data; because of this, it was necessary to acknowledge my personal biases. My assumptions regarding the nature of reality (i.e., ontology) and how I understand knowledge (i.e., epistemology) led me to embrace a constructivist, interpretative philosophy. In their discussion on constructivism, Burkholder, Cox, and Crawford (2016) suggested that there is no single reality but instead that reality is subjective. I chose to embrace a constructivist paradigm for this study. My philosophical paradigm was reflected in the design of this study and how information was interpreted.

To provide valuable insight on the topic, I used personal, face-to-face interviews with nurse educators as the data source. In addition, I gathered data from the analysis of documents associated with nurse educator preparation and teaching. My role in the study was that of a participant-observer, as described by Merriam (see 2009), who indicated that a participant-observer is a member of the bounded group that is being examined, In

the role of participant-observer, the group is aware that the researcher is conducting a study (Merriam, 2009). As a nurse educator, I was a member of the group that was studied.

I have been a nurse for more than 30 years, and I have been an educator of nurses for 8 years. I have educated nurses both in hospitals and at the university level. I taught undergraduate nursing majors for a school of nursing in a university located in the general area where my research took place. The potential for researcher bias was possible since I was a member of the group of interest and I had insight into IPC education in nursing. Because of the possibility of bias, I addressed validity in this study by examining multiple sites, enacting member checking, providing detailed descriptions of data, and using peer-debriefing (see Creswell, 2007).

To further minimize the chance of personal bias, I did not conduct my study where I taught, and because there were multiple schools of nursing located in the area, this was not problematic. Additionally, I had no supervisory relationships with the prospective participants in this study. No material incentives were provided in the data collection process to avoid any possible ethical issues. I also requested that participants review the results of the study after the analysis phase to limit the possibility of personal bias. This afforded me the opportunity to use member checking, which augmented the quality of the results. I also obtained permission from the Walden University Institutional Review Board (IRB; IRB Approval # 01-02-19-0622690) to ensure that this study was conducted ethically.

Methodology

Participant Selection

The population that was examined in this study was undergraduate nursing educators in the western United States. I applied specific criteria to narrow the focus of the research and to bind the group to a manageable size. The binding criteria for this study encompassed considerations about past work experience, appropriateness of setting, and convenience.

I chose to examine a wide variety of nurse educators in this study. To ensure variation, I decided to investigate multiple educators from three different nursing programs. The sampling strategy chosen for this study was purposeful, maximum variation sampling. A maximum variation strategy, as described by Yin (2009), was selected to represent any possible diversity in participant experiences. The educators and the nursing programs that they represented were required to meet the binding criteria identified in the following section to be eligible for this study.

Binding criteria. I selected the nursing programs based on several binding criteria. Initially, I considered which schools would be most likely to provide a variety of educators who could assist in answering the research questions. To be sure all of the conditions were met, I made a list of all schools in the area selected for study and then removed any schools that did not meet the criteria.

Since both associate and baccalaureate programs award RN degrees, I included both types of programs in the study. I also represented both kinds because even though both produced RN graduates, it was possible that different perspectives existed in each

type of program. Because I intended to examine undergraduate nursing schools, any Carnegie Tier 1 or 2 graduate universities, as defined by the Indiana University Center for Postsecondary Research (2017), were not considered. I also removed my workplace from consideration to avoid possible bias.

Another important selection consideration was the stability of the educational institutions. In this study, I defined stability as schools of nursing that had been operating for a minimum of 10 years and were fully accredited by a national nursing organization. There are two main national accrediting organizations for nursing education in the United States: the Commission on College Nursing Education and the Commission for Education in Nursing (United States Department of Education, n.d.). I decided that accreditation from either organization was acceptable. I also eliminated any nursing schools with a published accreditation warning or a provisional grant. I was able to confirm program accreditation status online and eliminate any schools that did not meet the criteria. Finally, I believed that it was beneficial to examine at least one private and one state-run nursing program because it was possible that they were somehow different. Once I identified a list of potential sites that met all of the criteria, I selected sites based on variety, convenience, and their willingness to participate within a reasonable time frame.

Sample selection. Within each institution, I also identified criteria to select the nurse educators. Within each program, I chose to interview three nurse educators. Although I had initially considered choosing two participants from each site, I determined that three interviews would provide greater insight and ensure variation. To

ensure that the conditions were met, I gave each educator a list of the requirements and asked if they met the requirements. The criteria were (a) full-time nurse educators who held at least a master's degree in nursing and had taught for at least 1 year, (b) educators who had taught at least one didactic course for prelicensure RN students, (c) the educators taught in a nationally accredited nursing program, and (d) the educators taught in schools located in the western United States.

The rationale for the criteria was to ensure that the educators were experienced and could provide the data that were needed to answer the questions posed in this study. The nurse educators I interviewed in this study were responsible for planning and delivering educational content to nursing students. This stipulation was necessary because the tradition of IPC education involves the delivery of theory, which ideally, is followed by a simulated application of theory (see NLN, 2015; WHO, 2010). Although the final application of theory happens when students engage in clinical practice, if students do not learn IPC during their didactic courses, they will not be prepared to apply IPC to clinical situations. Therefore, didactic nurse educators were the purposeful focus of this study.

Instrumentation

I used two methods to collect my data to strengthen findings. First, I interviewed the participants individually. I considered interviews to be the best way to acquire nurse educators' perceptions because they would provide rich data. I also asked the participants for any documents that pertained to the research questions to add depth to the findings.

Interviews. I employed open-ended, semi structured, in-depth interview techniques to gain an understanding of the experiences and perspectives of the participants. Merriam (2009) described interviews as open-ended conversations focused on the topic of research and classified by structure. As the sole researcher in this study, I conducted the interviews by following a self-created, open-ended, written interview protocol (see Appendix). Questions for the protocol were created based on discoveries made in the literature review and based on the conceptual framework of the IPEC (2016) core competencies and the TLT (Mezirow, 1994, 1997, 2003). I created the protocol to align with the research problem and questions.

I audio-recorded and transcribed all interviews and took personal notes during and immediately after the interviews. I began the interviews using broad questions, followed by more focused questions to elicit detailed descriptions. I remained flexible and allowed for changes in conversations but also tried to ensure that the purpose of this study remained the focus of the interviews. Finally, I allowed participants to do most of the talking to ensure that their information provided a rich, deep level of data. Additionally, I remained open to the use of follow-up questions as needed to clarify or elaborate. The final question in the interview was to ask each participant if there was anything else they considered significant.

During and after the interviews, I made every attempt to set aside personal biases. I also took notes after the interviews to consider any personal bias. The questions were considered sufficient because they elicited rich, detailed information that answered the research questions.

Documents. I also collected and reviewed documents as another source of data for this study. Documents included course syllabi, course documents, journal articles or books, and program outlines. The documents were meant to augment evidence and corroborate data from interviews. Participants were asked to provide digital copies of all relevant documents unless digital copies did not exist, then hard copies were scanned to create PDF files for digital analysis and storage. I also obtained documents through the participants' organizational websites. All digital documents were de-identified, labeled with a code, and stored on a password-protected data storage system.

Recruitment, Participation, and Data Collection

Once I had identified eligible programs, I e-mailed a request to participate in the study to each of the program heads. The invitation contained a list of the study criteria and a description of the purpose of the study. To communicate with potential sites, I used publicly available information from institutional websites to contact deans or chairs of nursing programs. The letters included a description of the nature and purpose of the study. Although I originally intended to gain written consent from each program head, this became problematic when program heads were unavailable. After consulting with the IRB, I changed my plan and moved forward by notifying the program heads but not requiring their written consent.

