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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

FACULTY BELIEFS TOWARD ACADEMIC ACCOMMODATIONS
FOR PRELICENSURE NURSING STUDENTS WITH DISABILITIES

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

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College of Natural and Health Sciences
School of Nursing
Nursing Education

May 2024

This Dissertation by: Connie Harris

Entitled: *Faculty Beliefs Toward Academic Accommodations for Prelicensure Nursing Students With Disabilities*

has been approved as meeting the requirements for the Degree of Doctor of Philosophy in the College of Natural and Health Sciences in the School of Nursing program of Nursing Education.

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ABSTRACT

Harris, Connie. *Faculty Beliefs Toward Academic Accommodations for Prelicensure Nursing Students with Disabilities*. Published Doctoral of Philosophy dissertation, University of Northern Colorado, 2024.

The purpose of this study was to explore nurse educators' beliefs using the conceptual framework of the theory of planned behavior to investigate faculty behavioral, normative, and control beliefs toward providing academic accommodations for prelicensure nursing students with disabilities. The theory of planned behavior served as the study's framework to guide data collection and analysis. Semi-structured interviews from 13 study participants representing all regions of the United States were conducted. Nurse educators described their experiences providing academic accommodations to students with physical, sensory, learning, emotional/mental health, and medical disabilities in clinical, lab, and didactic learning environments. Data analysis employed the use of provisional and inductive coding methods with constant comparative analysis to identify three themes and eight sub-themes. These findings represented the general beliefs of nurse educators regarding academic accommodations, perceived internal and external motivators in this process, and their views regarding the knowledge, skills, and resources needed to effectively implement requested accommodations. The importance of the role of nursing program administrators, nurse educators, and professional nursing organizations in this process were highlighted with suggestions describing multiple opportunities for improving the process of providing academic accommodations to prelicensure nursing students with disabilities.

Keywords: academic accommodations, faculty accommodation beliefs, nursing faculty attitudes toward accommodations, nursing students with disabilities, Theory of Planned Behavior

ACKNOWLEDGMENTS

I am grateful for all the people who supported me through this dissertation process. It would not have been possible for me to accomplish this work without you.

To Coleen and all the nurses and students with disabilities whose dedication and commitment to achieving their career goals expanded my ontological vision of the nursing profession. I also want to express my sincere thanks to the nurse educators who responded to the invitation for participants and were willing to be interviewed and share their thoughts and experiences for this research.

To Dr. Melissa Henry, my research advisor, your wisdom and guidance were invaluable. Thank you for believing in me. Your optimism, patience, and support of me, especially during this past year, gave me hope and the energy I needed to finish. To the members of my committee, Dr. Jill Bezyak, Dr. Darcy Copeland, and Dr. Jeanette McNeill, your insights and feedback were instrumental in helping me understand and appreciate the importance of carefully planning my research methods.

To my colleagues at work, especially Dr. Barbara Arnold, your support and friendship mean more than I can express. Thank you for your counsel and for the encouragement you provided when I wanted to give up. To Dr. Maha El Hachi and Dr. Leann Laubach, thank you for being empathetic and checking on my progress. I appreciate you listening to me discuss my work and for your helpful suggestions.

To my siblings and extended family, thank you for being there when I needed you. To Justin, Ryan, and Rachel, I love you more than you know, and I am incredibly blessed to have

you as my children. Your love and concern for me throughout this journey, especially this past year, enabled me to persevere and complete my degree. Finally, to Jesus, my lord and savior, thank you for giving me the strength and clarity of mind to write this dissertation. May this work bring honor to you.

This dissertation is dedicated to my parents, Bill and Betty Miller. You were my parents, role models, and friends. Through you, I learned the importance of family and the values of diligence, striving for excellence in one's work, and using your gifts and talents to help others. I am forever grateful to you for your influence in my life. I miss you.

TABLE OF CONTENTS

CHAPTER I. INTRODUCTION.....	1
Background.....	1
Theoretical Frameworks	8
Statement of the Problem.....	13
Purpose of the Study	14
Research Questions.....	15
Definitions.....	15
Significance of the Study	16
Summary.....	17
CHAPTER II. REVIEW OF THE LITERATURE.....	19
Literature Review Process	19
Disability.....	20
Academic Accommodations	21
Theory of Planned Behavior	23
Behavioral Beliefs Toward Accommodations	24
Normative Beliefs: Social Pressures.....	40
Control Beliefs: Capacity and Autonomy.....	48
Complex Accommodation Requests.....	63
Summary.....	68
CHAPTER III. METHODOLOGY	70
Research Design.....	70
Sample.....	74
Procedure	79
Data Analysis	86
Assumptions.....	93
Trustworthiness.....	93
Ethical Considerations	97
Summary	98
CHAPTER IV. RESULTS.....	100
Study Participants	100
Interview Results	105
Research Sub-Question 1a Theme and Sub-Themes	109
Research Sub-Question 1b Theme and Sub-Themes.....	119

Research Sub-Question 1c Theme and Sub-Themes	133
Additional Findings	145
Summary of Results	147
CHAPTER V. DISCUSSION AND RECOMMENDATIONS.....	150
Discussion	151
Significance of the Findings	163
Implications.....	164
Limitations	172
Delimitations.....	173
Recommendations for Future Research	173
Conclusion	174
REFERENCES	176
APPENDIX A. INVITATION TO PARTICIPATE IN RESEARCH.....	199
APPENDIX B. ONLINE CONSENT FORM	201
APPENDIX C. ONLINE RECRUITMENT SURVEY	206
APPENDIX D. CONSENT FOR HUMAN PARTICIPANTS IN RESEARCH	213
APPENDIX E. INTERVIEW GUIDE.....	216
APPENDIX F. BACKGROUND AND STANCE ON DISABILITY	221
APPENDIX G. DATA ANALYSIS PROCESS.....	225
APPENDIX H. PROVISIONAL DATA ANALYSIS CODE BOOK	228
APPENDIX I. INDUCTIVE DATA ANALYSIS CODE BOOK	230
APPENDIX J. INDUCTIVE CODING OF NURSE EDUCATOR BELIEF STATEMENTS.....	232
APPENDIX K. CODING THEMES FOR SALIENT NURSE EDUCATOR BELIEFS	236
APPENDIX L. MEMBER CHECK EMAIL AND SURVEY	241
APPENDIX M. INSTITUTIONAL REVIEW BOARD APPROVAL	246

LIST OF TABLES

Table

1. Participant Demographic Information102
2. Faculty Experience With Accommodations and Types of Disabilities104

LIST OF FIGURES

Figure

1. Theory of Planned Behavior Diagram12
2. Themes and Sub-Themes in Relation to the Theory of Planned Behavior's
Belief Categories.....107

CHAPTER I

INTRODUCTION

An examination of the current nursing workforce in the United States revealed a need for greater diversity and inclusion of minority groups in the nursing profession (American Association of Colleges of Nursing [AACN], 2019). Position papers from the AACN (2017/2021) and the National League for Nursing (NLN; 2016, 2009/2017) challenged faculty and administrators from prelicensure registered nursing programs to develop greater diversity within their student populations by supporting the admission, retention, and graduation of students from all cultures, backgrounds, and abilities. Achieving diversity through the inclusion of students with disabilities in nursing presents unique challenges that do not end upon the student's admission to the nursing program. Difficulties faced by nursing students with disabilities are well-known (Luckowski, 2016; Maheady, 1999; Neal-Boylan & Miller, 2017); however, less is known about the obstacles academic nurse educators encounter when teaching this student group. Faculty insight is needed to investigate the barriers that hinder and the processes that facilitate nurse educators when providing accommodations that support and enhance the retention and graduation of nursing students with disabilities in professional prelicensure nursing programs.

Background

Federal laws protect against discrimination and support the educational rights of individuals with disabilities by mandating that institutions of higher education ensure reasonable academic accommodations and accessibility for students with disabilities (Laird-Metke &

Moorehead, 2016). In response to a student's accommodation request, faculty glean insight from campus disability support personnel, principles of universal design for learning, and other academic disciplines regarding best practices for the provision of accommodations in didactic environments (Sukhai & Mohler, 2017). Despite the existence of campus resources, nursing faculty reported a lack of knowledge about accommodations (May, 2014; Suplee et al., 2014; Yarbrough & Welch, 2021) and frustration with inadequate communication among campus disability support staff, nursing faculty, and students seeking academic accommodations in the classroom (Ashcroft & Lutfiyya, 2013; Yarbrough & Welch, 2021).

Providing classroom accommodations could be challenging. The process becomes more complex, however, when creating academic adjustments to facilitate learning for students with disabilities in the clinical or laboratory setting. Implementing a request for accommodations in an environment that provides healthcare services to patients requires advance planning. This planning could include the coordination, cooperation, and involvement of persons from multiple campus departments, nursing program faculty, university administrators, and representatives from the clinical placement site (McGough & Murray, 2016; Serrantino et al., 2016). Evidence-based policies and practices should be used to guide the implementation of accommodation requests. Unfortunately, the results of qualitative research studies involving nursing faculty with experience arranging accommodations for students with disabilities found that theory-driven, evidence-based practices in nursing academe were lacking. Instead, a trial-and-error approach prevailed as the dominant method used to plan and implement clinical accommodations (Ashcroft & Lutfiyya, 2013; Horkey, 2019).

Although faculty expressed frustration with the accommodation process, many endorsed the inclusion of students with disabilities in nursing programs (Ashcroft & Lutfiyya, 2013; Elting

et al., 2020) and believed they were advocates for student learning (Ashcroft & Lutfiyya, 2013; Moriña & Orozco, 2020). Faculty support is important to the success of students with disabilities, especially in majors that require close interaction between students and educators (Diez et al., 2015; Sukhai & Mohler, 2017). Sadly, some students with disabilities viewed faculty as obstacles to their learning. They believed some educators created, rather than mitigated, barriers to student achievement (Diez et al., 2015; Evans, 2014a; Howlin et al., 2014; Luckowski, 2016; Neal-Boylan & Miller, 2017).

Gatekeepers of the Profession

While it is difficult to speculate about the nature of the obstacles that students perceive as hindrances to their learning, it is true that faculty perceive themselves as gatekeepers to the nursing profession. Prospective nursing students with disabilities experience the impact of gatekeeping before entering the nursing program when they examine the program's admission qualifications. The difference between an inclusive nursing program and one that discriminates against students with disabilities simply can be based on the language a nursing program uses to describe attributes needed among student applicants. Requirements that conflate essential functions, physical abilities needed for employment, with technical standards, skills needed for academic success, will determine which students are eligible or excluded from acceptance to a nursing program (Ailey & Marks, 2017/2020; Aquino, 2019; Matt et al., 2015; Neal-Boylan & Miller, 2020). Additionally, faculty members' ontological and philosophical beliefs about what nurses do and what nursing is will influence the characteristics and abilities required of ideal candidates to the program (Marks & Ailey, 2014).

Gatekeeping continues throughout a student's time in the nursing program as faculty evaluate students' knowledge and skill performance based on the program's curriculum standards

in didactic and clinical settings. Nursing literature reports that faculty find the process of evaluating students with disabilities problematic. Researchers cite a lack of clearly defined competency standards, subjectivity in the evaluation process, and confusion regarding accommodations as concerns, especially when evaluating students with disabilities in the clinical setting (Ashcroft & Lutfiyya, 2013; Horkey, 2019). In addition, faculty report this process creates an increase in workload to document the performance of a student with a disability who is borderline or failing. They also fear the administrative and legal implications related to a challenge by a student with a disability regarding their grade assessment (Langørgen et al., 2020; Neal-Boylan et al., 2021). These problems are likely to persist as more students with disabilities enroll in institutions of higher education.

Student Prevalence

Since the passage of the Americans with Disabilities Act (ADA) in 1990, there has been an increase in students with disabilities attending college in the United States. This trend has continued according to the Rehabilitation Research and Training Center on Disability Statistics and Demographics who reported a 61% increase between 2009 and 2019 in the number of persons with disabilities receiving a bachelor's degree or higher (Houtenville & Rafal, 2020). Since students are not required to disclose their disability and many students hide this information from faculty (Evans, 2014a; Luckowski, 2016), it is difficult to know the true number and types of disabilities that are representative of students on college campuses including those enrolled in nursing programs. Regardless of whether students disclose their disabilities, facilitating student learning and creating an inclusive and supportive educational experience in both the didactic and clinical environments are responsibilities of all nurse educators (Caputi & Frank, 2019). Inclusive and supportive learning environments for minority

student populations including students with disabilities, however, are often lacking (Neal-Boylan & Miller, 2020; Read et al., 2013).

Experiences and Attitudes

Since academic accommodations were introduced in the United States after the passage of the Rehabilitation Act of 1973 Section 504, literature about students with disabilities reflected two major themes: the perceptions of students with disabilities about their experiences in nursing school (Blue et al., 2017; Evans, 2014a; Howlin et al., 2014; Luckowski, 2016; Maheady, 1999; Neal-Boylan & Miller, 2017) and attitudes faculty had toward teaching students with disabilities and providing the accommodations needed to facilitate their learning (Calloway & Copeland, 2021; Elting et al., 2020; Evans, 2014b; L'Ecuyer, 2019). The body of research investigating nursing students with disabilities began in the late 20th century and continues to the present. The methodology used in early studies predominately focused on surveys sent to nursing programs seeking information about the program's admission practices and estimates regarding the number of students known to have disabilities and their specific type of disability. Adding to this knowledge were qualitative studies that focused on positive and negative nursing school experiences described by students with disabilities (Evans, 2014a; Hill & Roger, 2016; Maheady, 1999). In-depth, semi-structured interviews from qualitative research studies dominated nursing student disability literature with few studies employing grounded theory research (Horkey, 2019; Yarbrough & Welch, 2021) or quantitative studies (Sowers & Smith, 2004b). Qualitative and quantitative avenues of inquiry contained research studies that preceded the most recent passage of disability legislation in the study's country of origin including those studies conducted in the United States.

A recurring theme in the literature published over the past 30 years revealed a dichotomy of positive and negative experiences described by nursing students with disabilities and the faculty who taught in prelicensure nursing programs (Clinton, 2007; Dailey, 2010; Evans, 2014a; Maheady, 1999; Ridley, 2011; Sowers & Smith, 2004b). Although enrollment of students with disabilities in college increased and a greater number of faculty reported teaching these students, no perceptible improvements in the educational experiences of students with disabilities or faculty attitudes toward teaching these students over the last decade were reported (Ashcroft & Lutfiyya, 2013; Blue et al., 2017; Elting et al., 2020; Hill & Roger, 2016; Luckowski, 2016; Neal-Boylan & Miller, 2017).

Random efforts to mitigate the problems identified by students with disabilities and their faculty were occasionally found in the literature. The primary methods suggested to improve the learning environment for students with disabilities focused on increasing disability awareness and knowledge of disability law among faculty or suggesting new pedagogical methods for teaching students with disabilities (Azzopardi et al., 2014; Carballo et al., 2019; Murray et al., 2014; Sowers & Smith, 2004a). Among the few studies that implemented a mitigation strategy (Carballo et al., 2019; Murray et al., 2014; Sowers & Smith, 2004a), none were longitudinal and all relied on self-reports by faculty and failed to demonstrate that the study's strategy actually improved learning experiences from the perspectives of the students.

Research Design and Rigor

Most studies related to nursing students with disabilities had a limited number of research participants and generally investigated only one type of disability. The studies were usually exploratory or descriptive in nature and recruited participants through convenience or purposive sampling techniques. Studies were rarely conducted that included both didactic and clinical

settings (Maheady, 1999) or investigated the phenomena by including the perspectives of both the student and the educator (White, 2007). No studies provided a comprehensive understanding of the barriers and challenges experienced by these students, the faculty who taught them, and the personnel within the higher education system who provided support to them.

Often, these studies failed to include conceptual models or discuss theories that informed the research. When an instrument was used to measure a concept, investigators frequently omitted discussion about the validity or reliability of the tool and often failed to provide the methodological details needed to replicate the study (Millward et al., 2005; Persaud & Leedom, 2002; Sowers & Smith, 2004b). Some studies contained a list of recommendations nursing faculty should implement to improve the experiences of students with disabilities without providing empirical evidence to support the effectiveness of these suggestions (Child & Langford, 2011; Luckowski, 2016).

One example of published research that lacked this information was a classic study by Sowers and Smith (2004b). In this study, the researchers investigated faculty concerns about teaching students with disabilities and the likelihood of a student's success within their nursing program based on disability type. This study was often cited in student disability research, yet Sowers and Smith offered no evidence to support the validity and reliability of the study's survey instrument. In addition, the researchers failed to identify a theory, conceptual model, or epistemological perspective that guided their work, a common critique of many nursing research studies (Bond et al., 2011).

Quasi-experimental research investigating interventions to mitigate problems associated with teaching students with disabilities was rare. Of the few studies published using this research design (Murray et al., 2014; Sowers & Smith, 2004a), the findings were not generalizable since

the researchers did not establish adequate variable control with clearly defined concepts and an understanding of how these concepts related to one another (Grove et al., 2013). Using a conceptual model or theory to guide research at the experimental stage of knowledge development allows relationships to be tested and advance what is known about the subject (Wood & Ross-Kerr, 2011). Unfortunately, conducting experimental research before conceptual frameworks were identified or developed contributed to a disorganized and fragmented body of literature.

Using theory to underpin research about nursing students with disabilities creates the opportunity to link seemingly discrete topics in student disability literature. A framework that describes the associations between student experiences, faculty perceptions, accommodation practices, and effective nursing education pedagogies was needed. Social science researchers use theoretical frameworks to describe what is known about phenomena for the goal of knowledge development through theory testing and refinement (Thorne, 2016). In contrast, implementation researchers believe that theory should be used as a tool to advance knowledge. This knowledge should then be translated into evidence-based strategies for practical use to improve outcomes in healthcare (Meleis, 2012; Rycroft-Malone, 2012; Thorne, 2016). This same argument could be applied to disability research where theory-informed solutions to the obstacles that hinder the education of nursing students with disabilities are needed.

Theoretical Frameworks

Models of Disability

The social model of disability describes the construct of disability within a social, cultural, and political context, separating it from the concepts of impairment or illness (Scullion, 2010). According to this model, educational, physical, and economic barriers exist because of

societal attitudes, policies, and practices that oppress and marginalize individuals with disabilities (Lyon & Houser, 2018; Scullion, 2010). Although the model was endorsed by many researchers, some disability advocates believed it was biased toward those with physical disabilities and was less inclusive for persons with learning disabilities. An additional critique of the model was a gap between policy and practice the model could foster. This occurred when institutions and organizations philosophically agreed to the concept of disability as a social phenomenon and included it as policy but failed to change attitudes or behaviors at the practice level (Scullion, 2010).

Another perspective on disability is the medical model of disability. Although not a formal theory, this perspective of disability medicalizes the individual who is viewed as a patient in need of care and services from healthcare professions (Grue, 2015; Scullion, 2010). According to this paradigm, the cause of disability lies with the individual having a medical condition or impairment. The determination of disability was based on a person's functional status and ability to carry out normal day-to-day activities (Scullion, 2010).

These disability models are generally presented as discrete, dichotomous ways of viewing disability. Disability within the social model is a socio-political phenomenon emphasizing hegemony and oppression while the medical model focuses on the individual who had a bodily impairment or a physical disablement requiring care and treatment. Grue (2015) challenged this mindset and described disability as a multidimensional construct that included both the social and medical perspectives. Research by Lyon and Houser (2018) supported Grue's position and reported that nurse educators preferred a biopsychosocial model of disability that encompassed both models.

Theories are useful to (a) describe phenomena, (b) explain relationships, (c) offer a framework for the implementation of interventions, and (d) predict outcomes (Meleis, 2012). While the social, medical, and biopsychosocial models offered distinct or a combination of views regarding disability, these models were broad in scope, much like a grand theory in nursing. They were designed to convey a global perspective of disability and lacked the ability to describe the nature of specific relationships, assist in the planning of targeted interventions, or predict outcomes. What was needed in disability research within the milieu of nursing education was a middle-range or situation-specific theory. For example, a model that conceptualized the reasons for discrepant views reported by faculty and students might offer insights that could be used to develop strategies to improve the accommodation process and promote supportive and inclusive learning environments.

Attitudes and Behaviors

In a classic work that investigated attitudes and actions, LaPiere (1934) described attitudes as verbal expressions about a symbolic situation. His research explained that attitudinal surveys were easily and cheaply administered, yet they failed to predict study participants' actual behaviors. In other words, what people said was not necessarily how they actually behaved in a particular situation. This finding by LaPiere was consistent with literature describing faculty attitudes and student perceptions about educating nursing students with disabilities. The support nursing faculty expressed was not always congruent with the behaviors observed by nursing students with disabilities (Evans, 2014a; Howlin et al., 2014; Luckowski, 2016; Neal-Boylan & Miller, 2017).

Fishbein and Ajzen (2009) offered the principle of compatibility as an explanation for the contradiction LaPiere (1934) described between what people said and what they did. This

principle explained the importance of ensuring the specific behavior under investigation was compatible with what was actually measured. The principle of compatibility distinguished between two types of attitudes: (a) the attitude toward an object, group of people, a policy, or event; and (b) the attitude toward performing a specific action or particular behavior (Ajzen, 2012).

For instance, faculty attitudes about teaching students with disabilities are not the same as faculty attitudes toward the process of modifying teaching practices and/or learning environments in response to a request for an accommodation by a student with a disability. An educator could hold a positive attitude about individuals with disabilities while simultaneously having a negative perception about the process of altering their teaching methods or the student's learning environment in response to an accommodation request. This subtle difference impacts what the researcher measures and might explain the contradictory findings between studies that report positive faculty attitudes toward nursing students with disabilities and the lack of support and negative faculty behaviors nursing students with disabilities describe. Studies that conflate attitudes and actions have contributed to contradictory findings about educating students with disabilities and hindered meaningful changes needed to improve the process of providing accommodations for these students.

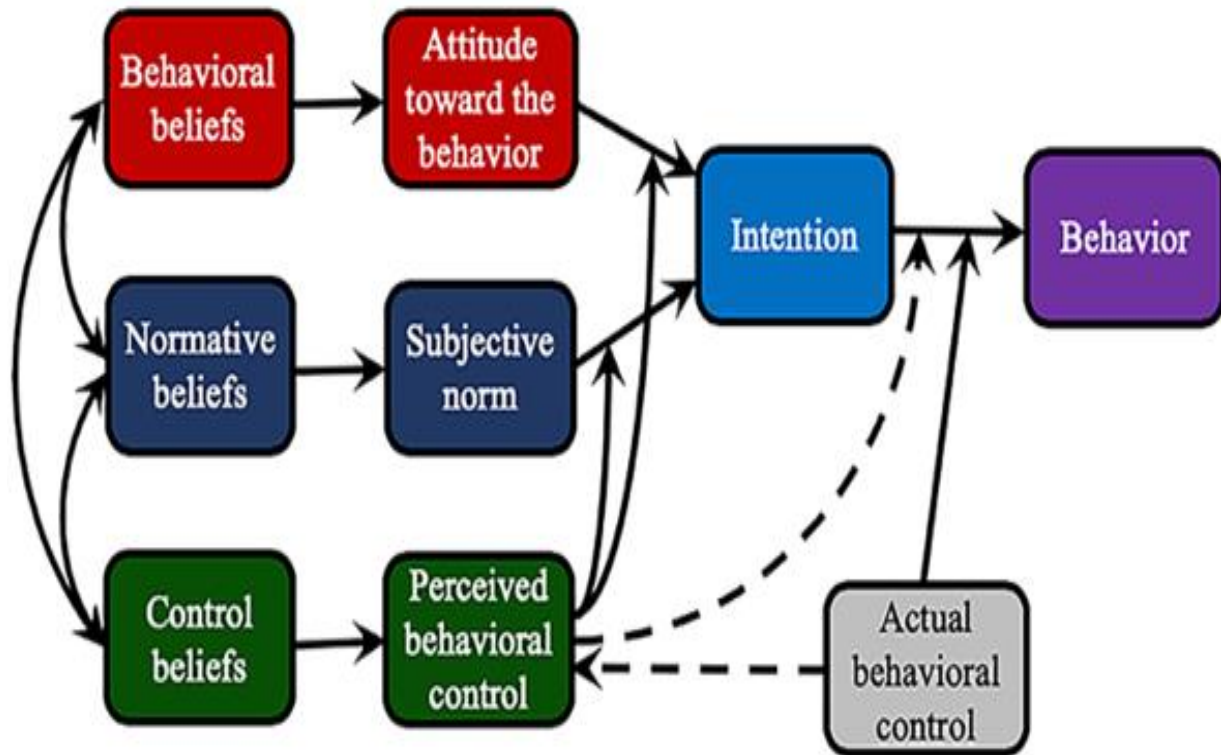
Theory of Planned Behavior

The principle of compatibility is embedded in the structure of the theory of planned behavior (Ajzen, 2019). This theory expands on the distinction between attitudes and actions and describes antecedents that influence the behaviors exhibited by an individual. According to the theory, intentions are the best predictor of behavior and these intentions are the product of three

processes or concepts: (a) attitude toward the behavior, (b) subjective norms, and (c) perceived behavioral control (Ajzen, 2019; Figure 1).

Figure 1

Theory of Planned Behavior Diagram



Note. From Ajzen, I. (2019). *Theory of planned behavior diagram*. University of Massachusetts Amherst. Copyright 2019 by Icek Ajzen. Reprinted with permission (see <https://people.umass.edu/aizen/tpb.diag.html>).

This theory predicted that a positive attitude regarding a specific behavior, social norms that favor or support the behavior, and a high level of confidence or self-efficacy to perform the behavior were the best predictors of an intention to ultimately perform the behavior. If one or more of these concepts did not support the behavior, then the individual was less likely to enact the behavior or did so with less enthusiasm (Fishbein & Ajzen, 2009). The theory of planned

behavior might provide the conceptual framework and insight needed to facilitate and direct strategies within nursing academe to mitigate obstacles faculty encounter when providing academic accommodations for nursing students with disabilities.

Developing evidence-informed strategies that promote positive educational experiences for nursing students with disabilities requires a comprehensive understanding of the factors involved in providing academic accommodations. When faculty reported they supported and advocated for the inclusion and education of nursing students with disabilities, yet students described a lack of faculty support for their learning and perceived negative attitudes toward them, the contradiction in views and the academic accommodation process, including its antecedents, must be examined.

Statement of the Problem

Since the passage of the ADA in 1990, more individuals with disabilities have sought education and employment in the nursing profession (Maheady, 2003; Meeks & Jain, 2016). Professional nursing education programs in higher education are faced with the challenge of graduating students for entry in the nursing workforce who reflect the demographic trends of the nation's population (AACN, 2017/2021; NLN, 2009/2017, 2016). Achieving greater student diversity through inclusive educational practices and the equitable treatment of nursing students with disabilities was needed.

Federal legislation mandated the implementation of academic accommodations to mitigate the obstacles students with disabilities encountered while attending school. Nurse educators stated they supported the inclusion of students with disabilities in nursing programs and provided the requested academic accommodations (Ashcroft & Lutfiyya, 2013; Moraña & Orozco, 2020); however, students with disabilities perceived a lack of support from nurse

educators to facilitate their learning needs. Some students stated they encountered barriers to their success during nursing school, citing faculty negativity and misconceptions about their ability to provide safe and effective nursing care to patients in clinical settings (Evans, 2014a; Luckowski, 2016; Neal-Boylan & Miller, 2017).

Faculty in higher education reported confusion and difficulties with the accommodation process and stated they lacked support to implement feasible and effective accommodations for these students (Horkey, 2019; Yarbrough & Welch, 2021). Research studies examining faculty perceptions of the accommodation process were scarce and efforts to facilitate the provision of an inclusive and supportive learning environment for students with disabilities were fragmented and ineffective. Meaningful changes cannot be made to overcome these problems without a comprehensive understanding of the hindrances, facilitators, and contextual factors that influence faculty attitudes and actions regarding the provision of academic accommodations for nursing students with disabilities.

Purpose of the Study

Little is known about faculty beliefs toward providing academic accommodations for nursing students with disabilities. Additionally, it is unknown whether these beliefs contributed to the appearance of a lack of faculty support and negative attitudes toward this population of nursing students. Nursing research investigating academic accommodations focused on the process within narrowly defined populations of students with disabilities (Horkey, 2019; Yarbrough & Welch, 2021). No study specifically investigated antecedent beliefs that influenced nurse educators' behaviors toward modifying teaching practices for students with disabilities.

A comprehensive understanding of faculty beliefs regarding academic accommodations is essential before improvements can be made in this process. Investigating the phenomenon by

using the three categories of beliefs described in the theory of planned behavior provided a structure to identify salient influences that affect faculty beliefs and behaviors toward the provision of academic accommodations for students with disabilities. Therefore, the purpose of this study was to explore nurse educators' beliefs using the conceptual framework of the theory of planned behavior to investigate faculty behavioral, normative, and control beliefs toward providing academic accommodations for prelicensure nursing students with disabilities.

Research Questions

The following research question and sub-questions achieved the purpose of this study:

- Q1 What are the antecedent beliefs nurse educators describe that enable or impede the process of providing academic accommodations to nursing students with disabilities?
 - Q1a What are nurse educators' behavioral beliefs regarding academic accommodations?
 - Q1b What are the normative beliefs about perceived social and organizational expectations that nurse educators describe regarding the process of accommodating nursing students with disabilities?
 - Q1c What control beliefs related to knowledge, skills, and resources do nurse educators perceive are needed to fulfill student accommodation requests?

Definitions

Academic Accommodations. Alterations in teaching methods, policies, or practices to meet the learning needs of students with disabilities. This includes planning, implementing, or evaluating actions taken by nurse educators to adapt the learning experience and/or environment for a student in response to recommendations made by campus disability services staff. While not recommended by some nurse educators (Neal-Boylan et al., 2021), academic accommodations include adjustments made informally by nurse

educators who did not follow official accommodation processes that originated in the campus office of disability services.

Nurse Educators. Full-time or part-time members of the nursing faculty in prelicensure registered nursing programs at institutions of higher education in the United States. These educators have experience teaching and/or arranging accommodations in didactic, laboratory, or clinical learning environments for nursing students with disabilities.

Nursing Students With Disabilities. Individuals enrolled in prelicensure registered nursing programs in the United States. These students have a temporary or permanent, and fluctuating or static impairment that interferes with their ability to learn without adjustments to instructional methods and/or the educational environment. Difficulty in academic achievement occurs as a result of the student having a condition involving a sensory, physical, medical, emotional/mental health or learning disorder.

Significance of the Study

The nursing workforce and learner populations within nursing programs should reflect the diversity of individual, population, and social characteristics of patients receiving their care (AACN, 2019). Achieving diversity within the profession of nursing necessitates that nursing academe create and maintain an inclusive and equitable educational environment for all individuals including students with disabilities (AACN, 2017/2021). Measuring the effectiveness of reaching this goal requires input from nursing students and faculty. Results of studies that investigated student and faculty perceptions of this educational process revealed conflicting views regarding the obstacles that hindered achieving equity and inclusion for students with disabilities in nursing education.

Knowledge development has no single starting point. It is a process where nurses in practice and nurse researchers share and build upon each other's work to create new knowledge. Research is conducted, theories are developed and tested, and guidelines are established to promote evidence-informed interventions with the goal of improving practice (Chinn & Kramer, 2015). This process also applies to the phenomena of faculty modifying their teaching practices or altering the learning environment for students with disabilities in response to an accommodation request. Research that attempts to promote inclusive and equitable teaching strategies before the problems of educating nursing students with disabilities are fully conceptualized might fail to advance the knowledge needed to effectively teach these students.

Summary

Despite legislation designed to protect against discrimination and ensure the provision of academic accommodations for students with disabilities, the extant literature described ongoing barriers to student learning for nursing students with disabilities enrolled in prelicensure nursing programs. There was ample evidence that negative faculty attitudes were perceived by students with disabilities who described unsupportive faculty behaviors and inadequate or unfulfilled requests for accommodations. Research efforts were ineffective in achieving meaningful progress to improve the learning experiences for these students.

Few researchers used theory to underpin studies that described nurse educators' views about factors that supported or hindered their ability to modify teaching practices or the learning environment for nursing students with disabilities. A gap existed that described a conceptual framework capable of organizing the numerous variables that preceded the provision of academic accommodations for these students. Additionally, no explanations were found for the differing perceptions regarding faculty attitudes and behaviors toward these nursing students.

Since faculty support is an integral component of student success, a comprehensive understanding of what influences their attitudes and experiences related to academic accommodations for nursing students with disabilities was required. This insight might inform future nursing education research investigating this phenomenon and lead to improvements in the accommodation process and a more inclusive and supportive learning environment for nursing students with disabilities.

CHAPTER II

REVIEW OF THE LITERATURE

This chapter discusses the concepts of disability, academic accommodations, and the theoretical framework of the theory of planned behavior that informed this study. A review of the literature regarding the phenomenon of academic nurse educators and the provision of academic accommodations for nursing students with disabilities is provided. The literature review is organized using the three belief categories of the theory of planned behavior: Behavioral beliefs regarding academic accommodations, normative beliefs or social pressures to provide accommodations, and control beliefs regarding the capacity and autonomy of nurse educators to provide accommodations. The chapter concludes with a discussion regarding the provision of complex accommodations for nursing students with disabilities.

Literature Review Process

A comprehensive search was conducted using the Cumulative Index to Nursing and Allied Health Literature (CINAHL) and ProQuest Dissertation and Theses Global databases. The following key search terms were searched separately, in combination, and using phrases: accommodations, academic accommodations, adjustments, barriers, faculty attitudes, nursing students with disabilities, reasonable accommodations, and technical standards. Searches were restricted to peer-reviewed, full-text articles written in English and published since 1990, the year of the enactment of federal ADA (1990) disability legislation. This search resulted in 65 articles critically reviewed. In addition, the ancestry method of using citations from key research studies to identify other relevant sources of research (Grove et al., 2013) was also used.

Disability

There is no universally accepted definition describing disability. Of interest to nurse educators is the language used in the 1973 Rehabilitation Act Section 504, the ADA of 1990, and ADA Amendments Act (ADAAA) of 2008, legislative acts that prohibit discrimination toward students with disabilities and mandate that educators from public and private institutions of higher education provide academic accommodations to individuals who meet the legal definition of disability (Carey et al., 2014). According to federal legislation, the construct of disability is defined as an individual who has substantial limitations regarding one or more major life activities due to a physical or mental impairment (Bagenstos, 2020; Iezzoni & Agaronnik, 2020). Students enrolled in institutions of higher education meeting this definition are eligible to seek academic accommodations.

While the legal definition of disability is important, nurse educators' experiences and philosophical perspectives about health and disability influence their attitudes and actions toward people with disabilities. The medical model views disability as a deficiency or abnormality requiring treatment or support by professionals while the social model describes disability as a neutral state where barriers exist when the social environment and policies fail to adapt to the needs of individuals with disability-related problems (Retief & Letšosa, 2018; Scullion, 2010).

The World Health Organization's (WHO, 2011) *World Report on Disability* stated, "Disability should be viewed neither as purely medical nor as purely social: persons with disabilities can often experience problems arising from their health condition. A balanced approach is needed, giving appropriate weight to the different aspects of disability" (p. 4). Within this report, the WHO introduced the international classification of functioning, disability, and health system. This classification system attempted to acknowledge many of the definitions

by considering disability as an umbrella term for impairments, activity limitations, and participation restrictions. Rather than a medical or socially-created construct, disability was viewed as a biopsychosocial phenomenon where an individual's level of function varied based on personal and environmental factors. Research by Lyon and Houser (2018) reported that nurse educators' views of disability aligned with the WHO and supported the biopsychosocial model that depicted the complex nature and varying descriptions used to define disability.

