

NURSING FACULTY PERSPECTIVES:
ENROLLMENT AND ACCOMMODATIONS FOR THE UNDERGRADUATE
DISABLED NURSING STUDENTS

By

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Submitted in partial fulfillment of the requirements for the degree of

Doctor of Nursing Practice

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January 2020

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Abstract

Nursing has been identified as a profession with a rising student disability enrollment. Student attendance in post-secondary institutions is climbing, and as the disabled student population expands, students are seeking enrollment into undergraduate nursing programs. There is limited evidence about the experiences of disabled students in nursing programs, the impact they have on the program, and those that teach them. Nursing faculty are expected to educate disabled students enrolled into nursing programs and perform accommodations as needed on instructional content and testing strategies.

Problem: An investigation is necessary to determine the viewpoint of nursing faculty on the impact of disabled students on educational coursework, nursing programs, and the nursing profession.

Aim: This study examined the perspectives (attitudes and beliefs) of nursing faculty on enrollment and accommodations for undergraduate disabled nursing students using Kolb's Cycle of Experiential Learning as the theoretical framework.

Methods: The research design is a quantitative descriptive study. The sample was drawn from nursing instructional faculty employed in Northeast Ohio at Associate Degree Programs and Bachelor of Science in Nursing Programs with permission of the Program Administrators of these schools. Also, Institutional Review Board approval from Case Western Reserve University was obtained. The instrument is a six-point, self-administered, Likert type scale survey. The questionnaire included six

sections, which contain: (1) faculty background demographics, (2) faculty experiences and prior exposure to the disabled population, (3) faculty attitudes on enrollment, (4) student disability manifestations, (5) faculty perspectives on course and clinical accommodations, and (6) disabled student impact on nursing programs and the nursing profession.

Data Analysis: The SPSS software was used to describe the sample and key variables.

Findings: The study results described the nursing faculty characteristics and demographics. Research questions were answered using descriptive statistics. Nursing faculty perceptions of enrollment, accommodation, information needs and benefits of the disabled nursing students were described.

Conclusion: Findings indicated the need for increased knowledge, education, training, and research. This study may impact changes by guiding the education of faculty and generating curriculum changes, and initiating more research for the disabled nursing student.

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Dedications

I dedicate the work on this scholarly project to my family, friends, lung transplant team, and advocates working with the disabled population. Everyone gave support to me in various forms during this process including physical care, healthcare, love, understanding, prayers, and positive affirmations. There were times I wanted to give up, but someone crossed my path confirming this project was needed for nursing faculty, disabled students, and the nursing profession.

A special thanks to Ian Thompson my son who is on the Autism Spectrum; opening the eyes of others opens the world to you.

Acknowledgements

The faculty and staff of the Frances Payne Bolton School of Nursing at Case Western Reserve University have provided phenomenal support for students enrolled in the doctorate of nursing program. The members of the nursing program offered experiences with instructional experts and life-long learners, researchers, nursing and non-nursing professionals, and doctorate level collaborations and opportunities. I have had the privilege of working with, and being instructed by, some of the most impressive men and women in the nursing profession - Drs. Faye Gary and Mary Quinn Griffin. This educational experience has solidified my love of nursing and rejuvenated me as a nursing educator.

I would like to acknowledge the nursing educators who agreed to be a part of this process: the research study committee - Dr. Patricia McDonald, Dr. Scott Moore, and Dr. Diana Morris; and my advisor, Dr. Cheryl Killion, for supporting me through some difficult times in my educational program. Dean Vivian Yates, of Cuyahoga Community College Nursing Division, was one of my respected supporters along with Dr. May Wykle, who listened to me sorting through the scholarly project process.

I was accepted by my instructors, even with respiratory difficulties and use of oxygen during several course semesters. I was hospitalized twice, on one occasion for a double lung transplant, yet my advisor supported me steadfastly. When I

returned to the program, determined to complete the journey I started, support was ever-present from the instructors and staff.

This decision to return to coursework for my doctorate was not easy, but the support of my family, friends, and co-workers at Cuyahoga Community College aided my success.

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Chapter One

Introduction

The number of students with disabilities are increasing in schools of nursing. Nursing faculty are expected to adjust and adhere to special needs accommodations to facilitate the successful education experience for these students (Educational Services for Students (ESS) Disability Resources, Case Western Reserve University, 2016; ACCESS Disability Services, Cuyahoga Community College, 2016). Case Western Reserve University, Division of Student Affairs, University Health and Counseling Services, Disability Resources and Accessibility Information Management for Accommodations (2018) updated for use by the disabled student.

Background

As rising numbers of disabled students enroll in undergraduate programs, research shows a correlation between the number of students diagnosed with a disability, those attending post-secondary programs, and acceptance of disabled students in undergraduate nursing programs (Rue & Lewis, 2011; U.S. Department of Education, 2016; ESS Disability Resources, Case Western Reserve University, 2016; ACCESS Disability Services, Cuyahoga Community College, 2016). The disabled student admittance coincides with legislature.

Historically, laws expanded to include the rights of the disabled in the areas of self-care, healthcare, and employment. Later, parent advocacy and organizations for the disabled entered into the area of education. Rights in education over time expanded from equal learning experiences for the disabled student into transitional assistance

including post-secondary college admissions. Sowers and Smith (2004) acknowledged the law as a legal guideline for inclusion of disabled students into nursing, but asserted that successful application of the laws were dependent on nursing faculty attitude.

Data identifying the types of disabilities and the total number of disabled students registering for post-secondary education admissions were tracked by governmental agencies (Rue & Lewis, 2011). The data tracking of disabled students allowed educational institutions and departmental programs to project potential enrollment numbers (U.S. Department of Education, 2016).

The term “disability” is defined differently by legislature, educational institutions, nursing organizations, nursing programs and nursing standards and guidelines. Relevant laws include the Americans with Disabilities Act (ADA, 1990), and the Rehabilitation Act Section 504 (1973) which both addressed the inclusion of individuals with disabilities in the areas of employment and education (Maheady, 1999). Institutions of higher education in response to these laws developed policies and procedures along with disability resource offices. These offices support the definition of disability, aid in enrollment criteria, and assist in the development of basic accommodations for the disabled student.

Disability is defined as a physical or mental impairment that substantially limits one or more major life activities, or having a record of such an impairment, or being regarded as having such an impairment. Major life activities include functions such as caring for oneself, performing manual tasks, walking, seeing, hearing, eating,

sleeping, standing, bending, speaking, breathing, learning, reading, concentrating, thinking, communicating, and working (ACCESS Disability Resources Factsheet, Cuyahoga Community College, 2016).

The Educational Services for Students (ESS) Disability Resource Office at Case Western Reserve University (2016) identified the following disabilities, Attention Deficit Disorder (ADD), Attention Deficit Hyperactivity Disorder (ADHD), Learning Disabilities, Visual and Hearing impairment, Mobility/Dexterity impairments, Chronic Illness (Irritable Bowel, Celiac, Arthritis, Postural Orthostatic Tachycardia Syndrome (POTS), Psychological and Psychiatric Disorders, Autism Spectrum Disorders, and temporary conditions (surgery, broken bones) are commonly seen disabilities. Educational institutions have established treatment plans for enrollment and accommodations by nursing faculty that incorporate disability definitions, identify types of disabilities, examine manifestations of disabilities, and to review documentation supporting policies and standards for disabled nursing students. These accommodations may involve adjusting teaching approaches and individual learning methods for the success of the student.

Significance of the Problem

Faculty are required to educate students with or without disabilities. Disabled nursing students were enrolled in programs requiring accommodations.

The admission of disabled students into nursing programs will be beneficial to individual students. Each disabled student has the same opportunity as any other student to begin a career as a professional nurse. Standards were established to

eliminate discrimination and guide advocacy and support for students with disabilities (Marks & Ailey, 2014). Disabled nursing students should consider the opportunities for developing and improving themselves in academics by using technology, informal mentors, and peer tutor services. In addition, they needed to consider the benefits of self-disclosure, which entitles the student to more academic accommodation support and allows the student the benefit of advocating for themselves (Connor, 2012).

Nursing offered career mobility in clinical practice, technology training, leadership development, and education along with financial stability, all of which enhance the student's quality of life.

Educating the disabled student should be beneficial to nursing faculty and the profession of nursing. The disabled nursing student served to increase workforce numbers, introduce diversity in peer interactions, support education of non-disabled nurses in providing care, and meeting the needs of an increasing disabled population (O'Boyle-Duggan, 2012).

Positions other than acute care nursing were increasing and available for graduated disabled nursing students in the form of informatics, community health, risk management, occupational health, and public health (Dzubak, 2018). With the disabled nursing student population, educators should consider options for career starting points other than the bedside.

Nursing faculty needed to be trained to educate and develop accommodations for nursing students with varied disabilities, which could meet workforce needs and improve college attrition rates for graduates from nursing programs (Sowers & Smith,

2004). Disabled students successfully completing nursing programs and the National Council Licensure Examination (NCLEX) with high pass rates may prompt other students with disabilities to seek enrollment in the same nursing programs adding to admission and attrition numbers. Student attrition should be supported by faculty development of accommodations performed on a case-by-case basis. Nursing faculty trained in education and development of the disabled nursing student could advocate for fostering new methods for transitioning nursing graduates into employment. Arndt (2004) discussed the training and transitioning of graduated disabled nursing students beginning careers in other areas of practice than the bedside due to educational training options (accommodations).