Within each school, the prospective participants were also contacted using publicly available organizational e-mail addresses. The e-mails included an invitation to participate and a description of the criteria of eligibility. I did not offer compensation to participants, but, in the letter, I did explain to participants that their contribution could

assist in the development of a deeper understanding of the phenomenon. I requested that faculty who were interested in participating reply via e-mail.

When I received replies, I verbally confirmed that prospective participants met the study criteria. I limited my acceptance of interested individuals to three per institution, for a total of nine individuals. I selected the first three educators who respond from each institution for the interviews. Those who replied received an e-mail denoting my acceptance for their participation in the study. Once the educators had agreed to participate, I planned with them to establish a time and location that was convenient.

I obtained informed consent from each of the participants before the interview. As part of the consent process, I provided participants with written notice of their rights, including the voluntary nature of the interview, the time commitment, and the processes that were used to maintain confidentiality. Additionally, I provided the participants with documentation that described the process that I intend to use to record, create transcripts, and code for themes. Applicable documents were also collected from each educator to clarify and augment the information gained from the interviews.

Once participants consented to the interview, I arranged to meet for 30–60 minutes at a mutually agreed upon location. The nurse educators who participated in this study were required to consent both verbally and in writing before the beginning of the interview. I informed participants that they were free to exit the interview and the study at any time. The consent forms were e-mailed to participants for review before the interview was conducted. I audio recorded the interviews and stored them as audio files on a password-protected computer in a locked room. I then created de-identified verbatim

transcripts from the recordings. I have stored all transcripts, documents, and recordings on a password-protected digital storage system. I began recording after permission had been granted and concluded when the interviewee indicated they were finished.

The interview protocol (see Appendix) was composed of an introduction, a list of research questions, and ended with a conclusion (see Creswell, 2007; Rubin & Rubin, 2012; Vogt, 2012). The main body of the interview protocol began with ice-breaking questions. The inclusion of initial informal dialogue is recommended to develop a rapport with the participant (Bodan & Biklen, 2007). I then informed participants that their point of view was important. I used the list of exploratory, open-ended questions related to the topic of this study to conduct the interviews. I founded the interview questions on the research questions and focused on how nurse educators prepared to teach IPC and how their preparation influenced their teaching. I concluded by asking participants if they have anything else to add. The question protocol also contains a list of possible prompts that could be used by the interviewer to clarify. At the conclusion of the interview, I requested any documents that could apply to the research questions.

When the interviews were complete, I thanked the participants for their time. Additionally, I reminded them that I intended to send them a copy of the transcript within 7 days. The participants were asked to review the transcript for accuracy and to e-mail verification within 1 week of delivery. I also took notes during the interview, and then, after the participant was gone, I wrote a summary of my impressions and reflected on the key concepts that had emerged during the interviews.

Data Analysis Plan

For this study, the strategy for data analysis was oriented through a constructivist lens influenced by Mezirow's (1994, 1997, 2003) TLT, the IPEC (2016) core competencies, and the questions posed in this study. Data from interviews were audio recorded, transcribed, and saved as secure digital files as described in the ethical section of this paper. All documents were created and organized using Microsoft Word 2016. Once data were transcribed, and all identifiable information removed, I e-mailed each informant a transcript of their interview, and requested that they verify the accuracy of the transcription. I gave the participants the opportunity to add, change, or remove any of the information. I saved each interview transcript as a separate file within a computer folder that contained each case; this system aided in the analysis of each case. In addition, each case was organized within an institution file, and finally, in a master file for analysis across cases.

In multiple case-study designs, experts suggest that data analysis is a two-step process; first, the data is analyzed on a single-case basis, and then it is analyzed across cases (Creswell, 2007; Merriam, 2009; Stake, 1995; Yin, 2003). To begin the case analysis process, I immersed myself in the data by reading through each transcript and accompanying documents several times. First, I made summative notes on each case. I then began a descriptive coding process (see Saldana, 2009).

I began the coding process by highlighting relevant words or phrases and making notations. Then I labeled the concepts that I identified as relevant to the purpose of the study with specific codes. For instance, I classified answers about past experience with

IPC, types of educator preparation described, how educators taught IPC, and which core competencies (IPEC, 2016) were mentioned. I repeated the process with data from each participant. I initially identified fifteen codes, which were, barriers, benefits, teaching methods, awareness, vision, communication, teamwork, common values, respect, hope, lack of knowledge, dreams, preparation, and silos. When I had coded all of the data, I began to organize the data so that I could compare across participants, then later across institutions. Once the codes were identified, I compared them back to the transcripts to ensure accuracy.

The initial codes were then placed into a table and examined for relationships. Through an immersive process, which included constant comparison (see Merriam, 2009) and a consideration of the conceptual framework, patterns began to emerge. Once I identified patterns, I organized the codes into logical categories by considering the questions asked and the similarities between the answers provided. Then, I examined the codes multiple times to identify similarities and relationships and to generate broader themes. The codes were finally condensed using constant comparison (see Creswell, 2007; Merriam, 2009) until there was a list of five descriptive themes.

The development of the codes and themes was guided by the emergent findings and by the research purpose, questions, and conceptual framework. The resulting themes were also compared against the transcripts to ensure accuracy. Peer-debriefing was utilized at each step to verify themes and to discuss possible discrepancies (Creswell, 2007). I also remained open to alternative themes and interpretations (Bloomberg & Volpe, 2012). Once the final themes were identified, I utilized the process of member

checking by sending copies of themes and requesting final comments from participants (Creswell, 2007).

Trustworthiness

Rigor in qualitative research is demonstrated by specific strategies (Lincoln & Guba, 1985). The strategies associated with qualitative research quality can be classified into four different categories credibility, transferability, dependability, and confirmability. Each category has a specific focus and consists of strategies that can be used to demonstrate that a researcher has ensured that their study is of high quality. The strategies that were used in this study are described below.

Credibility

Credibility in qualitative research was defined by Lodico, Spaulding, and Voegtle, (2010) as the degree to which the researcher has accurately portrayed the data. Creswell (2007) suggested that credibility was synonymous with the word accuracy. I employed several procedures to ensure credibility in this study. Tactics that I employed included the use of triangulation, member checking, and peer-debriefing.

Additionally, data collection did not end until saturation had been reached (Lodico et al., 2010). In the process of member checking, the transcriptions from each interview were shared with the corresponding participant to make sure that the written words matched the intent of the interviewee. An additional way of establishing credibility is through the use of a peer-debriefer (Lodico et al., 2010). The peer-debriefer in this study was a colleague with whom I was able to discuss my thinking and to check my personal assumptions without breaching confidentiality.

Transferability

Transferability in research refers to how research results could be generalized (Lodico et al., 2010). However, in qualitative research, it is not anticipated that findings are generalizable (Creswell, 2007). Nevertheless, the possibility remains that results could be applicable in more than one context (Lodico et al., 2010). Yin (2003) asserted that in case study research, findings could be generalized to a broader theory.

Transferability of findings is demonstrated in this study through the provision of a detailed, rich description of the data (Bloomberg & Volpe, 2012). I have provided quotes, examples of the themes, and a description of my assumptions. Presenting a sufficient level of details is an ideal way to show others that the complexity of information is at a high enough level to allow them to determine if the findings in this study relate to their situation (Lodico et al., 2010).

Dependability

Lincoln and Guba (1985) defined dependability in research as repeatability and transparency. To ensure dependability, I have used the process of data triangulation. I have also explained the methods used to collect data, along with the procedures used to analyze the information. In addition, my questions were reviewed by a peer to ensure content validity and alignment.

Confirmability

Confirmability is concerned with verifying the accuracy of the meaning that is attributed to the data and decreasing the possibility of bias (Lincoln & Guba, 1985). To ensure that the research findings were based on the participants' perceptions as well as

the purpose of the study, I described my biases earlier. Additionally, I also used member checking to verify accuracy. Finally, peer-debriefing was also used to check for possible biases.