Academic Accommodations

Although federal disability legislation was clear regarding its intent to remove barriers to learning and facilitate the inclusion of students with disabilities (Maheady, 2003; Neal-Boylan et al., 2021), the terminology used in ADA (1990) and ADAAA (2008) legislation regarding the process for accomplishing this mandate was ambiguous (Laird-Metke & Moorehead, 2016; Walker, 2017a). This was most evident when considering the concept of providing academic accommodations to nursing students with disabilities, specifically the concept of *reasonable accommodations*. Academic accommodations, by definition, foster equity and facilitate student learning by modifying instructional practices and/or providing services and devices to mitigate educational barriers experienced by students with disabilities (Laird-Metke et al., 2016; Walker, 2017b). Bagenstos (2020) explained that the definition for reasonable accommodations was more elusive and generalized rules regarding what was reasonable or unreasonable could not be made.

An academic accommodation, according to the ADA (1990), required institutions of higher education to sufficiently modify or adapt teaching and evaluation practices to meet the student's needs. Meeting student needs, however, did not mean the student's request for a specific accommodation was granted exactly as stated; rather, the accommodation must result in an educational experience comparable to the experience of students without disabilities (Laird-

Metke et al., 2016). Additionally, it was not reasonable to lower academic standards, fundamentally change the program's requirements, give an unfair advantage to the student seeking the accommodation in comparison to other students, or create an undue financial burden for the university (Carey et al., 2014; Walker, 2017b). Mehta et al. (2020), however, cautioned that denying a student's request for an accommodation based on the premise that it places a financial hardship on the university rarely succeeded when challenged in court.

In the higher education milieu, the student, disability services staff, and faculty have specific obligations to fulfill under disability law before academic accommodations can be implemented: (a) students must self-disclose their disability and submit a timely request for accommodations, (b) disability services staff evaluate the student's disability documentation and determine the appropriate accommodations based on the disability, and (c) faculty modify teaching policies or practices and/or the learning environment in response to the needed accommodation (Carey et al., 2014). For clinical accommodations in nursing education, this could be a highly complex process. The degree of complexity depends upon the nature of the student's disability, the need for collaboration and cooperation from clinical partners, and consideration of factors such as safety and the effectiveness of the accommodation (Horkey, 2019).

Management researchers denoted a high degree of complexity as a major reason why projects within organizations failed. For instance, the management model developed by the Project Management Institute (2013) identified two critical factors that increased the complexity of a project and rendered it more likely to fail: ambiguity and the involvement of persons representing multiple vested interests. When reflecting on their experiences accommodating students with disabilities, nurse educators described an unstructured accommodation process

having no clear policies or procedures and ineffective lines of communication between nursing faculty and disability support staff (Ashcroft & Lutfiyya, 2013; Yarbrough & Welch, 2021). Faculty perceptions about this process ultimately impacted the provision of accommodations to students with disabilities (Zhang et al., 2010). A conceptual understanding of the interrelationships among factors that hinder or support faculty during the accommodation process is essential before improvements can be made.

Theory of Planned Behavior

In applied sciences, the theory of planned behavior is used as a conceptual model to describe factors that determine human social behavior (Fishbein & Ajzen, 2009). In the context of this theory, the term *behavior* is the product of a conscious decision an individual makes to perform a particular action (Ajzen, 2012). The theory of planned behavior identifies three types of beliefs that influence an individual's intent to perform a behavior: (a) behavioral beliefs or attitudes toward performing the behavior, (b) normative beliefs or beliefs about perceived social pressures to perform or not perform the behavior, and (c) control beliefs or an individual's perception of having the knowledge, abilities, and environmental resources necessary to perform the behavior. Positive attitudes about performing the behavior within each of the belief categories influence the likelihood the behavior will be performed (Fishbein & Ajzen, 2009).

A person's attitude toward each belief category might vary and carries different weights of influence toward the intent to perform a behavior (Fishbein & Ajzen, 2009). It is conceivable an individual might perform a behavior even though their attitudinal belief is not as strong in one category as long as their attitudinal belief in another category has greater influence on their intention to perform the behavior. This concept of one category carrying more weight of influence than another could be explained using the example of a nurse educator deciding to

grant a request for an academic accommodation to a nursing student with a disability. Although the educator might have a negative attitude about the processes and resources needed to provide the accommodation, the educator might perceive strong social pressures from peers or university administrators to provide the accommodation.

While the theory of planned behavior's framework includes behavioral, normative, and control beliefs as major antecedent categories influencing an individual's intention to perform a behavior, it does not describe the origins of these beliefs. The theory of planned behavior offers flexibility in identifying specific background factors and their ability to influence an individual's beliefs without requiring or stipulating the variable as part of the framework (Ajzen, 2011). For instance, experience teaching nursing students with disabilities could be considered a background factor that might positively or negatively influence a nurse educator's attitude toward future encounters with students having a disability. The theory of planned behavior's framework illustrates relationships among factors that influence a person's intentions toward performing a particular behavior. Examining behaviors using this level of analysis explains why some people with similar beliefs behave differently since the combined influences of attitudes, social pressures, and perceived control could be different for each individual (Fishbein & Ajzen, 2009).

Behavioral Beliefs Toward Accommodations

Attitudes, according to the theory of planned behavior, are evaluated in terms of the degree a person favors or opposes an action or object (Fishbein & Ajzen, 2009). Few studies specifically examined nurse educators' attitudes toward the process of providing accommodations for students with disabilities (Horkey, 2019; King, 2018; Yarbrough & Welch, 2021). Other studies were less prescribed in their definitions and broadly investigated nurse

educators' experiences teaching students with disabilities including faculty comments about their experiences providing accommodations (Ashcroft & Lutfiyya, 2013; Evans, 2014b; Moraña & Orozco, 2020; Storrie et al., 2012). When accommodations were discussed, most studies distinguished between faculty perceptions providing classroom adjustments and the experiences of accommodating nursing students in the clinical setting.

Didactic Accommodations

Using grounded theory methodology, Yarbrough and Welch (2021) investigated nurse educators' perceptions of the accommodation process in the classroom setting for students with learning disabilities. The 26 nurse educators participating in this study had experience with academic accommodations for prelicensure nursing students and unanimously believed that providing accommodations to students with disabilities was an integral part of their role as nurse educators. Despite their strong conviction and support for student accommodations, these educators expressed negative attitudes toward the coordination and management activities required when accommodating nursing students, a sentiment shared by nursing faculty in a similar study (Ashcroft & Lutfiyya, 2013). Accommodations in classroom settings could include the use of assistive communication devices, a note taker, tutor, or access to faculty notes (Betz et al., 2012; Weis et al., 2016). The accommodation most frequently requested and granted for college students in the didactic setting was testing modifications, specifically extended time for exams (Abreu et al., 2016; Betz et al., 2012; Weis et al., 2016).

Nursing faculty expressed confusion about whose responsibility it was to coordinate and communicate exam modifications. Some identified the student as responsible for scheduling the exam in a testing center, while others believed it was a shared responsibility between the faculty member and disability resource staff. Narratives from faculty included examples of nurse

educators altering their personal schedules to ensure that students received extended time on exams with one educator solving the dilemma by arriving early in the morning and administering tests before the scheduled class time (Yarbrough & Welch, 2021). The lack of an organized and clearly defined process to accommodate students with disabilities was a recurring theme reported by educators (Ashcroft & Lutfiyya, 2013; Evans, 2014b; Horkey, 2019; May, 2014).

Even the purpose of accommodations was confusing for those recommending or granting accommodations for students with disabilities. In a study published more than a decade after the passage of 1990 ADA legislation, the authors reported that misunderstanding persisted regarding the basic intent of disability law (Gordon et al., 2002). For Gordon et al.'s (2002) study, clinicians who conducted psychoeducational assessments for students seeking accommodations were surveyed regarding their understanding of the 1990 ADA law. Although the purpose of academic accommodations is to eliminate discrimination by providing students an opportunity to participate in the educational process (Laird-Metke et al., 2016), nearly one third of the survey respondents believed the intent of accommodations was to guarantee the academic success of students with disabilities (Gordon et al., 2002). Federal law mandated institutions of higher education make accommodations to ensure that students with disabilities had an equal opportunity to demonstrate their ability to meet the educational program's academic requirements.

Equity Beliefs and Didactic Settings

Accommodations allowing students extended exam time were frequently requested and approved based on the assumption that students with learning disabilities or anxiety issues required additional time to demonstrate their knowledge. Miller et al. (2015) questioned the validity of this assumption. Their study compared performance on reading comprehension exams

by students with attention deficit hyperactivity disorder (ADHD) and students without disability. Of interest in this study was the finding that students diagnosed with ADHD answered the same number of questions and performed with similar rates of academic improvement as students without disability when tested using a standard time limit, time and one-half, and double time limits. The authors concluded that students with ADHD might receive an unfair advantage if given the accommodation of extended time to take exams, an inference supported by other studies (Holmes & Silvestri, 2019; Lewandowski et al., 2013).

Although some studies questioned the validity of extended exam time for students diagnosed with ADHD, students with other disabilities might need additional time. Nelson et al. (2019) examined reading rates among four groups of students: (a) dyslexia, (b) ADHD, (c) other disabilities such as anxiety disorders, and (d) no disability. Of these student groups, the reading rates among students diagnosed with dyslexia were significantly slower than students in other groups. This included students diagnosed with ADHD who had reading rates comparable to students with no disabilities. Findings from these studies demonstrated reading rates and comprehension levels varied for students depending on their specific type of disability. The results of the study by Nelson et al. highlighted the need for disability-specific, evidence-informed accommodations. If extended exam time created an advantage rather than equity for students with disabilities, this finding might engender faculty distrust regarding the integrity of the accommodations process in didactic settings.

Clinical Accommodations

Ashcroft and Lutfiyya (2013) conducted research investigating faculty attitudes toward teaching students in both the didactic and clinical settings. While faculty recalled positive experiences teaching students in the classroom, they described their experiences as difficult or

challenging when they taught students with disabilities in clinical settings. A real-world, patient care environment increased the complexity of the accommodation process. This severely limited the ability for nurse educators to meet student learning needs in clinical compared to didactic settings (Phillion et al., 2021).

When students attend clinical in an acute care facility, they face the challenge of learning to apply new knowledge and skills in an unfamiliar environment. Added to this challenge are pressures of time constraints and the potential for adverse changes in a patient's clinical status. Time management was often cited as an important factor in patient care by educators working in clinical environments. In a qualitative study involving 14 clinical instructors and 14 nursing students with disabilities, Epstein et al. (2020) reported that half of the nurse educators believed extended time for students with disabilities was an unreasonable accommodation in clinical settings. A delay in time-dependent patient care activities potentially affects the patient's well-being and is viewed as incompatible with nursing care expectations.

Another concern voiced by educators was the opinion that too many accommodations could create barriers to student success by creating a dependency on support that might not be available or acceptable in the work environment after graduation (Collins et al., 2019). In other studies, nurse educators expressed similar beliefs of ableism where they predicted that students with disabilities lacked the skills and abilities necessary to successfully practice nursing in acute care environments (Epstein et al., 2020; Evans, 2014b). Negative attitudes about accommodations could impact their implementation in clinical settings.

Epstein et al. (2020) reported discussions among educators regarding requests for accommodations involving technology. Most faculty viewed technology aids as a teaching tool rather than an appropriate accommodation in clinical environments. While faculty in the study

stated they provided the accommodations requested, some educators instructed students to access accommodations involving technology in a private setting. This allowed the nurse educator to comply with the student's request for an accommodation without challenging the expectations staff nurses held about nursing students' use of technology as a resource in patient care settings (Epstein et al., 2020).

Academic nurse educators, known as nurse lecturers in the United Kingdom, described concerns regarding students with dyslexia requiring accommodations during clinical placements (Evans, 2014b). When discussing the interactions between the preceptor and student with dyslexia, the educators explained the first priority of nurses in clinical practice was the patient; ensuring that accommodations were provided to a student with a disability was of secondary importance. Extra time and support for students with disabilities were viewed negatively as they detracted from the preceptor's patient care responsibilities (Evans, 2014b). Acute care staff nurses with preceptor experience and clinical educators in other studies voiced similar concerns, expressing a lack of time to implement student accommodations (Calloway & Copeland, 2021; Epstein et al., 2020).

Safety in the Clinical Environment

Patient safety and the safety of nursing students with a disability during clinical rotations are concerns for nurse educators. Accommodations sufficient to meet the needs of the student and ensure the safe provision of patient care are essential. Students might not understand the potential consequences of a patient receiving nursing care from a student who has inadequate or no accommodations for their disability. In a phenomenological study examining the clinical experiences of 13 baccalaureate nursing students with self-declared disabilities, Luckowski (2016) reported that student participants were egocentric in their perceptions of clinical

experiences. For example, students discussed the type of nursing specialty most compatible for accommodating their disability and mentioned patient interactions where the student related to a patient based on shared disability experiences. The author, however, noted a disturbing lack of student concern about the safety and well-being of patients as these students reflected on their clinical experiences.

The observation by Luckowski (2016) was in contrast to findings by Ridley (2011) who investigated the clinical experiences of students with dyslexia. Students in Ridley's study stated they recognized the potential for patient care errors due to their disability and acknowledged their responsibility to provide safe care. They cited examples of their actions to reduce the risk for patient care errors by checking twice before giving a medication or by asking a nurse to verify their actions to ensure no mistakes were made (Ridley, 2011). Luckowski and Ridley were not the only nurse researchers to raise the issue of safety regarding students with disabilities in clinical settings. Concerns about patient safety and the ability of students with disabilities to meet student learning outcomes in acute patient care environments were long-standing and recurring themes (Ashcroft & Lutfiyya, 2013; Calloway & Copeland, 2021; Elting et al., 2020; Epstein et al., 2020; Evans, 2014b; Ikematsu et al., 2014; King, 2018; Phillion et al., 2021; Sowers & Smith, 2002). While many studies discuss examples of patient safety, only one study includes concerns expressed by a nurse preceptor for the safety of both the patient and the nursing student caregiver (Calloway & Copeland, 2021).

Errors with the potential to cause patient harm were of particular concern among nurse educators. One educator described an extreme example of a hypothetical situation where a student caused the death of a patient due to their disability (Ashcroft & Lutfiyya, 2013). Studies often included statements from nurse educators who questioned whether a student with a

disability could effectively respond in a patient emergency (Ashcroft & Lutfiyya, 2013; Calloway & Copeland, 2021; Epstein et al., 2020; Evans, 2014b; Ikematsu et al., 2014). Among the studies reviewed, concerns for patient safety expressed by study participants were conjecture and not based on documented accounts of patient injuries or near miss situations. Regardless of whether the nurse educator's concern for patient safety was based on an actual event or a fictitious scenario, faculty beliefs about a student's safe performance in a clinical setting might affect their decisions and actions related to requested accommodations.

Equity Beliefs and Clinical Settings

Ideally, all nursing students should receive the same amount of time and attention from their clinical instructors. This, however, was not always feasible. Conflicting views from clinical educators, preceptors, current students, and former nursing students with disabilities were reported in the literature in relation to the amount of time and the degree of supervision some nursing students with disabilities needed in clinical settings to meet student learning outcomes.

Time With Clinical Educators

Clinical educators and preceptors have limited time and resources to mentor students with complex learning needs. Nurse educators reported that some students with disabilities required more faculty time in patient care settings when compared to the time faculty spent with students having no disability (Ashcroft & Lutfiyya, 2013; Evans, 2014b; Tee et al., 2010). One clinical educator described an instance of a student with a disability taking an hour to give a medication (Ashcroft & Lutfiyya, 2013). Additional time faculty spent in clinical settings instructing nursing students with disabilities resulted in less time available to train other students (Ashcroft & Lutfiyya, 2013; Storrie et al., 2012). To compensate for the extra time preceptors perceived they needed teaching students with disabilities, they reported limiting the student's patient

assignments or patient care activities. (Calloway & Copeland, 2021; Epstein et al., 2020). These actions contributed to the learning inequities students with disabilities faced in acute care settings.

Student Supervision and Evaluation

Previously reported studies described the view that inequities were created among nursing students in clinical groups when faculty and preceptors spent more time with some nursing students with disabilities. Other studies reported this view represented biased and inequitable treatment toward nursing students with disabilities in the clinical environment. Reflecting on their experiences in nursing school, registered nurses with disabilities expressed the perception that students with disabilities worked harder than their nursing student peers to gain the acceptance of others and demonstrated their competence in performing nursing skills (Neal-Boylan & Miller, 2017). This observation was supported by clinical instructors and students who agreed that nursing students with disabilities were disproportionately supervised compared to other nursing students (Epstein et al., 2020; Evans, 2014b; Ridley, 2011).

Nursing students with disabilities described discriminatory treatment and challenged beliefs that they required additional time in clinical settings to safely care for patients and meet student learning outcomes. They asserted that students with disabilities must demonstrate their ability to be successful in the nursing program before they received nurse educator support (Blue et al., 2017). This finding was consistent with comments from clinical educators about their experience teaching a student with an orthopedic disability. Initially, faculty were reluctant to work with the student; however, their support for the student's learning increased after witnessing the successful implementation of clinical accommodations (Horkey, 2019). Other students claimed they created their own accommodations and did not rely solely on nursing

faculty to meet their clinical accommodation needs (Blue et al., 2017; Child & Langford, 2011; Howlin et al., 2014; Maheady, 1999). Despite accommodations designed to remove barriers to student learning and create equity for nursing students with disabilities, disparities in clinical learning experiences persisted between nursing students with disabilities and their peers having no disabilities.

Life-Threatening Situations

Many nurse educators believed it was important to provide accommodations and additional support for students with disabilities to facilitate their success in the clinical environment. Not all educators, however, shared this opinion. Nursing educators who questioned the value and appropriateness of accommodations for students in patient care settings based their skepticism on the belief that students should possess the same ability to perform skills required of all nurses in clinical practice. One example of an essential skill cited by nurse educators and preceptors was the ability to effectively respond to life-threatening patient situations (Calloway & Copeland, 2021; Epstein et al., 2020). The skills required for the employment of nurses in acute care facilities, however, should not be conflated with the abilities necessary for students to demonstrate competency and the achievement of learning outcomes established by their nursing program (Ailey & Marks, 2017/2020; Neal-Boylan et al., 2021).

The development of high-fidelity manikins and simulation technology offer students with physical disabilities the opportunity to demonstrate their knowledge and competence to respond to life-threatening patient situations in an environment conducive to student learning. Simulation activities using low, medium, and high-fidelity manikins could be developed that enable students to meet their educational learning objectives without endangering patient safety (Azzopardi et al., 2014; Serrantino et al., 2016). Organizations offering certification in life-sustaining skills

recognized the importance of ensuring that healthcare personnel with disabilities could demonstrate their competence and ability to participate in emergency response situations.

Historically, certification in basic cardiopulmonary resuscitation (CPR) only recognized individuals who demonstrated both cognitive knowledge and acceptable performance of CPR psychomotor skills. Chest compressions are physically demanding. Ineffective performance of this skill was evident even among individuals without disabilities in actual resuscitation events (Sugerman et al., 2009). Emergency response with the initiation of life-saving measures in clinical settings is not a single-participant activity as it requires a team of trained healthcare personnel who collectively possess the knowledge and skills required to respond to patient emergencies.

In an effort to recognize cognitive competence distinct from skill performance, the American Heart Association (2020), in conjunction with the National Organization for Nurses with Disabilities, developed a CPR certification for individuals unable to meet American Heart Association standards in the performance of basic life support CPR skills. Basic life support certification is available for persons with physical disabilities who demonstrate cognitive knowledge and the ability to communicate and advise others in the performance of CPR (American Heart Association, 2020). This certification offers an alternative method to demonstrate emergency response competence and reflects one manner in which an individual with a physical disability might function during a patient emergency in the clinical milieu.

Conflicting beliefs and a lack of consensus exist among nurses in academia and clinical practice regarding effective pedagogies for nursing students with disabilities. These beliefs fundamentally influence the attitudes and actions of nursing faculty, preceptors, and staff nurses who train, supervise, and provide accommodations for nursing students with disabilities. The

theory of planned behavior explains that people have different behavioral beliefs because they have different backgrounds and origins for these beliefs. Examining factors that contribute to the development of these beliefs might provide insight regarding the reasons for the different responses among nurse educators about providing nursing student accommodations.

Background Factors

Zhang et al. (2010) investigated the provision of academic accommodations for students with disabilities. Participants included more than 200 faculty members from nine universities representing a broad range of academic disciplines including health care. Results of their study revealed that an educator's personal beliefs about teaching students with disabilities had the greatest influence upon the decision to grant the accommodation request. According to Ajzen (2011), background factors such as demographic characteristics, knowledge about a subject, and life experiences could influence the development of beliefs an individual has about a particular behavior. The theory of planned behavior stated that background factors were not directly related to the performance of a behavior; however, these factors might influence the intentions or attitudes about the behavior. Background factors become important when beliefs about a behavior vary among people. If there is evidence that demonstrates a background factor could influence attitudes about a particular action, then interventions could be implemented to support or discourage this behavior (Fishbein & Ajzen, 2009).

For nurse educators, multiple factors might contribute to the development of their attitudes and ultimately their actions regarding the provision of accommodations for nursing students with disabilities. Although no studies specifically investigated background factors related to nurse educators' attitudes about student accommodations, several research reports

discussed possible factors associated with faculty attitudes toward accommodating nursing students with disabilities.

Faculty Age

A student with a physical disability, specifically a disability that requires a wheelchair for mobility, is one of the most difficult scenarios for nurse educators to envision student success in nursing school. Elting et al. (2020) incorporated student learning outcome statements from the American Association of Colleges of Nursing's Essentials of Baccalaureate Education for Professional Nursing Practice (BSN Essentials) as a guide to investigate the perceptions of 111 faculty from nursing programs throughout the United States about achievement outcomes for nursing students with a physical disability. The authors identified the age of the nurse educator as a factor in whether faculty were likely to perceive a student using a wheelchair could meet the learning outcomes described in the psychomotor domain of the American Association of Colleges of Nursing's BSN Essentials. Most faculty believed the student could successfully meet learning outcomes in the cognitive and affective domains. Younger members of the faculty, however, were more likely to believe the student could meet student learning outcomes involving patient care in the psychomotor domain compared to older faculty.

Prior Experience

Among higher education faculty, some studies reported that educators with current or prior experience teaching students with disabilities had more favorable attitudes toward inclusive teaching practices than those reporting no experience teaching this population of students (Ashcroft & Lutfiyya, 2013; Emmers et al., 2020). Additionally, educators who had a family member or friend with a disability tended to view students with disabilities more positively than those without prior experience of knowing persons with disabilities (Freer & Kaefer, 2021).

Prior experience teaching and providing accommodations to students with disabilities did not guarantee a positive faculty experience. Jain et al. (2016) acknowledged it could be difficult to change attitudes among faculty with negative prior experiences teaching students with disabilities. This observation was supported by results from a study that surveyed faculty reports from 52 prelicensure registered nursing schools in California (Persaud & Leedom, 2002). While 77% of survey respondents expressed successful accommodation experiences, 15% of the nursing programs had an accommodation experience with less than optimal outcomes. Based on their negative accommodation experience, the respondents indicated they would not provide the same accommodation in the future if given the choice (Persaud & Leedom, 2002).

Beliefs About the Nursing Profession

The discipline of nursing is viewed as having both a practice component and a theoretical base. The evolution of nursing education during the 19th and 20th centuries included a shift from emphasizing skills acquisition to incorporating clinical and theoretical knowledge using conceptual models, theories, and research to inform nursing practice (Meleis, 2012). Public perceptions and views among some nurses continued to describe the practice of nursing based on an emphasis of what nurses did rather than what they knew (Cingel & Brouwer, 2021).

Today, the education and training of nursing students includes cognitive, affective, and psychomotor domains of learning. The AACN's (2021) framework for educating nursing students described the core competencies within each domain that reflected the knowledge and skills essential to professional nursing practice. The core competencies did not specifically describe the types of skills and abilities required of entry-level nurses. Instead, educational frameworks were broadly described and allowed individual nursing programs to establish admission criteria, course objectives, and specific student learning outcomes. The ontological

beliefs about professional nursing practice held by nursing faculty could influence what is taught and expected of students within a nursing program. These beliefs might impact their attitudes and behaviors toward providing accommodations to nursing students with disabilities.

For instance, some faculty perceived it was futile to spend the time and work required to provide accommodations to students having certain disabilities due to a belief the student would not successfully pass the course or be able to find a job upon graduation (Evans, 2014b; Langørgen et al., 2020). In one study, faculty questioned the profession of nursing as an appropriate career choice for students with disabilities that affected interpersonal skills (Ikematsu et al., 2014). Ikematsu et al. (2014) conducted a survey of nursing programs in Japan to determine the prevalence of nursing students with special education needs involving difficulties with communication, social interactions, or attentiveness. Of particular concern to investigators was students with a diagnosis of high-functioning autism spectrum disorder who might have difficulty recognizing non-verbal communication and accurately interpreting this information in a clinical setting. The authors raised the philosophical question regarding the requirements to practice in the nursing profession when nursing is defined as *caring*. The authors contended the act of providing nursing care requires individuals to possess the ability to identify and interpret non-verbal cues, establish rapport with patients, and demonstrate empathy. They questioned whether an individual whose disability limited the acquisition of these skills, despite extensive education and training, could practice the art of nursing (Ikematsu et al., 2014).

Biased beliefs in the form of abelistic attitudes are not limited to one particular type of disability. While some studies cited nurse educators who expressed concerns about the suitability of a career in nursing for students having a disability such as severe dyslexia (Evans, 2014b), others described their concerns for students with physical impairments (Elting et al., 2020;

Horkey, 2019). Deficit language consistent with the medical model, rather than the social model, was found in the results of studies where faculty described their experiences teaching students with a disability (Calloway & Copeland, 2021; Epstein et al., 2020; Evans, 2014b). By focusing on a student's limitations, faculty might view the student's disability as the reason for any academic difficulty they encountered. This deficit thinking "identifies students as being *at risk* than *at potential*" (Read et al., 2013, p. 186). Faculty age, prior experience teaching students with disabilities, and philosophical beliefs about the ontology of nursing practice among nurse educators, preceptors, and staff nurses might impact the provision of accommodations and degree of support received by students with disabilities.

Summary of Behavioral Beliefs Toward Accommodations

According to the theory of planned behavior, an individual's values and beliefs are antecedent factors that influence a person's attitudes and behaviors. Nurse educators value equity in terms of student learning opportunities, time spent with faculty, and criteria used to evaluate student performance. These values apply when teaching all students including nursing students with disabilities. Research described differences in student learning experiences, inequities in faculty time and supervision of students, and accommodation concerns regarding unfair advantages for some students with disabilities compared to students without a disability.

Additionally, nurse educators believed all nursing students should provide safe and effective patient care including care without errors, timeliness when providing patient care, a prioritization of the needs of the patient before student learning needs, and the ability of nurses and nursing students to recognize and respond to a patient care emergency. This expectation applied to students with and without a disability; however, some studies reported biased, hypothetical concerns by faculty about the ability of nursing students with disabilities to provide

safe and effective patient care. Although actual events of safety issues were seldom described, safety concerns continued to be reported. Recent advancements in the use of simulation and new forms of certifications for emergency response activities were documented; however, no studies evaluated their use as an accommodation that used alternative pedagogies in nursing education.

Background factors that correlated with faculty attitudes and the provision of accommodations for students with disabilities included faculty age, prior experience teaching students with disabilities, and nurse educators' philosophical beliefs about the ontology of nursing practice. While not considered direct antecedents, they were thought to influence faculty attitudes and behaviors toward providing accommodations to nursing students with disabilities.

Normative Beliefs: Social Pressures

The theory of planned behavior (Fishbein & Ajzen, 2009) stated perceived social pressures, whether positive or negative, could influence the attitudes and actions of individuals. These pressures are perceived by the individual and reflect the action or inaction a person believes is expected of them by individuals or groups of importance. Moreover, it includes the behaviors an individual perceives others perform or refrain from performing in similar situations (Fishbein & Ajzen, 2009). Although no studies addressed perceived social pressures to provide or deny academic accommodations, students' expectations of faculty, the culture within academe, and legal mandates might influence the normative beliefs of nursing faculty.

Student Expectations of Faculty

Narrative accounts of students with disabilities described their expectations of faculty. Students reported they wanted faculty to be fair, to understand their learning needs, and to refrain from expressing judgmental attitudes toward disability (Luckowski, 2016). A common theme expressed by students based on their prior experiences with nursing faculty was the desire to be

treated like any other student (Evans, 2014a; Neal-Boylan & Miller, 2017). Additionally, they wanted faculty to be knowledgeable about disabilities and provide individualized adjustments based on input from the student (Howlin et al., 2014).

Many accommodations involve technology. Research investigating the technology needs of undergraduate students identified several areas where faculty could improve their efforts to facilitate student learning. Based on an international survey of undergraduate students from 160 higher education institutions involving seven countries and 38 U.S. states, Gierdowski and Galanek (2020) investigated technology needs expressed by students with disabilities by using secondary data analysis. Open responses from students who identified as having a physical or learning disability that required accommodations or accessible technology resources were reviewed. Students were asked to identify what they felt was most important for faculty to provide to facilitate the student's academic success.

Findings revealed two main themes (Gierdowski & Galanek, 2020). The first theme involved requests for faculty to expand their use of online technologies by (a) posting all course materials including class notes and presentation slides, and (b) incorporating components of the learning management system more extensively in their courses. The second theme described the need to improve faculty pedagogies by (a) allowing student use of mobile devices during class, (b) providing more training for faculty and students in the use of technology for learning, (c) including more multimodal learning activities, and (d) using assistive technology such as text-to-speech and captioning software to accommodate neurodivergent learners (Gierdowski & Galanek, 2020). The expectations expressed by students in this study were consistent with the principles of universal design for learning that seeks to provide all students equal opportunities for academic success.

Peer and Organizational Influences

The attitudes and expectations of others could influence an individual's intentions to perform a behavior (Fishbein & Ajzen, 2009). McHugh (2020) conducted research to determine which aspects of an organization had the greatest influence on a worker's perceptions and behaviors in the workplace. The researcher examined the influences of the organization's leadership, culture, and climate in relation to healthy workplace practices. In this study, culture was described as the organizational values widely shared by employees and workplace climate related to the interactions and relationships among coworkers. Data from McHugh's research indicated that coworkers had greater influence over a worker's perceptions and behaviors in the workplace than organizational philosophies or influences from the leaders of the institution.

This finding explained one nurse educator's actions described while implementing an accommodation request to allow a student with a disability to use assistive technology in the clinical environment (Epstein et al., 2020). The nurse educator instructed the student to use assistive technology but only in private areas where the nursing staff could not observe the student's use of the technology. Although the nurse educator stated the accommodation request was appropriate, the educator acquiesced to the perceived social norms of the nursing staff (Epstein et al., 2020).

Legal Mandates

A gap existed regarding research studies that specifically investigated the nurse educator's perceptions of social pressures that influenced their decision to provide or deny didactic and/or clinical accommodations. The language used by educators and researchers as they discussed the accommodation process revealed insights about their normative beliefs. For some faculty, the legal requirement to provide accommodations to students with disabilities

might be the salient factor that determines whether to provide an accommodation. For example, one nurse educator summarized the attitudes about accommodations by participants in a study: “We do it because we have to and because it is the law...because it is fair” (Yarbrough & Welch, 2021, p. 9). The possibility of experiencing legal repercussions for failure to grant an accommodation request was a concern for some nurse educators and might have been their primary motivation for approving student requests for accommodations.

Another example of language within a research report that might reveal perceived norms was described in a study investigating the experiences of nurse educators who taught students with disabilities enrolled in nursing programs in Spain. When discussing legal mandates regarding academic accommodations, Moriña and Orozco (2020) explained that “universities *must* [emphasis added] provide support” and “the reasonable adjustments *demand*ed [emphasis added] by the institution” (pp. 2, 4). The choice of the words *must* and *demand*ed conveyed the perception that the accommodation process was a non-negotiable requirement for faculty. Although accommodations were mandated, this did not mean nurse educators were opposed to the legal requirement of accommodations. A legal mandate to perform a particular behavior might not be the primary reason an educator grants an accommodation request.

If an educator has strong beliefs about the value of individuals with disabilities choosing nursing as a profession, the educator might willingly provide an accommodation and would be less likely to cite the legal mandate as the motivation for their actions. Positive accounts of accommodating students with disabilities by 19 nurse educators interviewed in the study by Moriña and Orozco (2020) were described in the research report. Faculty interview data were summarized by the study’s authors who stated, “These adjustments were defined as actions that did not require an excessive effort and which should form part of the work of any faculty

member committed to ensuring the learning and full participation of all students” (Moriña & Orozco, 2020, p. 4). This example demonstrated that norms such as legal requirements to accommodate students with disabilities did not imply that faculty were opposed to the concept of the mandate.

Conversely, if social pressure to conform to the legal mandate was great, the nurse educator might grant an accommodation despite believing the accommodation was inappropriate or lacked feasibility. Accommodations mandated despite faculty objections might be the reason nursing students perceived negative attitudes from nurse educators. Equally important are the factors that influence a nurse educator’s decision to deny an accommodation request. Unfortunately, no studies were found that specifically investigated this phenomenon.

Student Failures

Students Without Disabilities

A student’s failure in the clinical setting is uncommon and a difficult process for the nurse educator evaluating the student’s performance (Hunt, 2019; Sukhai & Mohler, 2017). The responsibility to assess and evaluate student performance in didactic, lab, and clinical settings is one of the most important core competencies required of academic nurse educators (Spurlock & Mariani, 2019). The roles of assessor and evaluator, however, are in stark contrast to the mentoring and nurturing roles students expect from their clinical faculty (Hunt, 2019). The desire to mentor and nurture students while simultaneously remaining committed to maintaining high academic standards creates a conflict of values when nurse educators encounter an underperforming student in the clinical setting (Docherty, 2018; Hunt, 2019; Pratt, 2020).

When a student does not meet the required clinical objectives, some nurse educators tenaciously hold to their professional commitment and assess a failing grade (Nugent et al.,

2020) while other educators pass the student because of a fear of being labeled as a ‘bad educator’ or a belief the university would not support the clinical educator's decision if challenged by the student (Docherty, 2018; Hughes et al., 2021; Hunt et al., 2016a; Storrie et al., 2012). Most research studies investigating the *failure to fail* phenomena agreed that failing a student was an emotionally taxing prospect with no guarantee that faculty decisions would be supported by the university if the student challenged the assessment (Couper, 2018; Docherty, 2018; Hughes et al., 2021; Hunt, 2019; Hunt et al., 2016a; Pratt, 2020; Storrie et al., 2012). This highlighted the importance of receiving support from didactic faculty and university administrators to uphold the professional judgements made by clinical faculty (Hunt et al., 2016a).

Hunt (2019) investigated the attributes needed of preceptors and clinical staff who were charged with the responsibility to supervise and evaluate nursing students in clinical settings. Study participants described conflicting emotions and said they felt pressure from the student and sometimes from university staff to pass the student. Ultimately, the nurses viewed themselves as gatekeepers who were responsible for upholding professional standards despite accusations of discrimination from students or intimidation from academic nurse educators.

Other research findings reported that preceptors often relied on a support network to provide counsel and helped them cope with the stress associated with assessing a failing grade for a student's clinical performance (Hunt et al., 2016a). Academic nurse educators employed by the university were identified by preceptors as essential in this process since they provided the encouragement and emotional support needed for the clinical nurse to follow through with the decision to fail the student. Unfortunately, university faculty were not always an available resource for the clinical-based preceptor. When the preceptor experienced difficulty making

decisions about the assessment of a student nurse's performance in the clinical setting, the preceptor sought support from fellow nursing staff on the clinical nursing unit (Hunt et al., 2016a). If stress and anxiety accompanied the process of failing a nursing student who did not have a disability, it was understandable that the prospect of evaluating and potentially failing a student with a disability instilled more trepidation, especially if the nurse educator was uncertain of the legal implications of failing a student receiving accommodations in the clinical setting (Hunt et al., 2016a).