Nursing curriculum with added content in the treatment of disabled individuals could enhance all student interactions, improve knowledge base on diversity care, and generate familiarity between nursing and the disabled population while supporting the nursing workforce and educational attrition.

Problem Statement

Teaching disabled students in nursing programs are relatively new in development. The problem is limited data about how nursing faculty are adjusting to the influx of nursing students with disabilities. Little is known about the attitudes and beliefs of the nursing faculty concerning inclusion of students with disabilities in nursing programs and making the appropriate accommodations for them. Based on the faculty perspective relating to the disabled nursing student's enrollment and need for accommodations; research studies should be performed as an important first step

to produce positive educational and workforce outcomes. There is a need to document and understand the concerns faculty may have about teaching students with various impairments.

Purpose

The purpose of this research study is to investigate nursing faculty perspectives (attitudes and beliefs) on the enrollment of disabled nursing students and making accommodations for them in undergraduate nursing programs.

Research Questions

There are three research questions connected to the purpose of this study:

1. What are the attitudes and beliefs of undergraduate nursing faculty concerning the admission of disabled nursing students enrolled in nursing programs?
2. What are the attitudes and beliefs of undergraduate nursing faculty concerning formulating accommodations for the disabled nursing student in the nursing program?
3. What is the knowledge base of undergraduate nursing faculty concerning the enrollment and initiation of accommodations for the disabled nursing student in nursing programs?

Theoretical Framework

The theoretical framework used to guide the work for this scholarly project is Kolb's Cycle of Experiential Learning, Figure 1 (Kolb, 2007). David A. Kolb is an American educational theorist who based his work on constructivism theories by John Dewey and Kurt Lewin. Kolb who was a professor in organizational behavior at Case Western Reserve University used this experiential learning theory to support his

learning style inventory. This can serve as an inventory for the ability of nursing faculty to learn more about the disabled nursing student. The experiential learning theory is composed of four elements concrete experience, reflective observation, abstract conceptualization, and active experimentation. Each element acts as stage of learning and builds on the other. In a circular fashion, the learner can enter the framework at any stage but, upon entering, the order of the cycle must be maintained. The stages represent experiential learning and address the individual's perception, cognition, behavior, and experiences with a phenomenon.

Experiential learning is the process of learning through experience, and is more specifically defined as "learning through reflection on doing". Hands-on learning is a form of experiential learning. After going through the cycle (which could require several attempts), different types of learners may arise the converters, accommodators, assimilators, and divergers. Each stage in the cycle upon completion aids in developing and identifying the learner. The first stage is labeled Concrete Experience. At this level, the learner experiences activities and engages directly by exposure to a learning situation.

Nursing faculty exposure and interaction to disabilities or the disabled nursing student is the beginning of learning. The second stage, Reflective Observation involves the learner consciously reflecting back on that experience. The faculty reviews previous interactions and observations with a disabled nursing student to develop a better understanding and improve learning conditions associated with the disabled nursing student. In the third stage, Abstract Conceptualization, the learner

extends, constructs, and creates a new way of thinking about the disabled nursing student by identifying positive and negative ideas. Negative ideas need to be improved and positive outcomes continued.

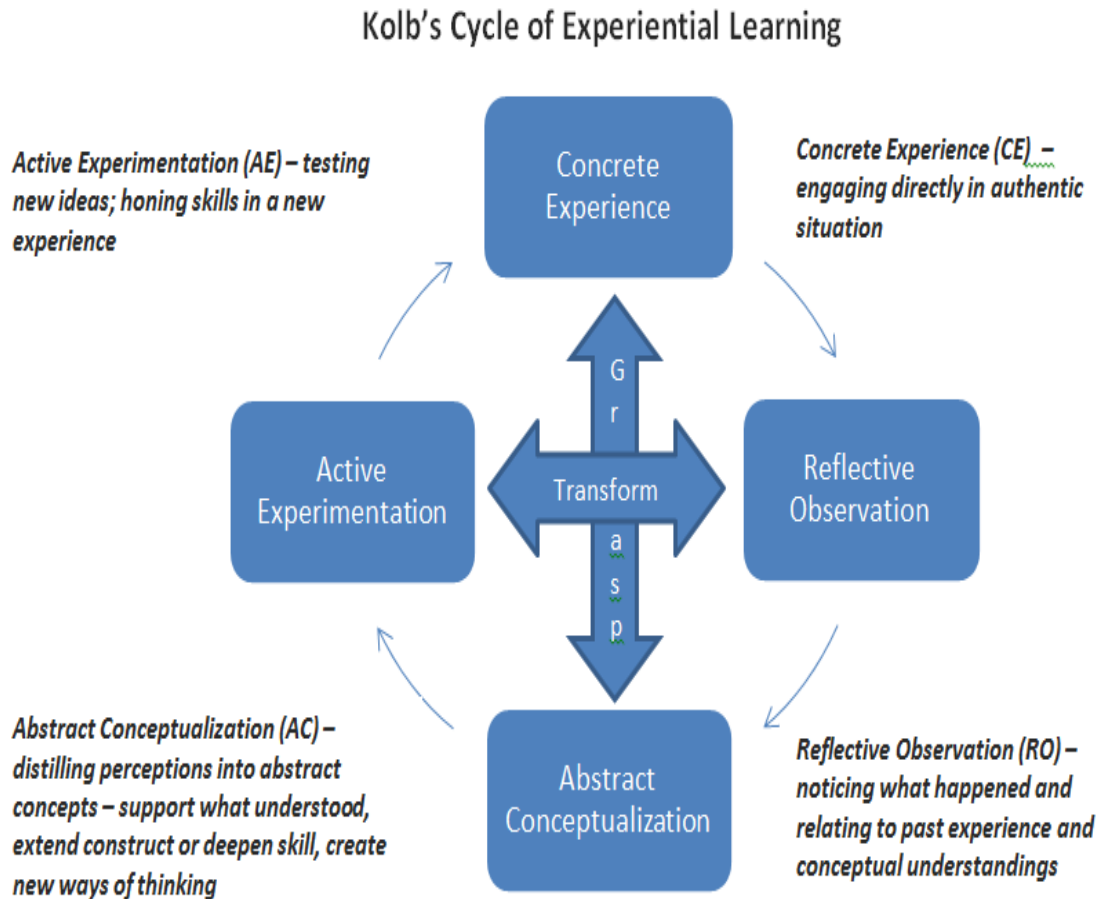
Nursing faculty because of prior exposure and observation, begin to reflect on the learning needs of the disabled student and role of faculty. Based on the observation and reflection to determine the needs of the disabled student, nursing faculty may begin to change their views related to the learning patterns of disabled nursing students. The fourth stage, active experimentation involves the learner in this case the nursing faculty who would plan how to select and apply improvements (Kolb, 2007).

The active stage four of Kolb's theory is not applied in this research study but, all the theoretical thinking and types of learning have been included and could later prepare faculty to perform and develop individualized accommodations for disabled nursing students.

This framework can guide nursing faculty perspectives as the learner based on previous experience and exposure to the disabled nursing student. Faculty can revisit improving actions and activities with the student. The stages can be combined identifying types of learning experiences and labeling the learner (Kolb, 2007). Faculty awareness based on experience and learner type, instructional methods, and activities can be developed for the disabled nursing student. This theoretical framework can help the nursing faculty understand how they perceive disabled students and how they react to them. The Kolb cycle can be entered in at any point of

the learning process, but actions must remain circular keeping stages in the correct order to accomplish the learning outcome.

Figure 1. Kolb Theoretical Framework



Chapter Two

Literature Review

A review of the literature and research strategies included investigating two hundred and seventy (270) articles using CINAHL, EBSCOhost and OVID databases for full text and English authored articles. Key terms used to search for articles were disabled nursing student, post-secondary student, special accommodations, nursing faculty perspectives, and nursing enrollment. Articles were from multiple disciplines including education, sociology, medicine, psychology, and nursing. The research articles examined were not all current due to usability of older research supporting the topic. The individual subjects in the literature search varied due to disabilities and could involve a spectrum of ages. Articles from the years 2010 to 2017 were primarily reviewed for this scholarly project. However, selected articles outside of the desired years were used when relevant to the topic of nursing faculty perspectives and the disabled nursing student.

The literature reviewed was organized according to research headings, source of origin, research purpose, and data focused on the project populations of nursing faculty and disabled nursing students. The articles included supporting historical and background information on treatment of disabled students and education. Review of nursing articles written on the topic of nursing healthcare, disabilities, and disabled nursing students provided data supporting the research problems.

Articles from other disciplines such as psychology, sociology, and physical and occupational therapies furnished large volumes of information about historical interactions and research with the disabled student population. There are articles included in the literature review that are categorized to support the headings and focus areas of concern addressed in the survey tool. The research studies tackle topics of enrollment, admission, attrition, nursing safety, accommodations, and faculty development in these areas. Research articles organized by date, types of literature, and topics attend to nursing faculty perspective on enrollment and accommodation of undergraduate disabled nursing students.

Brief History of Nursing Faculty and Disabled Nursing Students

Literature reviewed implies the nursing faculty understands of the laws, performing basic accommodations, and using institutional resources for student referrals are not enough to assist with the success of disabled nursing students (Maheady, 1999; Obi, 2006; Colon, 1997; Sowers & Smith, 2004e; Sowers & Smith, 2004d; Arndt, 2004; Selekman, 2002).