Ethical Procedures

When conducting qualitative research with human subjects, concerns related to the ethical treatment of individuals must be addressed. First, the IRB at Walden University required that a formal review process be conducted to ensure ethical conduct. To demonstrate that this procedure has been followed, I have included the IRB approval number in the methodology section of this paper. I did not begin the recruitment process until after the IRB granted approval. In addition, I complied with any IRB requirements of the institutions associated with the participants of this study as required.

Potential Risks

The risks of participation in this study were considered low, with little to no risk anticipated. Nurse educators are adults, and not part of a protected population and, participation was confidential. Potential recruits received a request through their individual e-mail address; this method decreased the possibility of embarrassment if they did not wish to participate. I met the educators at a place that was convenient for them to reduce the chance of a financial or time burden and to increase privacy. The primary inconvenience to the participants was considered to be time, and to deal with this, I asked each individual to specify the time and place or the interview, and I limited the duration to 1 hour or less. The questions were not personal in nature and were not anticipated to cause undue stress.

Recruitment and Consent Procedures

The cases identified for this study were nurse educators from three nursing programs. Heads of programs were initially contacted through an e-mailed letter of consent; the e-mail described all of the pertinent elements of the study. I contacted program heads using information available from public web sites. After the program heads were notified, I sent e-mails to prospective nurse educators that included a request to participate.

The e-mail addresses of nurse educators were also located on public institutional websites. I planned to accept volunteers in the order that I received them. If extra participants had volunteered, they would have been thanked for their willingness and notified that they were not needed. No one changed their mind, but if a volunteer had changed their mind about participation, I would have contacted other individuals. Once I received replies of interest, I sent a copy of the informed consent form to the potential interviewees for review.

Once an individual had agreed to participate, I arranged an appointment to meet with the person at a date and time and place of their choosing. During each interview, I reviewed the consent form and obtained a signature along with verbal consent to record. I reminded each participant that their participation was voluntary and that they were free to end the interview at any time.

Confidentiality

Participants were assigned an alphanumeric label to maintain confidentiality. A letter and a number were assigned to each person to protect institutional and participant

identities. I labeled each school with a different letter, A, B, or C. Individuals from the same institution were assigned an additional number (1, 2, or 3) to differentiate the individuals within each case. During the write-up phase of the study, I removed all personal identifying information.

Data Protection

I took several measures to protect data and participant privacy. I audio-recorded the interviews using a phone; I then uploaded the recorded files to my password-protected computer, which is located in a locked office. Once I loaded the recordings to the computer, I erased them from the phone. I transcribed the audio into documents with the use of voice to test software and reviewed the audio against the transcriptions to ensure accuracy. I also stored the typed transcripts on my password-protected computer and kept them in a locked file cabinet in a locked office when not in use. I will store all of the files for 5 years per university requirements and then I will destroy or erase all files.

I used paper copies of data in the analysis phase. I did not include any personally identifying information on the paper copies. At the conclusion of the data analysis process, I shredded all hard copies. I took several measures to comply with the ethical guidelines of Walden University. First, I did not conduct the study in an environment where power issues were possible. Also, I did not know the potential participants, and finally, I did not offer any incentives in this study

Summary

In this section, I included a description of the rationale for the choice of the qualitative case study research design. Also, I have reviewed my role as the researcher in this study. I then outlined the data collection, analysis, and storage processes. I have also described the recruitment procedures in this study, including how I selected participants. I then described the reliability and validity strategies that I used in this study. This chapter also contains a description of my plan for the ethical protection of participants. In the following chapter I will provide a detailed review of the results of the study.

Chapter 4: Results

The purpose of this qualitative case study was to understand how nurse educators were prepared to teach IPC and how their preparation informed their teaching. To ensure that I was able to consider multiple programmatic preparations, I selected three different nursing programs. To best understand the lived experience of the individual, I examined three nurse educators from each of the three academic settings. The research questions posed in this study were:

> Research Question 1: How do undergraduate nurse educators describe their preparation to teach interprofessional collaboration?
>
> Research Question 2: How does the preparation that undergraduate nurse educators experience inform their teaching practice?

The following sections contain a description of the specific steps of the data collection and data analysis processes to provide additional context. I also provide a report of the results of this study, including the steps taken to ensure trustworthiness is discussed.

Setting

I used three different nursing programs to identify prospective participants for this study to provide a degree of variety in prior preparation. One nursing program represented a privately-owned institution with a bachelor's of nursing program (i.e., School B), and two represented state-owned institutions, one with an associate's of nursing program (i.e., School A), and one with a bachelor's of nursing program (i.e., School C). Participants included three individuals from each of the three different programs for a total of nine nurse educators. All participants met the required

specifications, each: (a) taught full time, (b) had taught for at least 1 year, and (c) had taught at least one didactic course in a prelicensure RN program. A variety of individuals participated in the study, which supplied a wide range of experiences and assisted in improving the validity of this study. I collected a limited number of demographics, specifically those which were specifically relevant to this study. The characteristics gathered on each participant are presented in Table 1.

Table 1

Participant Characteristics

School	Alpha-numeric code	Gender	Education	Years of experience as educator
School A	A1	Female	Doctorate	24 years
	A2	Male	Masters	4 years
	A3	Female	Masters; Doctoral student	10 years
School B	B1	Male	Masters	10 years
	B2	Female	Doctorate	20 years
	B3	Female	Masters	14 years
School C	C1	Female	Masters	4 years
	C2	Male	Doctorate	10 years
	C3	Male	Doctorate	31years

Data Collection

I collected data through interviews with nine nurse educators and from supporting documents related to each of their preparation and teaching practices. All participants lived and taught within a specific geographic area in the western region of the United States. In addition to interviews and documents, I wrote analytic memos to capture my thoughts during the data collection phase to address the potential of personal bias. I used the memos to ensure that I addressed the research questions and explored emergent

patterns and possible connections. I collected all of the data for this study between February 2019 and April 2019.

Interviews

I created a list of questions to guide the interviews (see Appendix). The creation of the questions were informed by the purpose of this study, the research questions, the IPC core competencies (IPEC, 2011), and Mezirow's (1990) TLT. I interviewed all of the participants separately. Each of the nine nurse educators participated in one approximately 30–60 minute interview at a location of their choice. I was careful to ensure that the interviews were conducted in private so that interruptions would be minimal. If a conversation was interrupted for any reason, I paused the interview until I could again ensure confidentiality.

I audio recorded the interviews using voice-to-text software and later transcribed them into Microsoft Word documents. In most cases, I began the transcription process within 24 hours and was able to complete the transcripts within 1 week. After each interview, I created a journal entry to reflect on the interview. When transcriptions were complete, I employed member checking by providing each participant with their transcript via e-mail and giving them the opportunity to give feedback to ensure that I had accurately reflected their perceptions. I reviewed the recordings and the transcripts several times to ensure accuracy and to immerse myself in the data.

Because it was challenging to reach program heads during the recruitment process, some variations from the original IRB-approved data collection plan were employed. The major change to my plan was to eliminate the need to obtain written

consent from program heads and instead use publicly available information to contact prospective participants directly. I did send all program heads an e-mail informing them of my intent. In addition, due to a change in one of the previously planned institution's leadership and consequent refusal to participate, I found it necessary to choose an alternative school. I employed the same criteria that I used in the original selection process to choose the alternate institution. Once these changes were reviewed and accepted by the IRB, I was able to move on and complete the data collection.

Documents

The second method of data collection in this study involved a review of documents that were associated with the interview participants. I included the documents because the materials provided additional insight into the phenomena of nurse educator preparation and how IPC was taught. The documents I reviewed in this study included syllabi and curriculum documents, faculty development documents, institutional web pages, and journal articles. I collected and reviewed the documents between February and May 2019. In the analysis phase of the study, I printed all of the documents for ease of review. During the review, I made notes on the documents as ideas came to me. After the analysis was complete, I digitalized all of the documents and shredded the paper copies.