Nursing Students With Disabilities

Nurse educators, preceptors, and nursing staff who worked with nursing students expressed reluctance to fail a student in the clinical setting, especially a student with a disability (Hunt et al., 2016b; Neal-Boylan et al., 2021). There was confusion regarding the impact a student's disability had on the evaluation process (Hunt et al., 2016b) and whether traditional academic standards apply to students with disabilities (Neal-Boylan et al., 2021). The prospect of failing a student with a disability added complexity to the evaluation process for educators who must determine if the student's failure to meet clinical requirements was disability-related or due to a knowledge or skill deficit (Meeks et al., 2020). This was an important distinction because a student failure due to knowledge and/or skill deficits would lead to academic remediation while disability-related failures required re-evaluation of the accommodation to determine if revisions or augmentations to the accommodation were warranted (Patwari et al., 2021).

Neal-Boylan et al. (2021) discussed this dilemma and offered guidance for clinical faculty. They believed the decision to fail a student with a disability in the clinical setting should be no more difficult than it was to decide to fail a student without a disability. Accommodations are intended to overcome the barriers that might be present due to a disability but they should not

be viewed as a reason to lower performance standards. The ability to safely perform nursing skills is required of all nursing students; therefore, students with disabilities should be evaluated using the same student learning outcomes as students without disabilities (Neal-Boylan et al., 2021). Unfortunately, there were no empirical data to report whether this guidance helped faculty evaluate the performance of nursing students who received clinical accommodations.

Summary of Normative Beliefs

The theory of planned behavior describes normative beliefs as a person's perception that a particular behavior is expected or required. Normative beliefs can be difficult to discern when investigating the factors that influence a nurse educator's decision whether to grant an academic accommodation. The social pressures perceived by nurse educators to approve or deny student requests for accommodations could be inferred from the educator's narratives and the language used by researchers who interpret the data. Areas where faculty might perceive normative pressures described in research studies included the manner of support received by students, peer and administrative influences, and the nurse educator's professional ethos.

Additional pressures perceived by faculty arise from student expectations that faculty should be unbiased and supportive. Students believe faculty should treat all students equitably while also providing individualized accommodations and personal support to students with disabilities. In addition to student expectations, faculty comments alluded to social pressures from university administrators to implement requested academic accommodations. While some educators complied with mandates to avoid legal repercussions, other educators did not perceive pressure from legal mandates and willingly supported the accommodation process.

Of great concern to nurse educators is the conflict between providing accommodations to demonstrate inclusive educational practices toward students with disabilities and their

professional commitment to fairly evaluate and assess a failing grade when a student with a disability does not meet course or clinical objectives. Gaps were noted in the body of research regarding normative pressures faculty encountered with the accommodation and evaluation processes for nursing students with disabilities.

Control Beliefs: Capacity and Autonomy

As previously described, the theory of planned behavior included the components of behavioral, normative, and control beliefs that individually or collectively influenced a person's intention to perform an action. Faculty might hold behavioral or attitudinal beliefs that supported the provision of accommodations and might receive social support to grant the request. If, however, the educator lacked control through self-efficacy and/or the availability of resources to adjust pedagogies and facilitate the student's learning process, the accommodation might be ineffective or not provided in a timely manner.

Perceived behavioral control, the third component of the theory of planned behavior, was described by Fishbein and Ajzen (2009) as

the extent to which people believe that they are capable of performing a given behavior, that they have control over its performance. Perceived behavioral control is assumed to take into account the availability of information, skills, opportunities, and other resources required to perform the behavior as well as possible barriers or obstacles that may have to be overcome. (pp. 154-155)

Fishbein and Ajzen acknowledged the concept of perceived control was not unique to the theory of planned behavior and considered it synonymous with Bandura's concept of self-efficacy. Additionally, the theorists explained that determinants of perceived behavioral control were comprised of two sub-factors: capacity and autonomy.

Capacity

Capacity refers to an individual's perception of their ability to perform a particular behavior (Fishbein & Ajzen, 2009). An individual must believe they are capable of granting an accommodation request before the action is attempted. This confidence requires the knowledge and skills needed to enact the behavior and the person's positive assessment of their ability to overcome any barriers to accomplish the behavior (Fishbein & Ajzen, 2009). Although studies rarely investigated nurse educators' perceptions of their capacity to grant accommodation requests, there were qualitative studies that described faculty comments regarding aspects of this issue. Most comments described self-reports by faculty about their knowledge of certain disabilities, disability laws, procedures for accommodation within academe and healthcare agencies, alternative teaching methodologies, and evaluation procedures related to teaching nursing students with disabilities.

Faculty Self-Efficacy

Results from a collaborative action research study that identified challenges and potential solutions for accommodating and supporting nursing students with disabilities in the clinical environment revealed that clinical instructors did not always feel prepared to teach some nursing students with disabilities (Philion et al., 2021). The types of students identified in this study included students with learning disabilities, a mental health disorder, or an autism spectrum disorder. Fourteen participants in this study, which included clinical supervisors, clinical coordinators and researchers, described student difficulties and conflicts due to challenges involving their organization of clinical tasks, time management, priority setting, performance anxiety, and disability-specific issues. While these difficulties could occur with any student, participants believed the intensity and complexity of these problems increased for students with

disabilities (Phillion et al., 2021). Similar concerns were expressed in other studies where faculty reported uncertainty about interacting with students who had disabilities and felt unprepared to teach these students in clinical settings (Langørgen et al., 2020; Moraña & Orozco, 2020; Storrie et al., 2012; Suplee et al., 2014).

The training clinical faculty received to prepare them for teaching prelicensure nursing students in clinical settings was investigated by Suplee et al. (2014). In this study, researchers asked 74 educators representing diploma, associate degree, and bachelor's degree nursing programs in the northeastern United States to complete a survey about their preparation and self-efficacy to teach students in the clinical setting. When asked about their training, only 12% reported receiving instruction for working with students having physical disabilities while less than a quarter of the respondents received information about teaching students with learning disabilities. These statistics provided rationale for the study's findings about clinical challenges where faculty felt the least prepared. Of the 22 challenges listed, 42% of faculty reported a lack of self-efficacy working with nursing students having a learning disability, nearly 40% lacked self-efficacy teaching students with a physical disability, and 40% did not feel prepared to manage students with emotional disabilities. Furthermore, 17% of respondents reported a lack of confidence in their ability to implement accommodations approved by the school's disability office (Suplee et al., 2014).

Faculty Knowledge

Multiple researchers reported a knowledge deficit and the need for faculty training regarding disability law and legal mandates to provide academic accommodations for students with disabilities (King, 2018; Lombardi & Lalor, 2017; May, 2014; Yarbrough & Welch, 2021). One study surveyed faculty from baccalaureate nursing programs in Pennsylvania to assess their

knowledge of the ADA and accommodation process (May, 2014). Although 90% of respondents reported working with nursing students with disabilities in the past three years, less than half were knowledgeable regarding liability issues. Based on the survey results, May (2014) concluded that nurse educators lacked basic knowledge regarding faculty responsibilities and liabilities associated with granting and implementing academic accommodations to nursing students with disabilities. Litigation initiated by the U. S. Office of Civil Rights against universities that failed to provide timely and effective accommodations for students with disabilities reinforced the importance of faculty understanding the legal mandates associated with the provision of academic accommodations for students with disabilities (Carey et al., 2014; Laird-Metke et al., 2016).

The current process for initiating academic accommodations in many institutions of higher education in the United States consists of an individualized approach that requires students to request accommodations through the campus disability services office. After the student provides third-party documentation of their disability and discusses the impact of their disability on learning, staff from the disability services office are responsible for reviewing the information and making a recommendation for academic accommodations. This recommendation is documented in the form of a letter the student shares with faculty to notify them of their request for accommodation in compliance with disability law (Cory, 2011). Until faculty receive notification from the student of their request, nurse educators might be unaware of the need to make academic adjustments.

Reports from research studies investigating the topic of accommodations concurred that educators had a responsibility to comply with legal mandates to provide academic accommodations for students with disabilities (Azzopardi et al., 2014; Horkey, 2019; Zhang et

al., 2010). Sufficient time to comply with a student's accommodation request, however, was a problem described by nurse educators (Ashcroft & Lutfiyya, 2013; Yarbrough & Welch, 2021). An added concern of educators was a trend in recent years toward an increase in the number of student requests for academic accommodations. This increase in individualized accommodation requests hindered the implementation of a timely response to provide the requested adjustment (Yarbrough & Welch, 2021). Andrew Lessman, an attorney employed by Temple University's Office of Digital Education whose responsibilities included ensuring the university's compliance with disability law, believed legislative mandates were never designed to expect that academic accommodations would be frequently required (Tobin & Behling, 2018).

Lessman contended that student-specific accommodations should occur only in extraordinary circumstances (Tobin & Behling, 2018). Instead of individually accommodating the needs of each student's request, faculty should design learning activities and environments that are accessible and meet the needs of a broad population of students. The mindset of waiting until a student requests an accommodation is outdated and places institutions of higher education legally liable for violating the intent of the ADA (Tobin & Behling, 2018). Collins et al. (2019) agreed with Lessman's premise that colleges and universities should move from the practice of granting individualized accommodations. Instead, they should advocate for the creation of an inclusive learning environment by designing universal learning materials accessible to all students.

Capacity to Modify Pedagogies

Nurse educators, who were perceived by others to be supportive of students with disabilities, viewed student requests for accommodations as opportunities to rethink pedagogical methods and make changes in learning experiences that promote inclusion and diversity in

nursing education. From their perspective, the process of adapting teaching methods to support nursing students with disabilities made them a better educator (Moriña & Orozco, 2020). Accommodations that supported inclusive learning for students with disabilities could be beneficial to all students including those without disabilities. The practice of designing educational materials and creating inclusive learning environments for the greatest number of students describes the concept of universal design for learning (Tobin & Behling, 2018). The decision to alter one's teaching practices to be more inclusive of students with disabilities requires that educators believe they have the capacity, in the form of knowledge, skills, and support, to implement pedagogical changes.

Educator self-efficacy to enact change was demonstrated in research by Levey (2016) and Lombardi and Murray (2011). Their studies reported a correlation between faculty willingness to incorporate inclusive pedagogies in their teaching and the factors of (a) knowledge about universal design principles and (b) the presence of campus resources to support changes involving universal design. Not all faculty altered their teaching methods to adopt inclusive teaching strategies despite having the knowledge and resources needed for the pedagogical change. According to the theory of planned behavior, an individual must be capable and willing to implement the behavior before it is accomplished (Fishbein & Ajzen, 2009). Of interest in the reports of these research studies were the findings that non-tenured faculty (Lombardi & Murray, 2011) and faculty with fewer years of teaching experience (Levey, 2016) were more willing to adopt universal design methodology than were faculty with more experience and seniority. The prospect that faculty were capable but not willing to adjust teaching methods implied other factors influenced their decision to grant or deny accommodation requests.

According to Bandura (1997), self-efficacy is influenced by motivational factors. An individual highly motivated toward a desired outcome might act, despite obstacles, while a person who is neutral or averse to the outcome might not attempt the action despite their perceived control in the situation. One example of a factor that might influence faculty willingness to alter teaching practices is the degree of disclosure a student with a disability reveals to faculty when requesting an accommodation.

Using a hypothetical scenario, Wright and Meyer (2017) examined faculty responses to a student's request for accommodation. Two groups of university educators were compared to determine if the amount of information that students self-disclosed affected faculty beliefs about their ability to grant the accommodation. Prior to reading the scenario about the student's request, both educator groups were assessed and determined to be comparable in measures of empathy toward students with disabilities and flexibility for altering course policies and teaching practices. The low-disclosure group only received information about the specific accommodation requested, while the high-disclosure group received contextual information about the student's desire to do well in the class and how a recent health condition impacted the student's ability to attend class and complete assignments on time.

Study results revealed that faculty in the low-disclosure group had lower self-efficacy scores for meeting the accommodation compared to the high-disclosure group. This outcome led Wright and Meyer (2017) to conclude that better communication and understanding of the contextual factors associated with a student's accommodation request might influence faculty perceptions about their self-efficacy to grant an accommodation. While disability laws do not require that students disclose to faculty confidential information related to their accommodation request, this study emphasized the influence of contextual knowledge as a motivating factor for

faculty in relation to self-efficacy beliefs (Wright & Meyer, 2017). Research relevant to faculty perceptions of behavioral control regarding accommodations supported the theory of planned behavior (Fishbein & Ajzen, 2009) and Bandura's (1997) assertions that capacity to perform a behavior included the elements of knowledge, skills, resources, and motivation. While capacity is a critical antecedent to performing a behavior, an individual also must believe they have the authority to implement the action.

Autonomy

The second component of perceived control according to the theory of planned behavior is autonomy or how much of the decision to perform the behavior is under the volitional control of the individual (Fishbein & Ajzen, 2009). Degree of authority and the perception of barriers or obstacles impact perceived control and whether an accommodation request is granted. Obstacles frequently mentioned by faculty with regard to implementing an accommodation included a lack of time, resources, and support from within academe (Ashcroft & Lutfiyya, 2013; Horkey, 2019; Yarbrough & Welch, 2021). Additionally, nurse educator autonomy to implement a student's accommodation might be affected if the healthcare facility where clinical learning occurs rejects or hinders the implementation of the accommodation (Horkey, 2019).

Communication and Planning

Multiple studies discussed the need for better communication amongst students, disability services staff, and faculty to improve the learning experience for students with disabilities (Abreu et al., 2016; Horkey, 2019; Yarbrough & Welch, 2021). Based on interviews from students reflecting on their clinical experiences, researchers acknowledged the importance of advanced planning to facilitate learning and successful implementation of accommodations for students with disabilities (Hill & Roger, 2016; Luckowski, 2016). According to Luckowski

(2016), discussions among disability services staff, faculty, and the student should occur one year before the student is scheduled to begin their experiential learning in clinical settings. The researcher's rationale for such advance planning was to ensure the individual understood faculty expectations of students during nursing school. These expectations included (a) an understanding of required didactic and/or clinical activities, (b) a conversation about the impact of the student's disability in meeting student learning requirements, and (c) a discussion of what constituted reasonable accommodations in clinical and didactic settings (Luckowski, 2016).

Advance planning, however, required that nurse educators receive sufficient notice of the accommodation, which was problematic if students were reluctant to initiate a request for accommodations (Hill & Roger, 2016; Luckowski, 2016; Storrie et al., 2012). Nurse educators frequently described difficulties in communications with disability services personnel regarding timely notification of accommodation requests (Ashcroft & Lutfiyya, 2013; Epstein et al., 2020; King, 2018; Yarbrough & Welch, 2021). Often nurse educators reported they learned about a student's need for an accommodation after the student enrolled in their course or later in the semester when the student encountered difficulties meeting the course or clinical requirements (Epstein et al., 2020; Horkey, 2019; King, 2018; Yarbrough & Welch, 2021). Maintaining student confidentiality in compliance with legal mandates added to the difficulties nurse educators might encounter with student accommodation requests. Permission from the student was needed before faculty or higher education staff might discuss the student's disability with others including staff and representatives from the clinical facility (Langørgen et al., 2020). For students with complex learning needs, advance planning was essential for the successful implementation of clinical accommodations (Hill & Roger, 2016; Horkey, 2019; Luckowski, 2016).

Full-Time Faculty Workload Issues

Increased faculty workload is a concern in nursing academe and a cause for faculty attrition. Multiple studies cited nurse educators' reports of excessive workloads (Bittner & Bechtel, 2017; Kirkham, 2016; Owens, 2017; SmithBattle et al., 2021). The logistics of planning and implementing accommodations for students with disabilities requires time. Yarbrough and Welch (2021) reported faculty felt overwhelmed with the number of accommodation requests by students, especially in relation to exams and during finals week. The pressures of an increased workload in response to student accommodation activities were echoed by faculty who taught in clinical settings.

Horkey (2019) explained that multiple parties are involved in planning student accommodations in patient care settings and all participants have decision-making authority in this process. As a result, the steps required to plan and implement an accommodation become less linear and more of a matrix. The increased complexity associated with accommodations in clinical settings often requires someone to coordinate communications and actions among all participants. Frequently, this function is the responsibility of the course coordinator or full-time nurse educator and adds to their faculty workload.

SmithBattle et al. (2021) reported the method of calculating faculty workload hours is individualized based on institutional and/or departmental policies. The time faculty spend meeting with and advising students is rarely included as part of their assignment of faculty workload hours (SmithBattle et al., 2021). This was of particular importance since faculty reported some students with disabilities required additional faculty time for meetings related to accommodations and difficulties experienced during the semester (Ashcroft & Lutfiyya, 2013; Evans, 2014b; Horkey, 2019; King, 2018; Langørgen et al., 2020; Tee et al., 2010).

The extra time needed to educate some students with disabilities results in an increase in uncompensated faculty workload. In response to the time spent with these students, faculty stated they were instructed to adjust their schedules. Langørgen et al. (2020) reported faculty replied to this suggestion by explaining that schedule adjustments were not realistic as there was no free time in their workweek. For some, the prospect of educating a student who required additional faculty time and responsibility led to a hesitancy and reluctance among supervisors to accept students with disabilities for placement in clinical settings (Langørgen et al., 2020).

Clinical Faculty Workload Issues

Historically, clinical faculty have less experience teaching students compared to full-time nursing faculty. Although they are experienced clinicians, adjunct clinical faculty often are novice educators with limited knowledge of institutional practices in academe and frequently receive little to no formal orientation to their role as clinical educators (Sorrell & Cangelosi, 2016; Suplee et al., 2014). Depending on state regulations, the nursing program, and type of clinical rotation, the faculty-to-student ratio could vary from 1:6 to 1:15 (Sorrell & Cangelosi, 2016). Additionally, the time faculty teach in clinical settings receives less contact hour credit than teaching time in didactic settings (SmithBattle et al., 2021). Inexperience in teaching, a lack of familiarity with academic policies and practices, and increased workload contribute to the obstacles clinical educators must overcome when faced with the challenge of implementing accommodations for students with disabilities assigned to their clinical group.

A dearth of research investigated strategies to facilitate student learning and reduce the workload for clinical educators when assigned a student requiring accommodations in patient care settings. Tee et al. (2010) described a one-year pilot program in the United Kingdom using a student practice learning advisor to support students with complex learning needs during their

clinical placement. Students with disabilities requiring accommodations and other students in need of assistance were referred to the student practice learning advisor by nursing faculty. Nurse educators selected to serve in this role were responsible for meeting with the student and their clinical mentor. During these meetings, recommended accommodations made prior to clinical placement were evaluated by the learning advisor for their efficacy. Areas of concern were identified and action plans were created to assist the student in demonstrating practice competencies to meet required clinical learning outcomes. Additional support for the student and/or mentor was provided by the learning advisor as needed. Nurse educators and clinical mentors reported that support from the student practice learning advisor was essential for the effective implementation of student accommodations in the clinical environment (Tee et al., 2010). While the student practice learning advisor role relied on experienced nursing faculty to support the implementation of student accommodations, personnel from the office of disability services were typically mentioned as a resource for faculty regarding accommodation issues.

Campus Disability Services

Institutions of higher education are required to observe legal mandates for academic accommodations as specified in Section 504 of the ADA (1990). Providing accommodations required knowledge of the law, the accommodation process, and an understanding of the needs of students with various types of disabilities. While faculty are regarded as experts in their academic discipline, disability service staff are knowledgeable about accommodations and responsible for assisting faculty with disability-related issues. This process includes working in consultation with faculty to relieve some of the administrative responsibilities associated with establishing accommodations (Cory, 2011).

Some researchers reported that nursing faculty viewed campus disability services personnel as helpful and supportive of their efforts to accommodate nursing students (Moriña & Orozco, 2020). Other studies, however, described mixed findings regarding the degree of support nurse educators received from disability services personnel (Ashcroft & Lutfiyya, 2013; Horkey, 2019; Yarbrough & Welch, 2021). Feedback from students regarding their perception of the help they received from disability services personnel was similar to faculty reports with some students viewing campus disability services staff as a valuable resource (Neal-Boylan & Miller, 2017) while other students reported them to be less helpful (Ridley, 2011).

Establishing accommodations for students with disabilities in clinical settings requires an expertise that exceeds the general skills needed to arrange common accommodations requested in the classroom. To effectively support the accommodation process in experiential learning environments, knowledge and expertise providing accommodation support that is unique to a student's career field is necessary. In a study by Hill and Roger (2016), students expressed views that some clinical placement staff did not appear to understand their role in assisting nursing students with accommodations in clinical settings. This aligned with a U.S. study conducted by Aquino (2019) who investigated the knowledge and responsibilities of disability services staff regarding accommodation support for students in settings outside the traditional classroom.

Results from Aquino's (2019) research revealed that 79% of disability resource staff reported having a general awareness of guidelines for non-classroom accommodations; however, only 35% of survey respondents stated they received training in accommodation support specific to experiential learning environments. Nearly 60% of the respondents participating in this national survey indicated their office of disability services did not assist with arranging accommodations outside classroom settings. This left faculty and support staff within the

individual academic departments to navigate the process of arranging accommodations in experiential settings for students with disabilities (Aquino, 2019).

Policies, Procedures, and Resources

A lack of policies and procedures specific to the implementation of academic accommodations and the instructional management of students with disabilities in clinical settings undermined nurse educators' confidence that they were empowered to teach students in accordance with the standards established by the academic institution (Epstein et al., 2020). Without support from the university, nurse educators frequently reported frustration with the accommodation process. They cited unfamiliarity with or a lack of established policies and procedures as hindrances to their ability to plan and implement student accommodations in clinical and didactic settings (Ashcroft & Lutfiyya, 2013; Epstein et al., 2020; Horkey, 2019).

The need for university support in the form of established procedures, knowledgeable staff, and other resources to assist faculty becomes especially important when faculty feel inadequately prepared to manage the needs of students with specific disabilities. One example cited in two research studies reported faculty concerns regarding a lack of policies and procedures for teaching students with mental health issues (Langørgen et al., 2020; Storrie et al., 2012). Educators described uncertainty regarding actions to take in circumstances where student behaviors were concerning or inappropriate in classroom and clinical settings. Storrie et al. (2012) described faculty narratives of feeling unprepared or ill-equipped to respond to behaviors exhibited by students with emotional issues.

Faculty believed better direction and support from the university was needed (Storrie et al., 2012). The creation and/or standardization of procedures for managing students with emotional difficulties was a suggestion offered by faculty. In addition to improved policies and

procedures, Storrie et al. (2012) recommended that universities employ a specialist counselor. This person should be knowledgeable about the expectations of students in clinical settings and experienced in working with students with emotional difficulties. Improved guidance and support from the university was needed to increase the autonomy and teaching effectiveness of clinical and didactic educators responsible for educating students with disabilities (Storrie et al., 2012).

Summary of Control Beliefs

The theory of planned behavior (Fishbein & Ajzen, 2009) explained that control beliefs are comprised of two sub-factors: (a) the perception of one's capacity or self-efficacy and (b) one's assessment of their autonomy to act in a situation. Knowledge, skills, resources, and the willingness to act are factors that impact control beliefs. Issues reported by nurse educators that affected self-efficacy toward providing accommodations included a lack of knowledge of disabilities and disability law, and insufficient time to respond to requests for student-specific accommodations. Capacity also included a willingness to implement changes in teaching practices. An example of a motivational factor that might influence faculty decisions to grant an accommodation request involved the degree of a student's disclosure about their disability.

Another sub-factor of control beliefs was autonomy or the educator's perception of the degree of control they possessed to enact an accommodation request. Issues of significant concern often reported by educators were issues of time and faculty workload in relation to complex accommodation requests in the clinical setting. Faculty reported mixed views on the degree of help received from disability resources personnel and often received no assistance in clinical accommodation planning. Rarely, campus personnel were described in studies as providing support to clinical faculty and students through specialized training of disability

support services staff and a program trialing the use of a nurse educator as a clinical learning advisor. Nurse educators frequently cited a lack of support from within academe, noting an absence of clearly-defined institutional policies and procedures to guide faculty through the accommodation process. This led to their perceptions of feeling insufficiently empowered to arrange and implement accommodations, especially for students with mental health issues and for students with disabilities in clinical environments.

Complex Accommodation Requests

Research about nurse educators' experiences teaching nursing students with disabilities was replete with narratives describing difficulties faculty reported concerning the accommodation process. While issues involving commonly requested student accommodations might be readily resolved, some accommodation requests were complex, requiring significant planning, creative and innovative changes in pedagogies, and/or the acquisition of additional resources. Other requests for accommodations might exceed the abilities and resources of the nursing program and therefore these accommodation requests might be considered unreasonable. Few research studies were found that investigated these issues.

Requests for Service Animals

In the last decade, requests involving animals to accompany students on college campuses and in campus learning environments have significantly increased (Bauer-Wolf, 2019). Evaluating and implementing an accommodation request involving an assistance animal in the classroom, laboratory, or clinical environment could be complex. Factors to consider when determining the logistical implications of the request included the student's rights under federal and state law and the resources and procedures of the university and clinical facility (Shilling et al., 2020; Silbert-Flagg et al., 2020).

Animals could be invaluable to individuals with disabilities as they positively contribute to the person's health, well-being, and the performance of activities of daily living. While many animals are useful in these capacities, only a service animal as defined by the ADA of 1990 is protected and regulated by federal law (Shilling et al., 2020). Based on ADA legislation, the definition of a service animal is "a dog that is individually trained to do work or perform tasks for a person with a disability" (U.S. Department of Justice, 2011/2020, Overview). While this was the definition used regarding federal disability legislation, confusion could arise if state statutes used different language when describing the animals used to assist persons with disabilities.

According to the Animal Legal and Historical Center's (ALHC, 2019) database that compares service animal laws for each state in the United States, the state of Colorado uses the same language to describe the term *service animal* as the federal government's definition used in Title II and Title III of the ADA (1990). In other states, definitions might differ and create ambiguity for faculty seeking to comply with disability legislation. For example, Oklahoma statutes used the terms *service dog*, *signal dog*, and *service animal* with each definition describing how an animal is used based on a specific type of disability (ALHC, 2019). Some states offered no definition of a service animal, choosing to use other terms. In Connecticut, statutes used the terms *guide dogs or assistance dogs* but did not include service animal, the term used by the ADA (ALHC, 2019). This lack of consistency in definitions among state and federal laws is only one example of the complexity that faculty encounter while determining the feasibility of accommodating a request from a nursing student to bring their assistance animal to campus or clinical learning environments.

Once it can be determined the dog is indeed a service animal used by the student in compliance with state and federal disability laws, faculty must consider the logistical challenges of allowing the animal's presence in the classroom or clinical environment. For instance, the Centers for Disease Control and Prevention (CDC, 2019) stated that service animals could enter areas in a hospital accessible to the general public provided the areas did not require staff or visitors to wear gloves or other personal protective equipment. This guidance, however, was less clear in areas not accessible to the general public such as medication preparation areas or clean supply rooms. If hospital staff did not allow a nursing student to bring a service animal into a medication room or supply room, the clinical educator must consider where to leave the dog and determine who is responsible for the animal while the nursing student is in restricted areas. Reliance on hospital policies to offer logistical help was unlikely to be useful since hospital policies regarding the presence of animals focused on patient care and safety concerns (CDC, 2019) and not the clinical activities and learning needs of a student nurse.

While CDC (2019) guidelines stated that service animals could not be restricted from a healthcare facility for a hypothetical threat to patient or public safety, the handler was responsible to monitor and ensure the animal's behavior in patient care settings posed no additional risks to the health and safety of patients, visitors, and staff. This guidance from the CDC assists faculty in planning clinical accommodations; however, it places additional responsibilities on the nursing student and the student's clinical educator. When providing patient care, the student with a service animal is required to focus on their patient's needs as well as monitor the behavior of their service animal. Although experienced nurses might be able to safely divide their attention between the patient and a service animal, the student is learning nursing skills and not considered proficient in performing nursing care. Responsibilities of

clinical educators include direct patient care with students, student observation, and maintenance of patient safety (Hunt, 2018). To ensure the student provides safe and effective patient care, additional observation and support from the clinical educator or nursing staff might be needed until it could be established the student's performance in the clinical setting is not jeopardized by the presence of the service animal.

Some nursing programs reported positive and successful clinical experiences for students requesting the accommodation of a service animal in clinical settings. Narratives describing these events discussed the value of communication and coordination among those involved in the process including the student, nursing program faculty and administrators, and representatives from the clinical facility (Silbert-Flagg et al., 2020). Successful implementation of this accommodation required advance planning, a willingness to adapt teaching pedagogies within the patient care environment, and a commitment to facilitate clinical learning experiences for the student.

Denial of Accommodation Requests

Studies investigating the experiences of nursing students with disabilities contained reports by students where faculty failed to provide or denied their request for accommodation (Epstein et al., 2020; Howlin et al., 2014; Luckowski, 2016; Neal-Boylan & Miller, 2017). Scant research, however, documented faculty accounts of denials for requested accommodations with the exception of one study. Persaud and Leedom (2002) surveyed nursing programs in California to examine accommodation practices regarding students with disabilities. Survey questions in this study were unique as they included specific questions about (a) accommodations denied, (b) those granted and approved by someone else but deemed unreasonable by the respondent, or (c) requests granted, but the survey respondent would not choose to repeat the accommodation in the

future. Clinical accommodation requests that were denied included students using crutches or a wheelchair and students with back injuries that restricted bending or lifting. Hospital policy was cited as the reason for accommodation denials for students using crutches or a wheelchair. No discussion of student responses or consequences regarding the accommodation denial were mentioned in the research report (Persaud & Leedom, 2002).

When asked about whether requests were unreasonable, 16% replied their program granted what the survey respondent considered an unreasonable request for accommodation (Persaud & Leedom, 2002). Examples of unreasonable requests included (a) general comments about changing assignments or evaluation criteria for students with learning disabilities that would lower academic standards, (b) a request in a clinical setting to double the length of time for a surgical technician student to prepare for an operation, and (c) a student diagnosed with diabetes mellitus who was granted a medical withdrawal and then despite limited clinical skills, was allowed to return to the program with a 1:1 student/faculty ratio. The survey respondents providing these examples of unreasonable accommodations did not identify the title or role of the person within academe who approved the request (Persaud & Leedom, 2002).

Multiple studies recounted faculty concerns about teaching students with disabilities and the accommodation process (Ashcroft & Lutfiyya, 2013; Evans, 2014b; Moriña & Orozco, 2020; Yarbrough & Welch, 2021); however, only the Persaud and Leedom (2002) report asked respondents to describe a negative teaching experience where, in retrospect, they would deny a request for a similar accommodation in the future. Examples of these requests included (a) allowing unlimited attempts to repeat a skills test and (b) allowing a student to continue in the nursing program who demonstrated inconsistent performance on dosage calculations due to transposition of numbers.

While nurses and nurse leaders who represented clinical agencies expressed an inclusive attitude toward students with disabilities, they also reserved the right to refuse a student's placement in their facility. Reasons for accommodation denials by clinical facilities typically involved concerns for patient and/or student safety or the potential impact the student's presence might have on hospital staff (Horkey, 2019; Persaud & Leedom, 2002; Rankin et al., 2010). Denial of access to clinical learning experiences for students with complex accommodations impacts the nurse educator's autonomy and ability to comply with federal mandates regarding the education of students with disabilities.

Summary

Nurse educators viewed disability as a biopsychosocial phenomenon having varying degrees of impact for an individual. Federally mandated academic accommodations were intended to remove barriers and facilitate learning for students with disabilities. The theory of planned behavior (Fishbein & Ajzen, 2009) provided a conceptual framework that was used to review research findings related to student accommodations. The interrelationships among personal beliefs, social influences, available resources, and institutional support affected the nurse educators' attitudes and behaviors toward the provision of academic accommodations for nursing students with disabilities. Educators described their concerns about potential consequences for refusing an accommodation request or failing a student with an academic accommodation.

Patient care concerns and inequities occurring as a result of student accommodations were reported by nurse educators. Social pressures experienced by faculty working with nursing students with disabilities included the need to avoid biased and discriminatory behaviors and comply with student, peer, and organizational expectations regarding teaching practices in

didactic and clinical settings. Inadequate resources and a lack of institutional policies contributed to nurse educators' perceptions they were insufficiently empowered to provide accommodations to students, especially those with complex needs in clinical learning environments.

CHAPTER III

METHODOLOGY

Little is known about the antecedent beliefs influencing nurse educators' responses to requests for academic accommodations. The theory of planned behavior's conceptual framework (Fishbein & Ajzen, 2009) was used to examine faculty experiences with the accommodation process and provided insight regarding this issue. The purpose of this study was to explore nurse educators' beliefs using the conceptual framework of the theory of planned behavior to investigate faculty behavioral, normative, and control beliefs toward providing academic accommodations for prelicensure nursing students with disabilities.

Research Design

Interpretive Description

The research method used in this study was interpretive description. Thorne et al. (1997) described interpretive description as a non-categorical approach to scientific inquiry that borrowed research design methods from the social sciences of psychology, sociology, and anthropology. Traditional qualitative research designs rely on adherence to a single qualitative method that aligns with the epistemological views of a specific social science discipline. Tools and techniques are developed for use with each methodology for the purpose of advancing discipline-specific knowledge through the testing and refinement of theory (Thorne et al., 2016).

Examples of methodological processes that serve the goals of their discipline of origin but create difficulties when used in health care professions such as nursing include the concept of *tabula rasa* in phenomenology and sociology's use of theoretical saturation in grounded theory.

Thorne (2011) explained that bracketing a researcher's preconceptions to discern the essence of human experience is methodologically sound in psychology but insufficient to offer solutions for solving patient care problems within the discipline of nursing. Additionally, justifying the cessation of data collection solely based on the notion that all constructs within a conceptual framework are represented, thus meeting theoretical saturation, is appropriate for sociology's focus of population-based knowledge. This approach, however, is not always adequate for the discipline of nursing as it precludes the analysis of outlier data that represent the variety and depth of human experiences that are hallmarks of the complexities of nursing's focus on individualized patient care. In contrast to a nurse researcher's adoption and adherence to the rules of a single social science's methodology, Thorne (2016) explained that interpretive description modifies established qualitative research design methods used in the social sciences and aligns these methods with nursing's unique philosophical foundations, interpretive views, and goals for the profession.

Comparison of Studies

Examples of studies within nursing that used interpretive description included studies by (a) Bernard and Ghaffari (2019) who investigated nurse educators' experiences transitioning to a flipped classroom pedagogy, (b) Gurné et al. (2021) who described nursing practice from the vantage of clinically experienced registered nurses, and (c) Van Osch et al. (2018) who sought strategies to promote employee retention among critical care and emergency department registered nurses. Each qualitative study used interpretive description as its design methodology; yet, they differed in the application of specific methods used in the study. All studies obtained qualitative data; however, variations in data sources, determination of sample size, and data analysis methods were noted.

While all studies used purposive sampling techniques, Bernard and Ghaffari (2019) relied on 16 individual participant interviews, Van Osch et al. (2018) conducted three focus group interviews representing a total of 13 study participants, and Gurné et al. (2021) obtained data from 16 group interviews consisting of a total 74 nurses' reflections about the nature of nursing practice. The differences in data collection methods and sample sizes of these studies reflected the nature of the research question for each study. While the studies by Bernard and Ghaffari and Gurné et al. were relatively narrow in focus and used smaller sample sizes, the study by Van Osch et al. who investigated the nature of nursing practice was conceptually larger in scope, necessitating a different approach to obtain the data and incorporating a larger sample size. Data saturation was described in the research by Bernard and Ghaffari while the other two studies cited Thorne (2016) and explained that thick description rather than data saturation was desirable in interpretive description studies (Gurné et al., 2021; Van Osch et al., 2018). This example was consistent with one premise of interpretive description where the research question dictated the methods used in the study rather than a strict adherence to the rules and practices prescribed when using a particular methodology (Thorne, 2016).