There are positive and negative attitudes related to the inclusion of disabled nursing students by nursing faculty, which could influence the success of the student. Research articles outside the United States reported similar attitudes that nursing faculty require an improved knowledge base and assistance developing accommodations to support disabled students (Ashcroft et al., 2008).

The nursing faculty basis for attitudes comes from lack of knowledge and poor exposure to diverse nursing students with disabilities (Sowers & Smith, 2004e). It has been reported that there is a lack of knowledge and awareness by nursing faculty on how to develop individualized accommodations and incorporate varied learning methods (Sowers & Smith, 2004e; Colon, 1997; Marks & Ailey, 2014). According to these authors, training sessions and workshops could improve the faculty knowledge base and change negative preconceptions about enrollment and accommodations towards the disabled student (Sowers & Smith, 2004e, Selekman, 2002, Colon, 1997). Studies reported nursing faculty were challenged to instruct and accommodate these increasing numbers of disabled nursing students questioning if students should be enrolled in nursing? (Ardnt, 2004; Sowers & Smith, 2004e; Sowers & Smith, 2004d; Selekman, 2002; Colon, 1997).

There were positive attitudes and information in the reviewed literature. Positive information came from fact sheets and organizational data from government organizations demonstrating progress with increasing post-secondary school admission of disabled students. The facts show an increasing number of diagnosed disabled students seeking admission to post-secondary institutions and nursing as a career endpoint (Rue & Lewis, 2011; Colon, 1997; ACCESS, Disability Services, 2016; U.S. Department of Education (2016);

National Center for Education Statistics (2016); Center for Disease Control, National Center on Birth Defects and Developmental Disabilities Department (2017). Several studies were positive in connecting nursing faculty to specific areas of

enrollment, faculty concerns, awareness, and accommodations that impact the relationship with the disabled nursing student (McCulloh & Marks, 2016; Marks, 2005; Sowers & Smith, 2004; Reed & Curtis, 2012; Obi, 2006). Nursing faculty perspectives towards the undergraduate disabled nursing student is the concern of this study. The topics of the study survey instrument coincided with the examination of literature articles. The faculty perspectives addressed in the literature and with the survey tool were faculty demographics and exposure to the disabled student, enrollment, developing student accommodations, faculty attitudes and beliefs, and the knowledge base of nursing faculty related to disabled nursing students.

Enrollment

The disabled population numbers are growing, and with the increase, individuals are seeking admission to colleges and institutions (Rue & Lewis, 2011). Post-secondary admissions placed nursing as a career endpoint for the disabled student (Colon, 1997; ACCESS, Disability Services, 2016). According to Sowers and Smith (2004), the nursing faculty was familiar with the laws. However, this knowledge did not alter educator's individual perspectives on enrollment (Sowers & Smith, 2004).

Nursing faculty were aware of the need for compliance to legislature and governmental agencies and penalties for non-compliance to individuals and nursing programs. This thought process supports literatures report of faculty agreement to inclusion of disabled students (U.S. Department of Education, 2016; National Center for Education Statistics, 2016; Center for Disease Control, National Center on Birth

Defects and Developmental Disabilities Department, 2017; ACCESS, Disability Services, 2016). Colon (1997) reported there is a growing population of disabled individuals and due to the increase in this population; laws remain in place for inclusion in education and employment. These laws cause government agencies and institutional organizations to track census numbers (U.S. Department of Education, 2016; National Center for Education Statistics, 2016; Center for Disease Control, National Center on Birth Defects and Developmental Disabilities Department, 2017; ACCESS, Disability Services, 2016).

A number of studies reinforced the rights of disabled students transitioning to post-secondary schools who are entering nursing programs and disclosing disabilities which entitle the student to accommodations, non-disclosure of disabilities by nursing students present with another set of issues for the nursing faculty (ESS Disability Resources, 2016; Rue & Lewis, 2011). Students diagnosed with disabilities have the right to disclose disability information to the college institution and receive special needs resources or non-disclose disability.

Regardless of a student with a disability, nursing educators were prompted to maintain or improve established enrollment guidelines (Maheady, 1999). Nursing faculty participating in surveys questioning enrollment have been supportive of the inclusion of the disabled nursing student (Sowers & Smith, 2004; Selekmán, 2002).

Literature was reviewed that had to do with barriers to enrollment of the disabled student. Nursing faculty were found to be familiar with the laws for enrollment but, faculty were challenged to address unsafe practice by institutions

enrolling and graduating unsafe students (Colon, 1997; Maheady, 1999). The California Committee on Employment of People with Disabilities, White Paper on “Inclusion of Students with Disabilities in Nursing Education Programs and Technical Standards” identified outdated admission standards, misconceptions about student capacity, and perceived lack of comprehensive understanding of issues related to patient safety (Marks & Ailey, 2016). These remain as barriers to the enrollment of disabled students and affect the perspective of nursing faculty. The nursing disabled student enrollment and a possibility of completing a nursing program were among the positive findings. According to Maheady (1999), Sowers & Smith (2004), and Lindgren & Oermann (1993) barriers identified can be revised and improved to meet the needs of the disabled student.

Accommodations

Literature was reviewed concerning nursing faculty awareness of the need for developing accommodations for the disabled nursing student was reviewed. Accommodations are performed early in the educational history of the disabled student in grades K-12 with trained special education teachers (Obi, 2006). The nursing literature asserted that accommodations were continuing to refer to issues of fairness for all students, patient safety, and lists of essential functions for the disabled nursing student (Arndt, 2004; Pischke-Winn, Andreali & Halstead, 2003; Azzopardi et al., 2013). Nursing accommodations and treatment can extend beyond the familiar basics of adjusting test examination times, offering different size print, oral exams and use of test readers were suggested in the literature (Obi, 2006; Colon, 1997).

Literature analysis suggested adding accommodations in the form of simulation, journaling, student self-initiated accommodations in conjunction with nursing faculty assistance, and help from other health occupations (Doody, McInerney & Linnane, 2012; Arndt, 2004; Azzopardi et. al, 2013; Sin & Fong, 2008; St. Petersburg College, 1996; Sin, 2009).

There were several problems associated with accommodations noted in the literature. Accommodations are time-consuming and may require nursing faculty to perform over contracted workload hours during implementations.

An important problem was identified related to developing accommodations by nursing faculty for students failing to disclose diagnosed disabilities, but identified by faculty as problematic with coursework (Colon, 1997). One author placed importance on evaluating accommodations used by nursing faculty and nursing divisions for the disabled nursing student to ensure effectiveness for individual students (Selekman, 2002). However, nursing educators were not receiving training to develop accommodations supporting the post-secondary disabled nursing student (Sowers & Smith, 2004; Obi, 2006; Ashcroft et al., 2008).

Knowledge Base

Knowledge was important because it is required of the relationship between nursing faculty and the disabled nursing student (Sowers & Smith, 2004). The author of a survey developed for nursing faculty recognized a need for knowledge to develop perceptions and support disabled nursing students (Sowers & Smith, 2004e, Obi, 2006; Sowers & Smith, 2004d). According to them faculty training sessions and

workshops could improve faculty knowledge base and change negative preconceptions about enrollment and accommodations for a disabled student (Sowers & Smith, 2004e, Selekman, 2002, Colon, 1997).

The literature addressed barriers concerning limited knowledge about the needs of disabled students. Nursing faculty's understanding of the laws, performing basic accommodations, and using institutional resources for referrals to the student were not enough to assist with the success of disabled nursing students (Maheady, 1999; Obi, 2006; Colon, 1997; Sowers & Smith, 2004e; Arndt, 2004; Selekman, 2002). Sowers & Smith (2004) identified low levels of knowledge as problematic for developing a relationship between nursing faculty and the disabled nursing student.

Attitudes and Beliefs

Attitudes and beliefs about impairments are among the many concerns nursing faculty have related to students with disabilities. Nursing faculty concerns on enrollment were based on the degree or level of disability for enrollment (Sowers & Smith, 2004d). Nursing faculty had varied attitudes about the enrollment of disabled students (Sowers & Smith, 2004e). The disabled nursing student was accepted for inclusion by faculty in nursing programs, but there was a lack of awareness of how to develop accommodations and varied learning methods (Sowers & Smith, 2004e; Colon, 1997; Marks & Ailey, 2014). A student with disabilities can be enrolled but, the extent to which faculty can offer enough support to keep the student in the program is questionable. Faculty attitudes were concerned with the types of

disabilities identified with an emphasis on developmental, learning, and mental disabilities (Colon, 1997; Sowers & Smith, 2004e; Selekman, 2002).

There was limited discussion about nursing faculty and their perspectives on physical disabilities. In fact, study findings reveal the physical disabilities are less accepted than mental disabilities (Arndt, 2004; Pischke-Winn, Andreoli & Halstead, 2003; Sowers & Smith, 2004d).

Patient safety under the care of the disabled student was questioned repeatedly in the literature by nursing faculty (Sowers & Smith, 2004; Obi, 2006; Lindgren & Oermann, 1993; Arndt, 2004; Maheady, 1999; Selekman, 2002; Colon, 1997; Sin & Fong, 2008). The nursing educator has a belief in the laws protecting the disabled student and following guidelines and standards established by nursing divisions in meeting the needs of disabled students (Pischke-Winn, Andreoli & Halstead, 2003). There are different attitudes and beliefs towards the disabled nursing student by nursing faculty. According to Sowers & Smith (2004) the basis for faculty attitudes and beliefs comes from knowledge and exposure to varied disabled student populations.