All of the data for this study were organized and stored as electronic files on my secure computer. I labeled each of the participants in two ways. First by their institution, either, A (i.e., first institution contacted), B (i.e., second institution contacted), or C (i.e., third institution contacted). In addition, I categorized each educator-participant by a number, either 1, 2, or 3. For example, I labeled the first interviewee from School A as

Participant A1, the second as Participant A2, and so on. I determined the identification labels by order of contact and used them to store and organize all data. All documents were labeled to ensure that they corresponded with the applicable participant.

Data Analysis

I began the data analysis process with an immersive review of the interview transcripts and the accompanying documents. Conducting and transcribing the interviews assisted in the immersive process, as did repeated readings of the documents. I identified no discrepant cases and determined that all data were useful in answering the research questions. I arranged the documents with a large margin on the right side for note taking and coding purposes. To facilitate manual coding, I formatted the printed transcripts into a table, using the second column to make notations, and in each, highlighting applicable content.

I followed the two-step descriptive coding process described by Saldana (2009) to inductively code the data. I began the coding process by reading each participant's transcript. After repeated readings, I identified words, phrases, and concepts from the transcripts that pertained to the purposes of this study. Examples included concepts associated with the IPEC competencies, the types of preparation identified by each participant, and ways the educators taught IPC. Following the analysis of each interview, I began a review of the corresponding documents. I wrote on the documents, noting possible relationships to the interview data and the emerging themes. The documents provided illumination regarding what was taught in each institution as well as program outcomes while the interviews provided information about individual beliefs and

practices. I placed the initial codes into a Microsoft Office table for ease of access and review.

I coded the transcripts and documents from each case first individually, then institutionally, and later comparatively across institutions. I used constant comparison (see Merriam, 2009) to note codes that were similar. When certain words or concepts began to repeat, I was able to identify several patterns. As similarities were considered, I often combined multiple codes into one. Fifteen codes related to the purpose of this study were generated from words representing ideas found in the transcripts. The final codes were barriers, benefits, teaching methods, awareness, vision, communication, teamwork, common values, respect, hope, lack of knowledge, dreams, preparation, and silos.

In the final phase of analysis, I used an inductive and iterative process to consolidate the codes into five themes. I formulated the final themes around the research questions and the conceptual framework of this study. I began consolidating by considering what ideas the codes represented and combined them accordingly. For example, I felt that the codes vison, hope and dreams could be brought together with barriers to illustrate the contrast between barriers to teaching IPC on one hand and the beliefs about the need to teach IPC on the other hand. I also brought all of the IPEC core concepts together in one theme, but I subdivided them because, even though they were connected, they were also distinctly different. I also concluded that although no one explicitly said that they did not clearly understand IPC education, it was clear from the conversations that the participants had gaps in their knowledge, and this conclusion became one of the final themes.

After careful consideration and repeated reviews of the data, the themes associated with answering the first research question were (a) academic IPC preparation was limited and (b) lack of formal preparation and an incomplete understanding. The themes associated with answering the second research question were (c) interprofessional communication: positive perceptions and perceived barriers, (d) previous IPC exposure influenced instruction, and (e) educators taught IPC informally. The educators taught IPC informally theme also contained five subthemes: communication, teamwork, respect, values, and roles/responsibilities.

Results

Research Question 1

The first research question posed in this study was intended to determine if and how educators had learned about IPC education. The interview protocol contained questions which helped in gathering information aimed at answering the first research question. Two themes emerged that helped to answer this question.

Theme 1: Academic IPC preparation was limited. When asked, "what kind of preparation have you had to teach IPC?", most participants were unable to identify any formal IPC educational preparation. The answers provided by the participants indicated that most had not participated in any formal preparation. Examples of answers regarding formal preparation to teach IPC were: "I can't say I have ever seen it presented as a conference topic… and I don't believe I've ever done any continuing ed. either" (Participant A3), " the answer is next to nothing" (B2), and "I don't recall any" (Participant C1).

Several participants experienced some type of exposure to elements of IPC. More than one person said they might have read a professional journal article about IPC (Participants A1, A2, and C1). Even though participants said they may have read something about IPC, none of them were able to identify a specific article or describe anything learned from reading a scholarly publication. The preparation that most were able to recall tended to be associated with the Quality and Safety for Nurses (QSEN) initiative (American Association of Colleges of Nursing, 2006), which focused on safe communication and the use of communication tools for safe patient hand-offs.

Two educators participated in an activity that helped them to learn about the concept of interprofessional teams with one attending a talk during a local nursing conference discussing the nurses' place in an interprofessional team (Participant C3), and the other educator participating in an interprofessional simulation training activity provided by a previous clinical job (Participant B1). No one received any instruction on how to teach IPC during their graduate education or during their teaching career. In fact, most were unfamiliar with the specifics of IPC.

When asked, "Did you participate in any type of interprofessional activities when you were a student?", three participants indicated that they had. One educator participated in clinical learning experiences with medical students during their undergraduate nursing education, saying "We actually did a couple of mock scenarios with the [medical doctor] students" (Participant C2). Another educator, while a graduate student, participated in one simulation experience that involved other healthcare professions students, describing that "there was one course…that had one simulation where we worked with three or four

other disciplines" (Participant A2). One additional participant took an interprofessional (although not with healthcare professions majors) course during their graduate education, stating "so in my Masters [program], we paired with the educational department [students] and learned adult learning theories" (Participant B1). One educator cited an undergraduate general education communication class as a way they were prepared to teach students how to communicate with others (Participant A3).

Several participants learned about IPC education from a chance encounter. For instance, one educator visited another school and, in the process, witnessed an example of IPC education from that school, explaining, "when they got into the simulation, they [had] pharmacy, nursing, physical therapy, speech therapy, occupational therapy, and … premed students in the classroom and they play[ed] their own parts in the simulation" (Participant A1). This experience seemed to help the educator to possess a higher degree of understanding of the concept of IPC education and why it may be advantageous. Participant A1 said, "I do think it takes a broader look at the healthcare system [and helps us see] how we improve and work together with each other to make things happen."

One significant finding was how the participants gained preparation to teach IPC. A few educators identified their own clinical nursing experience as a way they were prepared to teach students how to practice interprofessionally. Examples of this were: "What ultimately got me interested (in teaching IPC) …was when I went back to work … in the hospital" (Participant A1) and, "I had worked [in the hospital] …and I noticed that … the nurses are not communicating with [others]" (Participant C2).

Participants with recent clinical experience seemed more likely to have personally witnessed interdisciplinary team meetings in the clinical setting and displayed positive viewpoints about the need for them. Participant A1 stated, “I started recognizing that some of the viewpoints … were important in helping nurses to recognize that we don’t work in silos … so that collaboration seemed to be essential and, things started working better.” While Participant A2 opined, “It changes a lot of how you see your responsibility as the nurse … not just in a vacuum but in relation to everyone else and it makes just a huge difference”. Conversely, those who did not practice in a clinical setting for a significant amount of time were less likely to verbalize the value of interprofessional teamwork.

Theme 2: Lack of formal preparation and an incomplete understanding.

During the interviews, it became clear that, although most of the participants had some familiarity with IPC education, they also displayed an incomplete understanding of the topic. When I provided the WHO definition of IPC education to the participants, there was often a pause, followed by a request for clarification, such as “Would you mind reading it again?” (Participant A3). When participants were asked to provide examples of IPC education, many involved teaching nursing students to work with other nurses (Participants A3, B1, C1, C2, and C3). No one mentioned the national IPC education movement described in current literature or the statements from various professional organizations; in fact, some asked me questions about IPC (Participants A1, B2, C1, and C3).