The steps used during data analysis in these studies varied with each research report describing three to five steps in the process. All studies conducted a review of the transcripts and employed the use of coding, identification of patterns and categories, and interpretation that generated themes from the data (Bernard & Ghaffari, 2019; Gurné et al., 2021; Van Osch et al., 2018). Only the study by Bernard and Ghaffari (2019) reported the use of member checks to enhance the study's credibility while all studies described a team approach to data analysis among the authors of the studies. Analysis of these studies demonstrated the flexible use of methods inherent in interpretive description studies.

While critics of blended qualitative methodology argued that rigor was lost using this approach (Baker et al., 1992; Morse, 1991/2013), others advocated for the use of this method, especially when the purpose of research was to respond to the pragmatic demands of health-related disciplines engaged in solving complex clinical problems. Johnson et al. (2001) and Thorne (2016) explained that flexible methods for data collection, analysis, and theorizing did not diminish rigor if the logic for blending methods and changing processes was clearly explained by the researcher.

Rationale for Use of Interpretive Description

Interpretive description was the method used for this study due to the complexities inherent in the academic accommodation process and the need to explain and mitigate faculty negativity and lack of support perceived by nursing students with disabilities. Data obtained through semi-structured interviews were used to analyze nurse educators' descriptions and interpretations of their experiences providing academic accommodations to nursing students with disabilities in higher education and clinical nursing practice milieus. This study was informed by the theory of planned behavior (Ajzen, 2011) and the biopsychosocial model of disability.

Thorne (2011) stated that interpretive description does not endorse a priori identification of a theory or framework to advance theoretical knowledge development. Instead, the disciplinary problem under investigation was the central focus when considering the design logic used in an interpretive description study. Theory might be used situationally and temporarily to assist in providing meaningful interpretation of the study data. The theory of planned behavior (Ajzen, 2011) was used as a tool to organize and investigate specific antecedent categories that applied to the process of accommodating students with disabilities. Contextual perspectives about factors that hindered, facilitated, and influenced faculty attitudes and actions regarding the

accommodation process were analyzed. This study used both descriptive and interpretive data analysis through deductive and inductive methods to achieve the ultimate goal of elucidating areas where practical mitigation strategies could be developed to improve the accommodation process for nurse educators who teach nursing students with disabilities.

Sample

Recruitment of Participants

An invitation to participate in the study was posted on the American Association of Colleges of Nursing Community Discussion Board (see Appendix A). Faculty with experience teaching in prelicensure registered nursing programs were asked to complete a questionnaire designed to identify eligible educators willing to participate in the study. The discussion board post instructed faculty to access and view an online consent form (see Appendix B) and an online recruitment survey for study participants (see Appendix C). Contact information for interested faculty was obtained prior to ending the survey. In addition, an electronic copy of the consent form was included as an attachment to the discussion post for individuals interested in printing a copy of the consent form (see Appendix D). To be included in the study, faculty met criteria that included (a) experience teaching nursing students enrolled in a prelicensure registered nursing program after 2009, the year of enactment for the ADAAA (2008); and (b) direct involvement in modifying teaching practices or arranging and implementing accommodations for student learning.

A total of 36 nurse educators responded to one of two online requests for study participants; of these respondents, 30 nurse educators met eligibility requirements and provided contact information for arranging subsequent interviews. Since the two invitations to participate in the study yielded more eligible nurse educators than might be needed, participant selection

was employed when determining which nurse educators to contact for interviews. Data saturation was achieved after 13 videotaped interviews; therefore, the remaining 17 individuals who responded to the invitation to participate in the study were not contacted for interviews and their recruitment surveys were not included in the study's data analysis.

Participant Selection

Patton (2015) emphasized the term *selection* instead of *sampling* since participants were intentionally chosen based on specific characteristics that ensured the intent of the research is met. Nurse educators selected for interview provided thick, rich descriptions of experiences that represented a broad range of accommodation requests in didactic, lab, and clinical environments. Additionally, participant narratives described a variety of student requests for academic accommodations related to sensory, emotional/mental health, physical, medical, and learning disabilities. This method of selecting participants with a variety of accommodation experiences was what Patton described as purposeful maximum variation sampling. It was used to identify common patterns and areas of divergence within the phenomenon being studied.

Information Power and Data Saturation

By nature, qualitative studies use fewer participants than quantitative studies. Malterud et al. (2016) introduced the concept of *information power* to determine when sample size in a qualitative interview study was sufficient. They proposed that sample size should be based on information power, not saturation. Sample size within the context of information power would vary depending upon the (a) purpose of the study, (b) specificity of the participant sample, (c) use of an established theory, (d) richness of information obtained during interviews, and (e) strategy for analyzing the data. In general, information power is greater and sample size is smaller for studies that have a narrow focus and use in-depth case analysis informed by an

established theoretical background to interpret rich, thick data from interviews of study participants selected from specifically-defined criteria. While information power offers an a priori conceptual method for determining sample size, other researchers employed common methods of analysis to justify the numbers of interviews needed to demonstrate the study's rigor and significance.

Many qualitative researchers rely on the concept of data saturation to determine when data adequacy is reached. Data collection based on this concept ceases when the information obtained from study participants offers no new data, themes, or coding (Palinkas et al., 2015). Hennink et al. (2017) proposed that researchers use one of two distinct approaches: (a) code saturation or (b) meaning saturation to determine data adequacy. If the study's purpose is to describe a phenomenon using an inductive, content-driven analysis that structurally organizes and identifies data themes based on similarities and differences in participant experiences, then redundancy through code saturation determines data adequacy.

Conversely, Hennink et al. (2017) contended that meaning saturation should be used to determine data adequacy for studies that seek an understanding of the impact and significance of a phenomenon among study participants. For these studies, meaning saturation occurs when no new insights are discovered during data analysis. The results of Hennink et al.'s study investigating the comparison of code saturation versus meaning saturation to determine sample size found that fewer in-depth interviews were needed for code saturation than meaning saturation. Using code saturation to determine sample size, participant interviews containing information-rich data identified salient issues and reached code saturation in nine interviews compared to meaning saturation that required 16 to 24 interviews before no additional insights were obtained during data analysis (Hennink et al., 2017).

Qualitative research studies that purported data saturation often failed to explain the rationale or operational methods used to determine data sufficiency (Guest et al., 2006). For this study, both information power and code saturation were sought. This study investigated nurse educators' perceptions of the accommodation process in didactic, lab, and clinical settings for requests from students representing multiple types of disabilities; information power was considered when prioritizing participants who responded to the second invitation for research participants. Code saturation was used to determine data adequacy and the criterion to end data collection as participant's interviews were deductively analyzed and categorized based on a priori codes identified from the review of literature and new codes identified from participants' narratives regarding nursing student accommodation requests.

Rationale for Sample Size Needed to Achieve Code Saturation

With inductive qualitative research methods, a priori determination of sample size is arbitrary since key data themes cannot be known until data analysis (Sim et al., 2018). Patton (2015) explained that sample sizes in qualitative research studies that use in-depth interviews of participants selected by purposive sampling should be flexible and based on emergent findings obtained during data analysis. He recommended that qualitative researchers specify a minimum sample size based on the research design and the phenomenon studied and then explain the rationale for adjusting the sample size when reporting the results of the research.

Francis et al. (2010) concurred with Patton's (2015) recommendation of a minimum sample size but added an additional step to operationalize the process for determining data sufficiency in theory-based interview research. The authors explained the first step involved specifying the minimum number of study participants needed who represent the *initial analysis sample*. The second step in this process involved determining the *stopping criterion* or the

number of additional consecutive interviews required where analysis of the transcript information revealed no new themes or data codes. Once data saturation represented by meeting the stopping criterion was reached, no more interviews were conducted and the data collection phase of the research study concluded (Francis et al., 2010).

Two research reports informed by the theory of planned behavior were used in a study by Francis et al. (2010) to illustrate the two-step process for operationalizing data saturation. Each study was retrospectively evaluated to determine if data saturation was achieved using 10 interviews as the a priori number of interviews needed for the initial analysis sample. A stopping criterion of three was used as the number of subsequent consecutive interviews required to determine when saturation was met and no new data codes were identified. Although the authors of the first study reported saturation after 14 interviews, Francis et al. determined that saturation was only achieved in one of the three categories of the theory of planned behavior. Their retrospective analysis revealed code saturation was achieved only in the category of normative beliefs but not in the categories of behavioral or control beliefs. In the second study, the retrospective analysis revealed that saturation in each of the theory of planned behavior's categories of behavioral, normative, and control beliefs was achieved after 15, 13, and 14 interviews respectively. This demonstrated that an initial analysis sample of 10 participants and a stopping criterion of three consecutive interviews was a viable method for determining code saturation in individual participant interview research (Francis et al., 2010).

Achievement of Code Saturation in Current Study

For this study, interviews from nine participants served as the number needed for the initial analysis sample. The quantity of nine interviews was selected based on research by Hennink et al. (2017) regarding the minimum sample size to achieve code saturation. Nine

participant interviews representing the initial analysis sample were analyzed and provisionally coded. Data collection continued with interviews of nurse educator participants until the stopping criterion was met. Three additional, consecutive interviews with high information power and where no new codes were identified within each of the three categories of the theory of planned behavior were used to determine data sufficiency. During analysis of the 10th interview, new codes were identified; therefore, 13 interviews were needed to satisfy the stopping criterion and cease interviews and data collection.

Procedure

Sources of data for the study included demographic information and accommodation experience from the online recruitment survey, interview transcripts, field notes, and video recordings of the interviews. Each of these modes of data collection was useful; however, each had disadvantages. Tessier (2012) stated that combining artifacts needed for a comprehensive analysis of the data enhanced the strength of each method and mitigated the disadvantages of using any single mode of data collection.

Development of Online Recruitment Survey Questions

Closed questions with an open answer option were used to obtain information about nurse educators' academic accommodation experiences and faculty demographic information as survey respondents were more likely to answer a closed question survey format compared with open response questions (Zhou et al., 2017). Data collection included questions about the types of academic accommodation requests nurse educators received and information about the type of disabilities represented by requesting students. The answers to these questions were used to guide the selection of which accommodation experiences to explore with study participants during the interview process.

Categories used for identifying student disability types listed on the recruitment survey were modifications based on disability categories described in the Individuals With Disabilities Education Act (U.S. Department of Education, 2018). This included only categories that represented the types of student disabilities encountered by faculty teaching in higher education settings (Betz et al., 2012; Sowers & Smith, 2004b) to ensure relevance to academic accommodation requests encountered within prelicensure registered nursing education programs. The content for questions about prior training regarding disabilities, legal mandates, and institutional policies and procedures was based on studies examining the academic accommodation process (Ashcroft & Lutfiyya, 2013; Horkey, 2019; L'Ecuyer, 2019; May, 2014; Yarbrough & Welch, 2021). Questions seeking information about nurse educators' experiences implementing specific academic accommodations based on the learning environment were derived from the types of accommodation experiences encountered by nurse educators as cited in the literature review (Ashcroft & Lutfiyya, 2013; Betz et al., 2012; Epstein et al., 2020).

Participants' demographic data were obtained as nurse educators completed the online recruitment survey. This information was reviewed during the interview to ensure the accuracy of the demographic data collected. Timmins (2015) recommended that researchers only ask questions designed to identify participant characteristics pertinent to the research question and could be used for comparison within the data. In addition to collecting data about study participants' educational background, employment status, job responsibilities, and the type of nursing program where they taught, the demographic survey included questions about faculty age ranges and years of teaching experience. These questions were included as demographic data needed based on studies that demonstrated these variables might influence faculty behaviors regarding student requests for academic accommodations (Elting et al., 2020; Levey, 2016). The

order of questions in a recruitment survey is important and could influence potential participants' interest in the research study (Babbie, 2013); therefore, survey questions related to academic accommodation experiences were asked first with faculty demographic questions placed at the end of the survey.

Development of Interview Guide Questions

Question Development and the Theory of Planned Behavior

Interview questions corresponded to the theory's structural components and explored the nurse educators' beliefs regarding the provision of academic accommodations for nursing students with disabilities. According to the theory of planned behavior, an individual's beliefs about performing a specific action must be determined before behaviors can be predicted or modified. Fishbein and Ajzen (2009) used the term *elicitation study* to describe formative research using qualitative methods that asked participants to describe their fundamental beliefs about a behavior. To identify these beliefs, they recommended researchers develop broad, open response interview questions based on the three belief components of the theory of planned behavior.

For example, Fishbein and Ajzen (2009) recommended that researchers simply ask participants to list characteristics or perceived advantages or disadvantages associated with the performance of the behavior under investigation. The purpose of this type of question was to prompt the individual to recall readily-accessible beliefs about the consequences of performing a behavior. Fishbein and Ajzen emphasized the question should be asked about the participant's personal performance of the behavior and not their beliefs about the behavior performed by others. These general thoughts described the beliefs of greatest relevance for that individual. This

process was continued by asking questions of all study participants to investigate beliefs represented for each component of the theory of planned behavior.

Within the theory of planned behavior's category of behavioral beliefs, two types of beliefs required investigation: instrumental and affective beliefs. When exploring beliefs about a particular behavior, questions that asked an individual to describe advantages and disadvantages to performing the action are characterized as instrumental or value beliefs. Questions asking a study participant to discuss their emotions or anticipated experiential consequences to performing the behavior elicit affective beliefs. For instance, an educator might dislike arranging academic accommodations and describe negative aspects of the process but recognized the benefit of providing accommodations for the individual student and the value of including persons with disabilities in the nursing profession. Both instrumental and affective belief questions are needed as they might elicit different responses and capture a broader perspective about beliefs held among study participants (Ajzen, 2011; Sutton et al., 2003). Additionally, questions within the normative and control beliefs categories are designed to generate participant responses that describe perceived social pressures and self-efficacy beliefs in relation to performing the behavior (Fishbein & Ajzen, 2009).

For this study, broad, open response questions that aligned with the three components of the theory of planned behavior were used to interview study participants (see Appendix E). Additionally, the interview guide contained probe questions that were asked when further insight and explanations were needed. Content used for probe questions was based on themes identified previously in the review of literature regarding student requests for academic accommodations. Examples of themes from the literature that were used when asking probe questions included the concepts of equity, time, academic standards, and safety.

Review and Pilot Tests of Questions

The online recruitment survey (see Appendix C) and interview guide (see Appendix E) were examined by an expert panel using a two-phase review process (Davis, 1992). The first phase of the review used experts knowledgeable in the research process and questionnaire development. Panel experts reviewing the interview guide during this phase were the researcher's dissertation committee members. The dissertation committee included graduate faculty with administrative and teaching experience regarding accommodation provisions and research process experience in the development and use of questionnaires. Based on feedback from the panel, questions were revised and submitted to the research advisor for review prior to pilot testing the tools.

The second phase of the review consisted of pilot testing the online recruitment survey, interview guide, and interview process by using nursing faculty with content expertise. Content expertise for this study was defined as faculty with experience arranging accommodations for students in a prelicensure registered nursing program and experience teaching students with disabilities within the past five years. Davis (1992) recommended at least two experts with content knowledge review the instrument. Therefore, a nurse educator with accommodation experience in the didactic setting and a nursing instructor with recent experience providing accommodations for nursing students in the clinical setting were used in the pilot tests. Based on their feedback, the online recruitment survey and interview questions were further revised.

Interview Process

Individual, in-depth, semi-structured interviews using a virtual meeting platform were conducted over a period of six months. Before beginning the video recording of each interview, the researcher reviewed the nurse educator's rights as a study participant, described the practices

used to manage data and protect confidentiality, and verified the electronic consent obtained from each research participant during the recruitment process (see Appendix B).

Once the video recording began, a pseudonym chosen by the participant was used when referring to the nurse educator throughout the interview. Additionally, each participant was asked to confirm the information given when completing the online recruitment survey (see Appendix C). The purpose of this review was to remind participants of their responses and determine if any other experiences providing academic accommodations were recalled. If the participant had multiple instances of providing academic accommodations for nursing students with disabilities, the researcher asked the study participant to select one or more accommodation experiences to discuss that reflected the greatest involvement by the research participant.

These individual participant interviews were used to collect data to explain nurse educators' beliefs of the accommodation process and factors that influenced their decisions to grant or deny requests to modify teaching practices and/or the learning environment for nursing students with disabilities. Patton (2015) described this type of interview as a *pragmatic interview* where questions are asked about real-world problems with the goal of obtaining answers capable of providing practical insights regarding the issue under investigation. Pragmatic interviews tend to be of short duration, typically lasting an hour in length and focusing on a specific topic.

Study participants were given the opportunity to describe one or more experiences providing academic accommodations to nursing students with disabilities. An interview guide (see Appendix E) was used to ensure the same general questions were asked of each participant. The semi-structured interview method provided the researcher the freedom to ask additional questions that built upon the participant's answers to previous questions. This enhanced the likelihood that information-rich data were collected about the nurse educator's experiences with

the accommodation process. Questions asked during the interview were informed by the framework described in the theory of planned behavior with the use of follow-up probes as needed based on themes identified in the review of the literature.

Each interview ended after the nurse educator described their experiences and answered the researcher's interview and probe questions about providing academic accommodations to nursing students with disabilities. Interview lengths varied between 45 to 90 minutes with no participant requesting the interview to end before answering all questions asked by the researcher and listed within the interview guide.

Data Management

Each interview was recorded using the Microsoft Teams video conferencing platform. Interview data were automatically stored on the Microsoft Cloud Server and only accessible through a password protected login to the researcher's Microsoft Teams account. This video conferencing platform was chosen for its ability to provide end-to-end data encryption that eliminated the risk of a third party accessing the data. Additionally, the Microsoft Teams video conferencing platform generated an automatic transcription data file from the recorded video. Before beginning the data collection phase of this research study, the process of using Microsoft Teams as an interview meeting platform was trialed to ensure the automatic transcription files generated by Microsoft Teams software would transfer to NVivo qualitative data analysis software.

Once the video and automatic transcription files were transferred to the researcher's computer, all files stored on the Microsoft Cloud Server were deleted and inaccessible via the Microsoft Teams platform. In addition to video and transcript files, the researcher's field notes

were created after each interview. Prior to electronic storage, all data files were reviewed to ensure the removal of any information that linked the participant's identity to the stored data.

The University of Northern Colorado's Microsoft OneDrive file system and NVivo software accessible through the university's Apporto Virtual Lab were initially used to store and analyze research data. Due to difficulties accessing the Apporto Virtual Lab and NVivo software, the use of NVivo software for data analysis was abandoned after the initial provisional coding phase of data analysis was completed. All subsequent data analysis activities used standard word processing software and the University of Northern Colorado's Microsoft OneDrive file system. The only individuals having access to these files were the primary researcher and the research advisor. Access to this information required a two-factor authentication system using computers that were password protected and kept in locked offices. Data collected during this research study were maintained on the University of Northern Colorado's Microsoft OneDrive storage system and will be deleted three years after the research study is completed.

Data Analysis

In qualitative research, the knowledge and experiences of the investigator contribute to the design and outcome of the study. Researchers should thoughtfully consider what theoretical, disciplinary, and personal assumptions, values, and beliefs they bring to the study. Along with a thorough review of the literature, understanding and acknowledging these influences establishes the groundwork and forms the forestructure or scaffolding used to build the study design and subsequently the interpretation of the data (Thorne, 2016).

This researcher's interest in studying the phenomenon of nurse educators' accounts of teaching and providing accommodations to students with disabilities arose from a history of personal and professional experiences (see Appendix F). These included a family member whose

disability prevented him from receiving an education, personal recollections about working with nurses having physical or medical disabilities, teaching students with disabilities, and knowledge of theories relevant to disability that might explain why nursing students with disabilities perceived a lack of support from some nursing faculty. These preconceptions were acknowledged while designing the study and prior to data collection and interpretation to remind the researcher how forestructure might affect data interpretation.

Accuracy of Data

Merriam and Tisdell (2016) recommended novice researchers create their own verbatim transcripts to gain familiarity with the data instead of hiring a transcriptionist. Therefore, the first review of data from each participant occurred as the researcher watched and listened to the video-recorded interview while comparing it to the auto-generated Microsoft Teams transcript. The goal of this review was to gain an overview of the interview data while simultaneously correcting inaccuracies in the Microsoft Teams autogenerated transcript to ensure a verbatim account of the dialogue was reflected in the written transcript.

After verbatim accuracy of data was confirmed, a multimodal transcript was created combining transcription data, time stamp notes based on the person speaking during the interview, and field notes of the researcher's observations. Field note data included the researcher's observations of the participant's non-verbal communication. Examples of field note data included emotions expressed by the participant, filler words, hesitation forms, gestures, and other relevant communication forms observed by the researcher.

This process was repeated for each video interview conducted during the research study. The remaking of the video interview into a multimodal transcript added a rich description and context to the interview data by combining information sources and documenting the multiple

ways people communicated (Bezemer & Mavers, 2011). While description is an essential step in qualitative research, Thorne (2011) explained that a detailed description without interpretation had little value for clinicians in applied research disciplines.

Data Analysis Process

With interpretive description, there is both description and interpretation. Description, using this method, seeks to present participants' subjective realities within the natural context of human experiences. Inductive analysis of data is central to the methodology of interpretive description. The iterative process of inductive reasoning is used to identify associations, relationships, and patterns within the data while also recognizing individual variances. Results of this analysis are reinserted into the original context of the phenomenon for the purpose of providing new insights and interpretations that could be used by practitioners for solving problems within an applied practice discipline (Thorne, 2016).

Although interpretive studies share commonalities by using a contextually-based, inductive approach to describing and interpreting phenomena, variations in study designs and methods occur. For this study, the process of data analysis involved a multi-phase approach using deductive and then inductive analysis of transcript data. The final step in data analysis involved identifying themes and sub-themes representative of nurse educators' beliefs about academic accommodations (see Appendix G).

Provisional, Deductive Coding of Data

Due to the prodigious amount of data collected from participant interviews, an exploratory method of data analysis was used to preliminarily organize passages from transcript data. Saldaña (2021) used the term *provisional coding* to describe a deductive process where the researcher develops a predetermined list of initial codes based on anticipated data categories

derived from the study's conceptual framework, literature review, or other sources of knowledge and information. Once developed and data analysis begins, the initial codes could be changed or eliminated and new codes could be added.

Provisional codes for this study (see Appendix H) were organized using the theory of planned behavior's three categories: (a) behavioral beliefs, (b) normative beliefs, and (c) control beliefs. Provisional coding categories and sub-categories within the theoretical structure were identified from concepts described in the literature regarding student accommodations research and questions asked of study participants based on the interview guide. Since the scope of the study's research questions were broad and encompassed multiple types of student accommodations in a variety of academic settings, it was unknown whether the theory of planned behavior's three belief categories were sufficient to use as organizational repositories for participants' narrative data passages. Therefore, a miscellaneous category was created to ensure no concepts or coding categories were omitted.

During the provisional coding phase of data analysis, each participant's transcript was read and reviewed for general content and context. Excerpts from participants' transcripts were copied to a coding template document based on data relevance to a specific provisional coding category. New codes were added to the codebook and coding template documents were created to correspond to each provisional coding category. The process of provisional coding of transcript data occurred after each participant's interview and throughout the data collection phase of the study until data adequacy through provisional code saturation was achieved.

After the data collection phase of the study ended, narrative passages within each of the provisional codebook categories were further examined, condensed, and refined to reduce redundancy in data analysis. As narrative passages were assessed for relevance, provisional

codes were retained, merged with existing codes, renamed, or eliminated. The theory of planned behavior's three belief categories were found to be a sufficient organizing structure to contain the concepts and representative passages of participants' interview narratives; therefore, the miscellaneous category within the provisional codebook was eliminated and codes included under this heading were moved to other categories or dropped if found to be redundant.

At the completion of provisional coding and prior to beginning the inductive phase of data analysis, the revisions and refinements of provisional codes yielded a final codebook representing 475 narrative passages contained within 20 categories and sub-categories that were organized based on the theory of planned behavior's conceptual framework. Within the codebook for inductive data analysis (see Appendix I), each coding category included a quantitative notation of the number of participants contributing data to the code and the total number of passages coded. Saldaña (2021) cautioned researchers regarding the practice of *quantitizing the qualitative* or transforming qualitative data or codes into numeric information. While this could be an option to use in some circumstances, Saldaña believed the researcher should be prepared to explain how numeric data helped to answer qualitative research questions.

Notations regarding the number of narrative passages and the number of study participants contributing data to each coding category were useful to answer the research questions for this study. The theory of planned behavior relies on the identification of salient beliefs among a defined population to determine attitudes, in the form of belief statements, toward an action or behavior. Salient beliefs or "information that serves as the foundation for their attitudes" (Fishbein & Ajzen, 2009, p. 98) are readily accessible and do not require much reflection or cognitive effort for the individual. Therefore, Fishbein and Ajzen (2009) contended that an individual's salient beliefs could be elicited by asking free-response questions generally

concerned about the consequences of an action or behavior. Since the type and strength of people's beliefs about an action could vary, the process of determining a population's salient beliefs about an action or behavior requires the researcher to be cognizant of quantitative aspects of the qualitative data.

One example of the usefulness for quantitative notations within the codebook in this study occurred during the provisional analysis of an interview where one participant held strong views regarding what the educator viewed as *temporary disabilities* or issues of short duration that temporarily hindered student learning. The participant gave numerous examples of these circumstances and believed ADA requirements or academic policies regarding eligibility to receive accommodations should be expanded to include these issues. Seven passages from one educator were initially coded regarding this issue but none of the other 12 participants identified this as concern. Tracking the number of participants contributing to a particular code lessened the likelihood the experiences and beliefs of a few individuals would be misinterpreted to be representative of the salient beliefs of a population. While the issue of temporary disabilities was not a salient belief among nurse educators, it was an issue that was notable during data analysis and is explained within the heading of facilitation in the discussion chapter of this study.

Inductive Coding of Data

The inductive phase of data analysis consisted of an iterative process using constant comparative analysis to review nurse educators' narratives about specific aspects of their accommodation experiences within each provisional coding category. First and second coding cycles were conducted to identify patterns, associations, and relationships in participants' narratives. Analysis of data for convergence, divergence, and synthesis within and across all

interviews provided a comprehensive interpretation of factors and influences impacting nurse educators' beliefs regarding student requests for academic accommodations.

The theory of planned behavior postulated that a person's behavior is a function of their beliefs or understanding about information that is foundational to performing the behavior (Ajzen, 1991). Therefore, nurse educators' belief statements regarding the provision of academic accommodations for nursing students with disabilities (see Appendix J) were formulated based on patterns identified through inductive coding cycles. Each coding category contained several nurse educator belief statements; however, only salient faculty beliefs were considered for the next phase of analysis to determine themes within the data. These belief statements were developed as a result of inductive coding and represented, to varying degrees, the influences and views of nurse educators toward the process of providing academic accommodations to students with disabilities.

Identifying Themes and Final Analysis

Thirty-one statements, representing the dominant beliefs expressed by nurse educators, were analyzed for relationships and patterns. Each statement was coded using constant comparative analysis to identify themes and sub-themes among faculty beliefs (see Appendix K). Three themes and eight sub-themes were identified; descriptive statements explaining each sub-theme were developed. Member check feedback was elicited from study participants (see Appendix L) and the research advisor to refine the descriptive statements and ensure they represented the salient views among nurse educators regarding the provision of academic accommodations to nursing students with disabilities.

Assumptions

The following assumptions were relevant to this study:

1. Study participants' descriptions were accurate retellings of their experiences.
2. Beliefs and past experiences from their recollections of providing accommodations and teaching nursing students with disabilities contributed to the understanding and interpretation used by study participants during the interview process.
3. The theory of planned behavior was a valid and reliable framework that was useful as a basic structure to inform the development of questions for data collection and to guide the analysis and interpretation of the research data.
4. While each educator's account was unique, participants shared common aspects of their experiences when providing accommodations and teaching students with disabilities. These elements could be examined and interpreted to find meanings that informed and advanced knowledge that was useful to academic nurse educators and nurse researchers.

Trustworthiness

Lincoln and Guba (as cited in Schwandt et al., 2007) used the term *trustworthiness* and the associated concepts of (a) credibility, (b) transferability, (c) dependability, and (d) confirmability as methods to establish rigor in qualitative inquiry. To enhance trustworthiness, several methods were used to ensure rigor was maintained in the research process.

Credibility

Credibility, the qualitative equivalent to internal validity, is one criterion used to evaluate the quality of a research study (Schwandt et al., 2007). Fusch et al. (2018) explained that threats to credibility could be mitigated by selecting a data collection method appropriate to the research

design. Due to the nature of the research question used for this study, data consisted of participant recollections and perceptions of their experiences providing accommodations to nursing students with disabilities. Since this involved obtaining personal narratives from study participants, it limited methods of data collection to interviews and recruitment surveys since participant observations were impractical and no document artifacts could be retrieved or were confidential based on student disability privacy laws. Denzin (2017), however, cautioned researchers to avoid single methodologies, if possible, when studying a phenomenon to reduce the risk of introducing personal bias in the research process.

Triangulation

To compensate for using a single data collection method, other avenues were used to demonstrate that personal narratives recorded in this study were congruent with the reality described by study participants and the criterion of credibility was met. Triangulation, the use of multiple methods to study a phenomenon, could enhance credibility. Denzin (2017) described four types of triangulation: (a) data, (b) investigator, (c) theoretical, and (d) methodological. Data triangulation and methodological triangulation are often confused when the researcher mistakes data collection methods, known as methodological triangulation, for data source triangulation (Fusch et al., 2018). Denzin explained that triangulation by data sources uses the subcomponents of time, space, and person to maximize the ways a phenomenon is studied.

This study employed triangulation by incorporating the data source subcomponents of time, space, and person through the purposeful selection of study participants who offered rich descriptions of their experiences from a variety of perspectives, what Creswell (2013) denoted as maximum variation sampling. Variation in time was achieved when study participants described experiences with accommodation requests; some participants cited experiences from student

accommodation requests that occurred 5 to 10 years ago while other educators reported recent or current student accommodation experiences. Comparing faculty narratives from different years since 2009, the year of enactment for the ADAAA (2008), revealed consistency in faculty experiences that strengthened the study's credibility.

Space, in reference to data source triangulation, included faculty narratives regarding accommodations within multiple learning environments, the classroom, lab, and clinical settings. The triangulation subcomponent of person included the types of accommodation requests based on the individual accommodation needs of the nursing students. Similar to the analysis used for the data source subgroups of time and space, faculty interview data analysis allowed the researcher to triangulate data comparing and contrasting the study phenomenon from multiple vantages of faculty experiences accommodating the diverse needs of students with disabilities.

Member Checks and Peer Debriefings

Additional methods used that enhanced credibility included member checks. Thorne et al. (1997) explained that member checks within interpretive description methodology is not a validation of the verbatim transcript by the study participant. Instead, they suggested that researchers establish credibility of the data collection and analysis process by asking selected individual participants to review conceptualizations of the analyzed data from the entire sample of participants. They contended this method of establishing rigor enhanced and refined the research process and ensured that study findings were grounded in data and represented the shared realities of research participants.

The process of performing member checks for this study included sending an email to six of the 13 study participants. These educators were asked to review and comment on the research findings via a link to an online survey (see Appendix L). The member check survey included a

listing and brief descriptive statements regarding the themes and sub-themes identified after data analysis. The online survey allowed member check participants to provide feedback regarding the themes, sub-themes, and descriptive statements.

Participants surveyed during the member check process represented all regions of the United States and included educators with doctoral and master's degrees. Collectively, member check participants included individuals who described didactic, lab, and/or clinical accommodation experiences representing a variety of accommodation requests from nursing students with disabilities. Feedback received during the member check process was used to further describe and refine the research findings. Throughout the analysis phase of the study, peer debriefings with the faculty research advisor were conducted to review and confirm analysis of the transcript data and study findings.

Transferability

The extent to which the results of a qualitative research study could be used and applied to other contexts describes the concept of transferability. This characteristic of trustworthiness depends on the reader's understanding of the context and interpretation of the study's findings. While study findings that describe a broad generalization to large populations are not the intent of qualitative research, the researcher should include sufficient information about the study data and outcomes for the readers of the study to determine if the findings from this study applied to other circumstances (Merriam & Tisdell, 2016).

Transferability in this study was enhanced through the use of thick descriptive data and the strategies used during data analysis. Schwandt (2015) explained that thick description in qualitative research includes more than an emphasis on reporting details of participants' experiences; it also characterizes the interpretive aspects of the meanings and intentions of study

participants as the researcher explains the study data and interpretive findings. Additionally, transferability for this study was enhanced using maximum variation through a purposive sampling method and data source triangulation. Data analysis using interpretive description methodology identified patterns and the shared realities of study participants to develop disciplinary knowledge that could be applied to individual cases (Thorne et al., 1997).

Dependability and Confirmability

While personal experiences are unique and future studies cannot replicate the precise circumstances present in previous qualitative inquiries, an investigator's research practices should include logical, traceable processes that demonstrate the dependability of the study. The findings could then be confirmed if the researcher linked the interpretive decision-making processes used during data analysis to the study data. This would corroborate the research findings and increase the trustworthiness of the research (Schwandt, 2015).

Specific actions used in this study to meet dependability and confirmability criteria included the use of an audit trail to document the dependability of data collection procedures and confirmability of the interpretive aspects of the research analysis. Multimodal transcripts of the study's interviews represented professional artifacts (Bezemer & Mavers, 2011) that were useful as audit documents. Additionally, decisions made during the analysis phases of the research process were documented through updates and revisions chronicled in the research study's codebook.

Ethical Considerations

Before data collection began, the University of Northern Colorado's Institutional Review Board granted approval for the researcher to conduct the study (see Appendix M). Electronic correspondence and invitations to participate in the research study used the researcher's student

email address and contained the university's logo on electronic survey documents. Data collected for the study were stored on the University of Northern Colorado's OneDrive and/or Qualtrics platform that required two-factor authentication prior to access.

The study's consent form contained information that explained the purpose of the study, actions to protect confidentiality, foreseeable risks to participate in the survey, and the respondent's right to refuse to answer survey questions or end the survey at any time. A forced-response question was used to document the respondent's consent to participate in the study prior to completing the online recruitment survey (see Appendix C). For any respondent who did not consent to this agreement, the survey ended.

Prior to beginning the videotaped virtual interview, each participant reviewed and confirmed their prior consent for participating in the research study. This review included information regarding the study's purpose, confidentiality provisions, foreseeable risks to participate in the study, and the right to terminate the interview at any time or refuse to answer any question during the interview. The electronic consent form was available for each participant to download and keep before the start of the interview (see Appendix D). De-identified transcript files of the participants' interviews were stored on the university's Microsoft OneDrive system where only the researcher and the research advisor had access. After a period of three years, interview data will be deleted.

Summary

Interpretive description methodology was selected for this study. This method offered flexibility in the design logic used to effectively investigate factors that influences nurse educators' beliefs regarding the provision of academic accommodations for nursing students with disabilities. A national recruitment strategy identified nurse educators with experience

teaching nursing students with disabilities. Purposive sampling allowed the selection of study participants with the greatest potential to provide a variety of information-rich accounts of academic accommodation experiences that were obtained using an online semi-structured video-conference interview process.