Literature Summary

The literature review was an examination and analysis of nursing faculty and their perceptions of the undergraduate disabled student. Nurses authored articles and studies in the late 1900 and early 2000 on the topic of nursing faculty and disabled students (Sowers & Smith, 2004e, 2004d, Maheady, 1999, Arndt, 2004).

The disabled populations were increasing during this timeframe and with laws and post-secondary admissions; the students were filtering into nursing as a profession (ACCESS, Disability Services, 2016). The literature documents nursing programs are exposed to increased numbers of disabled students and require new perspectives for this nursing student population. Researchers are investigating the ability to and willingness of faculty to develop accommodations for the improvement of educational practice settings including changes to support disabilities in the classroom. The review reinforced the need for education of faculty related to the disabled nursing student seeking enrollment and requiring accommodation in the nursing program. There was no stated training offered for nursing faculty to support developing individualized accommodations

Faculty demographics, prior exposure, safety concerns, types, and levels of disabilities, and faculty attitudes and beliefs were topics reviewed in the literature. These topics mirrored the topics contained in the survey tool that will be used in this study. Early inquiries were researched on the topic of nursing faculty attitudes and beliefs of encounters with the disabled nursing student. The literature reviewed established a lack of developing research on this topic.

Laws were reviewed relating to nursing faculty and disabled students. Legislature has impacted the definition and application of treatment for the disabled. The disabled nursing student data is generated from disability resource offices and governmental agencies tracking census numbers for the population. Government documented data stored on the disabled population and disabled students can

establish the amount of disabled students who is available to pursue enrollment in post-secondary institutions and later into nursing programs.

The literature was consistent in identifying knowledge as a basis needed by the nursing faculty regarding the undergraduate disabled nursing student. The research was initiated on the topic of nursing faculty and disabled nursing students as disabled students begun to enroll in nursing. Nursing faculty reported acceptance at the inclusion of the disabled nursing student but, required more information on the population.

Research performed on the topic of nursing faculty and the disabled nursing student also identified areas of weakness in the literature. The nursing research was outdated (over ten years) with the increasing disability population more research should be performed to establish evidence-based practices specific to relationships and areas of need by the nursing faculty and disabled nursing student. Articles identified accommodations needed for the disabled student.

There were insufficient suggestions on the development of learning methods supporting instruction. Research conducted thus far on nursing faculty and education of the disabled student did not identify theoretical frameworks supporting the efforts to resolve some of the problems between the faculty and students.

Research addressing the topic of nursing faculty perspectives on enrollment, performing and developing accommodations for the undergraduate disabled nursing student could impact nursing and the nursing profession. Nursing faculty are aware of the growing changes with students enrolled in nursing and the possibility of

increased exposures to a student with disabilities. Articles identified educators must be prepared to service all students and as a result, prepare the students for licensure and employment. Nursing has to open up to disabilities and the disabled nursing student.

Chapter Three

Methods

Design

A quantitative descriptive design was used for this study. A survey, using a Likert scale with questions that elicit responses from nursing faculty describing their perspectives (attitudes and beliefs) and knowledge relating to the disabled nursing student, was the data collection approach. A comment area followed each question to allow for further elaboration.

Recruitment of Sample

Prior to data collection, the researcher made initial contact with nursing department administrators to determine interest in participating in the research study. A formal letter, which included the research abstract, was sent via e-mail to each administrator. Nursing program administrators were contacted by the researcher via e-mail and followed up within one week by telephone. The e-mail contained a formal introduction letter (Appendix F) about the research and an overview of the researcher's biography. The letter and research abstract were used by the program administrator to inform the faculty of the upcoming survey and to secure approval to administer survey before a scheduled faculty meeting. This approach was used to optimize participation. Administrators were requested to approve participation of their faculty.

A designated contact person at each study site location worked in conjunction with the study researcher to facilitate the data collection process.

The staff contact had no affiliation with the study. At each faculty staff meeting, the researcher provided a brief introduction and requested the cooperation of the nursing instructional staff in the completion of the survey.

Sample

A convenience sample was drawn from nursing faculty teaching in Associate Degree Nursing (AND) programs and Bachelor of Science in Nursing (BSN) degree programs. Faculty who were instructional lecturers, assistant professors, nursing lab instructors, student advisors, researchers and clinical teaching staff, comprised the sample. Office staff and non-instructional nursing administrators were excluded from participating in the study. All sample members had instructional opportunities to interact with disabled nursing students. Surveys were administered at respective schools of nursing. No power analysis was performed in this study.

Setting

The study was conducted at nursing programs in Lorain and Cuyahoga Counties of Northeast Ohio. Two Bachelor of Science School of Nursing programs and one Associate Degree Nursing program participated in the study.

Instrument

The instrument used for this study supports the purpose for research and the topic of nursing faculty perspectives on enrollment and accommodations.

The instrument, titled “Nursing Instructional Faculty Perspectives” by Thompson (2018) is a nursing instructional faculty survey inquiring about the attitudes and

beliefs of the nursing faculty towards enrollment and accommodations for disabled undergraduate nursing students (Appendix D).

The instrument areas of focus include enrollment, accommodations, experience, and exposure, which coincide with the phases of Kolb's Experiential Learning Theory (Figure 1). A Likert scale was used to rate the responses of the participant related to the research purpose, problems, and research questions. The sections of the survey include: (a) Basic faculty demographics section, (b) Disability related experience section, (c) Perception of students with disabilities enrollment in nursing programs and the nursing profession, by nursing faculty; (d) Faculty concerns about nursing students with disabilities and accommodations; (e) Knowledge of disability issues, and (f) Information needs and benefits.

Nursing faculty were queried about their perspective of enrollment, accommodation, and other concerns with the disabled undergraduate nursing student. Kolb's learning theory is used to support the development of faculty knowledge regarding faculty/student interactions. The survey instrument examined the extent to which faculty are familiar with disabilities and their perspective on enrolling and accommodating the disabled student. Also, the survey instrument examined the need and benefit of faculty knowledge regarding the disabled nursing student.

The instrument was originally designed by JoAnn Sowers (2004) at the Oregon Health and Science University, Center of Self Determination titled "Enhancing the Success of Students with Disabilities in Health Science Education Programs". The original survey was comprised of twenty-eight questions. Each

question captured nursing faculty responses by a six-point rated Likert scale and offered an option to add a comment with rationale for each response. No documented psychometrics were found in the literature developed by JoAnn Sowers. She was contacted and verified no prior testing had been performed on the survey tool. Subsequently, face validity testing was performed on the instrument. The survey for this study is a rendition of printed survey used in an article authored by Sowers & Smith (2004). Permission was granted from the survey author to change one section of the original survey. Section (c) was changed from the perspective of disabled students in health science programs to disabled students in nursing programs.

Procedures

The study was facilitated by the cooperation of nursing faculty and nursing program administrators. The survey was offered to the nursing faculty at the nursing schools during a monthly scheduled faculty staff meeting. Administration of the survey at faculty staff meeting optimized participation and study return rates. Faculty were asked to respond to all survey questions. Each question provides the respondent with a section for a narrative explanation. The anonymity of each respondent was maintained.

This survey was confidential and the identities of the respondents were not requested or disclosed. Upon completion of the survey the nursing instructors were asked to place it in a sealed box located by the exit of the room.

Protection of Human Subjects and Ethics

Prior to conducting the research, the study proposal was submitted and approved by the Case Western Reserve University Institutional Review Board (IRB). The study submitted allowed for anonymity for nursing faculty in completing the survey, a plan for the protection and safety of the collected data, and inclusion and exclusion criteria.

Nursing faculty employed at nursing programs had the option to participate in the study. A cover sheet (Appendix D) included instructions for completing the survey and a participation agreement portion that did not require the responders' name. This aided in the assuring the anonymity of faculty. The faculty were asked to carefully read the survey and respond to all questions.

To ensure confidentiality of the research, the researcher implemented the protection plan for the collected data. Each completed survey was dropped into a secured box at the rear of the faculty meeting room. The sealed box was stored in a locked file cabinet in the researchers locked office. All data was imported into SPSS-25 version software from EXCEL data organizational sheet. Responses from the survey were maintained after software conversion on EXCEL to a flash drive and locked in the same lockbox as hardcopy surveys.

The data was encrypted on a flash drive requiring password access. The hardcopies of the survey were destroyed after all data was processed and stored on the flash drive.

Content supporting inclusion and exclusion from survey participation were also submitted. Because no psychometric testing was performed on the survey instrument, a face validity was determined by administering a questionnaire with random nursing faculty to establish validity of the survey tool used for this research study. The face validity questionnaire was developed by the researcher (Appendix E) prior to the formal administration of the survey. Fifteen nursing faculty members submitted responses; the validity questions were administered to review the veracity of content related to disabilities.

Data Analysis

The SPSS-25 version of software was used to perform data management and to facilitate data analysis. The computer software processed responses, summarized data, and managed demographic and descriptive data. The Likert Scale was used primarily to measure participant responses. The Likert scale data was coded. The survey responses were assigned numerical values. The sample group responses presented on the Likert scale was expressed in graphs or charts making faculty viewpoints visual to the reader. The survey, using the Likert scale method, captured the faculty answers and measure less concrete concepts, such as perceptions, attitudes, beliefs, and concerns of disabled nursing students.

A statistician was consulted to assist with the conversion of collected data into numeric values. Open ended responses provided by the nursing faculty were summarized.