In terms of the IPEC (2011) core competencies of communication, teamwork, respect, values, and roles/responsibilities, none of the participants discussed all of them. The most common competency discussed by participants was communication, while the next most frequently identified competency was teamwork. In addition, only one made the connection between improved communication and teamwork and better patient outcomes (Participant A1).

Research Question 2

The second question posed in this study was: how does the preparation that undergraduate nurse educators experience inform their teaching practice? The answers to this question provided a great deal of insight into how educators taught the concepts of IPC to students as well as illuminating gaps in teaching practice. I categorized the answers aimed at answering the second question into three themes.

Theme 3: Interprofessional communication: Positive perceptions and perceived barriers. None of the educators were able to identify a formal and significant IPC education presence or focus in their program or their courses even though most told me that IPC was an important concept to teach, "it's so important and yet we just kind of avoid it" (Participant B2), and, "I do agree that this will be the way it will go in the future, but I think the implementation [is the issue]" (Participant B3). Two of the schools seemed to have plans to increase the amount of IPC simulations in their curriculum, but, although the topic had been discussed among the faculty, none had been able to implement a plan (Schools A, B). There were a variety of reasons that educators identified to explain why IPC was not overtly included. The most cited reason was that

the curriculum was already content saturated, and there was no room for anything else "yes, I think we could use it [IPC education], but what gives if we do?" (Participant B3).

Several educators suggested that the purpose of nursing school was to prepare students to pass the national nursing exam. Because of the need for students to pass the national nursing exam, IPC was considered not as important as some other concepts, "most faculty want to just get in and teach the students nursing skills so that they can help them to pass NCLEX" (Participant C2), and, "they're so focused on hospital nursing, that's what we prepare them for … that's where most of the NCLEX question are" (Participant A1).

While some recognized the need to add IPC to the curriculum, many mentioned the need for more resources such as time, money, and space in order to make sweeping changes "I think people want to do it, it's just how to do it" (Participant B3) and, "I really do think we all value that idea … but we go back to the idea of working with what we have" (Participant A1), and, "we've had some discussion about it … [but] as you know, the wheels turn ever so slowly in higher ed." (Participant A3). Others felt that there was not sufficient buy-in from leadership, "our director is great to support us... [but] we're talking about the dean or provost level, and I don't think that [we have] got a lot of support from there" (Participant C2). Most suggested that there was only limited support from faculty, "they just don't want to make more work for themselves" (Participant C2). One educator reported that, in a previous job, the faculty attempted the implementation of an IPC simulation activity (Participant B2) but, in the end, all of the different disciplines remained territorial and refused to work together.

Theme 4: Previous IPC exposure influenced instruction. While none of the three nursing schools examined in this study included a significant amount of IPC in their curriculum, a small number of the educators described an experience which led them to find ways to teach students interprofessional teamwork and. communication skills within their own sphere. One example came from an educator who had participated in interprofessional simulations as a nursing student "as a student, I [learned] how to communicate with [others] … if you don't have those kinds of experiences in your education, I think that it just fails you as a professional" (Participant C2). Significantly, this educator created an assignment aimed at addressing teamwork, communication, and role awareness. This educator encouraged another educator to use the assignment as well "we hired a new faculty member this year, and I was talking to her about it [the assignment] now she's implemented … [it] into her … class" (Participant C2).

As mentioned previously, recent clinical experience seemed to lead educators to value IPC education and to take the time to create assignments or activities that would allow student to explore IPC concepts, "I think those are the kinds of things that we need to help teach them and I do think that we also need to help them understand respect for the different professions" (Participant A1). Significantly, two of the educators thanked me at the end of our conversation for giving them new ideas "these are fantastic ideas, I keep thinking wow, we should be doing that" (Participant B2), and, "you have just given me an idea [of something that I could do] … thank you" (Participant B1). Notably, three of the nine participants had recent clinical experience, and those three displayed the most

knowledge about IPC and had used assignments that taught interprofessional teamwork skills (Participants A1, A2, C2).

Theme 5: Educators taught IPC informally. The majority of the assignments that were described by the participants were not purposefully created to teach students how to work in interprofessional teams. Still, most of the educators were able to describe individual assignments that could teach students IPC skills and transfer knowledge about best practices. Many educators mentioned simulation activities in connection with IPC, while others described discussions and written assignments. Several identified clinical experiences as a way that students could learn about IPC; however, few of the clinical experiences contained purposeful IPC activities. Because my goal was to understand how educators taught in relation to the IPEC (2011) core competencies, this section is divided into sub-themes, delineating each of the competencies and describing how the educators taught each competency.

Communication. Communication was the most frequently discussed competency in the interviews. The documents that I obtained as data for this study confirmed that communication was a focus in each institution's curriculum. Schools A and B both required a course on quality, safety, and communication, and School C required one unit on communication.

Four of the educators discussed the QSEN (2006) initiative, either directly or indirectly (Participants A3, B1, C1, C2). The QSEN information that educators described included making mention of communication tools, such as situation, background, assessment, and recommendation [SBAR] (Participants A3, B1, C1). SBAR is an

acronym for a standardized communication technique which originated in the United States military and was adopted by the healthcare community in the early 2000s to address miscommunications among healthcare professionals (Beckett & Kipnis, 2009). SBAR was designed to ensure that healthcare professionals communicated with others in an organized manner with the goal of preventing the types of miscommunications that lead to patient harm (Beckett & Kipnis, 2009).

Several educators described teaching through simulated learning experiences in which students were required to speak to or call instructors who acted in the roles of a variety of healthcare professionals. The purpose of the simulated conversations was either to share information, ask questions, or to request additional orders (Participants A3, B1, B2, C1, C2). In addition, most of the simulations were a single encounter, such as calling a physician to clarify orders. Three educators mentioned instances where they encouraged students to purposefully communicate with someone from another discipline while attending clinical education (Participants A2, B1, C3).

Teamwork. Although many educators verbalized the value of good teamwork, only one mentioned teaching about teamwork. One participant described a written assignment where students were required to identify "effective and ineffective aspects of teams and teamwork" (Participant C3) and then asked students' to role play successful teamwork behaviors. Significantly, the assignment was designed to strengthen teamwork among nurses rather than other disciplines.

Among those who taught clinical courses in addition to didactic, there were three who required their students to attend an interdisciplinary team meeting while in the

clinical setting (Participants A1, A2, C3). Two educators had created assignments where students were required to identify other healthcare disciplines who could potentially perform patient care tasks that nurses did not (Participants A1, B3). While all of those interviewed verbalized the value of team-based simulations, in which students from several different healthcare professions would be able to participate together, none had actually taught using this type of method.

Respect. The competency of respect for others was a frequent undercurrent of the discussions with educators, although no assignments were associated with this topic. One interviewee mentioned telling students to respect everyone on the team, "I have spoken with my students about the importance of being kind … and being respectful [to everyone]" (Participant A3). The majority of the interviewees focused more on a lack of respect between professionals, along with the differences between nurses and others. Many commented about the fear that students have of physicians "they are terrified to [talk with physicians]" (Participant B1), "I think students and even nurses will say 'I'm afraid to talk to the doctor" (Participant C2), and "[how to deal with doctors] when … doctors … treat me rotten" (Participant A1). Another educator mentioned that many non-nursing professionals felt that nurses "looked down on them" (Participant B2). Virtually everyone said something about disrespectful relationships with other professionals; in contrast, few discussed ways to foster respect for other professionals.

Values. The competency of common values was the least discussed topic during the interviews. One individual mentioned the need to work as a team to help the patient, "students … learn how those different professions work together for the benefit of the

patients" (A1). No other references were made to a common set of values. No assignments were explicitly designed to acknowledge the reality that the healthcare teams should function with the common goal of helping the patient.