Data collection and provisional coding analysis occurred concurrently. Data collection ended once two pre-established criteria were met: (a) sufficient information power from participant selection, and (b) data adequacy through code saturation based upon an initial analysis sample of nine nurse educator interviews and a stopping criterion of three additional participant interviews identifying no new codes. An iterative and inductive process using constant comparative methods was then employed until statements were identified within each of the three categories of the theory of planned behavior. These 31 statements represented the dominant beliefs of study participants about providing academic accommodations to nursing students with disabilities. The final steps in data analysis examined associations, relationships, and patterns within the 31 faculty belief statements to identify data sub-themes and themes. Final refinement of data analysis occurred after receiving feedback from member checks and peer debriefings.

Verbatim transcripts of participant interviews, field notes, and decisions made and documented in the study's codebook served as artifacts for an audit trail to verify the dependability and confirmability of the research. Data source triangulation for recruitment and participant selection, member checks, and peer debriefings enhanced the credibility and transferability of the research findings. Study assumptions were acknowledged and safeguards that protected individuals participating in this research were observed to ensure the methods employed during the study adhered to ethical standards for research.

CHAPTER IV

RESULTS

The purpose of this study was to explore nurse educators' beliefs using the conceptual framework of the theory of planned behavior to investigate faculty behavioral, normative, and control beliefs toward providing academic accommodations for prelicensure nursing students with disabilities. The study used interpretive description for its design methodology and the theory of planned behavior to inform the development and organization of interview questions and data analysis. Semi-structured interviews of 13 nurse educators were conducted with deductive provisional coding and inductive interpretive coding methods used to analyze interview data. The coding process resulted in 31 faculty belief statements used to identify themes and sub-themes during final data analysis. This chapter describes the study participant sample, the themes, and the sub-themes identified from analyzed data that represented the salient beliefs among nursing faculty toward providing academic accommodations for nursing students with disabilities.

Study Participants

Thirteen nurse educators participated in individual semi-structured interviews describing their academic accommodation beliefs and experiences. The educators represented all regions of the United States with the Northeast and Midwest regions each having four participants, the South had three, and the West had two nurse educators complete the interview process.

Level of Education, Age, Experience, and Responsibilities

Nearly 70% of the educators reported having a doctoral degree and the remaining 30% had a master's degree in nursing; two of the four nurse educators with master's degrees were currently enrolled in a doctoral program. Of the 13 educators, only one was employed in a part-time adjunct teaching position; the remaining 12 participants worked full-time in nursing education with two-thirds of these educators in non-tenure track positions. The age range most frequently reported was 50 to 59 years old with only one educator under 50 years of age.

The majority of educators had extensive teaching experience. Nine participants reported 11 or more years, two educators with 6 to 10 years, and one educator had two or less years of teaching experience. All educators described experience teaching prelicensure nursing students. Most educators taught in more than one type of nursing program. These programs included traditional and accelerated prelicensure programs, master's, and doctoral programs. Only one educator reported teaching in an associate degree nursing program while the remaining 12 nurse educators taught in Bachelor of Science in Nursing (BSN) programs.

Past and current academic responsibilities varied among participants. Two educators reported having classroom but no clinical experience since 2009, while one educator had no didactic teaching experience. The remaining 10 educators listed both classroom and clinical experience. Nearly half of the participants' responsibilities included course coordination. Four educators described current or past administrative experience, three participants served in the role of the nursing program director, and one participant identified as an assistant dean (see Table 1).

Table 1*Participant Demographic Information*

Participant Pseudonym	Age Range	Education Level	Years Teaching	Employment Status	Program Type	Responsibilities (Past &/or Current)
Mary	50-59	Master's	6-10	Full-Time, NTT	BSN	C, CL, CC
Penelope	60 or >	Doctorate	11 or >	Full-Time, NTT	BSN	C, CL, L/S, CC, PD
Janet	60 or >	Doctorate	11 or >	Full-Time, Tenured	BSN	C, CL, CC, PD
Ellen	40-49	Doctorate	11 or >	Full-Time, NTT	AD	C, CL, L/S, CC
Michelle	50-59	Doctorate	11 or >	Full-Time, Tenured	BSN	C, CL, L/S
Susan	50-59	Doctorate	11 or >	Full-Time, Tenured	BSN	C, CL, L/S
Cissy	60 or >	Masters	2 or <	Full-Time, NTT	BSN	C, CL, L/S
Marcy	50-59	Doctorate	11 or >	Full-Time, NTT	BSN	C, CL, L/S, CC, PD
Jo	60 or >	Doctorate	11 or >	Full-Time, NTT	BSN	C, AD
Joy	60 or >	Masters	11 or >	Part-Time Adjunct	BSN	CL, L/S
Lena	50-59	Masters	6-10	Full-Time, NTT	BSN	C, L/S
Amelia	50-59	Doctorate	11 or >	Full-Time, TT	BSN	C, CC
Sarah	50-59	Doctorate	11 or >	Full-Time, NTT	BSN	C

Note. NTT = Non-Tenure Track; TT = Tenure Track; C = Classroom, CL = Clinical; L/S = Lab/Simulation; CC = Course Coordinator; PD = Program Director; AD = Assistant Dean

Experience With Accommodations and Types of Student Disabilities

Although faculty might not know a student's specific type of disability, they might know the broad category associated with the student's disability. Based on data obtained from the recruitment survey that was reviewed with each participant prior to the start of the interview, the most frequent types of accommodations reported by faculty were modifications related to exams, followed by alterations in teaching materials or methods, and adjustments in the learning environment. Faculty were asked what types of disability categories they had experience in teaching nursing students. Learning disabilities was cited by participants most frequently with all but one educator reporting this experience; physical disabilities was the least identified with one faculty member describing a student who had a prosthetic arm (see Table 2).

Table 2*Faculty Experience With Accommodations and Types of Disabilities*

Participant Pseudonym	Mary	Penelope	Janet	Ellen	Michelle	Susan	Cissy	Marcy	Jo	Joy	Lena	Amelia	Sarah
	Accommodation Type												
Exam Modification	Y	Y	Y	Y	Y	Y	Y	Y	Y	-	Y	Y	Y
Alteration in Teaching Materials/Methods	Y	Y	Y	Y	Y	Y	-	Y	-	Y	Y	Y	Y
Environmental Modifications	Y	Y	Y	-	Y	Y	Y	Y	-	-	Y	-	Y
Assistive Device or Equipment	Y	Y	Y	Y	Y	-	-	-	-	Y	-	Y	Y
Policy, Procedure, Routine Altered	Y	-	Y	-	-	Y	-	Y	Y	Y	-	Y	-
Service Animal in Clinical Setting	-	-	-	-	-	-	-	Y	-	Y	-	-	-
	Disability Type												
Sensory	-	HV	-	H	H	-	-	-	N	N	H	N	N
Physical	-	P	-	-	-	-	-	-	-	-	-	-	-
Medical	-	-	Y	Y	Y	Y	Y	Y	Y	Y	-	-	Y
Emotional/ Mental Health	-	Y	Y	Y	Y	Y	-	Y	Y	Y	-	Y	-
Learning	Y	Y	Y	Y	-	Y	Y	Y	Y	Y	Y	Y	Y

Note. H = Hearing; N = Disability type not specified; P = Prosthetic arm; V = Visual; Y = Yes

Training Related to Disabilities

Having experience teaching a student with a specific type of disability, however, did not imply the faculty member received training about the disability or felt they were competent to effectively teach and evaluate learning outcomes for the student. All participants except one reported receiving some form of training from their employer related to the process of providing accommodations to students with disabilities. For the one faculty member who did not receive employer training, information was provided by the nursing program director. Most study participants described the information they received from their employer as basic instructions regarding the process of communication between the student, personnel in the disability services office, and the faculty member. Ten participants stated they received general information about ADA (1990) disability laws and how these mandates related to providing students with academic accommodations.

Three educators (23%) described instances of receiving training about specific types of disabilities; two reported training on sensory impairments related to hearing and vision while one educator received training about children with chronic medical conditions. These instances of disability-specific training were not provided by the educators' employers; instead, the training was primarily self-initiated by reading articles, attending professional conferences, or completing online continuing education courses.

Interview Results

After each participant's online recruitment survey was reviewed and consent to participate in the study was verbally reaffirmed, nurse educators were asked to describe their experience related to a student's request for accommodations. Participants were free to discuss

the experience with respect to classroom, lab, and/or clinical settings. Each participant was allowed to complete their story before follow-up questions were asked.

Faculty narratives varied. Two participants described an example of a specific student and chronicled the student's progress from admission to the nursing program until present day including the student's success on the National Council Licensure Examination (NCLEX) and their current employment status. One study participant focused on a specific accommodation: extended time on exams in an environment with reduced distractions. This study participant provided an historical perspective of how the implementation of testing accommodations had changed from 2009 to the present day including a discussion about the operation of a student testing center managed by their nursing program's personnel. Most participants offered several vignettes about students with disabilities and actions the faculty member took to comply with each student's request for academic accommodations. After concluding a description of their accommodation experience, all participants were asked questions that elicited their behavioral, normative, and control beliefs about the accommodation process for nursing students with disabilities (see Appendix E).

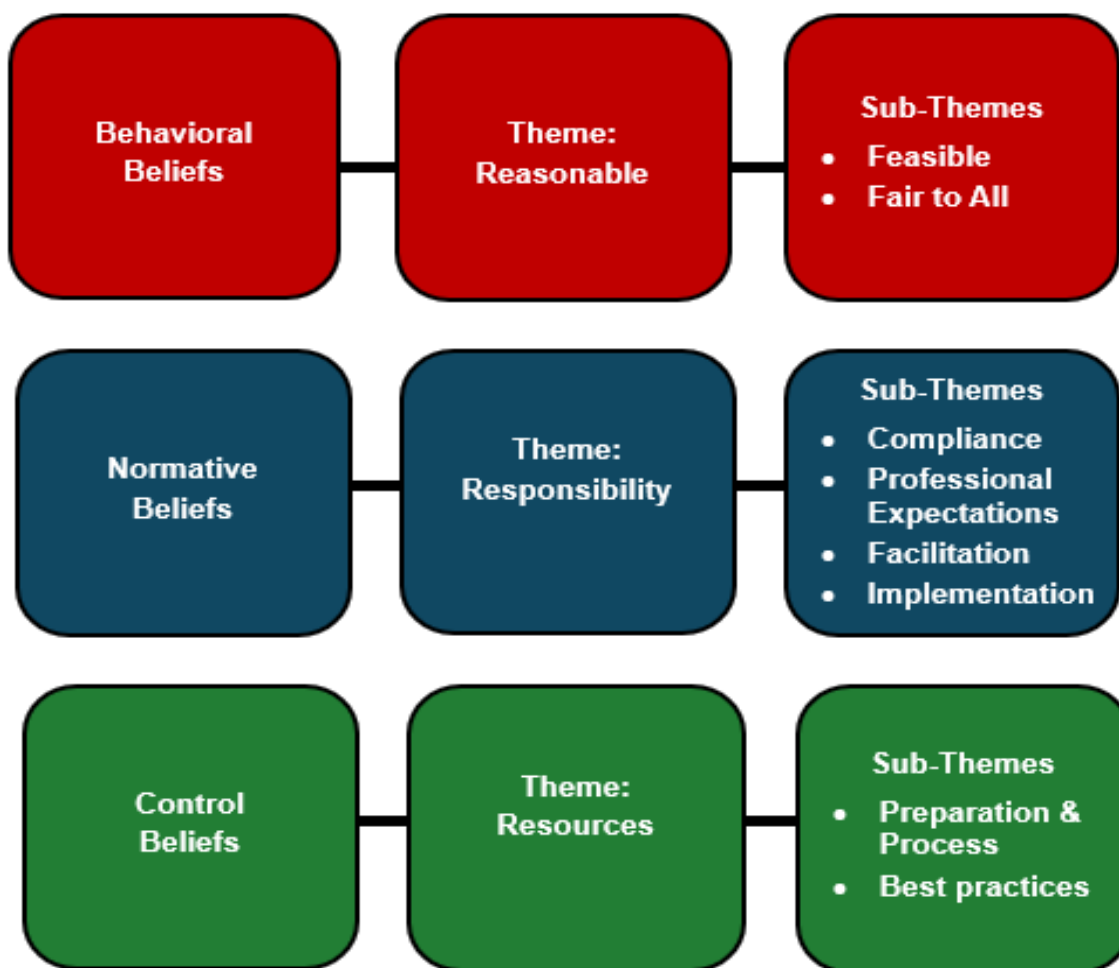
Thematic Findings

This study investigated antecedent beliefs among nurse educators that enabled or impeded the process of providing academic accommodations for nursing students with disabilities. Three themes (Reasonable, Responsibility, and Resources) were identified from the 31 salient faculty belief statements related to the accommodation process for nursing students with disabilities. Within each theme, sub-themes were identified that represented essential concepts expressed by faculty participants during the interview process: Feasible, Fair to All, Compliance, Professional Expectations, Facilitation, Implementation, Preparation and Process,

and Best Practices (see Appendix K). Each sub-theme was described by consolidated belief statements that represented the dominant beliefs expressed among faculty participants. The three themes and their associated sub-themes aligned with the theoretical framework of the theory of planned behavior's three belief categories (see Figure 2). While there was no predetermined plan to identify themes in relation to the theory of planned behavior, the study findings demonstrated the sufficiency of using the theory of planned behavior's three belief categories as an organizing structure for data analysis.

Figure 2

Themes and Sub-Themes in Relation to the Theory of Planned Behavior's Belief Categories



Member Check Feedback

Once the themes and sub-themes with consolidated belief statements were identified, a member check email using an anonymous Qualtrics survey was sent to six faculty participants representing all regions of the United States including participants with master's and doctoral degrees (see Appendix L). Collectively, participants used for member checks included individuals with didactic and/or clinical accommodation experiences. Five surveys were returned with three providing feedback.

Participant feedback supported the findings for six of the eight sub-themes. Two sub-themes had mixed support regarding aspects of the associated consolidated belief statements. The sub-theme, Fair to All, generated comments from member check feedback. Faculty beliefs described for this sub-theme contained a statement about the expectation among educators that students who requested accommodations should use them. This statement was not supported by one educator; however, the other aspects of the sub-theme were supported. While multiple faculty participants commented on their observation that not all students used the extended time allowed for accommodations involving exam modifications, this element of the sub-theme was removed from the Fair to All sub-theme and included as an exemplar statement by an educator within the sub-theme, Facilitation.

Another concern within the sub-theme of Fair to All expressed through member check feedback involved the use of the term *fair*. One educator believed the use of this word was problematic because differing interpretations constituted fairness. Based on this comment, an explanation of the term, fair, and why it was selected for use in a sub-theme was included in the study findings. In addition, nurse educator exemplar statements explaining the multi-faceted aspect of this term are discussed in the results for this sub-theme.

Another sub-theme, Implementation, received mixed support from member check participants with two individuals commenting on aspects of the belief statements describing this sub-theme. The disputed belief statement contained a phrase that nursing faculty implemented accommodations with limited help and resources. While this was a recurring issue for multiple educators, it was not representative of the majority of participants; therefore, the statement was removed as a descriptor of consolidated faculty beliefs. Instead, specific examples of how faculty identified and used resources to implement accommodations are included in exemplar statements and the discussion for this sub-theme.

The final steps of incorporating feedback from member checks and peer debriefings with the research advisor enhanced the credibility of the study's thematic findings and completed the analysis of the research data. The three themes and associated sub-themes are presented in relation to their corresponding research sub-question. These findings are reported beginning with behavioral beliefs followed by normative and control beliefs. The presentation of study findings in this order is reflective of the study's structural framework using the theory of planned behavior and not based on the significance of the findings. Interpretations regarding the implications of these beliefs are discussed in Chapter V.

Research Sub-Question 1a Theme and Sub-Themes

Q1a What are nurse educators' behavioral beliefs regarding academic accommodations?

Theme: Reasonable

A dominant theme derived from transcript data was the belief that a specific accommodation and the process involved in implementing it should be reasonable. The perception of reasonableness varied based on the accommodation, circumstance, and interview

participant. Within the theme of Reasonable, beliefs among nurse educators contained two sub-themes: the concepts of feasibility and fairness.

For instance, the concept of feasibility was a factor in a student's accommodation request for bringing a service animal to the clinical setting. The ability to accommodate a service animal for a medical-surgical clinical rotation was reasonable and feasible for Joy to provide since the clinical facility permitted animal visits to patient rooms through their pet therapy program on the medical-surgical unit. Accommodating a student with a service animal for other clinical rotations involving the obstetrics unit or the neonatal intensive care unit was not feasible. Joy explained that her nursing program was working on alternative clinical placements for those courses; however, she was not aware of the outcome of those plans.

Ambiguity existed when defining the term, reasonable, in relation to academic accommodations. What was deemed a reasonable and fair accommodation in the opinion of one nurse educator might not be perceived as reasonable to another. Ellen described this dilemma by stating, "You know, there's reasonable accommodations, and then there's unreasonable accommodations. And what is that line? Is that line fair and equitable to all students? Or are we applying it willy-nilly across-the-board like?"

The sub-themes of feasible and fairness each represented a variety of beliefs expressed by nurse educators with regard to academic accommodations. Consolidated belief statements describing common issues reported by study participants and a discussion with exemplars of faculty statements supporting the analysis are provided.

Sub-Theme: Feasible

Sub-Theme Belief Statement. The difficulty and complexity of the accommodation process is dependent upon the availability of resources and personnel, number of people

involved, experience level of the faculty member regarding the specific accommodation, and time needed to plan and prepare the implementation of the accommodation. Nurse educators are especially concerned about accommodations that affect their teaching methods, materials, or plans.

Discussion and Exemplar Statements. Nurse educators explained that some accommodations were easy to implement while others were difficult. Accommodations requiring adjustments in student seating arrangements, the use of adaptive devices such as screen readers or amplified stethoscopes, minor modifications in teaching materials, and the presence of an interpreter or transcriptionist for a student with a hearing impairment were perceived as easy accommodation requests. The common element of these accommodations was the educator's ability to implement these adjustments independently with little need for advance notice, additional personnel, or material resources.

The concept of feasibility did not imply, however, that nurse educators refused to provide the accommodation in response to student requests. All educators gave examples of complying with the requested accommodation even if this created what the educator perceived as unintended consequences for faculty. For example, accommodations that involved an extensive time commitment by the faculty member or required the educator to alter pedagogical methods were viewed as difficult to implement. Michelle described the accommodation request of additional time for students with learning accommodations and the impact it had on her pedagogical methods:

The biggest thing that really stuck out to me the most, was I started quite a few years ago, when the flipped classroom became really big. I started all in doing that. And I had kind of a ticket in, ticket out system. Like a little five question quiz at the beginning and at the

end of the class... And, what I ran into, my class started at 8:00 a.m. so I had about a handful of students that had learning accommodations. So, if they were going to do the ticket in, I had to be there early for them to be able to take the ticket in and have the extended time. And the ticket out, I ran into the same situation, that we were often getting kicked out of our classroom and they didn't have time to finish the ticket out. So, I finally just gave up. I was like, you know what? Because I feel like every semester it got more and more. Like this semester, I have probably about one third of my students have some type of learning accommodation. And it just, it got like too much work for me to be able to do it [flipped classroom], you know? Then I'm like, I was trying to bounce around and accommodate these and it just was taking a lot of my own personal time away.

Since the accommodation of additional time on quizzes was considered a reasonable request, Michelle abandoned her active learning pedagogies for a more traditional lecture format. Finding a way to implement the accommodation and maintain a flipped classroom was not feasible for her.

The feasibility of providing an accommodation might exceed the authority and control of the nurse educator. While Susan supported the inclusion of individuals with physical disabilities in the nursing profession, she described the challenges her nursing program would face in finding clinical sites in the rural areas of her state where her academic institution resided. Although her program had not encountered such an issue, Susan explained why a student with a physical disability with lifting restrictions could be a feasibility issue for her nursing program:

We have a clinical agency which requires us to have students sign a form saying they can lift 50 pounds. And so, for a student who has physical motor challenges, that may not be realistic. And so, for us then, the question would be: Can we ensure competence of this

student if they don't go to that agency and how do we do that? I mean, we're in a relatively small, we don't have tons of options for clinical like this.

For Susan, providing alternative clinical experiences for students with certain physical limitations who might enroll in her nursing program, a school with fewer students and limited resources compared to larger universities, created challenges for determining what were feasible and reasonable accommodation requests.

Sub-Theme: Fair to All (Including Faculty)

Sub-Theme Belief Statement. While nurse educators believed that accommodations remove barriers to learning for students with disabilities, these accommodations should not create inequities for other students, lower academic standards, or require faculty to use a less effective method of instruction.

Discussion and Exemplar Statements. The phrase used to describe this sub-theme was deliberately chosen. The concept of fairness could be an emotionally-laden word that has different interpretations, depending on a person's experiences. It was important, therefore, to investigate what Fishbein and Ajzen (2009) described as background factors to gain insight regarding the origins of faculty beliefs toward performing an action such as providing accommodations to nursing students with disabilities.

The dictionary described the term *fair* as a word that "implies a proper balance of conflicting interests" (Merriam-Webster, n.d., "Choose the Right Synonym" section). With academic accommodations, the groups of individuals involved in maintaining a proper balance included the student requesting the accommodation, other students enrolled in the nursing course, and the nurse educator. When describing their accommodation experiences and beliefs, faculty participants expressed concern for all students regarding the implications an

accommodation might have for the student with a disability, other students, and themselves.

While all study participants acknowledged the importance and need to provide accommodations that mitigate barriers to student learning, faculty offered multiple examples of unintended consequences occurring as a result of the process used to implement requested accommodations.

Fairness for Nursing Students With Disabilities. Nurse educators in this study were cognizant of the impact an accommodation had for students with disabilities. A common accommodation in the didactic learning environment was the opportunity for the student to have extended time on exams in a reduced-distraction environment. Educators were sensitive to ensure the implementation of this accommodation did not create additional barriers for the student receiving exam accommodations. An example of this was described by Sarah:

The other thing with equity that I worried about was the student in the testing center doesn't have me right there to ask a question. So, what I did was, I texted, I mean, I emailed with the testing center and said, "You know, can I give her my phone number? She can call me or text me while she's taking it if she has a question," and, they thought that was a great idea. So that to me kind of solved that problem, because, you know, sometimes students just don't understand a word. So, I didn't want her to be disadvantaged that way.

The concern regarding unintended consequences experienced by students receiving the accommodation was echoed by Michelle who explained her concerns about students receiving exam accommodations:

One thing that I did have a big concern about with my last exam, cause we've gone all to online testing, and our students go to the testing center. But our disabilities, or our students with accommodations, have the option of either testing in the testing center or in

the Disability Access Center [DAC]. And I found out that my students who went to the testing center were not given calculators, and there were medication questions on the exam. And they also weren't allowed scrap paper, where my students in the DAC were allowed those tools.

Unintended consequences sometimes involved the effect that the accommodation had on student attendance in other classes. Susan explained:

Well, if I give a test at 7:45, and this student has 2 1/2 times the amount of time allowed.

If I say, oh, you have to start at 7:45, they're going to miss most of the next class. So, one of the conversations we have is: OK, what are you talking about in your class today?

What would happen if that student misses that?

These examples highlighted concerns nurse educators had when implementing accommodations for exam modifications. Sometimes new inequities were created when an accommodation prevented the student from having the same opportunity to ask questions during an exam as other students or the accommodation interfered with the student's ability to attend another class.

Nurse educators in this study believed they treated nursing students with disabilities in the same manner as they treated other students. While discussing a student who required an amplified stethoscope in the clinical setting, Ellen believed she was careful to maintain equity among her clinical students and did not perceive that she supervised and scrutinized the nursing care provided by the student with the disability to a greater degree than other students in her clinical group. Reflecting on her supervision of the student during clinical, Ellen stated: "So maybe she required a little bit more time and attention just because I needed to bring things to her awareness that maybe I didn't need to bring to the awareness of others. But I honestly feel like I didn't treat her differently than her peers." Ellen perceived the extra time spent for this

particular student was not based on a lack of trust in the student's ability to safely provide care to the patient; it was based on the need to lessen barriers to learning so this student and all students in her clinical group obtained the necessary clinical data to achieve student learning outcomes in that clinical setting. Nurse educators in this study were also concerned about fairness in relation to students who did not receive academic accommodations.

Fairness for Nursing Students Without Disabilities. All faculty believed academic standards were maintained and not lowered as a result of student accommodations. The process some nursing programs used to implement exam accommodations created issues for nurse educators. When the accommodation of testing modifications required a student with a disability to take an exam at a different time or a different day than other students, faculty were concerned test questions would be discussed among nursing students and compromise the integrity of the exam. Michelle provided an example:

I've had problems with our testing, our DAC center closes at 5 p.m. and our class starts at 2:30...I want them to take it during their class time, right? But if they get 2 1/2 hours or 3 hours, they could double, triple time, right? If they don't schedule to take the exam till 2:30, they don't have enough time for that accommodation. I've had, with both my exams so far this semester, I've had to open it a third day which I don't really like that because I feel like, you know, the more times you open it, the less secure it is. The integrity, I kind of question it.

Sarah shared the same concerns as Michelle and stated, "The testing center could not schedule her at the same time as my exam. So, she took it a couple hours later. So, of course, for exam integrity, you worry about that." In both Sarah and Michelle's examples, the issue of fairness related to scheduling and testing center limitations and not the accommodation itself.

Fairness for Faculty Providing the Accommodation. All comments regarding fairness for faculty related to the didactic setting and in relation to the accommodation's impact on pedagogy; no concerns were voiced regarding an accommodation negatively affecting clinical teaching. Nurse educators valued their ability to determine which methods of instruction were most effective for student learning; they also wanted the flexibility to make changes in their teaching plans to ensure student learning outcomes were met.

Educators discussed the impact of extended time on quizzes as an example of an accommodation that had the consequences of removing spontaneity in pedagogies. Janet commented, "It frustrates me that I can't teach it the way I want to teach it." Educators felt they had less flexibility to change their plans for the class that day and give a quiz or a time-dependent assignment for students to complete if a student with an accommodation received extended time for quizzes and assignments. Janet explained:

I had maybe 10 out of 160 students who had these testing needs due to that small variety of conditions. I had to change the way I taught, but I didn't notice early enough. I could no longer give a pop quiz. I could no longer hand out an assignment and say, "You know, let's do this here in the classroom." Well, that changes your mode of teaching and changes things if you had quizzes as a percent in your syllabus. And now you can't give the quizzes.

The impact of extended time on quizzes also affected Susan's use of formative and summative assessments:

And for me, it usually wasn't worth it. You know, I felt like I gave up too much time. The student would miss too much if they took extended time to take the quiz. So, you can do quizzes, but simply not give them. I mean, no stakes, kinds of things. So, you give them a

little set of questions, and then we talk about the questions, but it doesn't contribute to their grade. It's really more of just a learning activity as opposed to a testing activity.

Active learning strategies were impacted by quiz accommodations. Michelle explained:

I was kind of disheartened because there was so much literature around the flipped classroom, and I really noted with those couple of semesters that I did it, I could really push the students a lot further in their knowledge base.

In response to the impact of accommodations on her active learning strategies and the realization that changes were needed with regard to what helped all students learn and retain information, Michelle explained she now intentionally creates class activities with universal design for learning as the guiding concept for deciding which pedagogies to use:

I still try to use the universal design of using a lot of different types of learning. So, I bring hands- on things that they can feel like they can feel the fundus or they can see the position of the baby. Umm, and then I use a little bit of video, a little bit of lecture, Kahoots, active learning strategies, Padlets, group work. So, I kind of try to use a combination of things to accommodate all types of learners.

Reasonable Theme Summary

Throughout the interviews, faculty acknowledged the benefits of providing academic accommodations to mitigate barriers to learning for students with disabilities. While reasonableness, in the terms of feasibility and fairness, varied among interview participants, all educators expressed their support for the inclusion of students with disabilities in nursing programs. Additionally, they believed they maintained and did not lower their standards when educating and evaluating students with disabilities. Faculty gave examples of easy accommodations to implement: (a) those that required little or no changes in routine or

procedure, (b) could be implemented quickly, and (c) did not involve additional personnel or material resources. Accommodations perceived as difficult included any one or all of the variables related to the need for advance planning, additional human or material resources, and changes in teaching pedagogies.

Compared to discussions about difficulties with clinical accommodations, nurse educators in this study expressed more difficulty implementing accommodations in the didactic setting. Examples were shared describing negative unintended consequences both for students who received an exam and/or quiz accommodation and students without accommodations. Some faculty expressed problems using their preferred classroom pedagogies and abandoned them when implementing quiz accommodations conflicted with practical use of the pedagogy. While faculty sometimes expressed negative experiences implementing some types of accommodations, all educators conveyed a strong sense of commitment and responsibility to facilitate the achievement of learning outcomes for all students including those with academic accommodations.

Research Sub-Question 1b Theme and Sub-Themes

Q1b What are the normative beliefs about perceived social and organizational expectations that nurse educators describe regarding the process of accommodating nursing students with disabilities?

Theme: Responsibility

Of the three themes identified during data analysis, Responsibility was the dominant theme and had a pervasive influence on the study's other themes of Reasonable and Resources. Faculty expressed a commitment to fulfill legal, professional, and personal expectations to mitigate barriers to learning for students with disabilities. Analysis of faculty narratives

identified the four sub-themes of Compliance, Professional Expectations, Facilitation, and Implementation in relation to their normative beliefs about academic accommodations.

Sub-Theme: Compliance

Sub-Theme Belief Statement. Nurse educators believe they are expected to comply with the ADA (1990) mandate and fulfill their employer's expectations to provide accommodations for nursing students with disabilities.

Discussion and Exemplar Statements. All nurse educators reported it was their responsibility to comply with their employer's expectations and follow institutional procedures by providing accommodations to nursing students with disabilities. Penelope stated, "I don't think twice about giving time and a half or double time on a test. It's, it is a mandate and I just never question it. It's just what I do." Susan agreed with Penelope and stated, "They just expect it. It's a given. I mean this is, you know, if you get the letter about the accommodations, you're expected to abide by that. It's a given, it's a done deal." Amelia agreed with Susan and Penelope and emphasized the legal perspective of accommodations by stating, "It kind of seems to me like it's a little about the legal mess of it. You know what I mean? About the regulation and ensuring we will all be following the regulation. That's the impression that I get."

No educator expressed opposition to providing reasonable accommodations for students with disabilities. Some educators, however, expressed their perception that the nursing program or university administrators were more interested in compliance with the legal mandate than the effectiveness of the accommodation or the accommodation process. Janet stated:

They handed me the piece of paper and told me the accommodations and they're finished.

Nobody ever evaluated it. Nobody ever said, "Did it work?" Nobody ever checked to see.

I guess you would only check if the student went and complained that they're not doing what I need.

Janet's sentiments were supported by Marcy's statement:

They have *no idea* [emphasis added]. There's no other way to say it. You know when it first came to light [the accommodation request for a service animal], and I reached out to the College of Nursing, and they're very supportive in getting me connected with Disability Services for the entire university at the campus level... They really were pushing me to work with Disabilities [office] and really have *no idea* [emphasis added] what we've been doing this entire time.

Nurse educators believed they fulfilled the expectations of their supervisors and followed the university's process and complied by implementing requested accommodations.

While all educators expressed this belief, some educators described scenarios where compliance to the policy was not followed and the educator provided an accommodation without formal notice of the request for accommodations from the campus disability office. Ellen gave an example of receiving instructions from her supervisor to implement an accommodation prior to receiving official notice:

They [accommodations] are supposed to come through as formal. They are also supposed to occur before the first exam and they are also supposed to be, umm followed through with the student to make sure that the instructors know so that the testing plan can be discussed between the student and the instructor. That's what the policy is. However, I can tell you that it has been, "This student has accommodations paperwork. It hasn't come through yet, but just give them the extra time and the separate space for this first exam." So, we're going outside of that accommodation.

In this instance, Ellen complied with her supervisor's instructions, which conflicted with the university's process for waiting until notice was received before implementing the accommodation. Legal mandates and supervisor expectations were not the only sources of extrinsic motivation for nurse educators to provide academic accommodations; they also expressed a professional obligation to the nursing student with a disability.

Sub-Theme: Professional Expectations

Sub-Theme Belief Statement. Academic nurse educators believe they have a professional responsibility to equip nursing students with disabilities for entry to professional nursing practice and to prepare them to take the NCLEX.

Discussion and Exemplar Statements.

Preparation for Nursing Practice Beliefs. Throughout the interviews, faculty expressed a professional obligation to equip students with disabilities to practice as professional nurses. Seven of the participants provided clinical accommodation examples of preparing students for professional nursing practice. No one clinical accommodation dominated participant narratives; rather, clinical accommodation examples were distributed evenly with two educators offering examples of teaching students with low vision who required the use of a magnifier, two nursing students used amplified stethoscopes, two students had service animals in the clinical setting, one student required a prosthetic arm, and another student needed the clinical instructor to read the electronic medical record due to the student's learning disability. Susan explained how she helped prepare this student for the transition from student to professional nurse:

We [clinical instructors] would have to make sure that what she, you know, her charting was appropriate. I mean because there was a, she had some real language challenges. I mean, just I mean challenges and it wasn't because English was not her first language. It

was because of her learning. I mean it was a, it was a disability. And so, making sure she understood what was in the doctor's orders. Making sure, in a different way than you would with a student to say, "Make sure you look at the orders." For this student, you had to make sure and read them out loud to her and make sure she understood them before you moved on. Not because she wasn't smart, but because that was what she needed to have done... She and I used to talk about how she was going to have to build a network in her work environment of people that she could double check with and check in with who would check in with her to make sure that she was getting what she needed.

While all educators provided the requested accommodation, consensus was lacking regarding the educator's belief whether the student could be successfully employed after graduation.

Joy, a clinical educator, described future employment concerns she had for a student she recently taught during a medical-surgical clinical rotation whose accommodation included the need for a service animal in the acute care setting:

My concern is based on, based on what I see in nursing and employment in nursing, it's very traditional. And will there be a barrier for this person to be employed because of misperceptions, misinformation, and assumptions that this won't work, at least in an acute care setting? Other settings typically require a couple of years of acute care practice. So, we've kind of created this whole thing about a challenge for many students to be employed... And it's not that I feel obligated. I just kind of think, there's a whole other set of challenges that this student will have upon finishing an education program and it bothers me because I don't think nursing, as a profession, has accepted the fact that people with disabilities can be completely embraced within the profession.

Doubt was also expressed by two educators regarding students who received exam accommodations in didactic settings and its impact on preparing the students for nursing practice after graduation. Michelle, when discussing a student receiving extended time on exams, stated:

I probably have the same concerns that most nurses do. That, you know, we don't always have time to think. Sometimes we just have to act. And so, I do have that concern that, are we setting them up, umm with, I don't know, illogical expectations of what's going to be expected of them in a nursing role? You know, I do consider that.

Cissy had similar concerns about a student who received extended exam time, a separate environment to complete the exam, and the exam was read to the student by the faculty proctor: "How is she, if she has to have things read to her, how is she going to read orders off the chart? How is she going to interpret, be able to interpret those? How is she going to handle all the tasks that are required of a nurse on the unit?"

While Michelle and Cissy expressed doubt regarding the successful transition to professional nursing practice for students requiring exam accommodations, other faculty participants adopted a different philosophical view about the impact of accommodations on a student's transition to practice and the nurse educator's professional responsibility to equip the student for practice. Sarah explained:

I think that school is not necessarily a reflection of nursing as a job. And I think that in school, they need time and space to try and fail and to experiment and to practice. And you can't do that if you're not in an environment where you can learn well...so I think that accommodations for learning are different from accommodations on a job. And I think that the learning environment should be for learning and so we don't need to say the student doesn't always have to be on, like they're on a job.