Chapter Four

Results

The results addressed the purpose of the research study by investigating the nursing faculty perspectives on the enrollment and development of accommodations for the disabled undergraduate nursing student. In this chapter the results of the study, “Nursing Faculty Perspectives on Enrollment and Accommodations for the Undergraduate Disabled Nursing Student” are presented. The research questions were:

- 1) What are the attitudes and beliefs of undergraduate nursing faculty concerning the admission of disabled nursing students enrolled in nursing programs?
- 2) What are the attitudes and beliefs of undergraduate nursing faculty concerning formulating accommodations for the disabled nursing student in the nursing program?
- 3) What is the knowledge base of undergraduate nursing faculty concerning the enrollment and initiation of accommodations for the disabled nursing student in nursing programs?

The nursing faculty participation and involvement in the research study supported the collection of nursing faculty perspective data. Steps to protect the human subjects were taken throughout the study to maintain ethical integrity. There were 84 nursing faculty participants in the study from three nursing programs located in Northeast Ohio. Informed consent was secured prior to the administration of the survey.

The identity of nursing faculty participants in the research study was protected and their anonymity was maintained allowing for success in obtaining measurable survey responses. Throughout the research the focus was on the nursing faculty and their willingness to disclose information related to the disabled nursing student population.

Faculty Demographics and Characteristics

The sample was comprised of 84 nursing faculty members from three nursing programs. The demographics and general characteristics of the nursing faculty are summarized in Table 1. Current position, length of time as nursing faculty, and age of nursing faculty are summarized in the table. One hundred percent of the sample were faculty members who responded to the survey. All respondents were 31 years of age or older. The largest group of respondents were adjunct faculty members (36.9%, n=31). Nearly forty percent of nursing faculty (39.3%, n=33) had been employed in their program for five to ten years. No faculty identified with the position of researcher as their current nursing position. One faculty member had been teaching in a nursing program for more than 25 years. There were three relatively new faculty members (3.6%) who had been teaching in their programs for less than six months. The survey revealed that faculty reported a range of positions: instructors (21.4%), assistant professors (21.4%), and lab instructors (9.5%). The clinical supervisor (7.1%) and full professor (4.8%) numbered low in comparison to other current nursing faculty positions.

Table 1.

Nursing Faculty Survey Respondents (N=84), Demographic and Personal Characteristics

	<i>n</i>	%
Current Faculty Positions		
Instructor	18	21.4
Adjunct Faculty	31	36.9
Researcher	---	---
Clinical Supervisor	6	7.1
Lab Instructor	8	9.5
Assistant Professor	18	21.4
Associate Professor	9	10.7
Full Professor	4	4.8
Other	8	9.5
Length of Time as Nursing Faculty in Your Program		
Less than 6 Months	3	3.6
6 Months to 1 Year	2	2.4
2 Years to 5 Years	16	19.0
5 Years to 10 Years	33	39.3
11 Years to 15 years	16	19.0
16 Years to 25 Years	12	14.3
More than 25 Years	1	1.2
Age of Nursing Faculty		
21 Years to 30 Years	---	---
31 Years to 40 Years	16	19.0
41 Years to 50 Years	6	7.1
51 Years to 60 Years	24	28.6
61 Years and Above	37	44.0

Research Questions

Research Question 1: *What are the attitudes and beliefs of undergraduate nursing faculty concerning the admission of disabled nursing students enrolled in nursing programs?* Nursing faculty were questioned about specific disabilities and asked to rate the student's level of success in enrollment to their nursing program Table 2.

Faculty responses indicate that students with attention deficit disorder with hyperactivity (59.5%, n=50), learning disabilities (41.7%, n=35), and mental health disabilities (52.4%, n=44) had the highest chances for success in nursing programs. Further faculty believed that students with physical disabilities that included blindness and vision loss (35.7%, n=30), deaf and hearing loss (39.3%, n=33), use of wheelchairs (31.0%, n=26) and, had limited use of hands (32.1%, n=27) were less likely to succeed if enrolled in nursing programs. Thirty-three (39.3%) of faculty responded agreed or strongly agreed that students with autism spectrum disorder, a developmental disorder could be successful in nursing programs.

Faculty's belief about chances for success in nursing programs appear to be different for students with physical disorders compared to mental disorders. Nursing faculty ratings were low in agreement for the success of physically disabled nursing student's enrollment in nursing programs. There were no exceptions with deaf and hearing loss in the faculty ratings for the enrollment level of success for the students with these specific disabilities (11.9%, n=10).

Table 2.

Faculty Beliefs About the Level of Success for enrolled Students with Specific Disabilities

	Strong Disagree	Disagree	Slight Disagree	Slight Agree	Agree	Strongly Agree
Learning Disabilities	0 (0.0%)	1 (1.2%)	7 (8.3%)	20 (23.8%)	35 (41.7%)	21 (25.0%)
Blind or Vision Loss	14 (16.7%)	14 (16.7%)	30 (35.7%)	17 (20.2%)	5 (6.0%)	4 (4.8%)
Deaf or Hearing Loss	1 (1.2%)	6 (7.1%)	33 (39.3%)	28 (33.3%)	10 (11.9%)	6 (7.1%)
Use of Wheelchair	8 (9.8%)	12 (14.3%)	26 (31.0%)	17 (20.2%)	13 (15.5%)	6 (7.1%)
Limited Use of Hands	6 (7.1%)	13 (15.5%)	27 (32.1%)	21 (25.0%)	12 (14.3%)	4 (4.8%)
Attention Deficit Disorder (ADD) Hyperactivity (ADHD)	0 (0.0%)	1 (1.2%)	1 (1.2%)	17 (20.2%)	50 (59.5%)	13 (15.5%)
Mental Health Disabilities	1 (1.2%)	2 (2.4%)	4 (4.8%)	16 (19.0%)	44 (52.4%)	15 (17.9%)
Autism Spectrum Disorder	0 (0.0%)	4 (4.8%)	23 (27.45)	21 (25.0%)	24 (28.6%)	9 (10.7%)

Note. The numbered responses were different for some of disabilities listed in the table. Use of wheelchair (n=82), limited use of hands (n=83), Attention deficit /hyperactivity disorder (n=82), Mental health disabilities (n=82), and Autism spectrum disorder (n=81).

Research Question 2: *What are the attitudes and beliefs of undergraduate nursing faculty concerning formulating accommodations for the disabled nursing student in the nursing programs?* The nursing faculty perspective on accommodations were detailed in Table 3 and Table 4.

Nearly fifty percent of the respondents were concerned (38.1%, n=32) or very concerned (22.6%, n=19) about their impact on clinical standards. Similarly, nearly 50% were concerned (35.7%, n=30) or very concerned (21.4%, n=18) about patient care quality. There were some concern by faculty regarding cost of accommodations (34.5%, n=29), time on accommodations (32.1%, n=27), and impact on academic standards (31.0%, n=26).

Table 3.

Faculty Concern's About Accommodations for Disabled Nursing Students

	Strongly Not Concerned	Not Concerned	Slightly Not Concerned	Slightly Concerned	Concerned	Very Strongly Concerned
Cost of Accommodations	6 (7.1%)	7 (8.3%)	16 (19.0%)	29 (34.5%)	19 (22.6%)	6 (7.1%)
Time On Accommodations	2 (2.4%)	1 (1.2%)	16 (19.0%)	27 (32.1%)	22 (26.2%)	14 (16.7%)
Impact on Academic Standards	5 (6.0%)	2 (2.4%)	12 (14.3%)	26 (31.0%)	26 (31.0%)	12 (14.3%)
Impact on Clinical Standards	2 (2.4%)	3 (3.6%)	11 (13.1%)	14 (16.7%)	32 (38.1%)	19 (22.6%)
Impact on Quality of Patient Care	3 (3.6%)	3 (3.6%)	10 (11.9%)	18 (21.4%)	30 (35.7%)	18 (21.4%)

Notes. (N=84). However, Cost of accommodation response total (n=83), Time of accommodation response total (n=82), Impact of academic standards (n=83), Impact clinical standards (n=81), and Impact on quality patient care (n=82).

Research Question 3: *What is the knowledge base of undergraduate nursing faculty concerning the enrollment and initiation of accommodations for the disabled nursing student in nursing programs?* The questionnaire included questions about the level of knowledge of nursing faculty about their legal obligations for the undergraduate disabled nursing student, knowledge level of success by the disabled, and faculty knowledge about accommodations in the classroom and clinical settings.

Nursing faculty's level of knowledge reflected a full range of responses from having no knowledge to very high levels of knowledge as summarized in Table 4. Very few faculty (3.6%, n=3) responded that they had no knowledge about legal obligations; knowledge of successes with disabilities (2.4%, n=2), knowledge of classroom accommodations (4.8%, n=4) and knowledge of clinical accommodations (9.5%, n=8). Fifteen (17.9%) responded that they were knowledgeable; and, five (6.0%) reported that they had a high level of knowledge about disabilities. More than (31%, n=26) of the faculty were knowledgeable about classroom accommodations and clinical accommodations. A smaller number of faculty responded that they had a high level of knowledge about classroom accommodations (2.4%, n=2) and clinical accommodations (2.4%, n=2).

Table 4.