Roles and responsibilities. Although few discussed creating a better understanding of other disciplines' roles, there were some who acknowledged the value in doing so, "I think it's important to look outside of your own role … [and to] recognize the other team member's roles" (Participant C3). Two participants used lectures and written assignments to explore the roles that different professionals fill patient care (Participants B3, C3). One school had planned an interdisciplinary research conference where students would be able to share knowledge with students from other disciplines (Participant A1). A single educator had organized an interdisciplinary panel discussion for students to help them understand other's roles (Participant A2), and another implemented a simulated team meeting designed to help students understand other's roles (Participant C2). Overall, few discussed the need to understand other disciplines roles and how they may complement or overlap with others.

The data described in this section were gathered from nine nurse educators and provided a complete picture of how those nurse educators were prepared to teach IPC and how their preparation informed their teaching. A detailed description of the data has been provided in this section to ensure that the findings of this study were accurate. Other strategies were also employed to ensure trustworthiness. The measures that were used to strengthen the study findings are described in the following section.

Evidence of Trustworthiness

Lincoln and Guba (1985) identified several key strategies to ensure trustworthiness in qualitative case study research. Lincoln and Guba used terms such as credibility, transferability, dependability, and confirmability. In this study, I addressed trustworthiness in several ways, which are described below.

Credibility

To ensure that I portrayed data were accurately, I used several strategies including triangulation, member checking, and peer-debriefing. Triangulation of data were achieved in this study by gathering data from multiple sources, which included interviews and documents along with maintaining detailed notations during the process. I determined that saturation was obtained after collecting the data because themes began to repeat. After each interview, participants received an e-mailed transcript of their interview and a request for feedback to ensure that the transcript reflected their thoughts and experiences. If the participants identified any discrepancies, they were free to make any changes they thought necessary. Finally, I was able to discuss my conclusions with a qualified peer, specifically regarding the codes and themes created for this study to ensure credibility.

Transferability

Although the intent of qualitative research is not necessarily to demonstrate generalizability, I have made efforts to provide readers with sufficient information to determine if the results could be applied to other situations. To ensure transferability in this study, I have provided detailed descriptions of the data, including quotes, codes, and

the themes that were identified. In addition, I have described the characteristics of the participants, including the types of institutions with which they were associated. The provision of details for this study should be sufficient to allow others to determine if this study could apply to their situation.

Dependability

I addressed dependability considerations in the study through triangulation. I have also provided a detailed description of the data collection and the evaluation processes. I also described my possible biases in Chapter 3 of this paper. Finally, my questions were reviewed by a peer to check my thinking and to avoid bias.

Confirmability

As described previously, every attempt was made to ensure confirmability. I have carefully described the process that I used to collect data for this study. In addition, I identified my personal biases and used member checking and peer debriefing to verify the appropriateness of the data analysis process. These actions were accomplished to ensure that my analysis of the data was as accurate as possible and to avoid bias.

Summary

The answers to the questions posed in this study provided significant insight into the phenomenon of nurse educator preparation to teach IPC. After a deep, iterative analysis of the data, five themes were identified. The themes are: (a) academic IPC preparation was limited, (b) lack of formal preparation and an incomplete understanding, (c) interprofessional communication: positive perceptions and perceived barriers, (d) previous IPC exposure influenced instruction, and (e) educators taught IPC informally.

Additionally, I divided the final theme into five subthemes, which were guided by the IPEC (2011) core competencies: communication, teamwork, respect, values, and roles/responsibilities.

The data from this study created a wealth of information regarding what kind of preparation nurse educators experienced and how their preparation influenced how IPC was taught. Those who did learn about IPC tended to have only minimal exposure. In addition, exposure to IPC tended to be serendipitous rather than purposeful on the educator's or the institution's part.

Of those interviewed, none were taught how to teach students to work in interdisciplinary teams and few appeared to have a comprehensive understanding of IPC. The most significant exposure to IPC concepts happened to the three educators who worked recently in a clinical nursing job, which was in addition to their full-time teaching position. Those with recent clinical nursing experience demonstrated a greater understanding of IPC. Exposure to IPC concepts seemed to make it more likely that educators would include the concept in their teaching.

Significantly, most educators felt that IPC education was important, yet none of the schools had IPC embedded in their curriculum. Two of the schools reported times when they talked about adding IPC to their simulations in the future but all of the educators identified barriers which prevented them from making IPC a curriculum-wide concept. Barriers to implementation included lack of time, resources, and support.

Nurse educators taught IPC concepts only if they believed it was valuable. Nurse educators were most likely to discuss how they taught students communication skills.

The educators mostly focused on nurse-to-nurse communication, with limited practice talking to other healthcare professionals (this was usually calling educators representing physicians for orders). While no participant provided students with the opportunity to practice communicating with students from different professions, some encouraged students to talk to other professionals while learning in the clinical setting.

Finally, the other four IPEC (2011) core competencies (teamwork, mutual respect, common values, and roles and responsibility) were less widely discussed, with only minimal mention of teamwork and roles. On the topic of respect, there tended to be more discussion about a lack of respect between professions. Participants said very little about common values.

In this chapter, the process of data collection and analysis used in this study were described. I also discussed the results of the study in detail, and the actions used to ensure trustworthiness. In the following chapter, I will explain my interpretations of the findings of this project. I will also discuss the limitations to the study and suggest recommendations for future research. Finally, in the next chapter, I will describe the implications of this study.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative case study was to gain an understanding of how nurse educators were prepared to teach IPC and how their preparation informed their teaching. It is valuable to understand nurse educators' experiences because there is evidence that educators have not been consistently trained to teach IPC; yet, their preparation can influence their ability to teach essential IPC skills to their students. Previous researchers had indicated that healthcare professionals who possess critical IPC skills provided safer care to their patients (Boev & Xia, 2015; Eppich, 2015). In contrast, poor teamwork and communication are associated with a higher incidence of patient harm (JC, 2016). IPC education is important because when educators are prepared to teach students IPC skills, they have the potential to positively influence future patient safety.

I used a qualitative multiple case study design to answer the research questions posed in this study. I gathered data from interviews and documents provided by nine nurse educators representing three different schools of nursing located in the western United States. The conceptual framework that I chose for this study was based on Mezirow's (1994, 1997, 2003) TLT and the five core competencies of IPC, as defined by IPEC (2016).

The participants in this study provided valuable insight into the current state of nurse educator preparation to teach IPC. The key finding in this study was that nurse educators received no formal preparation to teach IPC. In addition, the participants did

not typically demonstrate a thorough understanding of IPC education, as evidenced by a lack of knowledge about all of the IPEC (2016) identified core competencies.

Although the educators had not formally learned how to teach IPC to students, most had some familiarity with the concept of IPC. A few participants had learned about IPC through recent clinical experience or serendipitous circumstances. The personal experiences that some of the participants described often resulted in an epiphany regarding the need to prepare students for interprofessional interactions.

The participants who had gained new insight were more likely to be motivated to create assignments that emphasized at least some of the elements of IPC. Most of the time, the isolated elements of IPC that educators taught were not done so with IPC in mind. The most commonly taught concept of the core competencies was communication. Conversely, there was almost no focus on the competencies of teamwork, mutual respect, roles and responsibilities, or common values.

None of the schools in this study had a significant program-wide IPC presence. Most of the educators said that, in the past, they had discussed the idea of incorporating IPC into their program with other faculty members. Many expressed the belief that IPC would eventually be part of their curriculum; however, the educators had also identified multiple barriers that had, thus far, prevented them from making substantial changes.