Jo agreed with Sarah when discussing the accommodation of extended exam time and the implications this had on nursing practice after graduation:

They can choose as to where they want to work. So maybe the ED is great, or maybe it's not. You know, maybe diabetes education is great and maybe it's not. So, I don't see, I hear sometimes where people try to make a connection, "Well, what are they going to do in the real world?" You know, it's like: Well, they're going to be in charge in the real world.

Beliefs regarding nurse educators' professional responsibilities were not limited to preparing students for professional practice in employment settings. They also felt an obligation to prepare students to take the NCLEX exam.

National Council Licensure Examination Beliefs. The majority of faculty participants expressed beliefs that preparing students for the NCLEX, including students with disabilities, was part of their responsibilities as a nurse educator. Mary viewed exams taken by students in nursing school as training for the NCLEX. Accommodations regarding extended time on exams and/or testing environment modifications generated the most discussion about NCLEX.

Educators held conflicting views about which, if any, accommodations were allowed during the licensure exam. Penelope, Mary, and Janet expressed the opinion that exam accommodations were allowed for individuals with disabilities while Michelle did not believe extended time on NCLEX was allowed and Ellen questioned whether the accommodation for environmental modifications to reduce distractions was provided; Sarah was unsure and stated, "Some teachers will say, 'Well, you know, they don't have accommodations for the NCLEX' which I don't know if they do or not."

Jo expressed a different philosophical view about nurse educators' responsibilities toward students who received exam accommodations during nursing school and the NCLEX. She described a conversation she had as a novice nurse educator with the program coordinator when Jo questioned the appropriateness of providing exam accommodations during nursing school and their impact on student success for the licensure exam:

She [the program coordinator] very carefully explained to me that they're completely unrelated. That my job was to provide education and provide the accommodations needed for the student to, you know, get through whatever was required of the course. And that had no bearing on what the student might need, or choose to request, or etcetera, related to the NCLEX.”

Student performance on the NCLEX was important to nursing programs and could be a reflection of the quality and effectiveness of the education students received in nursing school. A concern expressed by only one faculty participant involved the issue of exam accommodations and student performance on the NCLEX. Cissy, when reflecting on providing the accommodation of extended exam time for two recent graduates, stated:

I don't really know if it helped her to be successful in her program outcomes, because uh, she passed and she graduated. Umm, but she, since did not pass the board exam. And the other one that had accommodations, she didn't pass either. So, ultimately it affected our pass rates, which we are trying right now to get out of probation.

While faculty participants expressed conflicting opinions about the impact of nursing exam accommodations on student NCLEX performance, all nurse educators perceived a professional obligation to equip students for success after graduation from nursing school.

Sub-Theme: Facilitation

Sub-Theme Belief Statement. There is a strong belief among nurse educators that it is their responsibility to help students overcome barriers to success during nursing school. They want to help all students including nursing students with disabilities.

Discussion and Exemplar Statements. The dominant belief among nurse educators was that accommodations were beneficial and facilitated success among students with disabilities. Several educators articulated the belief expressed by Lena: “We want to be able to make sure that everybody who wants to be a nurse can be a nurse. And this person, she’s brilliant and was gonna be a great nurse. We just needed to, you know, give her what she needed so that she could go be a great nurse somewhere.” Nurse educators believed accommodations, and their role in facilitating success for students with disabilities, provided other benefits. Several educators expressed the importance of helping students with disabilities because of the benefits they brought to the nursing profession through expanded diversity among nurses and the unique perspectives that persons with disabilities could offer in patient care settings.

While the accommodation process was intended to reduce barriers to learning for students with disabilities, some faculty participants provided accommodation-like assistance to students who had not requested or had yet to receive a letter requesting the accommodation. Examples varied among educators with some providing assistance for students with temporary health conditions that the nurse educator believed to equate to a disability that should receive an accommodation. Mary described such an issue:

My only other would be when students have been temporarily disabled and it would take longer to go through that process than to accommodate them. I have absolutely worked

around the system so they could keep going because they shouldn't be held up for red tape.

Penelope gave an example of a student who needed exam modifications and was in the process of requesting accommodations but the letter had not been received. In that instance, Penelope allowed the student to delay taking the exam until the following week so the student could receive the exam accommodations. Michelle described her response to students seeking but not yet receiving exam modifications:

I think I've even accommodated students that have told me they're in the process of going through DAC. Cause often, I'll find, you know, they say they need extended test time and they really don't. A lot of them like, you know, they still take the normal hour or hour and a half that other students do. But I think just sometimes if I just tell them I've given them the extended time, that eases their anxiety enough that it kind of, they're OK either way.

Michelle also described providing accommodation-like assistance for a separate exam room for some students:

And some, I let a couple of them too, like after they had the baby, come back and take an exam. Umm, I'd put them in a separate room so they could bring the baby with them and not have to get a babysitter. So, kind of just... But those weren't really requested accommodations. Those were more like informal.

Jo, an educator with administrative experience in academic settings, expressed a different perspective regarding the practice of helping some students by providing accommodation-like assistance:

I am aware that, at times, educators will individually modify something for a student because they perceive the student needs something. "I'm just going to let you have a little

more time today.” That, I think, would lower a standard because the standard is: This is the time limit. And for, what to me, I would perceive is for no reason, an individual is allowed to have more time. To me, that would be lowering a standard. But when it's an accommodation, I think that maintains the standard.

Susan discussed the dilemma of providing assistance to facilitate student learning for nursing students without disabilities:

What I have noticed is, we have more students who come with other issues that interfere with learning that don't necessarily have accommodations for. So, they have mental health things, issues. They have very challenging lives outside of the classroom and there's no accommodations for those. And so, it isn't just the students with accommodations that take a lot of time. It's also other students' needs. And just because a student doesn't have an accommodation doesn't mean that I don't need to change things up to meet their learning needs as a learner. And so, I mean, the accommodation stuff in some ways is very easy because it's all spelled out. This is what you have to do. Whereas, for these other students who have other issues which are not necessarily academic accommodations, there's a lot more challenges with that, I think.

All participants expressed the belief that helping students overcome obstacles to learning was part of their role as an academic nurse educator. Conflicting opinions were expressed, however, with some faculty conflating the provision of academic accommodations for students with disabilities with helping students without disabilities who experienced difficulties during nursing school.

Sub-Theme: Implementation

Sub-Theme Belief Statement. Nurse educators perceive themselves as individuals who are responsible for implementing accommodations. Educators believe they are expected to be resourceful and effective when modifying pedagogies and making arrangements to implement requests for accommodations.

Discussion and Exemplar Statements. The majority of nurse educators expressed the view that it was the responsibility of the individual faculty member to ensure student requests for academic accommodations were implemented. Several participants described their actions in response to receiving an unfamiliar accommodation or when they lacked knowledge about a particular disability. Susan gave this example:

And if I were to have a student who had a different accommodation that I've not had a lot of experience with. For example, if I had a student with dyslexia, I would need to dig into what is the best teaching pedagogy to use with students who have dyslexia. Because I've not had experience with that...I could certainly go down to my colleagues in the Education Department and say, "Hey, you know, what's the basic principles of teaching a student who has dyslexia?" Because those basic principles would be true in elementary education as well as for me. But then some of it, I would just have to Google, "How do you teach nursing students with dyslexia?" Look up what people do. [Laughs] You know, and I mean I don't, I mean, I know what dyslexia is and I've certainly worked with kids, or I mean children who have dyslexia. But in terms of teaching someone, that would be a whole new gig for me.

Marcy shared a similar perspective when describing her initial response to receiving a student request for a service animal in the clinical setting:

But in no other cases had anyone had a clinical situation. Also, I reached out to a few listserves and again, no other institutions had expressed that they had a service animal in a clinical setting. So, at this point, we felt like we were, this was a grassroots effort, and we're going to see what we can do...So, I had to do the majority of the research on my own. I had to reach out to the institutions to get their policy and that's how it started.

Nurse educators valued their academic freedom to select pedagogical methods that are most effective for student learning. Susan elaborated on her perception of faculty roles and responsibilities with regard to choosing and implementing appropriate pedagogies for all students, including students with accommodation requests:

This is my perspective. If, as a faculty member, you're always waiting for someone to tell you how to best meet the students' needs, you're missing the boat. And I don't think you're doing your job as a faculty member. Because some of that, you need to use discernment. You need to apply the nursing process to your class and say what's working? What data do I have? What do I need to change up? What is my plan? Do I need to change it up? And if you're only waiting for someone from Disability Services to tell you, "Well, this you should do. This and this and this for this student" then you're missing the boat.

While faculty participants believed it was their responsibility to choose and implement appropriate teaching methods, several educators expressed frustration when discussing the logistics involved in implementing the accommodation of extended time on quizzes or exams. Janet's example was similar to several faculty participants when she described the difficulties she experienced implementing quiz accommodations:

I had to find a place that was available a half an hour before class so that those students who needed untimed, five-minute quizzes could have up to 30 minutes or whatever it was. And then arranging someone to proctor them while they took this quiz. And then they had to wait outside of the classroom until the class was done taking the quiz.

When questioned about what would help decrease her frustration when implementing this accommodation, Janet explained, “We don't even work together as faculty. We're individualized and there's nobody there to really watch you or give you guidance or the people who do that don't know how to give you guidance or what guidance to give.” Most faculty narratives described examples of the nurse educator making autonomous decisions regarding the pedagogical methods used but having difficulty implementing accommodations that required them to recruit personnel and/or material resources to comply with the letter of accommodation.

Responsibility Theme Summary

All nurse educators believed it was their responsibility as employees of their academic institution and as professional nurse educators to comply with student accommodation requests. This belief was viewed as a legal and professional mandate. Although most participants believed their role as professional nurse educators included the responsibility to prepare students for professional nursing practice upon graduation from nursing school, doubt remained for some participants whether employers and practicing nurses would support and facilitate the successful employment of these students in acute care nursing settings. Most study participants expressed the belief that the role of an academic nurse educator should include the responsibility to prepare students for the NCLEX; they disagreed, however, about which, if any, accommodations were allowed during the licensure exam.

The responsibility to facilitate learning for all students, including those with disabilities, was a recurring belief expressed by educators. Participants described examples of assisting students with issues that interfered with their learning. Sometimes the educator's actions would violate their institution's academic accommodation process by providing accommodation-like assistance to students who did not have or had not received approval for an academic accommodation. When discussing their responsibility to facilitate student learning, beliefs that conflated academic and employment accommodations were evident among several nurse educators. Faculty narratives reflected the belief that it was their individual responsibility as a nurse educator to coordinate and assure the requested accommodation was implemented. This sometimes involved altering pedagogical methods or coordinating logistical arrangements for didactic quiz and/or exam accommodations. While educators accepted the responsibility for adapting pedagogical methods to comply with the requested accommodation, some nurse educators expressed frustration about the expectation that they should coordinate personnel and/or material resources to implement the students' accommodation requests.

Research Sub-Question 1c Theme and Sub-Themes

Q1c What control beliefs related to knowledge, skills, and resources do nurse educators perceive are needed to fulfill student accommodation requests?

Theme: Resources

Sub-Theme: Preparation and Process

Sub-Theme Belief Statement. Nurse educators who receive accommodation requests express the need for a clear process, advance planning, and available resources. Without these and when there is little notice of the accommodation request, faculty may spend their personal time working to implement the accommodation.

Discussion and Exemplar Statements. All nurse educators reported their higher education institution had a process for students to request and receive academic accommodations in compliance with the ADA (1990). This process included utilizing the resources available through the institution's office of disability services. Several faculty participants reported the personnel in this office were helpful as a resource to clarify the accommodation request or answer questions about the accommodation process. Sarah stated, "The Office of Accessible Education is respected and listened to." Amelia agreed by stating, "They're very open to talking about any kind of element. You know, anything related to the accommodations that they outline in the letter."

Even when an educator disagreed with an accommodation as written in the letter of request, the personnel in the disability services office were perceived as approachable and a helpful resource for some aspects of the accommodation process. Penelope described an accommodation letter that asked for a flexible student arrival time to an acute care clinical site. She explained her interaction with office personnel, "The only time that I really had to like have a deep conversation was the one [accommodation request] that I ended up not agreeing to. And they were supportive of what I was not agreeing to." In that instance, Penelope explained her concerns about the language in the accommodation letter where the term *leniency* had no clear definition and created difficulty for the educator to implement in a time-dependent clinical environment. As a result of that interaction, Penelope stated, "In future courses, they [Office of Adaptive Services] were going to be more specific and not so loosey-goosey in their terminology so it wasn't left up to the instructor to try to interpret what do you mean by leniency?"

While personnel in the disability services office were perceived as a resource for clarifying language used in a request for accommodations or for answering procedural questions

about ADA (1990) compliance, resources were lacking to assist some nurse educators with planning and implementing some types of accommodations.

Exam Accommodations. For campuses with centralized resources where students could arrange to take their exam in the disability services office or testing center, faculty participants expressed frustration with the hours of operation and/or limitations in the number of students who could use the testing resources at a given time. Janet described her frustration, “But if the testing center isn’t open when you’re teaching an evening class or early morning class or something, then what’s the good of having the accommodation?” Sarah concurred with Janet by stating, “The difficult thing to wrap my head around was the testing center could not schedule her at the same time as my exam.” In addition to issues with hours of operation, Sarah described other constraints with campus resources: “That is one of the limitations. The student has to self-schedule that if they want to take an exam in the testing center. And so, if they don't do it fast enough, I guess then they don't get the spot they want or the time they want.” Concerns were not limited to a testing center. Michelle described issues reported by students when arranging to take exams in the disability services office:

Some have approached me because they couldn't get into the DAC Center like on the day to take the test and they say, “Oh, they won’t accommodate me this day. Is it OK if I wait to take it till Thursday?” And, you know, and in those aspects, yes. Sometimes I've had to reach out to the DAC Center and say, you know, “I really want them to take it. Will you please consider accommodating them? I'm OK even if they come in and take it at 11 instead of at 2.”

For nursing programs without centralized campus testing centers or the ability for students to take their exam in a disability services office, study participants described the need to

rely on fellow members of the faculty to assist in proctoring exams. Lena described a recent example: “We need test proctors like my friend was doing it this morning. We need test proctors. There's an e-mail for that all the time for people, ‘You're in the building. Could you please pick up test proctoring?’ You know that kind of thing.” Cissy described similar challenges faced by faculty at her institution for finding resources to implement exam accommodations:

I was notified before the semester started because we have to make a schedule of all of our tests and the instructor for the class has to find a proctor for each test... And we've been told that the proctors have to be nursing instructors. They can't be other staff or other faculty and has to be a nursing instructor.

While nurse educators discussed their need to rely on internal resources within the nursing faculty to implement exam accommodations, some educators described proactive initiatives taken by their program to address the increasing use of exam accommodations for nursing students with disabilities. Jo chronicled the establishment of a testing center that was maintained and managed within their nursing program to meet the exam and quiz accommodation needs of nursing students and other students on campus. Lena described her nursing program's anticipatory response to this issue:

We have our planning calendar discussions for a semester. It's program-wide like 3 semesters, 2 semesters ahead. So, this semester, we're planning for the fall's calendar, right? So, all of our courses for each semester, right? And now it's like we just anticipate that we're gonna have. Like for the new oncoming cohort, because we admit people in January, May and September, we just automatically are going to have two rooms for exam taking. You know what I mean? Like we just plan for it.

Faculty participants reported the greatest difficulties with insufficient resources when planning and implementing exam accommodations; clinical accommodations, however, were perceived to present fewer logistical challenges. The only exception to this finding was from two study participants who described the complexities encountered when implementing the accommodation of having a service animal in an acute care clinical setting.

Service Animal in a Clinical Setting. Marcy and Joy described recent experiences planning and implementing the accommodation request involving a service animal. Marcy's experience included clinical, lab, and didactic settings while Joy's experience with a service animal accommodation involved lab and clinical settings. With each narrative, both educators discussed the planning and coordination challenges encountered when implementing a complex accommodation with no established procedures. Marcy explained how policies without procedures impacted their planning for this accommodation:

When I reached out to the institution, the affiliate institution, you know, they right away sent me their policy. You know, we have a campus policy for service animals. They have an institution policy for service animals as well. So, the approach from the beginning, from the Office of Disabilities was going to be to say, "There is a requirement. You're required to have policies and procedures in place. Let me see what those are and then, we'll work on the rest from there." And so that approach was: You have to have policies in place and the policy is there. [Laughs] But they, you know, are so general that's not a procedure. So there really aren't procedures in place on what to do.

Placement of the student in the clinical setting required coordination and communication among the academic institution, the acute care facility, and the student with the disability. Multiple departments within the clinical facility were involved in discussions to determine the feasibility

of the accommodation. When asked about who was involved and the time needed to gain approval for having a service animal accompany a student to a medical-surgical nursing unit, Joy responded:

So, getting people on board. Meaning getting the right people within the organization which included: Legal, Risk Management, Infectious Disease, Professional Development people, Unit Manager and right down to Charge Nurses and the Unit Educator, all on board in communication with this student coming into the practice setting...So, that actually took much longer than I thought it would. It took about eight weeks to determine that, yes, this agency can safely host a student. And I'm not talking about at the unit level yet.

Marcy's experience was similar and required an extensive period of time to plan for the initial implementation of the accommodation:

So, I first started pushing for them to reach out to the institutions, meaning I pushed the Office of Disabilities back in April. And so, she would be starting here in the fall in August. And fortunately, we had a couple weeks in the beginning of August. Because it took that entire time to get things taken care of.

Marcy and Joy described students who just completed their first semester in a course with a clinical component. Both reported positive responses related to the experience from the perspectives of the student with the service animal, student peers, the clinical instructor, and hospital staff. For both educators, considerable time was required to plan and implement the accommodation for the student's first clinical experience in the nursing program. When asked the length of time needed to plan for subsequent clinical placements now that the initial process was established, Marcy replied, "Four months. Yes, as soon as we, umm, how should I say it,

start the spring, we should be preparing for the summer.” The impact of this advanced planning requirement on workload was explained by Joy, “It probably, for one course, probably added oh maybe an additional 20% of time, overall time, to my work load... It came out of my personal time.” Advance planning and its effect on faculty workload was not unique to the accommodation of a service animal in a clinical setting.

Advance Planning and Faculty Workload. Multiple nurse educators discussed issues with advance planning for academic accommodations. Cissy described the coordination needed between nursing faculty when planning an exam accommodation for a specific student:

We could not give her an exam and a quiz on the same day. So those had to be separated out which was difficult also because, well, generally the students really weren't given quizzes and exams on the same day. But, like if she had, if she had an exam in one course and a quiz in another, we also had to coordinate that to keep those on different days because she would, I guess, have two exams in one day.

Changes in teaching materials or methods required additional planning time and resulted in increased faculty workload. Sarah explained, “I've had a couple [of students with disabilities] that needed outlines or notes provided ahead of time. And honestly, I find that difficult [laughs] because I'm sometimes, you know, adding stuff the night before or the day before.” Susan also described the impact of preparing notes for a student and how it affected her workload:

Those which require notes or, you know, those kinds of things, that is way more work. I mean, I'm not saying I don't want to do the work, but it's just more work. Had I realized at the end of the spring semester of the student's sophomore year that she was coming into my class, for example, in the fall of the junior year. Had I known about that accommodation? I probably would have spent part of my summer making notes for her

instead of scrambling for most of the semester to make notes for her. I probably would have done some things different in my class, but I would have done that work over the summer kind of thing.

Sometimes, time constraints forced faculty to choose which modifications in teaching materials were feasible. Michelle explained:

But it is a concern, you know, because like, when I pull videos to use, I try to pull ones that have closed captioning already. But then I make a fair number myself and that's where I fall into, like, I just, I don't have time. I don't have the skills. I need an IT person to work with me and I need probably about 2 weeks to do it all.

For study participants, the ability to provide requested accommodations was contingent upon having adequate time to plan, a clear process to guide the educator, and sufficient material and personnel resources. In addition to these, some accommodations require the educator to possess specific knowledge and skills to ensure effective teaching and evaluation methods were used for nursing students with disabilities.

Sub-Theme: Best Practices

Sub-Theme Belief Statement. Nurse educators describe the training they receive from their employer as basic, general information about the accommodation process and the need for ADA (1990) compliance. They express a desire to receive training and/or have access to an easily-accessible repository of evidence-informed information and resources related to best practices for teaching nursing students with disabilities in didactic and clinical settings.

Discussion and Exemplar Statements.

Employer-Based Training. Faculty expressed frustration with the lack of resources available to them for educating students with diverse learning needs. Instead of receiving

information on policies related to the accommodation process, they wanted practical information regarding specific disabilities and how they impacted student learning and examples of effective pedagogies and evaluation methods to use. Joy's concerns were representative of several educators' frustrations with employer-based training activities regarding students with disabilities:

They talk about all the legal stuff. But when it comes to actually working with somebody who may have a disability, they don't provide training associated with that... I'm thinking in terms of other things. Such as, you know, someone who has a learning disability, perhaps... They don't provide instructional training. You know, how do you teach differently?

Sarah agreed and added:

I'm talking about pedagogies and just tips from the Office of Accessible Education maybe. Here are some examples of how you can do this. How you can give extended time if you're online. How you can give extended time [on exams] in the classroom. You know when we say outline or notes, what does that mean?

External Resources. While Sarah and Joy discussed ways their employer's disability office personnel could serve as a resource for increasing faculty self-efficacy toward educating students with disabilities, other educators used external resources for information. Janet, Joy, and Marcy mentioned their attempts to search published nursing literature as a resource for information about educating nursing students with specific academic accommodations and disabilities but did not find this resource helpful. Janet explained, "I don't recall seeing any publications that speak to: How you can adjust your teaching when you have to make these kinds of accommodations for exams or what have you." Joy and Marcy sought published literature

regarding students with service animals. While Marcy identified an article discussing the benefit of service animals, she stated, “All it did was suggest that, you know, the service animal should be allowed to support a student in the clinical setting. But certainly, none has ever been nursing. So, you know, this didn’t address it.”

Other nurse educators sought information by attending nursing conference presentations, accessing resources through online websites, and using social media or other networking tools. Examples of nurse educators accessing these resources included Jo, who attended a presentation at an AACN conference; she also discussed listening to a webinar about disabilities and accommodations through the Wolters Kluwer NurseTim internet resource. Sarah sought information via podcasts and Joy referenced the National Organization of Nurses with Disabilities website as a resource having videos about nurses with disabilities. Marcy sought information by asking colleagues through the collaborative email tool of ListServe and multiple study participants identified the AACN’s member community discussion board as an avenue to ask information from fellow educators. Although educators used creative methods to identify resources for information about student disabilities and accommodations, no centralized resource was mentioned. Susan summed this issue by stating,

Nursing education, I think is going to have to learn how to think outside the box about some types of students and figure out ways. And I know some programs are doing it because you see nursing students who graduate from BSN programs in wheelchairs and those kinds of things. So, I know some people are doing it. I just don’t think that information is widespread in terms of: How would I, as a faculty member or even a program, figure out how did some other program do this with a student who was deaf or had really limited vision?

Faculty Self-Efficacy for Teaching Students With Disabilities. Despite study participants' efforts to self-educate, the consequence of a dearth of evidence-informed resources was a lack of self-efficacy among academic nurse educators for teaching students with some types of disabilities. Amelia explained, "The other kinds of things that I do for students with learning disabilities or you know, mental or emotional disabilities, sometimes I feel like those are harder for me to accommodate." Joy, speaking for herself and faculty peers, stated, "We would like to have more education associated with how to work more effectively with people with disabilities. And that can range from, anywhere from physical to sensory to mental." Susan expressed a similar view:

I'm not sure how I would effectively teach them [students with sensory disabilities]. And I don't know exactly. I mean, I think that's perhaps a big gap, is where's the sort of resource pool that I could go to and pull things out that would say, OK, this is, you know, this is how you can adjust or demonstrate student learning outcomes.

The lack of practical, evidence-informed information highlighted the limited support perceived by educators and explained the frustrations they expressed. Upon reflecting on teaching students with disabilities, Janet concluded:

I don't think people have a good understanding of the accommodations that people need or why they need them... You tell me how many nursing educators really understand learning disabilities? It is not taught in nursing programs because there's no medical treatment and there's no medications for learning disabilities. And it is *not* [emphasis added] on our list of topics, even though we spend our life teaching patients.

Janet and Jo believed a place to start would be to train students who were enrolled in advanced nursing degree programs about how to educate students with disabilities, especially learning disabilities.

Resources Theme Summary

Although educators believed it was their responsibility to plan and implement academic accommodations, they identified the need for sufficient material and personnel resources in addition to an easily-accessible repository of information to use as a guide for implementing student accommodations. Nurse educators were in agreement and identified personnel in the disability services office as a resource regarding ADA (1990) compliance and questions about the interpretation of language used in a student's request for accommodations.

Many study participants described difficulties in implementing accommodations when there was insufficient campus or nursing program resources available to them. Necessary resources discussed by participants included sufficient time to prepare for the accommodation, availability of material and personnel resources, and the knowledge and skills required to effectively teach students with specific disabilities. Conversely, when resources, personnel, and a process were established and available, nurse educators did not perceive the accommodation request as difficult to implement.

The most frequent accommodation discussed that generated difficulties for nurse educators was the request for extended exam time in a room with reduced distractions. Another accommodation requiring extensive resources was the accommodation for a service animal in a clinical setting. The absence of any procedures to use as a resource to guide the educator and the significant amount of advance planning needed to implement this accommodation increased faculty workload. Advance planning and increased faculty workload were also mentioned when

educators discussed accommodations that required alterations in pedagogical methods and materials.

Faculty participants identified a lack of knowledge and self-efficacy to effectively teach students with some types of disabilities. While all nurse educators reported receiving some form of employer-provided training, they described this training as basic and expressed a desire to receive information related to the development of effective teaching pedagogies and evaluation methods in response to accommodation requests from students with specific disabilities.

Additional Findings

Three themes and eight sub-themes comprised the majority of findings from transcript data. One notable finding not associated with a theme or sub-theme was the varied interpretations expressed when nurse educators discussed the accommodation of exam modifications. It was not clear whether the language the educator used to describe the environmental modification reflected actual terms used on the accommodation request or just a paraphrased recollection based on how the modification was interpreted. Jo, Lena, Michelle, Sarah, and Susan used similar terms describing the exam environment: reduced-distraction, reduced-stimuli, noise-reduced, and limited distractions. Janet used the term, altered setting, and Penelope, Ellen, and Cissy used terms that included distraction-free, separate space, private room, and separate environment.

The significance of study participants using different terms was noted when they discussed the implementation of the accommodation. For faculty participants describing an environment with reduced or limited distractions, multiple students with one proctor were present in a room during the exam. Accommodations were difficult to implement for Cissy and

Ellen who described the environment using the terms *distraction-free* or *separate space*. Cissy explained:

It was sometimes difficult to find a separate classroom if all the classrooms were being used... There were two seniors that needed accommodations. So, at any time on the day of one of their instructor's tests, there had to be two other instructors available or made available that would sign up for those assessments in separate, two separate rooms. They couldn't even be in a room together. They each had to have their own separate room.

Ellen reported similar difficulties implementing the accommodation based on the language used to describe the exam environment:

My biggest gripe is a need for a separate room. And you know, that has been the biggest thing. Like every student now has to test independently and we don't have the resources to really accommodate that, although we've been figuring it out. Because we would have students in, like we don't have a testing center. So, students that need accommodations don't go to a testing center. They go to an empty classroom or an empty office. And we had so many students that needed a private room, that come testing day, we didn't have enough rooms. We didn't have enough space. And it doesn't. I think it's our lack of understanding as to what's, why is it necessary that they have this private space?

Jo, who used the term *noise-reduced* when discussing environmental modifications for exams, explained the implications of different interpretations of an accommodation:

Because students sometimes think their accommodations mean silent and private. And if it doesn't say silent and private, then it's not silent and private [laughs]. I've never seen silent, but noise and distraction-reduced. And so, sitting in a room with ten students is definitely noise-reduced from sitting in a room with 48 students.

The language used when conveying the accommodation needs of students was important as it impacted the implementation process. While most nurse educators stated that decisions involving the interpretation of accommodations were the responsibility of personnel in the disability services office, neither Cissy nor Ellen explained who made the decision regarding the interpretation of exam environment modifications for their academic institutions. For these educators, the language used to determine environmental modifications needed during exams added to the complexity of implementing the accommodation.

Summary of Results

The purpose of this study was to explore nurse educators' beliefs using the conceptual framework of the theory of planned behavior to investigate faculty behavioral, normative, and control beliefs toward providing academic accommodations for prelicensure nursing students with disabilities. Experienced nurse educators from all regions of the United States participated in the study. Interview participants offered numerous examples of providing accommodations to students with sensory, physical, emotional/mental health, and learning disabilities in all nursing education milieus. Findings from data analysis reflected unified and conflicting beliefs among nurse educators about the accommodation process.

Analysis of interview data generated three themes and eight related sub-themes. The theme of Reasonable included faculty beliefs about the feasibility and fairness of academic accommodations. Examples of easy and difficult accommodations were discussed. Factors that determined feasibility involved the amount of material and personnel resources needed, the length of preparation time required, and the nurse educator's degree of autonomy to implement the accommodation. Unintended consequences identified during the interviews included examples of accommodations that (a) created logistical problems for class attendance for the

student requesting the accommodation, (b) jeopardized the security of exam or quiz questions affecting all students, and (c) interfered with the nurse educator's ability to use preferred pedagogical methods in didactic settings.

The normative theme of Responsibility included faculty beliefs regarding compliance to the ADA (1990) legal mandate. Additionally, educators felt a professional obligation to prepare students for the NCLEX and professional nursing practice. Through the sub-themes of Facilitation and Implementation, participants described examples of assisting students to mitigate physical, emotional/mental health, sensory, and other barriers to learning. Faculty participants were in agreement that nurse educators were responsible for facilitating student success by helping students with issues that interfered with learning. Some bypassed or did not adhere to their institution's accommodation process, while others had difficulty differentiating between helping all students with issues that might arise and were obstacles for success in nursing school and formal academic accommodations provided to students with a documented need for accommodations due to their disability.

The term Resources described the theme that included faculty discussions of the preparation and process needed to implement requested accommodations. Many nurse educators offered examples of concerns regarding extended time on exams/quizzes and adjustments to the testing environment to lessen distractions during an exam. Planning, faculty workload, and training were also issues discussed by faculty participants. The majority of educators identified the need for a centralized resource with practical information and best practices about effective pedagogies and evaluation strategies to teach students with disabilities. An additional finding not associated with a particular theme or sub-theme was the difficulty some educators encountered

when providing exam accommodations based on how the accommodation for modifications to the testing environment was interpreted.

CHAPTER V

DISCUSSION AND RECOMMENDATIONS

As perceived gatekeepers to the nursing profession, academic nurse educators are responsible for ensuring that graduates from their nursing program, including individuals with disabilities, demonstrate required learning outcomes and are prepared for entry to professional nursing practice. Some students with disabilities described negative experiences during nursing school with a lack of faculty support (Evans, 2014a; Neal-Boylan & Miller, 2017; Ridley, 2011). Nursing faculty, while believing they were advocates for nursing students with disabilities, described difficulties with the accommodation process, citing a lack of guidance and insufficient resources to effectively implement accommodations for these students (Ashcroft & Lutfiyya, 2013; Horkey, 2019; Yarbrough & Welch, 2021).

Few research studies examined the accommodation process from the nurse educator perspective. While published literature offered some insight about the accommodation process from grounded theory studies (Horkey, 2019; Yarbrough & Welch, 2021), none offered a comprehensive analysis of faculty beliefs about the accommodation process based on multiple types of accommodations in clinical and didactic learning environments. Meaningful improvements in the accommodation process could not be achieved without a comprehensive understanding of the contextual factors that hindered or facilitated this process. The purpose of this study was to explore nurse educators' beliefs using the conceptual framework of the theory of planned behavior to investigate faculty behavioral, normative, and control beliefs toward providing academic accommodations for prelicensure nursing students with disabilities.

Discussion

Using interpretive description methodology, a qualitative study was conducted analyzing data from the semi-structured interviews of 13 nurse educators representing all regions of the United States describing their experiences providing accommodations to students with disabilities. Through a multi-phase data analysis process using provisional and inductive coding methods, three themes and eight sub-themes were identified. These findings represented the salient beliefs among academic nurse educators regarding the provision of accommodations to nursing students with disabilities and answered the study's research question.

Theme: Reasonable

Nurse educators believed that accommodations should be reasonable. Regarding exam accommodations, some educators questioned whether accommodations were equitably or arbitrarily determined. Ashcroft and Lutfiyya (2013) described similar views among educators in Canada who identified inconsistencies in the use of accommodations. Questions about the term 'reasonable' with regard to academic accommodations were a recurring concern in literature since the ADA (1990) did not specifically define this term and left its interpretation ambiguous (Bagenstos, 2020). Literature described multiple examples of court cases involving institutions of higher education where a student challenged the decision made regarding an accommodation request (Laird-Metke et al., 2016). While it was difficult for study participants to articulate what was considered reasonable versus unreasonable, the sub-themes of Feasible and Fair to All were represented in the statements they made as they described their experiences.

Sub-Theme: Feasible

Feasibility, as a concept of reasonable, was based on the ease or difficulty faculty encountered when planning and implementing the accommodation. Study participants

differentiated accommodations by describing those that were easy and ones that were difficult to implement. Easy accommodations required little advance notice, few or no additional personnel or material resources, and the educator had authority and discretion regarding how the accommodation was implemented. While all accommodations were implemented, difficult accommodations did not allow adequate time to plan or make the necessary adjustments or secure the needed resources without increasing faculty workload.

An example of the consequences encountered when educators discussed difficult accommodations in the didactic setting included the dilemma of providing extended quiz time for students with disabilities or maintaining their preferred teaching methods. Since it was not feasible to provide extended time on quizzes and continue using non-traditional learning activities, active teaching methods were most often sacrificed with some educators returning to a lecture format. Other educators eliminated the use of quizzes or did not grade the quiz, which impacted their ability to use a quiz as a formative assessment. The negative didactic experiences expressed by participants of this study were in contrast to nursing literature where faculty reported negative experiences in clinical settings (Ashcroft & Lutfiyya, 2013; Evans, 2014b) and positive experiences providing accommodations in classroom environments (Ashcroft & Lutfiyya, 2013).

Sub-Theme: Fair to All (Including Faculty)

Consistent with published literature, fairness and equity were concerns expressed by nurse educators in this study and in research by Horkey (2019). While Horkey's participants described concerns about equity and fairness among students with orthopedic disabilities, unintended consequences of exam accommodations were issues that generated the greatest concerns for equity by nurse educators in this study.

Concerns were expressed that students receiving accommodations for extended time and modifications in the testing environment might be disadvantaged and suffer unintended consequences as a result of receiving the accommodation. Examples of concerns voiced by nurse educators included the scenario where students who took the exam in another location did not have access to faculty to ask questions during the exam. Additionally, there were concerns that the exam routine and resources were inconsistently implemented where calculators and scratch paper for dosage calculations were available to students testing in one location but not to students receiving exam accommodations. Some educators described how extended time on exams created a disadvantage for students receiving the accommodation. Since more time was needed to take the exam, the students missed some or all of their next scheduled class when the times for nursing classes were consecutively scheduled. The majority of equity concerns expressed by study participants reflected the educators' sensitivity to the needs of the student receiving the accommodation to ensure it did not create additional barriers to student learning.