Nursing Faculty's Level of Knowledge About Disabilities

	No Level	Strongly Low Level	Low Level	Slight Level	Knowledgeable	High Level
Knowledge of Legal Obligations	3 (3.6%)	6 (7.1%)	20 (23.8%)	32 (38.1%)	17 (20.2%)	(4.8%)
Knowledge of Success with Disabilities	2 (2.4%)	14 (17.7%)	21 (25.0%)	25 (29.8%)	15 (17.9%)	5 (6.0%)
Knowledge of Classroom Accommodations	4 (4.8%)	10 (11.9%)	19 (22.6%)	20 (23.8%)	26 (31.0%)	2 (2.4%)
Knowledge of Clinical Accommodations	8 (9.5%)	9 (10.7%)	19 (22.6%)	16 (19.0%)	29 (34.5%)	2 (2.4%)

Note. N=84 survey respondents. Missing Data: the legal obligations section n=82 responses, success with disabilities section n=82 responses, classroom accommodations section n=81, and clinical accommodations n=83 responses.

Faculty Experience with Students with Disabilities

Questions were asked to determine faculty level of experience with students with specific types of disabilities. All faculty responded to this section of the questionnaire. Tables 5, 6, and 7 represent faculty responses based on their experience and exposure to disabled nursing students.

Nursing faculty reported having experience with students having some type of disability. Fifty percent or more of the faculty had had interactions with students with mental health issues (63.1%, n=53), ADD (53.6%, n=45), and ADHD (50%, n=42). The majority (73.8%, n=62) of the faculty reported having had experience with students with learning disabilities. However, fewer faculty reported having experience with nursing students, presenting with physical disabilities such as blindness and vision loss (8.3%, n=7) and limited use of hands (7.1%, n=6). A small percentage of faculty (10.7%, n=9) had experience with and exposure to students with autism spectrum disorder.

Table 5.

Nursing Faculty Reported Experience with Nursing Students with Listed Disabilities

	NO	YES
Learning Disabilities	22 (26.2%)	62 (73.8%)
Blind and Vision Loss	77 (91.7%)	7 (8.3%)
Deaf or Hearing Loss	60 (71.4%)	24 (28.6%)
Use of Wheelchair	83 (98.8%)	1 (1.2%)
Limited Use of Hands	78 (92.9%)	6 (7.1%)
Autism Spectrum Disorder	75 (89.3%)	9 (10.7%)
Attention Deficit Disorder(ADD)	39 (46.4%)	45 (53.6%)
Attention Deficit Hyperactivity Disorder (ADHD)	42 (50.0%)	42 (50.0%)
Mental Health Disabilities	31 (36.9%)	53 (63.1%)

The nursing faculty were questioned regarding familiarity with individuals diagnosed with disabilities. Familiarity included repeated interactions with family members, friends, students, and associates with listed disabilities. Faculty responses related to prior experiences with the disabled persons are in Table 6.

Sixty-nine (82.1%, n=69) of the faculty reported having some familiarity with learning disabilities. Also, faculty familiarity with mental health issues (71.4%, n=60), ADD (63.1%, n=53) and ADHD (60.7%, n=51) was high. Faculty were not familiar with disabilities identified as physical disorders that included limited use of hands (83.3%, n=70), use of wheelchairs (72.6%, n=61), and deafness and hearing loss rated at (60.7%, n=51). The majority of faculty (67.9%, n=57) were more familiar with disabilities of blindness and vision loss and autism spectrum disorders.

Table 6.

Nursing Faculty Familiarity with Selected Disabilities

	NO	YES
Learning Disabilities	15 (17.9%)	69 (82.1%)
Blind or Vision Loss	57 (67.9%)	27 (32.1%)
Deaf or hearing Loss	51 (60.7%)	33 (39.3%)
Use of Wheelchair	61 (72.6%)	23 (27.4%)
Limited Use of Hands	70 (83.3%)	14 (16.7%)
Autism Spectrum Disorders	57 (67.9%)	27 (32.1%)
Attention Deficit Disorder (ADD)	31 (36.9%)	53 (63.1%)
Attention Deficit/Hyperactivity Disorder (ADHD)	33 (39.3%)	51 (60.7%)
Mental Health Disabilities	24 (28.6%)	60 (71.4%)

Table 7 summarizes nursing faculty's experiences and exposure to disabled nursing students. Faculty were most familiar with learning disabilities (70.2%, n=59), mental health issues (64.3%, n=54), and ADD (47.6%, n=40) and ADHD (39.3%,

n=33). However, no faculty reported previous or current experience involving use of wheelchair.

Few faculty had had any previous or current experience with students with disabilities such as limited hand use (96.4%, n=81), blind or vision loss (91.7%, n=77), and autism spectrum disorder (92.9%, n=78).

Table 7.

Nursing Faculty Current or Previous Experience with Students in Classroom with Disabilities

	NO	YES
Learning Disabilities	25 (29.8%)	59 (70.2%)
Blind or Vision Loss	77 (91.7%)	7 (8.3%)
Deaf or Hearing Loss	66 (78.6%)	18 (21.4%)
Use of Wheelchair	84 (100.0%)	--
Limited Use of Hands	81 (96.4%)	3 (3.6%)
Autism Spectrum Disorder	78 (92.9%)	6 (7.1%)
Attention Deficit Disorder (ADD)	44 (52.4%)	40 (47.6%)
Attention Deficit/Hyperactivity Disorder (ADHD)	51 (60.7%)	33 (39.3%)
Mental Health Disabilities	30 (35.7%)	54 (64.3%)

Nursing Faculty Perception of Need

The perception of need or benefit to accumulating knowledge about disabilities and disabled nursing students was examined. Areas addressed included successful nursing students and professionals with disabilities, information related to legal obligations, how to teach and accommodate in classroom setting, and information on clinical accommodations. Eighty-three of 84 nursing faculty responded to this section of the survey.

Faculty responses perceived a need for information and examples related to successful nursing students and professionals with disabilities (54.2%, n=45), and a high need for information in how to teach accommodations in classroom setting (53.0%, n=44) and high need of (30.1%, n=25, perception of need for information related to legal obligations (50.6%, n=41), and high need (27.8%, n=23); and, perception of need for information on clinical accommodations (49.4%, n=41) and high need (36.1%, n=30).

Table 8.

Nursing Faculty Perception of Needed Information

	No Need/ Benefit	Strong Low Need/ Benefit	Low Level Need/ Benefit	Slight Need/ Benefit	Need/ Benefit	High Need/ Benefit
Perception of Need for Examples of Successful Nursing Students and Professionals with Disabilities	1 (1.2%)	1 (1.2%)	6 (7.2%)	10 (12.0%)	45 (54.2%)	20 (24.1%)
Perception of Need for Information Related to Legal Obligations	1 (1.2%)	1 (1.2%)	5 (6.0%)	11 (13.2%)	42 (50.6%)	23 (27.8%)
Perception of Need for Information on How to Teach and Accommodate in Classroom Settings	2 (2.4%)	1 (1.2%)	3 (3.6%)	8 (9.7%)	44 (53.0%)	25 (30.1%)
Perception of Need for Information on Clinical Accommodation	—	2 (2.4%)	4 (4.8%)	6 (7.2%)	41 (49.4%)	30 (36.1%)

A few narratives were written by faculty respondents for a few of the questionnaire items. For example, three nursing faculty expressed the need for more information and all three faculty included “a need for training on how to apply the information to the education of the disabled student in the classroom and clinical setting”. Also, two faculty voiced concern about “the disabled student and accommodating the student at the clinical setting and the effect it could have on patient safety”. Five faculty members expressed a need for more information about “the level of severity of the disability”.

Chapter Five

Discussion

The purpose of this research study investigated nursing faculty perspectives (attitudes and beliefs) on the enrollment of disabled nursing students and making accommodations for them in undergraduate nursing programs. This research study has provided results about the concerns of nursing faculty, their knowledge base, and perceptions about enrollment, design, and use of accommodations for undergraduate nursing students with disabilities. The findings suggest future areas for discussion and research regarding the undergraduate disabled nursing student and nursing faculty role in facilitating their success. An adaptive version of the survey tool developed by JoAnn Sowers (2004) was used to collect data on nursing faculty and addressed their perspectives on students with disabilities.

Registration for post-secondary institutions and colleges are faced with increased numbers and nursing is seen as a career endpoint for the disabled student. Self-advocacy is a part of the limitations. Many students with disabilities do not advocate for themselves. Disabled nursing students are not disclosing disabilities and if disclosed are not utilizing all resources available because of lack of knowledge on the part of the student (McCulloh & Marks, 2016) and faculty. There was a dearth of current research on the general topic of nursing faculty encounters with students with disabilities and their perspective about the extent to which they could be successful in nursing programs.

Research findings from this study suggest that nursing faculty should start with examining their perspective on this population and then begin to question how to advocate for the success of the student.

Participants Description

The nursing faculty role as a participant of this research study supported the idea of faculty and the undergraduate disabled nursing student. Eighty-four faculty members from designated nursing programs completed the questionnaire. There were some missing responses in one or two sections of questionnaire, participants did not respond to certain questions. Responses from the nursing faculty can be used to generate scholarly dialogue on nursing perspectives and concerns on enrollment and accommodation for the undergraduate disabled nursing students. The survey served as an effective tool that was able to capture enough information to motivate this research discussion.

Survey responses are from reputable nursing faculty and designate important areas that should be addressed in order to confirm the perspective (attitudes and beliefs) of nursing faculty in the enrollment and accommodation of the disabled nursing student. The nursing faculty had varied knowledge and levels of exposure to students with the listed disabilities. This caused questions to arise about effectiveness of our roles as educators to the disabled nursing student. While the faculty are recognized as professionals, advocacy is needed for the disabled nursing student (McCulloh & Marks, 2016).