The results of this study confirmed many of the results found in recent literature. The conclusions also lead to an expanded understanding of the phenomena of nurse educator preparation to teach IPC and how preparation may influence teaching. In the following section, I consider the results in the context of past research.

Interpretation of the Findings

The first question I asked in this study was: How do undergraduate nurse educators describe their preparation to teach interprofessional collaboration? After an in-depth evaluation of the data, I found two themes that provided significant insight into the first question. These themes, when compared with previous research, confirmed many past discoveries. In addition, I have gained significant understanding of the phenomena under examination. I have organized the following sections by the themes that I discovered during the data analysis process.

Theme 1: Academic IPC Preparation was Limited

The key finding from this study was that none of the participants formally learned how to teach IPC to students. Because I found few descriptions of IPC faculty development in the literature, this result was not completely surprising. Nevertheless, a lack of IPC preparation is problematic because according to experts, nurse educators must understand IPC to teach it (Cransford & Bates, 2015; Davis et al., 2015; Kahaleh et al., 2015). In addition, past studies reinforced the value of carefully planned faculty preparation (Blakeney et al., 2016; Brashers, Owen, & Haizlip, 2015; Coogle et al., 2016). Despite advice from experts that educators need formal training to teach IPC well (Hall & Zierler, 2015; Lie et al., 2016; Sullivan et al., 2015), most educators in this study seem to have experienced only minimal exposure to the concept of IPC.

Because my review of the literature unearthed only a handful of studies describing how educators prepared to teach IPC, it is perhaps not surprising that the educators in this study had not participated in any formal professional development on IPC education.

Considering the prevalence of literature describing how institutions have taught IPC to students, it was surprising that no one could identify any literature on teaching students IPC concepts.

One interesting and unexpected finding from this study was that, during a conversation with one of the participants, it became obvious that a great deal of the IPC educational literature has been published in IPC-specific professional journals. Because IPC research is more often found in specialized journals, it makes it less likely that educators would find information about IPC education unless they knew what they were looking for. This discovery makes an argument for ensuring that more IPC education literature makes its way into generic nursing education journals.

When educators had learned about IPC, it tended to have occurred in serendipitous and informal ways. One example of how an educator was exposed to IPC concepts happened when an educator was visiting another school that taught using IPC simulations. Two other educators had participated in simulated IPC activities when they were students. These experiences did seem to make a difference because those individuals had expressed a broader than average understanding of IPC education. It is not clear what level of exposure is needed to adequately prepare nurse educators to teach IPC, but past investigators indicated that those with less exposure to IPC were less likely to believe it was valuable (Davis et al., 2015; Loversidge & Demb, 2015).

The most common type of activity that led educators to possess a higher degree of understanding of IPC seemed to be recent clinical experience. Those who worked in a nursing job in addition to a teaching job were far more familiar with the idea of IPC.

During the literature review, I did not find a reference to a possible relationship between clinical experience and educator attitudes regarding IPC; therefore, it is difficult to know if this is an isolated incident. Although the chance encounters described here may have expanded educator awareness of IPC, most still did not possess a thorough understanding of IPC or how to teach it.

Theme 2: Lack of Formal Preparation and an Incomplete Understanding

The participants in this study did not appear to have obtained a great deal of exposure to IPC, and most did not appear to have a firm understanding of IPC education. For example, only one educator discussed the connection between IPC education and patient safety. Since past researchers have indicated that patient safety is the primary goal of IPC education (Bleich, 2016; Hall & Zierler, 2015; Lie et al., 2016), the fact that most of those interviewed did not verbalize that connection is significant. Another example illustrating a lack of knowledge was the participants' collective inability to identify all of the IPEC (2016) core competencies. Since the core competencies are considered the gold standard of IPC education, this inability indicates another significant knowledge gap. The lack of familiarity discovered in this study was consistent with past literature, which indicated that IPC had been a poorly understood concept (Baessler et al., 2016; Blakeney et al., 2016; Gordon et al., 2015). As already noted in previous studies, when educators do not understand IPC, they are unlikely to see a reason to teach it (Baessler et al., 2016; Loversidge & Demb, 2015).

In answer to the first research question posed in this study, the results suggest that the educators who were examined had no formal preparation to teach IPC and did not

fully understand the concept. The findings also indicated that most had some sort of exposure to IPC, even if they did not have a complete understanding of the concept. The second research question posed in the study was: How does the preparation that undergraduate nurse educators' experience inform their teaching practice? Three themes emerged concerning Research Question 2. Those themes were interprofessional communication: positive perceptions and perceived barriers, previous IPC exposure influenced instruction, and educators taught IPC informally.

Theme 3: Interprofessional Communication: Positive Perceptions and Perceived Barriers

Although all of the participants said that they thought IPC education was a good idea, none of the schools had IPC infused into their curriculum. In two of the schools, the faculty had talked about creating simulated interprofessional activities; nevertheless, everyone could identify reasons that IPC education did not happen in their institution. The barriers were a lack of time, money, resources, interest, or leadership. Another obstacle was related to educator priorities; some mentioned the overriding need for students to pass the national nursing exam. The interviewees reasoned that their primary focus should be on teaching students the knowledge they would need to pass licensure exams; this sentiment has been expressed previously (Loversidge & Demb, 2015) and appears to continue to be a challenge. All of these barriers were consistent with recent findings (Blakeney et al., 2016; Bressler & Persico, 2016; Chen et al., 2016).

Two additional barriers were not overtly identified by participants but became obvious during the interviews. Although consistent with past research (Bell et al., 2014;

Meleis, 2016; Reid et al., 2018), the realization that most participants continued to harbor negative attitudes about working with other disciplines was surprising. In addition to negative attitudes, I have also concluded that a lack of knowledge about IPC was a major barrier. As already discussed, a lack of knowledge is consistent with previous findings (Baessler et al., 2016; Gordon et al., 2015; Loversidge & Demb, 2015). Despite the obstacles described in this section, I did find isolated examples of educators teaching some aspects of IPC. When educators taught elements of IPC, it usually happened because they had been introduced to some aspect of the topic that had been meaningful to them.

Theme 4: Previous IPC Exposure Influenced Instruction

Those who could describe how they learned about specific concepts of IPC were more likely to have found ways to teach it to their students. Current research has reiterated the necessity of positive attitudes when attempting to teach IPC (Becker et al., 2014; Meleis, 2016). The link between exposure and willingness to teach IPC is strong. In addition, when participants believed that a concept was valuable, they were more likely to persuade others to change; this finding is also consistent with recent studies (Cransford & Bates, 2015; Davis et al., 2015; Kahaleh et al., 2015).

Surprisingly, just the act of having a conversation about IPC education during the interview process led several of the interviewees to express enlightenment and motivation to change their teaching practices. This finding was consistent with the TLT (Mezirow, 1994, 1997, 2003), which indicates that learning has the power to provide participants

with a new mindset. Yet, not all of those interviewed had experienced an epiphany, possibly because they had not had sufficient preparation.

Theme 5: Educators Taught IPC Informally

Although most educators reported informal conversations among faculty, none of the schools that were examined had included IPC in their curriculum. A lack of IPC as a curriculum-wide concept was consistent with current literature, which suggests that IPC is not present in all nursing programs (Hickerson et al., 2016; Hopkins & Bromley, 2016; Sexton & Baessler, 2016). The results of this study indicate that when educators learned about an element of IPC they were sometimes independently inspired to teach IPC concepts. Past investigators found that IPC was taught through simulation, written assignments, and clinical experiences (Balogun et al., 2015; Crouch et al., 2015; Krueger et al., 2017). The educators that I interviewed taught using the same types of activities found in past research, but, none of the simulated activities involved students from other disciplines.