Patient safety and equity issues were negatively described by clinical faculty in some studies (Luckowski, 2016; Ridley, 2011); however, no concerns were voiced among this study's participants. Nursing literature described clinical instructors' beliefs that students with disabilities in clinical settings were disproportionately supervised compared to their peers (Epstein et al., 2020; Evans, 2014b; Ridley, 2011). In this study, Ellen agreed that she spent more time in clinical at the bedside with a student with a hearing impairment but felt equity within her group of clinical students was maintained and not violated. Ellen viewed student equity in terms of ensuring that each student had the opportunity to acquire relevant assessment data on their assigned patient rather than making sure she spent the same amount of time in clinical with each student. The quality of a student's learning experience, not time in minutes with the clinical

instructor, was the indicator Ellen used to determine that equity was maintained among students in her clinical group.

Theme: Responsibility

When discussing responsibilities related to providing accommodations, the majority of nurse educators expressed this in terms of their personal responsibilities as individual nurse educators. Only one educator spoke from a collective view of what was valued by the nursing program and the university. This individual was a nursing program administrator, which might explain why she expressed the views of the nursing program rather than her individual views.

The ability to function within a complex educational environment was a core competency for nurse educators identified by the National League for Nursing (as cited in Krouse & Fox, 2019). A component of this competency was the ability to incorporate the mission and goals of the academic institution including the ability to articulate the values and beliefs of the nursing program. It is unknown whether the absence of study participants' discussions about the values and beliefs of their nursing program with regard to teaching students with disabilities was due to a lack of stated values by the leaders within their nursing programs or because each educator's beliefs were the dominant influence in their minds. As educators described their experiences with academic accommodations, the theme of Responsibility was expressed through the four sub-themes of Compliance, Professional Expectations, Facilitation, and Implementation.

Sub-Theme: Compliance

All participants believed they complied with requested accommodations as mandated by law and their university's policy. This view was supported by educators in other studies who believed it was part of their responsibilities as educators to provide accommodations to students with disabilities (Horkey, 2019; Yarbrough & Welch, 2021). Some educators described instances

of deviating from the university's procedure to implement an accommodation before the formal notice of request was received. All instances of providing the accommodation before receiving the official notification were justified based on the intent to support rather than further disadvantage the student. Meloy and Gambescia (2014) reported similar actions by educators and described how these actions might create inequities for other students.

Another issue of concern voiced by several educators was university and nursing program administrators seemed interested only in compliance to the legal mandate and did not follow up to determine whether accommodations were effective in mitigating barriers to learning. A perceived lack of supervisor support related to student accommodations was reported by other nurse educators (Horkey, 2019). A lack of supervisor interest and involvement in the accommodation process might contribute to nurse educators acting as individuals rather than as a member of the nursing faculty when responding to student accommodation requests.

Sub-Theme: Professional Expectations

Study participants were unified in their belief that nurse educators were responsible for preparing students for entry to nursing practice. Not all educators, however, were confident that all students with disabilities could gain and maintain employment in an acute care setting. The successful transition to professional nursing practice for students receiving extended time for exams was a concern voiced by two educators. Similar concerns were expressed by educators in other studies who speculated whether students with certain disabilities could be employed in an acute care environment (Ashcroft & Lutfiyya, 2013; Epstein et al., 2020; Evans, 2014b). A contrasting perspective was offered by two educators who differentiated academic accommodations from employment accommodations and expressed limits to their role as

educators. From their perspective, the nurse educator's responsibilities had boundaries and did not extend beyond the academic environment.

Faculty beliefs about professional responsibilities also included discussions about their role in preparing students to take the NCLEX. Educators expressed contradictory opinions whether the use of accommodations during the NCLEX was permitted. One nurse educator expressed concern regarding two recent graduates who received accommodations during nursing school but failed to pass the licensure exam. For this educator whose nursing program was in a probationary status with the state board of nursing, recent graduates' lack of success on the exam had implications for their nursing program's pass rate. No studies could be found in the nursing literature to compare the findings of this study with regard to accommodations for students with disabilities and the professional nurse licensure exam.

Sub-Theme: Facilitation

Nurse educators valued helping students overcome barriers encountered during nursing school. All educators offered examples of implementing accommodations to remove barriers to success for students with disabilities. Helping students be successful aligned with the American Nurse's Association's (as cited in Caputi & Frank, 2019) core competencies for nurse educators. This document stated that academic nurse educators were expected to facilitate student learning and learner development. Competency statements describing this expectation included the educator's need to use a variety of teaching strategies and provide resources to meet the unique learning needs of diverse student populations (Caputi & Frank, 2019; Luparell, 2019).

Some nurse educators in this study believed it was their responsibility to provide assistance to all students and used the term *informal accommodations* when describing accommodation-like assistance to students who had not sought ADA (1990) accommodations

but were experiencing difficulties that interfered with their learning. These nurse educators conflated academic accommodations provided in compliance with the ADA and student assistance due to extenuating circumstances the faculty member believed was a legitimate need for faculty intervention. The practice of providing accommodation-like assistance to students who had not followed the university's process for receiving academic accommodations was described by Meloy and Gambescia (2014) who recognized the need to balance assistance and equity. They cautioned against individual educators making decisions to alter academic expectations without consultation or compliance to the process established by the university. Meloy and Gambescia's recommendation was to employ a systems approach rather than the practice of individual nurse educators determining how to respond to student requests for academic consideration and accommodation.

Nurse educators in this study who provided accommodation-like assistance did not perceive their actions as creating the potential for challenges from other students for claims of inequity or favoritism. They believed they were helping students who had obstacles to learning that were similar to students with disabilities but did not meet ADA (1990) criteria to receive academic accommodations. One educator used the term *temporary disability* and believed there were time constraints for responding to the student's obstacle to learning and the university's accommodation process was not responsive to mitigate the student's issue. For this educator, providing accommodation-like assistance was part of her responsibilities as a nurse educator to facilitate student learning.

Sub-Theme: Implementation

When study participants offered examples of providing academic accommodations to students with disabilities, most participants spoke as individuals and not as a member of a team

or group of educators. This was mentioned by a study participant who expressed frustration that faculty did not work together and noted a lack of guidance and support for faculty when implementing accommodations. A few educators mentioned times when they discussed an accommodation with their supervisor or personnel in the disabilities office; however, decisions to alter pedagogies in response to accommodation requests were made by the educator. No educator mentioned a standardized process for implementation in response to receiving an accommodation request with the exception of a few educators who spoke of exam and quiz accommodation procedures.

Since educators viewed the implementation of accommodations as the responsibility of the individual educator, many study participants described their efforts to find information, personnel, and resources when planning to implement an accommodation. A variety of examples were provided; however, the accommodation that generated the most frustration among faculty participants was the logistics of implementing accommodations involving exams and quizzes. These findings were supported by studies that reported similar frustrations among nurse educators regarding the lack of guidance, resources, and procedures to effectively implement academic accommodations (Horkey, 2019; Yarbrough & Welch, 2021).

Theme: Resources

Nurse educators' ability to provide accommodations was dependent on multiple factors. The theory of planned behavior described the need for individuals to have confidence that they are capable of performing a behavior (Fishbein & Ajzen, 2009). This concept of being capable was discussed as behavioral control or self-efficacy and contained two components: autonomy and capacity. Nurse educators in this study did not perceive autonomy as an obstacle to

providing requested accommodations. They believed nursing program administrators granted them the autonomy to implement academic accommodations.

The only instance where autonomy to implement an accommodation was mentioned involved two study participants who described experiences of planning and providing the accommodation of a service animal in clinical, lab, and didactic settings. This complex accommodation in a clinical setting required extensive communication with numerous individuals through a multi-stage process to receive permission from the clinical institution before implementing the accommodation. Nursing and organizational literature concurred with this finding and explained that the complexity of a process greatly increased when multiple persons with vested interest and decision-making authority were involved (Horkey, 2019; Project Management Institute, 2013; Silbert-Flagg et al., 2020; Yarbrough & Welch, 2021).

Capacity was the second component described by the theory of planned behavior when discussing an individual's capability to perform an action. Contained within this concept were the individual's perceptions of having the necessary knowledge, abilities, and environmental resources. In this study, the theme of Resources with the sub-themes of Preparation and Process, and Best Practices were evident in the analysis of study participants' discussions of their accommodation experiences.

Sub-Theme: Preparation and Process

Study participants described a system of responding to rather than planning in advance for student requests involving common academic accommodations in the didactic setting. A system that required educators to wait until an accommodation request was received before enacting plans to implement the accommodation exacerbated the stress experienced by nurse educators. They described insufficient notice and the need to use their personal time to plan and

implement accommodations. Nursing literature supported the findings of this study and described added stress and frustration among nursing faculty who failed to receive timely notice of requests for accommodations (Ashcroft & Lutfiyya, 2013; Epstein et al., 2020; Horkey, 2019; King, 2018; Yarbrough & Welch, 2021).

An alternative to the typical process of waiting until a request for an accommodation was received was explained by one study participant who described her program's anticipatory approach to commonly requested accommodations. This individual's nursing program conducted planning meetings where faculty collectively worked months in advance to reserve rooms and plan the schedule of classes to prepare for the expected needs of extended time and environmental modifications for exam and quiz accommodations.

In addition to a lack of clear processes and inadequate planning, study participants identified insufficient organizational and personnel resources to implement accommodations for exam and quiz modifications. While their university might have centralized resources in the form of a disability service office or a testing center where students with accommodations could take exams or quizzes, nurse educators discussed instances where these resources were limited. Examples of these limitations included restrictions in the number of students allowed to schedule exams and services that were not available at a time that coincided with the student's class schedule, creating concerns among faculty regarding the security of exam questions.

Educators with insufficient or no centralized support services for students taking exams and quizzes described an increase in their workload due to a recurring need to find other rooms and exam proctors to assist them in providing this accommodation. While not specific to exam accommodations, other studies identified inadequate time, resources, and support from their employer regarding difficulties nurse educators encountered with the process of providing

accommodations to students with disabilities (Ashcroft & Lutfiyya, 2013; Horkey, 2019; Yarbrough & Welch, 2021).

An accommodation resource identified in nursing literature included the staff and services offered by the campus office of disability services. Literature described mixed views from nurse educators' perspectives regarding the help provided through this office. Unclear channels of communication with regard to the process for notifying faculty of a student's accommodation was the most common complaint among educators (Ashcroft & Lutfiyya, 2013; Epstein et al., 2020; King, 2018; Yarbrough & Welch, 2021).

Nursing faculty in this study generally viewed the individuals and services provided by the office of disability services as helpful. They viewed them as a resource for interpreting language used in the accommodation letter or for questions about the process for students to request and receive an accommodation. This office, however, was not perceived as a resource for information about how educators could adapt pedagogies to teach students with specific types of disabilities. Two nurse educators in this study who described their experiences involving the accommodation of a service animal in the hospital setting and on campus described personnel in the disability services office as active participants during the planning phase for this accommodation. While they were viewed as helpful, the nature of clinical accommodations limited the disability office personnel's usefulness to answer or investigate specific clinical concerns.

Sub-Theme: Best Practices

All educators indicated they received general information from the disability service office or supervisor about the university's process for providing accommodations and the need to comply with the ADA (1990) mandate. Nurse educators, however, expressed a need for specific

training in relation to teaching students with disabilities. Of interest to nursing faculty was training associated with effective pedagogies for specific disability types. Educators mentioned wanting more information about teaching students with learning, sensory, mental health, and physical disabilities. The information sought by study participants regarding specific types of disabilities was similar to research by Suplee et al. (2014) who reported clinical educators had the least self-efficacy for teaching students with learning disabilities, physical disabilities, and emotional difficulties.

In the absence of receiving information from their employer, the educators sought information through self-education from a variety of external resources including professional conferences, websites, research reports, and networking discussion forums. This finding was supported by other studies that identified the need for continued training and more guidance for nurse educators who provided academic accommodations to students with disabilities (Horkey, 2019; Yarbrough & Welch, 2021).

Additional Findings

A finding of significance among nurse educator narratives was their different interpretations of what was required when providing modifications in the testing environment for students with exam accommodations. Three educators in this study described a process of finding separate rooms with an individual proctor for each student having this accommodation while other educators described an environment with reduced distractions and fewer students in the testing room compared to their regularly-scheduled classroom.

Literature describing the process of implementing the ADA (1990) mandate for academic accommodations explained that it was the responsibility of disability services staff to evaluate the documentation of a student's disability and determine accommodations. Then faculty

received notification of the student's request with a description of the accommodation. It was the responsibility of the educator to implement the accommodation (Carey et al., 2014). The semantics used to convey what was needed and how it was to be implemented might vary based on who was responsible for interpreting this information. It was unknown whether the interpretation of a private room for each student requiring exam environment modifications was unique to the study participants' nursing programs and institutions of higher education or an interpretation that prevailed on campuses throughout the nation. Semantics and interpretations with regard to the type of accommodation a student received could have significant impacts on resource utilization when implementing accommodations for students with disabilities.

The results of this study described faculty beliefs toward providing accommodations to nursing students with disabilities. Faculty expressed unanimous support for the inclusion of individuals with disabilities in the nursing profession. No educator questioned the need for accommodations that assisted students with overcoming obstacles to their success while in nursing school. Educators conveyed a strong sense of professional responsibility and individual accountability to ensure the accommodations provided were effective and based on best practices and established institutional procedures. Study participants described an accommodation process hindered by insufficient policy, procedural, personnel, and material resources. This created feasibility concerns for some types of accommodations and faculty reports of unintended consequences that sometimes added new barriers to student learning or created pedagogical challenges for nurse educators.

Significance of the Findings

Faculty were motivated by a strong sense of personal responsibility as nurse educators, employees of institutions of higher education, and faculty within their individual nursing

programs to mitigate barriers to learning for all students including students with disabilities. While other participants in the accommodation process included university administrators, personnel from the office of disability services, nursing program administrators, and the student with a disability, nurse educators had primary responsibility for implementing accommodations. Nurse educators believed that academic accommodations should be appropriate, effective, and not create unintended consequences that hindered student learning or the educator's ability to choose the most effective pedagogies for students in clinical, lab, and didactic learning environments. Faculty reported that many accommodation requests posed no challenges and could be implemented without difficulty. Sometimes, however, the process for providing an accommodation lacked sufficient procedural, material, or personnel resources to guide and support the educator. In these instances, faculty believed they must find the necessary resources or make independent decisions to ensure the accommodation was implemented.

When encountering difficulties implementing some accommodations, nurse educators responded as individuals and not as members of a nursing faculty team. The perception that they must individually resolve issues due to insufficient resources and a lack of procedural guidance and administrative support led to faculty frustration and contributed to their belief that the accommodation process was unstructured and arbitrary. Independent actions by faculty in response to a lack of procedural guidance or administrative oversight might create rather than mitigate inequities and increase institutional liabilities within a legally mandated process.

Implications

A comprehensive analysis of faculty beliefs regarding the process of providing accommodations to students with disabilities identified numerous deficiencies that could be remedied by actions from professional nurse educators, academic administrators, and

professional nursing organizations. While this is a shared responsibility, major improvements cannot be realized without hierarchical changes in the mindset and culture of the organization. The order of recommendations are prioritized based on those having the greatest opportunity to enact meaningful changes in the accommodation process.

Academic Nurse Administrators

Academic nurse administrators are responsible for ensuring nursing faculty provide accommodations within a system that is organized with procedural support, sufficient resources to implement academic accommodations, and administrative guidance and oversight.

Researchers investigating the accommodation process for nursing students repeatedly described a flawed system where faculty expressed frustration and a lack of support (Ashcroft & Lutfiyya, 2013; Horkey, 2019; Yarbrough & Welch, 2021).

Opportunities for improvement would vary for each academic institution; however, nursing program administrators should conduct a thorough initial assessment of the accommodation process from faculty and student perspectives with periodic re-assessments to identify areas where administrative intervention is most needed. The behavioral, normative, and control belief categories as explained in the theory of planned behavior are recommended as an organizing structure for academic administrators in this process assessment. All categories of faculty beliefs with suggested interventions based on issues identified by study participants are listed for consideration.

Behavioral Beliefs Recommendations: Reasonable

Faculty narratives indicated the need for clarification and a clear understanding of what constitutes an academic accommodation. Actions academic nursing administrators should consider include the need to discuss with nurse educators the lexicon used when providing

academic accommodations and clarify terms that could have varied interpretations. Nurse administrators might want to implement the following strategies to minimize misinformation and confusion among faculty:

- Discuss ambiguous terms used with accommodations such as *reasonable* and steps faculty should take if they believe an accommodation request is not reasonable
- Explain to the nurse educator to avoid conflating the action of providing academic accommodations related to disabilities requested through the disability services office and the nurse educator's role in assisting nursing students with problems encountered during nursing school
- Investigate the language used in accommodation documents to determine how the term should be interpreted and who should make this determination (i.e., private room with individual proctor versus room with fewer students and reduced distractions for exam accommodations).

Other suggestions for nursing program administrators included the need to support nursing faculty and assist them with the provision of reasonable student accommodations. The following examples were based on data from study participant narratives:

- Help faculty identify alternative learning experiences for students with accommodations that are not feasible using traditional clinical placements or lab activities
- Assist the nurse educator, if an accommodation request creates the need to change classroom pedagogies, by reviewing their options and supporting the nurse educator's autonomy to determine the best pedagogies to use

- Monitor the impact on faculty workload regarding the amount of time the educator spends preparing for and providing student accommodations
- Establish a process where faculty engage in routine evaluations of accommodations provided each semester to determine their effectiveness in facilitating the achievement of student learning outcomes and to identify opportunities to improve the process for future semesters
- Create a process for evaluating the effectiveness of the accommodation process to see how the student with the disability perceives the accommodation experience.

Normative Belief Recommendations: Responsibility

When boundaries and responsibilities are not clearly established, faculty might assume more responsibility than necessary in relation to implementing accommodations, facilitating student success, preparing students to take the nursing licensure exam, and assisting students to prepare for employment upon graduation from nursing school. This could be a result of internal and/or external expectations regarding what faculty believed was expected of them.

Nursing program administrators could alleviate some of these issues. Based on interview data, actions that might reduce the normative pressures perceived by nurse educators included the following suggestions for academic nurse administrators:

- In addition to general orientation regarding student accommodations, establish a process to orient and support new faculty in the nursing program regarding their role and responsibilities as nurse educators in providing academic accommodations in all learning environments: clinical, lab, and didactic
- In coordination with personnel in the office of disability services, ensure policies and procedures contain a clear delineation of responsibilities for the nurse educator;

develop and maintain procedural guides as resources for faculty that operationalize the steps taken to plan, implement, and evaluate commonly requested academic accommodations

- Clarify misconceptions faculty might have regarding the approval and provision of accommodations for the nursing licensure exam; ensure faculty members understand their responsibilities in preparing all nursing students for this exam
- Discuss with nursing faculty the limits of responsibility for nurse educators and the need to avoid assuming a gatekeeping role for the nursing profession and/or future employers regarding students with disabilities who receive academic accommodations (i.e., conflating the nurse educator's responsibility for patient safety issues related to student clinical rotations with the responsibility for patient safety and oversight of nurses by their employer)
- Develop an action plan to guide nurse educators in what steps they should take if they encounter a complex request for academic accommodations that involves extensive planning and coordination of resources, and/or multiple individuals with decision-making responsibility that has an impact on the feasibility of implementing the accommodation
- Consider developing a written statement of philosophy articulating the values and beliefs of the nursing program regarding the inclusion and support for students with disabilities; ensure the philosophy is integrated into the routines and practices of the nursing program with the goal of unifying faculty and staff efforts that support students with disabilities

Control Beliefs Recommendations: Resources

Nurse educators described the need for advanced planning and well-defined processes to implement accommodations. In addition, educators expressed a desire to receive training related to the development of effective teaching pedagogies and materials for students with specific disabilities. Academic nurse administrators could equip nurse educators to effectively respond to accommodation requests by helping them acquire the necessary information, material, and procedural resources. Suggested actions nurse administrators could implement included:

- Encourage faculty to act as a team and share ideas about best practices and pedagogical resources used in response to specific types of accommodations
- Support the development of a virtual campus repository consisting of internal and external resources that allow faculty to seek and share information regarding specific types of student disabilities and pedagogies to use in response to accommodation needs
- Schedule nursing program planning meetings to identify areas where advance planning is needed including the coordination for scheduling courses so issues of extended time on exam accommodations do not create logistical challenges to implement
- Anticipate faculty resource needs for future semesters with the expectation that common accommodations would be requested for students with disabilities
- Adopt the philosophy of using universal design principles in nursing program courses. Encourage nurse educators to attend continuing education programs that focus on this concept and support sharing among members as faculty develop and revise course materials and pedagogies

- Engage in advance planning discussions with faculty and clinical affiliation institutions to explore the feasibility and limitations for allowing nursing students with complex accommodation needs to attend clinical. Examples of issues to discuss include future students who require assistive devices in clinical areas due to sensory or mobility disabilities and for students with a service animal.

Enacting suggestions such as these could create opportunities for nursing program administrators to demonstrate support for faculty and nursing students with disabilities through proactive rather than reactive behaviors in response to requests for accommodations.

Nurse Educators

While many of the issues identified through the analysis of interview data have implications for nursing program administrators, individual nurse educators could implement the following actions to improve their experiences and help other faculty members in providing accommodations to nursing students with disabilities:

- Remain updated on current institutional policies and procedures related to the provision of academic accommodations; adhere to the process and know the responsibilities and boundaries specified in this process for nurse educators
- Seek clarification from the nursing program administrator or representatives from the disabilities services office for terms that seem ambiguous or procedures that present logistical challenges to providing the accommodation
- Maintain a balance between the autonomy of the nurse educator to determine effective pedagogies and the educator's responsibility to take actions as a member of a faculty team that reflects the shared values and beliefs of the nursing program

- Communicate with the academic nurse administrator regarding any accommodation request that creates difficulty in maintaining the course's academic standards for student learning outcomes
- Be proactive by adopting principles of universal design for learning when developing teaching materials and planning activities for didactic, lab, and clinical settings
- Explore alternatives to quizzes as formative assessments in didactic settings to reduce reliance on pedagogies that interfere with extended time accommodations; investigate the use of audience response tools that ask questions of students with real-time aggregate feedback that the educator can use as formative assessment information while maintaining the anonymity of student answers (Egelandsdal & Krumsvik, 2017)
- Participate in proactive planning activities and function as a member of the faculty team to resolve logistical issues in response to common accommodation requests
- Share ideas about best practices and pedagogical resources used in response to specific types of accommodations with fellow faculty members.

Professional and Accrediting Organizations

Although the responsibility to provide accommodations to individuals with disabilities is a legal mandate for employers and institutions of higher education, national organizations that advocate for increasing the diversity of nurses to better represent the general population could support nurse educators in the accommodation process. Based on data from nurse educator interviews, suggestions for national organizations included:

- Support the development and maintenance of an online repository containing evidence-informed resources and best practices information to assist nurse educators regarding teaching and evaluating nursing students with disabilities
- Encourage and support universities who offer advanced nursing degrees to develop microcredentials that demonstrate nurse educator competence in didactic and clinical learning environments to educate students with specific disabilities that require changes in pedagogies and evaluation methods to achieve student learning outcomes.

Limitations

Qualitative studies share common limitations due to low sample sizes and limits to the application of research findings beyond the study participants. Additional limitations to this study included a lack of control regarding nursing faculty who responded to the call for study participants. For instance, the study design was biased toward participant selection of nurse educators with a history of rich experiences teaching students with disabilities. This bias might have led to data that were skewed toward faculty experiences that were intensely positive or intensely negative regarding the study phenomenon. The voice of nurse educators with infrequent experience or neutral attitudes regarding accommodating students with disabilities might have been inadvertently excluded from participation in this study.

This study did not ask the question about the size of the nursing program and the extent of campus resources available to nurse educators; therefore, that variable could not be included in data analysis. In addition, participant demographics limited generalizability. Most participants were experienced nurse educators having taught 11 or more years; only one educator had two or fewer years of experience, limiting input from novice educators. All participants were over 40

years of age. Life experiences affect how individuals perceive circumstances; therefore, the findings of this study might not be generalized to nurse educators who are younger or have less teaching experience. Only one participant was employed as adjunct faculty. Full-time faculty might have greater access to resources than those who are part-time or only teach in clinical and not didactic settings. Since access to resources was an issue of significance in this study, the lack of input from individuals who had limited access to campus resources might have influenced data analysis and study findings.

Delimitations

This study examined nurse educator experiences where a modification in teaching practice or the learning environment was needed to facilitate the education of a student with a disability. Some study participants gave examples of accommodations formally requested through the campus office responsible for implementation of the ADA (2008). Other nurse educators included examples of what they perceived as an accommodation experience. However, the accommodation was not formally requested and, instead, alterations in teaching practices or the learning environment were based on informal communication between the nurse educator and the student with a disability. Since the literature investigating the experiences of nursing students with disabilities and their faculty did not delineate whether accommodations were formally requested, this study did not make that distinction when recruiting study participants or during the interview process.

Recommendations for Future Research

No prior studies investigated faculty beliefs toward providing accommodations to nursing students with disabilities from a comprehensive perspective. This study sought to capture a broad perspective of faculty experiences and, therefore, did not limit the learning environment to either

the clinical or didactic setting. Additionally, faculty discussed experiences involving a broad range of academic accommodations for students receiving a variety of accommodations.

While replication of this study is needed to confirm or refute these findings, other studies should investigate specific accommodations and limit them to specific learning environments. The results of future studies designed to analyze faculty experiences involving fewer types of accommodations in specific learning environments might yield different conclusions when compared to this study. Participant selection for future studies should include the experiences of novice educators since early career experiences might have an influence on the development of beliefs that persist and alter the way faculty perceive the accommodation experience later in their career.

Replications of this study should include the use of the three belief categories described in the theory of planned behavior as a structure for data collection and analysis. This might confirm or refute the usefulness of this theoretical structure to inform future studies that analyze the academic accommodation process. Studies that investigate faculty perceptions of providing academic accommodations using other theories or methodologies such as grounded theory are also important since previous findings from three grounded theory studies reported similar results when compared to this study. Comparing this study with the results of studies that used different theories or methods could be helpful in determining if the methodologies and theoretical frameworks used had an influence on the stability or variability of the research results.

Conclusion

Nursing faculty expressed support for the inclusion of students with disabilities in prelicensure registered nursing programs. Nursing literature, however, described negative faculty

experiences with the accommodation process for students with disabilities. Little is known about the antecedent factors that contributed to faculty negativity toward the provision of academic accommodations. This interpretive description study used the three belief categories within the framework of the theory of planned behavior to organize and analyze semi-structured interview data containing faculty discussions regarding what hindered or facilitated the accommodation process. Analysis of transcript data identified three themes and eight sub-themes that substantially influenced faculty perceptions of the accommodation process. Since individual faculty had less ability to effect meaningful change in the accommodation process at a nursing program level, the findings from this study could have significant implications and offer multiple opportunities for improvements in the process within the scope of authority of the nursing program administrator.

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APPENDIX A
INVITATION TO PARTICIPATE IN RESEARCH

Posted to the American Association of Colleges of Nursing Online Community Discussion Board

Dear Fellow Nurse Educators,

My name is Connie Harris. I am a doctoral candidate at the University of Northern Colorado. I am seeking nurse educators willing to participate in a research study investigating faculty experiences providing classroom, clinical, or lab/simulation accommodations to students with disabilities enrolled in prelicensure registered nursing programs in the U.S.

The purpose of this qualitative research study is to investigate nurse educators' beliefs and experiences providing academic accommodation to nursing students with disabilities. If you have experience arranging or providing accommodations for prelicensure nursing students with disabilities, please consider participating in this study or passing this information on to your colleagues.

You can access the survey via the link or QR code below. These will take you to a page where you can read about the study and complete a brief recruitment and demographic survey to determine your eligibility for participating in the study. This study is approved by the IRB at the University of Northern Colorado. A copy of the consent form for this study is attached below

Thank you in advance for your time and willingness to participate in this study.

Connie Harris MS, RN
Doctoral Candidate, PhD in Nursing Education Program
University of Northern Colorado
Harr2691@bears.unco.edu

Link to survey:

https://unco.co1.qualtrics.com/jfe/form/SV_5ilxiJec7oilFu6

Survey QR Code:



Attachment: *Faculty beliefs toward academic accommodations research consent form pdf file*

APPENDIX B
ONLINE CONSENT FORM



CONSENT FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Please take your time to read and thoroughly review this document and decide whether you would like to participate in this research study. If you decide to participate, your completion of the research procedures indicates your consent.

You are invited to participate in a research study about:

Project Title:

Faculty Beliefs Toward Academic Accommodations for Prelicensure Nursing Students With Disabilities

Researcher:

Connie Harris MS, RN
University of Northern Colorado School of Nursing
Email: harr2691@bears.unco.edu

Research Advisor:

Melissa Henry PhD, FNP-C
University of Northern Colorado School of Nursing
Phone: (970) 351-1735 Email: Melissa.Henry@unco.edu

Purpose and Description

The purpose of this research study is to investigate nurse educators' experiences providing academic accommodations to nursing students with disabilities. As an educator with experience teaching students in prelicensure registered nursing programs in the U.S., your responses will provide information about the factors which hinder or support faculty during the accommodation process.

Procedure

Participation in this study includes:

- completing an online survey that asks questions about your experiences with academic accommodations and demographic information.

- an individual interview conducted virtually. During the interview, you will be asked to discuss your experiences with academic accommodations. Examples of interview questions are:
 - What factors or circumstances helped or would have been helpful for you to provide the accommodation for the student?
 - In your opinion, what were the overall positive outcomes related to your decision to provide accommodations for this student?

Expected Length of Participation

The online survey is expected to take between 10 – 15 minutes.

The virtual one-on-one interview is expected to last between 30 minutes to one hour. The date and time of the virtual interview will be at your convenience. The researcher will hold the virtual one-on-one interview with you in her private office via the Microsoft Teams online meeting platform.

Potential Risks and Benefits

There are no anticipated risks for participating in this survey beyond those experienced in everyday life when answering questions about providing accommodations to students. While there will be no personal benefit to you, the information gathered through this study will benefit nursing faculty to gain a deeper understanding of what facilitates or hinders the process of providing accommodations to nursing students with disabilities.

Confidentiality and Privacy

Your participation in the research study is confidential.

Online Qualtrics Survey:

- Recruitment and demographic survey results will be transmitted directly to a secure data storage service on the campus of the University of Northern Colorado and only accessible to the researcher and research advisor using a password protected computer.
- Any IP address information associated with the survey will be deleted by the researcher immediately after the survey results are received.
- As a participant in the study, your email address will be used only as contact information to arrange the one-on-one interview and for review of the transcript if you request one. Your email address will not be shared and no personal identifying information will be linked to your interview.
- **Please Note:** Qualtrics has specific privacy policies of their own. You should be aware that this web service may be able to link your responses to your ID in ways that are not bound by this consent form and the data confidentiality procedures used in this study. If you have concerns, you should consult this service directly.

Virtual Interview:

- The interview will be video recorded for transcription and analysis.
- The transcript will be a verbatim account of the interview and available to you for review if requested.
- General demographic information and a pseudonym that you select will be associated with the interview data. No personally identifying information will be included with the interview data. All data will be published in aggregate except anonymous quotes from the interview data which will be used in the research report to give “voice” to the qualitative data.
- The survey and interview data will be stored on password-protected computers for the duration of the research project and will be deleted after three years from the completion of the project.

Voluntary Participation

- Participation in this study is voluntary. If you decide to participate, you are not required to answer any questions that you do not wish to answer.
- Once you begin participation, you may skip any questions or stop the survey or interview at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled.
- You can choose to withdraw your responses at any time before you submit your answers to the online survey.
- You can stop the interview and request the recording be deleted at any time during the interview.

Questions

If you have any questions about this research project, please feel free to contact the researcher, Connie Harris, at harr2691@bears.unco.edu

If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, Office of Research & Sponsored Programs, University of Northern Colorado, Greeley, CO; 970-351-1910 or nicole.morse@unco.edu . Click on the file below if you would like a copy of this consent form:

Faculty beliefs toward academic accommodations research consent form pdf file

Affirmation by Research Participant

- I hereby voluntarily agree to participate in the research project as previously described in the consent form and further understand the explanations and descriptions of the research project.

- I also understand that there is no penalty for refusal to participate and that I am free to withdraw my consent at any time without penalty. I may quit the survey and/or interview at any time.
- I acknowledge that I am at least 18 years old and a resident of the United States.
- I have read and fully understand the informed consent form.
- My participation in the survey and interview constitutes my consent.

By advancing beyond this Informed Consent screen, I consent to participate in this study.

Yes, I agree to participate in this study

No, I do not agree to participate in this study

(If the respondent answers no, the survey will end with the statement: "Thank you for completing this recruitment survey. Your time and support are greatly appreciated.")

APPENDIX C
ONLINE RECRUITMENT SURVEY

Accommodation Experience

The following terms and their definitions are used in this study:

Survey Terms and Definitions:

Academic Accommodations: Alterations in teaching methods, policies, or practices to meet the learning needs of students with disabilities.

Students With Disabilities: Nursing students enrolled in a prelicensure registered nursing program in the U.S. having a temporary or permanent, and fluctuating or static impairment that interferes with their ability to learn without adjustments to instructional methods and/or the educational environment.

Please answer the following questions about your experiences arranging/providing accommodations for nursing students with disabilities.

Accommodation Experience Survey Questions

Recent Experience: The most recent changes made to the Americans With Disabilities Act were implemented in 2009. Have you had experience with the accommodation process since this time?

Yes

No, my experience with student accommodations was before 2009.

(If the respondent answers no, the survey will end with the statement: "Thank you for completing this recruitment survey. Your time and support are greatly appreciated.")

Direct Involvement

I have direct involvement in modifying teaching practices or arranging and implementing academic accommodations for student learning.

Yes

No, I do not have experience modifying, arranging, or providing academic accommodations for student learning.

(If the respondent answers no, the survey will end with the statement: "Thank you for completing this recruitment survey. Your time and support are greatly appreciated.")

Disability Types: If known and based on what you know of students' academic accommodation situations, please indicate the type(s) of student disabilities you encountered. (**Select as many as apply**)

- _____ **Sensory** (*Examples: Hearing, vision including color blindness, touch, etc. that require an accommodation*)
- _____ **Physical** (*Examples: Motor function disabilities [walking, lifting, standing, sitting]); upper limb disabilities limiting movement, strength or fine motor function; amputation of all or part of a limb requiring an accommodation; disabilities related to height, weight, etc.*)
- _____ **Medical** (*Examples: Acute or chronic diseases or conditions that require an accommodation such as a seizure disorder, severe allergies, diabetes-related issues, alterations in GI function, pregnancy, or any medical issue requiring adjustments to the classroom/clinical routine.*)
- _____ **Emotional/mental health** (*Examples: Disabilities related to anxiety, depression, PTSD, etc.*)
- _____ **Learning** (*Examples: Any condition or difficulty that affects learning such as ADD, ADHD, autism spectrum disorder, dyslexia, dyscalculia, dysgraphia, etc.*)
- _____ **Other**, please describe: _____

Type of Experience: Indicate your experiences with academic accommodations. (**Select as many learning environments for each accommodation as apply**)

	<i>Classroom</i>	<i>Lab/Simulation</i>	<i>Clinical</i>	<i>No experience with this accommodation</i>
<i>Testing/exam</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Teaching materials or methods</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Assignment or skill performance</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Environment modifications</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<i>Assistive devices or equipment</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Policy, procedure, or routine</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<i>Other type of accommodation, please describe:</i>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Prior Training:

As an educator and employee of an institution of higher education, have you received any training or information regarding:

(Please answer for each statement listed)

	<i>Yes</i>	<i>No</i>
<i>Specific types of student disabilities. If yes, please indicate the type(s) of disabilities:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>
<i>Laws related to accommodations for students with disabilities. If yes, please describe:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>
<i>Your institution's policies and procedures about your responsibilities regarding student accommodations. If yes, please describe:</i> _____	<input type="checkbox"/>	<input type="checkbox"/>

Demographic Survey Questions

Geographic Region: In which region of the United States do you live?