There were items to be discussed related to nursing faculty positions and responses on the disabled nursing student. The nursing faculty were identified as a mature and experienced group of educators. The nursing position identified by most of the respondents was adjunct faculty. This was a concern because this position often is a part-time position decreasing the interaction opportunities with the disabled nursing student and may involve less time to commit to enrollment practices and increasing knowledge about the disabled students to provide individualized or specific accommodations. This disproportion can cause an interruption in carrying through a needed plan from the classroom into the nursing lab or clinical setting.

Pertinent Findings

This discussion portion of the study recognizes the importance of the findings related to the research questions. The questions identified a need to pursue the perspective of nursing faculty and the enrollment of the disabled nursing. Included, nursing faculty attitudes and beliefs on developing and performing accommodations for the undergraduate disabled student. Finally, a discussion developed around nursing faculty having the knowledge base to effectively support the enrollment and accommodations for the undergraduate disabled nursing student.

Student success cannot occur effectively with a lack of knowledge regarding disabilities. Educators should be familiar with all learners. The comparisons of physical and intellectual disabilities within the study has been a part of global research and findings. Kritsotakis et. al. (2017) reported the same responses as this study that nursing had poor knowledge and ideas on accommodations.

Advocacy is needed for the disabled nursing student by nursing faculty members. Healthy People 2020 (2019) reported not only does the disabled require advocacy but also, they must learn to advocate for themselves. Faculty are charged with educating new nurses in the areas of diversity. The disabled nursing student is a part of a diverse population. Methods of learning should be developed and performed by professional nursing educators within the nursing programs. This provides a knowledge base specific to our career roles and responsibilities. The questionnaire results also emphasized the nursing faculty identified more knowledge and education were needed to impact the undergraduate disabled nursing student success in nursing programs.

Based on the findings of this study nursing faculty have an essential role in providing education and understanding about disabled nursing students. Faculty will need to seek training and educational development for this population and serve to pass content on to faculty peers. There should be consideration on incorporating content into program curriculums to familiarize our current and future students about disabilities. Once education and training has become a part of the nursing faculty advocacy for varied disabilities. There should be an emphasis on accommodations in the classroom and clinical setting. The expert nurse will be required as the driver, the change agent for this needed adjustment in nursing perspectives on students with disabilities.

This research study provided answers to the research study questions related to faculty perceptions and concerns about enrollment and accommodations of

students with disabilities in nursing programs. Further, light was shed on faculty's need for more information about enrollment and accommodation of the undergraduate disabled student. One segment of the survey addressed the perceptions of nursing faculty on the likely success of nursing students presenting with specific disabilities in nursing programs. This directly involves research question and the perception of faculty towards disabled undergraduate nursing student enrollment in nursing programs. A major finding was that most faculty surveyed believed that students with some disabilities could be successfully enrolled in nursing programs. Faculty perceptions of the success levels were higher for the disabled students with learning, mental health, and cognitive disabilities compared to lower identified success levels for physical disabilities and autism spectrum disordered students. The faculty attitudes and beliefs about either type of disability can obstruct or facilitate progress with enrollment and accommodations. If there is a lack of knowledge about the disabilities the chances of understanding, what is needed for success and accommodations of the disabled prevents the positive faculty attitude and support for success for the disabled nursing student (Selekman, 2002).

A sound knowledge base has been reported as needed by faculty to improve the chances of success for the undergraduate student. Knowledge is also a major player in resolving negative perceptions, promote enrollment, and development of accommodations for the undergraduate disabled student.

The survey results supported the idea that faculty need more knowledge and information about legal obligations associated with student disabilities, increased knowledge about successful examples of disabilities in nursing programs, developing accommodations for classroom settings, and clinical accommodations. The key is these results can carry the nursing profession into the future with research on the need for knowledge and the benefit to clinical and classroom setting accommodations for the disabled nursing student. There must be a sound knowledge base established due to the disabled student population is increasing and nursing remains a selected career endpoint (U.S. Department of Education, (2019), Disability Resource and Accessibility Office, CWRU (2018)).

Findings from the study emphasized concerns about accommodations for the disabled undergraduate nursing student. Accommodations were rated for cost, time spent on accommodating students, impact on academic standards, and impact on quality of care. Although reported, results showed faculty minimal concern related to cost, time, and impact on academic standards, they were very concerned about accommodations in classroom and clinical settings. This was a surprising since, concern with time and how it relates to cost in providing student accommodations along with the development and providing the accommodations directly address institutional and department standards. These concerns of cost, time, and standards are major administrative issues. The limited concern could be associated with faculty positions identified in the questionnaire as adjunct faculty. The composition of the

sample revealed adjunct faculty were documented as a large group of faculty who took the questionnaire.

Nursing faculty documented in the survey were mostly part time. There may not be as much exposure or experience to issues and concerns of the nursing department for this group of faculty. Full professors who focus on the overall operation of the nursing department including instruction and funding were not a major reported position.

Nursing faculty responses reflected concern for making accommodations for the disabled nursing student. The faculty concerns can coincide with faculty knowledge about individuals with disabilities and performing accommodations. There may be a difference in concerns related to accommodations due to faculty positions. Inclusion of all faculty to meetings addressing disabilities and accommodations can serve to benefit knowledge base on cost, timely performance, and impact on standards. Classroom and clinical settings are familiar areas of practice for nursing faculty and draw more concern about accommodations for the disabled nursing student according to the results of the study.

The research served to answer the research questions and pose new questions and needs by nursing and nursing faculty related to the topic of undergraduate disabled nursing students. The topic of accommodation is not an area where faculty is familiar with the development and performance options. Articles are appearing nationally about performing accommodations like using workbooks (Doody, McInerney & Linnane, 2012). There are new support ideas for the disabled to aid

faculty in making accommodation so the student can meet program goals and objectives.

Adaptive equipment has been developed and used to help correct disabilities (Ismaili & Ibrahim, 2017). Lifescribe (2019) offered the SMART pen, paper notebook, and software for assistance in accommodations are prevalent to the success of the disabled nursing student.

Limitations

There were several limitations to the research study that can be resolved with discussion and future research. The use of the JoAnn Sowers (2004) survey was too generalized or broad in questioning. There should have been revisions, more specific questions, and different verbiage. There were explanations required for example to determine the differences of familiarity and experience. The response options of the six-point Likert scale could have been decreased preventing so much spread in the responses. Some of the survey questions seem to overlap in content. The idea of developing an entirely new questionnaire could decrease these limitations.

The number of schools involved in the sample may have limited the research results. Sample group participation could have been offered to more nursing faculty and the administration method could have changed to a web based survey software offering the questionnaire to a larger sample group. Data collection timeframe and administration was selected due to the face-to-face self-administration of the questionnaire at the faculty meeting. This technique allowed a fast return to the

researcher. However, faculty could have been offered earlier exposure to allow participants more time to respond.

Cultural diversity begins with the question of self-evaluating your own individual viewpoint on cultural diversity and differences. This should have been considered with the disabled nursing student population.

If added to the questionnaire bias could have been established among the participants. These are a few limitations discussed related to the research study.

Implications for Nursing

The research study identified the important considerations for including nursing students with disabilities in nursing programs. There are several implications of the disabled nursing student to nursing programs and the nursing profession. Kolb's Experiential Learning Theory was used in this research as a framework to aid in organizing the research and making it useable for nursing. Education can be impacted beginning with this research and serve to affect nursing and the nursing profession. The disabled nursing student success will lead to needed changes in the performance and thinking of nursing practice. This research topic involves policy and policy changes in order to generate the success of the disabled nursing student and nursing as a profession.

Kolb's Experiential Learning Theory framework can aid nursing faculty by providing a learning plan based on observation and interaction. This is a learning process for nursing faculty about the disabled nursing student. Each stage of the experiential learning theory allows the faculty to learn more about the disabled

nursing student. Learning began with observation or experience with the disabled and reflecting on the original interactions. Faculty will begin to develop abstract ideas on aiding in the educational management of the learner for success. The final stage of performing the activities can be evaluated as positive or negative and the learning theory cycle can be reinitiated to accommodate new learning method.

The idea of using another theory was considered with this population of disabled nursing students. Leininger (1991) cultural diversity or competent care model could have been used for this study.

Nursing education could be changed as a result of research and findings related to the undergraduate disabled nursing student. The disabled student offers exposure to fellow students and instructors regarding disabilities. This serves as an introduction to diversity and a different student population. Students with disabilities can introduce a need for change in instructional methods and education strategies by faculty in attempting to perform accommodations. The disabled nursing student can be a means of introducing new concepts and theory to educational nursing curriculum. We must continue to perform as gatekeepers of our profession, and ensure that the support for students to succeed in nursing is provided by faculty to maximum levels. Likewise, unsuccessful students should be identified and alternatives discussed for them. Not everyone can be a nurse. If there can be a broadening of the education and development of nursing faculty on the topic of providing accommodations and other success support for the disabled nursing student. Nursing can be an endpoint career for the disabled (Selekman, 2002). Some

disabled students with the right training and individualized accommodations may pass national exams and serve as new nurses. The same student has the ability to excel as a learner in the field of nursing with higher degrees. Disability as a nursing topic covered in more academic detail can initiate some changes in nursing program course curriculums and the thought processes behind development of plans for education.