Communication was the most commonly taught IPC competency, with many of the participants citing the QSEN (AACN, 2006) initiative as the impetus for teaching communication skills. Despite the number of times communication was discussed, the focus on teaching IPC was narrow in scope and usually involved giving information and requesting orders on the phone. The other IPC concepts received even less attention. Only one of the interviewees taught about teamwork. Significantly, the concept of respect was mentioned frequently; however, it was most often discussed in terms of a lack of respect between disciplines. No one identified an assignment that focused on respect.

I was surprised that educators still held negative attitudes about working with other disciplines. Most of the interviewees discussed poor relationships, disrespectful treatment, and power differentials when talking about teaching students' IPC skills. Researchers have indicated that negative relationships from the past may hinder IPC initiatives (Bell et al., 2014; Meleis, 2016; Reid et al., 2018); nevertheless, without positive attitudes, IPC education is not likely to be embraced by educators (Bell et al., 2014). One of the main reasons for providing educators with formal preparation to teach IPC is that attitudes must be confronted before educators will be ready to let go of negative constructs from the past (Hall & Zierler, 2015; Lie et al., 2016; Sullivan et al., 2015). When examined through the lens of TLT and the IPEC (2016) core competencies, other considerations also come into view.

Theory and the Results

The TLT (Mezirow, 1994, 1997, 2003), along with the core competencies of interprofessional education as described by the IPEC (2016) provided the framework that guided the development, execution, and interpretation of this study. The results of this study confirm Mezirow's assumption that when faced with the right kind of stimulus (i.e., exposure to IPC education, clinical experience, etc.), educators were inspired to teach IPC concepts to students. Using the IPEC core competencies as a benchmark, a lack of knowledge limited the changes that educators made. Based on the TLT, educators need both the requisite knowledge of IPC and the belief that IPC education has value to succeed.

The results of this study indicated that the educators under examination may have lacked the knowledge necessary to teach IPC. In addition to a lack of knowledge, nurse educator attitudes also appeared to have been a significant barrier to change. Many educators continued to hold on to past negative beliefs and behaviors, and this may have prevented them from moving forward. Because knowledge and attitudes are so interconnected, they may be difficult to separate without thoughtful and deliberate training. The findings of this investigation make a strong argument for providing faculty development focused on the core competencies and anchored in the principles of transformational learning.

Limitations of the Study

I identified several limitations in this study. The sample size of this study was relatively small, with only nine participants. In addition, in an attempt to limit the scope of this study, only three schools of nursing in one geographic area were examined. Therefore, due to the limited number of schools and educators examined, the results of this study may not reflect the needs or experiences of other institutions or educators. In spite of the small sample size, I did gain saturation, which strengthens the credibility of this study. It is also possible that other geographic areas may have different characteristics and that interviewing nurse educators in other regions might obtain significantly different results. Another limitation of this study is the nonrandom sampling design of the study. It is possible that those who responded to my request to participate could have different attributes than educators who did not participate.

Recommendations

This study contributes to what is known about nurse educator preparation to teach IPC and how IPC was taught. The results of this study indicated a connection between knowledge, attitudes, and whether IPC is purposefully taught in the program. Based on the results of this study, I have several recommendations. First, it would be valuable to conduct this study with a larger number of institutions and educators. More extensive research could be done to determine how nursing programs in the United States purposefully include IPC in their curriculum as well as how IPC is taught. Further research could help to determine what nurse educators and administrators know about IPC education and what knowledge gaps exist. Finally, due to the realization that IPC literature may not be viewed by educators due to the practice of publishing IPC education research in IPC-specific journals, I recommend that nursing education journals publish more articles on IPC.

Implications

The results of this study have clear implications for positive social change in the field of nursing education. These findings revealed that there are still educators who do not understand or teach IPC. Those involved in nurse education, whether as leaders or as teachers, may wish to examine the current understanding of IPC education among faculty. While many institutions have embraced IPC education, it is also clear that many have not. Therefore, institutions may use the understanding gained in this study to examine both educator preparation to teach IPC and how IPC is taught at their institutions. If IPC is not found to be a part of their curriculum, I recommend that

administrators consider ways that this can be changed, which may include the addition of faculty development on IPC. The results of this study might also have implications for educators representing healthcare professions other than nursing. Because all healthcare professionals would benefit from learning how to work in interprofessional teams, there may be similar educator needs in other professions. It is possible that my findings could encourage educators from several professions to consider the possible need for educator preparation to teach IPC.

By disseminating the results of this study, I hope to raise awareness of IPC best practices with nurse educators at schools of nursing. I, therefore, plan to publish the findings of this study in a nursing education peer-reviewed journal. In addition, I also plan to present a poster at a national nursing education conference to share my conclusions. I also intend to share my research with the intuitions that participated in this study and with the institution where I currently I teach. Finally, in disseminating my research to a broader audience, I hope to inspire positive social change by bring attention to the connection between IPC education and patient safety and inspire educators to gain knowledge and change behaviors.

Conclusion

The purpose of this study was to understand how undergraduate nurse educators have been prepared to teach IPC and how their preparation informed their teaching. The results of this study revealed a lack of nurse educator preparation and revealed significant gaps in knowledge about IPC education. Nurse educators did not always understand the concept of IPC, and they did not know how it should be taught. Attitudes about IPC

education may also have prevented educators from being motivated to teach IPC. The lack of preparation among the participants has, consequently, led to the absence of IPC in the programs examined in this study. Because of these findings, understanding educator knowledge and attitudes regarding IPC education should be considered when planning the curricular content in nursing programs.

As an integral part of the healthcare team, nurses should graduate ready to practice interprofessionally. When interprofessional teams collaborate and communicate successfully, patient outcomes improve. With patient safety in mind, nurse educators should have sufficient preparation to teach IPC. Additional nurse educator faculty development may be one way to remedy the problem. Stakeholders in nurse education administration may wish to use the findings of this study to assess the learning needs of their faculty related to IPC education. When educators possess a complete understanding of IPC and how to teach it, there is a potential to influence positive social change that could have lasting implications for nurse education leaders, teachers, new nurses, and patients.

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Appendix: Interview Protocol

Date and time:

Location of Interview:

Interviewee Code:

Thank you so much for agreeing to participate in my research project.

Purpose of Study Interviews: I am conducting this interview because I am interested in knowing more about how educators have been prepared to teach IPC. You were invited because you are a nurse educator and can provide valuable information for this study. I am hopeful that I can learn more about this subject and your participation will help me to do that.

Rights and Confidentiality: I will begin by asking you to read the consent form. If you have any questions, I will answer them. If you agree with the terms as written, please sign the form.

Explanation of Process: This interview will take approximately 60 minutes. Do I have your permission to audio-record this interview? (Recorder will be started after permission is granted).

Background Questions:

- What type of nursing program do you teach in? (ADN/BSN)
- How long have you been a nurse educator?
- What degree(s) have you earned?

1. How does your definition of IPC education compare with the WHO definition of IPC?

2. What kind of preparation did you receive and where or how did you obtain it?

3. Did you participate in any type of interprofessional activities when you were a student?

4. How is IPC taught by you?

5. How is IPC taught in your institution?

6. Do you believe that IPC education can impact student thinking or behavior?

7. Did your preparation influence your teaching practices?

8. Do you feel like you have been adequately prepared to teach IPC?

9. Do you have anything to add to this conversation?

Possible probing questions:

- What do you mean?
- I am not sure I understand, could you please explain that?
- Could you give me an example?
- What did you do/say then?
- Could you give me more details about that?

Conclusion:

Thank you for answering my questions, I appreciate your time. I remind you that your identity will not be disclosed, and your answers will remain anonymous. I plan to send you the transcribed interview through an e-mail in approximately 7 days. If you note any discrepancies, I would appreciate your notifying me through a reply within a week from when you received the e-mail. If I do not receive a reply, I will assume that you agree with the transcription.