<input type="checkbox"/> Northeast
<input type="checkbox"/> Midwest
<input type="checkbox"/> South

Education: What is your highest level of education completed?

- Bachelor's degree
- Master's degree
- Doctorate
- Other, please describe: _____

Employment: What is your employment status in higher education?

- Full-time tenured
- Full-time tenure track
- Full-time non-tenure track
- Part-time/Adjunct
- Other, please describe: _____

Nursing Program Type: Please indicate the type of nursing program where you teach. (*Select as many as apply*)

- Associate degree nursing program
 - Fast-track Bachelor's degree prelicensure nursing program
 - Traditional Bachelor's degree prelicensure nursing program
 - Master's degree in nursing program
 - Doctoral program
 - Other, please describe: _____
-

Responsibilities: What are your responsibilities? (*Select as many as apply*)

- Classroom/didactic
 - Clinical (hospital or community)
 - Laboratory/simulation
 - Course Coordinator
 - Program Director
-

Years Teaching:

How many years you have been employed in a nurse faculty role?

- 2 years or less
 - 3 – 5 years
 - 6 – 10 years
 - 11 or more years
-

Faculty Age:

Please indicate your age range:

- Under 30 years
 - 31-39 years
 - 40 – 49 years
 - 50 – 59 years
 - 60 years and above
-

Contact Information: As explained in the consent form, I will only use your email address to correspond with you to arrange the one-on-one interview and to send a transcript of the interview to you if you request one. Your email address will not be shared and no personal identifying information will be linked to your interview.

Please provide your email address: _____

Final Instructions

Within the next few days, you will receive an email with information about the interview component of this study. Please check your email Inbox, Clutter and Junk folders for an email from:

Connie Harris: **harr2691@bears.unco.edu**

Subject line: ***Virtual Interview for Accommodation Research Study***

Thank you for completing this recruitment survey. Your time and support are greatly appreciated.

APPENDIX D

CONSENT FOR HUMAN PARTICIPANTS IN RESEARCH



Project Title: Faculty Beliefs Toward Academic Accommodations for Prelicensure Nursing Students With Disabilities

Researcher: Connie Harris School of Nursing email: harr2691@bears.unco.edu

Research Advisor: Melissa Henry, PhD, FNP-C School of Nursing Phone: (970) 351-1735 email: Melissa.Henry@unco.edu

Purpose and Description: The purpose of this research study is to investigate nurse educators' experiences providing academic accommodations to nursing students with disabilities. As an educator with experience teaching students in a prelicensure registered nursing program in the U.S., your responses will provide information about factors which hinder or support faculty during the accommodation process.

Procedures: Participation in this study includes completing an online survey that asks questions about your experiences with academic accommodations and demographic information. It also includes an individual interview conducted virtually. The online survey is expected to take between 10 – 15 minutes. The date and time of the individual interview will be at your convenience. The researcher will hold the virtual one-on-one interview with you in her private office via the Microsoft Teams online meeting platform. The virtual one-on-one interview is expected to last between 30 minutes to one hour. During the virtual interview, you will be asked to discuss your experiences with academic accommodations. Examples of interview questions are: "What factors or circumstances helped or would have been helpful for you to provide the accommodation for the student?" and "In your opinion, what were the overall positive outcomes related to your decision to provide accommodations for this student?"

Potential Risks and Benefits: There are no anticipated risks for participating in this survey beyond those experienced in everyday life when answering questions about providing accommodations to students. While there will be no personal benefit to you, the information gathered through this study will benefit nursing faculty to gain a deeper understanding of what facilitates or hinders the process of providing accommodations to nursing students with disabilities.

Confidentiality and Privacy: Your participation in the research study is confidential. Recruitment and demographic survey results will be transmitted directly to a secure data storage service on the campus of the University of Northern Colorado and only accessible to the researcher and research advisor using a password protected computer. Any IP address information associated with the survey will be deleted by the researcher immediately after the survey results are received. As a participant in the study, your email address will be used only as contact information to arrange the one-on-one interview and for review of the transcript if you

request one. Your email address will not be shared and no personal identifying information will be linked to your interview.

Please Note: Qualtrics has specific privacy policies of their own. You should be aware that this web service may be able to link your responses to your ID in ways that are not bound by this consent form and the data confidentiality procedures used in this study. If you have concerns you should consult this service directly.

The virtual interview will be video recorded for transcription and analysis. The transcript will be a verbatim account of the interview and available to you for review if requested. General demographic information and a pseudonym that you select will be associated with the interview data. No personally identifying information will be included with the interview data. All data will be published in aggregate except anonymous quotes from the interview data which will be used in the research report to give “voice” to the qualitative data. The survey and interview data will be stored on password-protected computers for the duration of the research project and will be deleted after three years from the completion of the project.

Voluntary Participation: Participation in this study is voluntary. If you decide to participate, you are not required to answer any questions that you do not wish to answer. Once you begin participation, you may skip any questions or stop the survey or interview at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. You can choose to withdraw your responses at any time before you submit your answers to the online survey. You can stop the interview and request the recording be deleted at any time during the interview. Please take your time to read and thoroughly review this document and decide whether you would like to participate in this research study. If you decide to participate, your completion of the research procedures indicates your consent. Please keep or print this form for your records.

Questions: If you have any questions about this research project, please feel free to contact the researcher, Connie Harris, at harr2691@bears.unco.edu If you have any concerns about your selection or treatment as a research participant, please contact Nicole Morse, Office of Research & Sponsored Programs, University of Northern Colorado, Greeley, CO; 970-351-1910 or nicole.morse@unco.edu

APPENDIX E
INTERVIEW GUIDE

Introduction of Research Project

My name is Connie Harris. I am a doctoral candidate at the University of Northern Colorado. I am seeking nurse educators willing to participate in a research study investigating faculty experiences and perceptions providing classroom, clinical, or lab/simulation accommodations to students with disabilities enrolled in prelicensure registered nursing programs in the U.S.

Purpose and Description

The purpose of this research study is to investigate nurse educators' experiences providing academic accommodations to nursing students with disabilities. As an educator with experience teaching students in a prelicensure registered nursing program in the U.S., your responses will provide information about factors which hinder or support faculty during the accommodation process.

Read and Verify Consent for Human Participants in Research

Do you have any questions about this research?

Inclusion Criteria Questions

To participate in this research study, you must answer “yes” to the following questions:

- Do you have experience with the academic accommodation process since 2009, the year of the most recent changes made to the Americans With Disabilities Act?
- Do you have direct involvement in modifying teaching practices or arranging and implementing accommodations for student learning.

Review Data the Participant Provided on the Qualtrics Recruitment Survey

- Confirm demographic characteristics listed in the Qualtrics survey
- Confirm the answers given on the Qualtrics survey about:
 - Participant's experiences providing accommodations and teaching nursing students with disabilities.

Begin the Online Video Recording

Interview Questions

We will now start the interview and I will begin the videotaped recording.

Pseudonym

What name would you like to use as a pseudonym for this interview? _____

General Description of the Academic Accommodation

1. Please describe your experience regarding the _____ accommodation request for the student you mentioned in the survey.

Probes

- Did the student seek this accommodation through a formal process defined by the campus Disability Resource Center?
- When did you learn about the student's request for academic accommodation?
- What type(s) of modifications to teaching materials/methods or the learning environment were associated with the accommodation?
- What specific actions were needed of you to provide this accommodation?

Behavioral Beliefs

1. What did you like or enjoy about providing this accommodation? (***Behavioral Beliefs: affective beliefs***)
2. What did you dislike about providing this accommodation? (***Behavioral Beliefs: affective beliefs***)

The previous two questions asked what you liked or disliked about the accommodation experience. Sometimes a person can dislike something but see its benefit or like something even though there may be negative consequences associated with the action. Based on the accommodation experience you described:

3. What did you believe are the benefits of providing/denying this accommodation? (***Behavioral Beliefs: instrumental beliefs***)
4. What if any, do you believe are the negative consequences of providing/denying this accommodation? (***Behavioral Beliefs: instrumental beliefs***)

Behavioral Beliefs Probes

Equity:

- What impact did the implementation of this accommodation have on equitable treatment of the student with the disability and other students in this class/clinical group?

Time:

- What were your experiences regarding the time you spent in relation to planning or implementing the accommodation?

Academic Standards:

- After implementing this accommodation, what are your thoughts about whether academic standards were maintained, increased or decreased for this nursing student receiving the accommodation?

Safety:

- In relation to this accommodation, what are your beliefs about patient safety and well-being and the student's safety and well-being?
5. After answering the previous questions and reflecting on your experience, what were the overall positive outcomes related to providing/denying academic accommodations for this student? (*Behavioral Beliefs: summary beliefs*)
 6. In your opinion, what were the overall negative outcomes related to providing/denying academic accommodations for this student? (*Behavioral Beliefs: summary beliefs*)

Normative Beliefs

1. What do you believe your faculty peers thought about your decision to provide/deny the student's accommodation request?
2. How have other educators responded to similar requests for accommodations by student(s)?
3. What do you believe your supervisor expected you to do regarding the decision to provide/deny the student's accommodation request?
4. What do you believe the university administrators expected from you regarding the decision to provide/deny the student's accommodation request?
5. Providing accommodations to students with disabilities is legally mandated by the Americans With Disabilities Act. Knowing this, what impact does this have regarding your actions to provide/deny the requested accommodation?

Control/Self Efficacy Beliefs

1. What factors or circumstances helped or would have been helpful for you to provide the accommodation for the student?
2. What factors or circumstances hindered or prevented you from arranging the accommodation for the student?

Control Beliefs Probes

- How would more training in the area of _____ have affected your experience providing this accommodation?
 - Types of disabilities
 - ADA mandates/legal requirements
 - Your institution's policies or processes to provide the accommodation
 - Alternative teaching methods/practices to support the student's learning needs
- How did communication with _____ affect the accommodation process?
 - Disability Resource Services
 - Your supervisor/administrators
- What was the impact for you regarding your workload/responsibilities in relation to this accommodation request?

Conclusion Question About Experience

1. Are there any other issues or thoughts that come to mind when you think about the experience you described with this student?

APPENDIX F
BACKGROUND AND STANCE ON DISABILITY

I have multiple life experiences that influence my views about disability, the metaparadigm of nursing, and the need for nurse educators to modify teaching practices and learning experiences for students with disabilities. I grew up observing the limitations experienced by someone with a disability. As a child, I accompanied my mother while she made her weekly visits to check on my grandmother and uncle. Since neither could drive, my mother bought their groceries, took them to doctor's appointments, and completed any needed errands.

My grandmother had no disability; she simply never learned to drive a car. I was told my uncle had cerebral palsy due to trauma during a home birth. While he had no cognitive impairments, my grandparents did not allow him to complete elementary school. The reasons given were due to concerns that his disability made it unsafe for him to attend school and created social problems during his interactions with other students. I remember my grandmother as she referred to him as a *cripple* and viewed him as someone needing care and sympathy.

The impact that his significant motor and speech difficulties had on his interactions with others were impossible to overlook. As a result of this experience, I was desensitized to less severe impairments in motor function and did not consider them as disabilities. For example, a friend in nursing school had polio as a young child and walked with a limp. I was surprised by someone's comment that my friend had a disability. My worldview envisioned persons with disabilities as individuals who were unable to work and needed special care and education services.

As a new graduate nurse, I worked with a nurse who had one arm and used a prosthesis due to an amputation after being diagnosed with cancer as a teen. She defied the stigma associated with a physical disability as she competently practiced nursing by taking a full patient care assignment on a busy post-surgical floor at the teaching hospital where we worked. This

occurred during the era before ADA accommodations and at a time when discriminatory comments and behaviors toward persons with disabilities were socially allowed. Her positive attitude, the way she graciously overlooked discriminatory comments by fellow healthcare professionals, the ease she demonstrated in developing rapport with patients, and her insatiable desire to give hope and encouragement to others had a profound impact on me and expanded my ontological horizons regarding what it means to be a nurse.

Throughout my nursing career, I have worked with individuals and developed friendships with nurses who were diagnosed with disabling conditions during their nursing career. In particular, I have worked with several nurses diagnosed with multiple sclerosis. Despite the diagnosis, they continued in their careers and adapted to their progressing disability. To me, disability does not represent an impediment to experiencing a fulfilling career as a nurse.

As an academic educator, I taught a student who developed hemi-paraplegia due to an accident that occurred eight weeks before graduation. In response to her limitations in mobility, I made accommodations for the student so she could complete her leadership clinical rotation. I was eager and willing to make these accommodations and encouraged her to complete the semester and not give up on having a career as a professional nurse. Knowing this student and her abilities before the accident undoubtably influenced my actions.

I facilitated an adjustment in her clinical assignment which allowed her to complete the clinical rotation in a wheelchair. In addition, I contacted the director of nursing at a rehabilitation institution and arranged a meeting between the director and the student. This meeting satisfied a course assignment to interview a nurse leader. My hope was that the nursing director could give my student a vision for the future and offer encouragement that the student was employable, despite her limited mobility. The experience of modifying clinical activities for this student

challenged me to examine my beliefs about technical admission standards, accommodations, and clinical expectations in nursing programs. Throughout my career as a nurse educator, I have taught countless students that successfully completed their nursing program requirements and gained employment as nurses despite their sensory, physical, medical, emotional/mental health or learning disabilities.

In graduate school, I learned about theories which support the education of students with disabilities and underscore the need to examine the experiences of these nursing students and the nurse educators who teach them. Specifically, the tenets of the biopsychosocial model of disability and the Theory of Planned Behavior will be used to study the process used by nurse educators to grant or deny requests for academic accommodations for nursing students with disabilities. I am mindful that my knowledge of these models and my life experiences regarding disability are preconceptions I bring to this research study. By acknowledging this, I am aware of the importance that life experiences have on how one views the world. All of these experiences and my knowledge of relevant theories strengthen my resolve to advocate for students with disabilities and facilitate the process for nurse educators to adapt teaching methods and provide academic accommodations in didactic and clinical learning environments for nursing students with disabilities.

APPENDIX G
DATA ANALYSIS PROCESS

Provisional (Deductive) Coding of Data

Step 1: Transcript data reviewed and participants' statements organized using the a priori categories of:

- Theory of Planned Behavior (TPB) Beliefs
 - Behavioral Beliefs
 - Normative Beliefs
 - Control Beliefs
- Miscellaneous topics/concepts identified from a review of nursing literature
 - Coding categories added during review of transcript as needed

Step 2: Provisional coding categories refined based on transcript data analysis

- Categories maintained, renamed, merged or deleted within the main structural categories of the Theory of Planned Behavior
- Miscellaneous coding category dropped. Contents within category & subcategories merged with other categories or dropped leaving only the Theory of Planned Behaviors three belief structures to organize transcript data

(Codebook after Step 2 contained 20 code categories/sub-categories organized within the Theory of Planned Behavior's Belief Structure)

Inductive Coding Data

Step 1: Transcript data of participants' statements analyzed through two coding cycles using constant comparative method within each provisional coding category

Step 2: Belief statements formulated after review of dominant codes representing the views of nurse educator participants within each provisional coding category

Step 3: Thirty-one salient belief statements with supporting narrative transcript passages identified and organized using the structural components of the Theory of Planned Behavior

Identifying Themes & Final Analysis

Step 1: Two coding cycles were conducted using the constant comparative method to analyze 31 nurse educators' belief statements.

- Exemplars of supporting nurse educator narratives periodically reviewed during the coding process to assure the interpretation and identification of codes represented the participant's views
- Three themes and eight sub-themes identified

Step 2: Eight descriptive statements written to explain each data them/sub-theme

Step 3: Member checks performed by sending survey themes and sub-themes with descriptive statements to research study participants

Step 4: Descriptive statements refined based on results of member checks

APPENDIX H
PROVISIONAL DATA ANALYSIS CODE BOOK

Provisional Data Analysis Code Book

Behavioral Beliefs

- Attitudes
- Benefits
- Impact
 - Academic Standards
 - Equity
 - Faculty Time
 - Lessons Learned*
 - NCLEX*
 - Pedagogy & Evaluation*
 - Safety
 - Student Perspective*
 - Need for Accommodation*
- Philosophical Beliefs
- Unreasonable/Denied Accommodations

Normative Beliefs

- ADA
- Peer Influence
- Social Media and Professional Influences*
- Supervisor/University Administration Influences

Control Beliefs

- Resources
 - Communication
 - Help Providing Accommodations
 - Hindrances
 - Planning, Procedures, & Routines
 - Testing Center*
- Self-Efficacy
 - Degree of Autonomy
 - Knowledge/Experience/Training
 - Lack of...*
 - Workload

Miscellaneous*

- Complexity*
- Frustration*
- History and Trends*
- Misconceptions*
 - NCLEX*
 - Temporary Disabilities & Informal Accommodations*
 - Help for Students but No Accommodation*
- Student Understanding of Accommodations*
- Trust*

*Codes added during provisional coding

APPENDIX I

INDUCTIVE DATA ANALYSIS CODE BOOK

Inductive Data Analysis Codebook

Behavioral Beliefs

- Benefits of Accommodations (12/29)
- Impact
 - Academic Standards & Equity (13/53)
 - Pedagogy & Evaluation (9/26)
- Philosophy, Attitudes & Beliefs
 - Beliefs About Accommodations (13/50)
 - Assisting Nursing Students (10/33)

Normative Beliefs

- ADA (8/15)
- NCLEX (9/15)
- Peer Influences (11/33)
- Supervisor-University Administration (13/27)

Control Beliefs

- Resources
 - Communication (8/16)
 - Help in Providing Accommodations (9/24)
 - Hindrances to Providing Accommodations (9/27)
 - Planning and Procedures (12/45)
- Self-Efficacy
 - Complexity (11/26)
 - Degree of Autonomy (10/18)
 - Knowledge/Experience/Training (13/38)

(# of study participants / # of passages analyzed)

APPENDIX J

INDUCTIVE CODING OF NURSE EDUCATOR
BELIEF STATEMENTS

Inductive Coding Statements

Behavioral Beliefs

ADA Influences

1. It is not within the role of the nurse educator or student to determine accommodations or interpret disability law; this is the role of the campus Disability Resource Center.

Benefits of Accommodations

2. Accommodations remove barriers to student success and offer the potential for students with diverse backgrounds to enter the nursing profession.

Academic Standards & Equity

3. Providing accommodations to students with disabilities does not lower academic standards.
4. Accommodations should not cause unintended consequences that create inequities for other students or the student with the disability.

Pedagogy & Evaluation

5. Accommodations should not interfere with the faculty member's choice of teaching methods.
6. The nurse educator is responsible for planning class activities and finding pedagogies that are effective for all students, including students who receive accommodations.

Assisting Nursing Students

7. Helping students with issues that interfere with learning due to a physical, emotional, mental health, social, or other issue is part of my responsibilities as an educator.

Beliefs About Accommodations

8. Some accommodations may not be feasible in a clinical setting.
9. Students who request accommodations should use them.

Normative Beliefs

ADA Influences

10. Since accommodations are mandated by law, nurse educators are expected to provide classroom accommodations as requested.

NCLEX Beliefs

11. As an educator, I am expected to prepare students for the NCLEX exam, including students who receive accommodations.

Nursing Program & University Administrator Influences

12. My nursing program and university administrators expect me to comply and provide requested accommodations to students with disabilities.

Knowledge, Experience, Training

13. For accommodation requests or disabilities that are unfamiliar to me, I am responsible for finding out the needed information or educating myself regarding adapting teaching materials or teaching methods to meet the student's accommodation needs.

Nursing Profession Beliefs

14. I have a professional responsibility to prepare students for entry to practice in an acute care nursing setting.

Control Beliefs***Degree of Autonomy***

15. For common accommodations, I comply with the request and follow the instructions/guidance as explained by the campus Disability Resource Center or my supervisor.
16. The campus Disability Resource Center and/or my supervisor provide guidance but allow me to use my discretion to implement the requested accommodation in a manner appropriate for the student's needs.

Planning and Procedures

17. There should be written procedures that faculty can access regarding specific steps for planning and/or implementing accommodations.
18. Faculty should have access to campus resources that are available at times consistent with the actual implementation of the accommodation.
19. When the need for an accommodation can be expected or foreseen, the nursing program should initiate advance planning with a clearly defined process for implementing the accommodation.
20. Receiving notice of the need for an accommodation at the beginning of the semester or later does not allow me adequate time to plan and implement some types of accommodation requests.

Helpful Resources/Assets

21. The Disabilities Resource Center is a campus resource for answering faculty questions about student accommodations.
22. When I am unfamiliar with a student's accommodation or disability, I educate myself by using internet websites, podcasts, webinars, and /or nursing literature as information resources.

Hindrances

23. I am responsible for finding and arranging the resources needed to implement accommodations for students with the accommodation of extended time and/or a reduced distraction environment for exams/quizzes.

24. I receive little or no help from university staff/resources for arranging or providing a student's accommodation.
25. There is little research or information regarding best practices available to help me plan, implement, and manage accommodations for nursing students with disabilities.

Complexity

26. Accommodations involving multiple people or requiring increased time to arrange are difficult to implement.
27. Accommodations that require me to find/schedule the necessary resources and personnel are difficult to implement.
28. Accommodation requests that require minor changes in classroom or clinical procedures and do not alter the learning experience for other students are easy for me to implement.
29. Some accommodations are difficult to implement unless I alter my classroom teaching methods, materials, or plans.

Knowledge, Experience, Training

30. The training I received from my employer regarding student disabilities and accommodations was basic information about the accommodation process and the need for compliance with the ADA law.

Pedagogy & Evaluation

31. Nurse educators lack resources regarding the use of effective pedagogies for students with clinical accommodations and for students with learning disabilities in the didactic setting.

APPENDIX K
CODING THEMES FOR SALIENT NURSE
EDUCATOR BELIEFS

Salient Statements: Behavioral Beliefs			
Belief Statement	Cycle #1	Cycle #2	Theme
1. It is not within the role of the nurse educator or student to determine accommodations or interpret disability law; this is the role of the campus Disability Resource Center.	Not my role, I follow DRC decision	Compliance	Responsibility (complying with DRC)
2. Accommodations remove barriers to student success and offer the potential for students with diverse backgrounds to enter the nursing profession.	Remove barriers to success	Facilitation	Responsibility (facilitating success for students with disabilities)
3. Providing accommodations to students with disabilities does not lower academic standards.	All treated the same	Fair to all	Reasonable (equity evaluating students)
4. Accommodations should not cause unintended consequences that create inequities for other students or the student with the disability.	No inequity created	Fair to all	Reasonable (fair to all students)
5. Accommodations should not interfere with the faculty member's choice of teaching methods.	Not a burden to faculty	Fair to all	Reasonable (fair regarding academic freedom)
6. The nurse educator is responsible for planning class activities and finding pedagogies that are effective for all students, including students who receive accommodations.	Plan effective teaching methods	Implementation	Responsibility (for implementing effective pedagogies)
7. Helping students with issues that interfere with learning due to a physical, emotional, mental health, social, or other issue is part of my responsibilities as an educator.	Helping students facilitate their success	Facilitation	Responsibility (for helping all students)
8. Some accommodations may not be feasible in a clinical setting.	Not feasible in clinical setting	Feasibility	Reasonable (practical)
9. Students who request accommodations should use them.	Faculty arrange accommodations so the student should use them	Fair to all	Reasonable (don't request if not planning to use it)

Salient Statements: Normative Beliefs			
Belief Statement	Cycle #1	Cycle #2	Theme
10. Since accommodations are mandated by law, nurse educators are expected to provide accommodations as requested.	Provide legal mandate of accommodation	Compliance	Responsibility (to comply by ADA law)
11. As an educator, I am responsible for preparing students for the NCLEX exam, including students who receive accommodations.	Helping students facilitate their success	Professional Expectation	Responsibility (to student success on NCLEX)
12. My nursing program and university administrators expect me to comply and provide requested accommodations to students with disabilities.	My employer expects me to comply	Compliance	Responsibility (to comply - expected by administrators)
13. For accommodation requests or disabilities that are unfamiliar to me, I am responsible for finding out the needed information or educating myself regarding adapting teaching materials or teaching methods to meet the student's accommodation needs.	I'm expected to modify materials & methods to implement the accommodation	Implementation	Responsibility (to modify materials & pedagogies)
14. I have a professional responsibility to prepare students for entry to practice in an acute care setting.	I'm expected to prepare students for entry into the nursing profession	Professional Expectation	Responsibility (to facilitate student employment upon graduation)

Salient Statements: Control Beliefs			
Belief Statement	Cycle #1	Cycle #2	Theme
15. For common accommodations, I comply with the request and follow instructions/guidelines as explained by the campus Disability Resource Center or my supervisor.	Comply with request	Compliance	Responsibility (comply/follow policies & procedures)
16. The campus Disability Resource Center and/or my supervisor provide guidance but allow me to use my discretion to implement the requested accommodation in a manner appropriate for the student's needs.	Implement accommodation as I decide	Implementation	Responsibility (to implement based on faculty judgment)

17. There should be written procedures that faculty can access regarding specific steps for planning and/or implementing accommodations.	Defined process, not arbitrary	Preparation & Process	Resources: procedures needed
18. Faculty should have access to campus resources that are available at times consistent with the actual implementation of the accommodation.	PM faculty should have same resources PM faculty should have same resources	Fair to all	Reasonable (re: fairness for faculty teaching in the pm)
19. When the need for an accommodation can be expected or foreseen, the nursing program should initiate advance planning with a clearly defined process for implementing the accommodation.	Advance planning & a defined process needed	Preparation & Process	Resources: (proactive, not reactive planning needed)
20. Receiving notice of the need for an accommodation at the beginning of the semester or later does not allow me adequate time to plan and implement some types of accommodation requests.	Late notice with no time to plan & prepare is unfair to faculty	Fair to all	Reasonable (fair faculty time and workload)
21. The Disabilities Resource Center is a campus resource for answering faculty questions about student accommodations.	Resource for getting questions answered	Preparation & Process	Resources: (Use DRC to answer faculty questions)
22. When I am unfamiliar with a student's accommodation or disability, I educate myself by using internet websites, podcasts, webinars, and/or nursing literature as information resources.	I educate myself in order to provide the accommodation	Implementation	Responsibility (to educate self about the disability & accommodation)
23. I am responsible for finding and arranging the resources needed to implement accommodations for students with the accommodation of extended time and/or a reduced distraction environment for exams/quizzes.	I must arrange my own resources for exam/quiz accommodations	Implementation	Responsibility (to find/arrange campus resources for exam/quiz accommodations)
24. I receive little or no help from university staff/resources for arranging or providing a student's accommodation.	On my own	Implementation	Responsibility (individually accountable)

25. There is little research or information regarding best practices available to help me plan, implement, and manage accommodations for nursing students with disabilities.	Need evidence-informed research/best practices.	Best Practices	Resources: (Info & resources to plan & implement accommodations)
26. Accommodations involving multiple people or requiring increased time to arrange are difficult to implement.	↑ time to plan & implement if more people	Feasibility	Reasonable (↑ people = ↑time to implement)
27. Accommodations that require me to find/schedule the necessary resources and personnel are difficult to implement.	↑ time needed for complex resource needs	Feasibility	Reasonable (↑ time to plan & find/schedule resources)
28. Accommodation requests that require minor changes in classroom or clinical procedures and do not alter the learning experience for other students are easy for me to implement.	Easy to implement for minor changes in class/teaching	Feasibility	Reasonable (No pedagogy change accommodations are easy)
29. Some accommodations are difficult to implement unless I alter my classroom teaching methods, materials, or plans.	Pedagogy changes are hard to implement	Feasibility	Reasonable (Pedagogy change is difficult)
30. The training I received from my employer regarding student disabilities and accommodations was basic information about the accommodation process and the need for compliance with the ADA law.	Employer training only teaches ADA, not how to teach/evaluate students with accommodations	Preparation & Process	Resources: (Need training re: teaching / evaluating students with accommodations)
31. Nurse educators lack resources regarding the use of effective pedagogies for students with clinical accommodations and for students with learning disabilities in the didactic setting.	Need resources & info on effective pedagogies for students receiving accommodations (didactic and lab/clinical)	Best Practices	Resources: (need resources for how to teach students with disabilities)

APPENDIX L
MEMBER CHECK EMAIL AND SURVEY

Subject: Accommodations Research Findings and Request for Feedback

Hello _____,

Between October 2022 and March 2023, you were one of thirteen nurse educators, representing all regions of the United States, who was interviewed for a research study about faculty beliefs toward academic accommodations for prelicensure nursing students with disabilities.

Through an iterative, constant comparative data analysis process, 475 passages were coded from the thirteen interview transcripts with thirty-one statements identified. These statements represent the dominant beliefs of faculty participants toward the provision of academic accommodations for nursing students with disabilities. Final analysis of these statements revealed the emergence of three themes and eight sub-themes.

I am asking for your assistance with enhancing the study's credibility by reviewing a summary of the data analysis. This email includes a Qualtrics link for you to use to review the summary of research findings. If you agree to review the findings and provide feedback, please indicate whether this analysis generally represents your beliefs or the beliefs of nurse educators that you know. With each statement, you can add comments, if needed, to explain your response. Your review and feedback are greatly appreciated.

Best regards,

Connie Harris MS, RN
Doctoral Candidate, PhD in Nursing Education Program
University of Northern Colorado
Harr2691@bears.unco.edu

Qualtrics link to research findings:

https://unco.co1.qualtrics.com/jfe/form/SV_5BjxVIGO52kMq0K

Qualtrics Survey
Participant Feedback for Research Data Analysis:
Faculty Beliefs Toward Accommodations for Nursing Students With Disabilities

Instructions:

To ensure the data analysis accurately reflects the beliefs of nurse educators regarding academic accommodations, you are asked to review the summary of research findings. The three themes, eight sub-themes, and descriptive statements are listed. Please review each statement to determine if it generally represents your beliefs or the beliefs of nurse educators that you know. A space to comment regarding your agreement/disagreement with each descriptive statement is provided.

Responsibility Theme, Sub-Themes, and Descriptive Statements

Theme: *Responsibility*

Sub-Theme: *Professional Expectations*

Descriptive Statement:

Academic nurse educators believe they have a professional responsibility to equip nursing students with disabilities for entry to professional nursing practice and to prepare them to take the NCLEX exam.

_____ Agree/Comments

_____ Disagree/Comments

Theme: *Responsibility*

Sub-Theme: *Compliance*

Descriptive Statement:

Nurse educators believe they are expected to comply with the ADA mandate and fulfill their employer's expectations to provide accommodations for nursing students with disabilities.

_____ Agree/Comments

_____ Disagree/Comments

Theme: *Responsibility*

Sub-Theme: *Facilitation*

Descriptive Statement:

There is a strong belief among nurse educators that it is their responsibility to help students overcome barriers to success during nursing school. They want to help all students, including nursing students with disabilities.

_____ Agree/Comments

_____ Disagree/Comments

Theme: *Responsibility*

Sub-Theme: *Implementation*

Descriptive Statement:

Nurse educators perceive themselves as individuals who are responsible for implementing accommodations but with limited help and resources. Educators believe they are expected to be resourceful and effective when modifying pedagogies and making arrangements to implement requests for accommodations.

_____ Agree/Comments _____ Disagree/Comments

Reasonable Theme, Sub-Themes, and Descriptive Statements

Theme: *Reasonable*

Sub-Theme: *Fair to All (Including Faculty)*

Descriptive Statement:

Nurse educators believe that students with disabilities should use the accommodation requested. While nurse educators believe that accommodations remove barriers to learning for students with disabilities, these accommodations should not create inequities for other students, lower academic standards, or require faculty to use a less effective method of instruction.

_____ Agree/Comments _____ Disagree/Comments

Theme: *Reasonable*

Sub-Theme: *Feasible*

Descriptive Statement:

The difficulty and complexity of the accommodation process is dependent upon the availability of resources and personnel, number of people involved, experience level of the faculty member regarding the specific accommodation, and time needed to plan and prepare the implementation of the accommodation. Nurse educators are especially concerned about accommodations which affect their teaching methods, materials, or plans.

_____ Agree/Comments _____ Disagree/Comments

Resources Theme, Sub-Themes, and Descriptive Statements

Theme: *Resources*

Sub-Theme: *Preparation & Process*

Descriptive Statement:

Nurse educators who receive accommodation requests express the need for a clear process, advance planning, and available resources. Without these and when there is little notice of the

accommodation request, faculty may spend their personal time working to implement the accommodation.

_____ Agree/Comments

_____ Disagree/Comments

Theme: *Resources*

Sub-Theme: *Best Practices*

Descriptive Statement:

Nurse educators describe the training they receive from their employer as basic, general information about the accommodation process and the need for ADA compliance. They express a desire to receive training and/or have access to an easily-accessible repository of evidence-informed information and resources related to best practices for teaching nursing students with disabilities in the didactic and clinical settings.

_____ Agree/Comments

_____ Disagree/Comments

Thank you for reviewing and providing feedback about the study findings.

Your time and support are greatly appreciated.

APPENDIX M
INSTITUTIONAL REVIEW BOARD APPROVAL



UNIVERSITY OF
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Institutional Review Board

Date: 08/22/2022

Principal Investigator: Connie Harris

Committee Action: **IRB EXEMPT DETERMINATION – New Protocol**

Action Date: 08/22/2022

Protocol Number: [2208042141](#)

Protocol Title: Faculty Beliefs Toward Academic Accommodations for Prelicensure Nursing Students With Disabilities

Expiration Date:

The University of Northern Colorado Institutional Review Board has reviewed your protocol and determined your project to be exempt under 45 CFR 46.104(d)(702) for research involving

Category 2 (2018): EDUCATIONAL TESTS, SURVEYS, INTERVIEWS, OR OBSERVATIONS OF PUBLIC BEHAVIOR. Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures, or observation of public behavior (including visual or auditory recording) if at least one of the following criteria is met: (i) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects cannot readily be ascertained, directly or through identifiers linked to the subjects; (ii) Any disclosure of the human subjects' responses outside the research would not reasonably place the subjects at risk of criminal or civil liability or be damaging to the subjects' financial standing, employability, educational advancement, or reputation; or (iii) The information obtained is recorded by the investigator in such a manner that the identity of the human subjects can readily be ascertained, directly or through identifiers linked to the subjects, and an IRB conducts a limited IRB review to make the determination required by 45 CFR 46.111(a)(7).

You may begin conducting your research as outlined in your protocol. Your study does not require further review from the IRB, unless changes need to be made to your approved protocol.

As the Principal Investigator (PI), you are still responsible for contacting the UNC IRB office if and when:



UNIVERSITY OF
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Institutional Review Board

- You wish to deviate from the described protocol and would like to formally submit a modification request. Prior IRB approval must be obtained before any changes can be implemented (except to eliminate an immediate hazard to research participants).
- You make changes to the research personnel working on this study (add or drop research staff on this protocol).
- At the end of the study or before you leave The University of Northern Colorado and are no longer a student or employee, to request your protocol be closed. *You cannot continue to reference UNC on any documents (including the informed consent form) or conduct the study under the auspices of UNC if you are no longer a student/employee of this university.
- You have received or have been made aware of any complaints, problems, or adverse events that are related or possibly related to participation in the research.

If you have any questions, please contact the Research Compliance Manager, Nicole Morse, at 970-351-1910 or via e-mail at nicole.morse@unco.edu. Additional information concerning the requirements for the protection of human subjects may be found at the Office of Human Research Protection website - <http://hhs.gov/ohrp/> and <https://www.unco.edu/research/research-integrity-and-compliance/institutional-review-board/>.

Sincerely,

A handwritten signature in black ink that reads "Nicole Morse".

Nicole Morse
Research Compliance Manager

University of Northern Colorado: FWA00000784