Disabled nursing students are bringing diversity to the career of nursing and causing the profession to re think who is eligible to be a nurse. Nursing faculty concerns are related to patient care at the bedside performed by the disabled nursing student and nurses' question should the disabled nursing student be measured with the same standards as other nursing students. Safety remains a primary issue. There is not much literature on the topic of patient perceptions on care by the disabled nurse. This is an implication for nursing because again we must assess our perspective on bedside nursing and the disabled nurse.

Nursing as a practice should begin to initiate the incorporation of this graduating population into nursing workforce positions. Nursing education should catch up with some hospitals recruiting disabled nurses for roles that match the strength of the individual's disability as seen in Nationwide Children's Hospital in Columbus, Ohio. Human resource educators interview nurses for employment with disabilities and perform placement testing for areas of success. A nurse for example has a physical disability but, good verbal communication. This nurse could be placed in telehealth, research, informatics, quality assurance, infection control, and education. While ensuring basic nursing criteria and standards are met by the

applicant. This idea offers the nursing faculty a change in thinking that students as new nurses can only start at the bedside with patient care. If re-thinking does not occur, the essential functions which are considered for enrollment and can be viewed as barriers for the disabled.

Thoughts may begin to change in order to aid the disabled in meeting new career goals in nursing (Matt, Maheady & Fleming, 2016). The disabled nursing student can serve to increase the nursing workforce.

There are policies and procedures that should be followed and documented by nursing. The American Disabilities Act (1990) and Rehabilitation Act Section 504 (1973) have generated other legislature civil rights case precedence regarding the disabled. Nursing serving as a career endpoint must begin to keep records on performing in conjunction with the disabled nursing students in education and completion data.

Future Research

The nursing faculty interactions with disabled nursing students are going to generate and require more research. The essential part of the new research must include nursing programs documentation on the disabled nursing students, success levels, intervention and accommodation technique effectiveness, graduation levels and NCLEX passing records. Research is going to be the beginning of an understanding about the disabled population and disabled nursing student. It will offer information for educators to aid in becoming more familiar with the disabled student. Nursing faculty will need to understand the legal obligations, laws, and

legislative decisions made on behalf of the disabled; and, how these laws affect nursing students. Research will divulge that the disabled population is increasing in size and as educators we must work on developing accommodations, adaptive equipment and make changes to include the disabled student into nursing. Therefore, research articles and studies need to increase on this topic in order to provide evidence for educators to work off.

There is an awareness that nursing has been selected as a career endpoint for the disabled and in order to address the increasing population, nursing must be prepared to perform research studies. Nursing faculty should be included in research to promote more knowledge about the disabled personality and behaviors, physical, mental, and adverse actions. There are some safety concerns with adverse behaviors for faculty, patients, and nursing student peers. Faculty needs to know how disabilities can present in positive and negative mannerism and be offered trainable options for supporting staff, other students, and disabled individuals. Finally, these ideas all can be addressed in the form of new research and studies.

Conclusion

In conclusion, much remains to be done in the area of nursing faculty and disabled students. Faculty are required to educate all students. Regular training and development have supported nursing faculty in acquiring skills to perform educational task. However, there was no preparation of nursing educators for developing accommodations or success plans for the disabled or designing learning strategies and teaching methods geared toward the disabled population. The nursing

educator is in contact with the disabled nursing students but, has very little knowledge or training. This is a barrier because lack of knowledge develops a closed mind and lack of awareness. Disabilities can include mental, physical, and medical disabilities. Nursing has incorporated in the classroom some mental and medical disabilities accommodations, but we must look beyond this and address physical disabilities, improved and effective lab, and clinical accommodations.

More options for nursing and patient care extend beyond what we see and now. Research is needed to open up minds, doors, and opportunities for the undergraduate disabled nursing student.

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Appendix D

Nursing Instructional Faculty Perspectives Survey

By Zenora Thompson MSN, RN

Case Western Reserve University

My name is Zenora Thompson a doctoral student at Case Western Reserve University. I would like to present this 20-minute survey titled “Nursing Instructional Faculty Perspectives”.

The purpose of this survey is to collect data on the perspectives of nursing instructional faculty about the enrollment and of accommodations for the undergraduate disabled nursing student in nursing programs. Disabled students are demonstrating an interest in nursing as a career. Nursing faculty are challenged to meet the needs of all nursing students. In order to meet the needs of the disabled students, nursing faculty viewpoint should be assessed on attitudes and beliefs (perspectives) and inclusion towards the undergraduate disabled nursing students.

Please review the survey and respond to all questions. Check to confirm this initial agreement.

_____ I agree to participate in the research study of faculty perspectives and the inclusion of undergraduate disabled nursing student.

_____ I do not agree to participate, return survey, and place in the sealed box.

Responses are rated by using a Likert six-point scale. Each question allows the respondent a selection of responses and a reason/rationale area to accommodate narrative responses to survey questions. The survey responses are confidential and respondent identities will not be disclosed. Surveys will be collected by researcher and locations of administration will be color coded to identify sample group location.

Upon completion, you will be asked to place the survey at the exit in a sealed box. Survey hardcopies will be double secured filed in a lockbox and locked cabinet until all data has been transferred by SPSS-25 version software to Excel. Data responses from the survey will be maintained after conversion on to an encrypted flash drive and locked in the same lockbox as hardcopy surveys under a double lock system. The data transferred to the flash drive is password protected and survey hardcopies will be destroyed.

If you have any questions you may contact me at cell (216) 392-0650 or Zxt88@case.edu

The agreement includes future use of survey responses in a published written manuscript

Nursing Instruction Faculty Perspective Survey

I. FACULTY DISABILITY-RELATED EXPERIENCE SECTION

**A. Indicate which of the listed disabilities, you have experienced as a faculty member?
(check all that apply)**

Learning disabilities	_____	Limited use of hands	_____
Blind or vision loss	_____	Attention-deficit disorder (ADD)	_____
Deaf or hearing loss	_____	Attention deficit /hyperactivity disorder	_____
Use of wheelchair	_____	Mental health disabilities	_____
Autism Spectrum Disorder	_____		

B. Which of the listed disabilities are you familiar? (Check all that apply)

Learning disabilities	_____	Limited use of hands	_____
Blind or vision loss	_____	Attention-deficit disorder (ADD)	_____
Deaf or hearing loss	_____	Attention deficit /hyperactivity disorder	_____
Use of wheelchair	_____	Mental health disabilities	_____
Autism Spectrum Disorder	_____		

C. Did you currently or previously have students with any of the listed disabilities in your classes at your present institution? (Check all that apply)

Learning disabilities	_____	Limited use of hands	_____
Blind or vision loss	_____	Attention-deficit disorder (ADD)	_____
Deaf or hearing loss	_____	Attention deficit /hyperactivity disorder	_____
Use of wheelchair	_____	Mental health disabilities	_____
Autism Spectrum Disorder	_____		

Nursing Instruction Faculty Perspectives Survey

II. BASIC DEMOGRAPHIC INFORMATION SECTION

A. Nursing faculty members are asked to specify your current position? (Check all that apply)

Instructor	_____	Assistant Professor	_____
Adjunct Faculty	_____	Associate Professor	_____
Researcher	_____	Full Professor	_____
Clinical Supervisor	_____	Other (specify)	_____
Laboratory Instructor	_____		

B. Indicate the length of time, you have been on faculty in this program? (check all that apply)

Less than 6 months	_____	5 years to 10 years	_____
6 months to 1 year	_____	11 years to 15 years	_____
2 years to 5 years	_____	16 years to 25 years	_____
		Other (specify)	_____

C. Designate the approximate percentage of time you devote to the following program activities. Consider a full semester at 100%.

Classroom teaching	_____ %	Research	_____ %
Student advising	_____ %	Supervising student's	
Laboratory Instruction	_____ %	in research	_____ %
Clinical supervision	_____ %	Office hours	_____ %
		Other (specify)	_____ %

D. Nursing faculty members are asked to identify age?

(21yrs-30yrs)	_____	(31 yrs-40yrs)	_____
(41yrs-50yrs)	_____	(51yrs-60yrs)	_____
(61yrs-Above)	_____		

Nursing Instruction Faculty Perspective Survey

III. PERCEPTIONS OF STUDENTS WITH DISABILITIES IN NURSING PROGRAMS AND PROFESSION SECTION

Rate the level of agreement with the following statements by using the scale provided and circling the number that corresponds with your response. Written reasoning for responses are acceptable with answers.

(1=strong disagree, 2=disagree 3=slightly disagree 4=slightly agree 5=agree 6=strongly agree).

A. “Students who experience the following types of disabilities can be successful in my program.”

Learning disabilities 1 2 3 4 5 6

Reason: _____

Blind or vision loss 1 2 3 4 5 6

Reason: _____

Deaf or hearing loss 1 2 3 4 5 6

Reason: _____

Use of Wheelchair 1 2 3 4 5 6

Reason: _____

Limited use of hands 1 2 3 4 5 6

Reason: _____

**Attention-deficit disorder (ADD) or
Attention-deficit/hyperactivity disorder
(ADHD)** 1 2 3 4 5 6

Reason: _____

Mental health disabilities 1 2 3 4 5 6

Reason: _____

Autism spectrum disorders 1 2 3 4 5 6

Reason: _____

Nursing Instruction Faculty Perspective Survey

IV. CONCERN ABOUT STUDENTS WITH DISABILITIES SECTION

A. Rate the level of concern regarding each of the following factors, given that the number of students with disabilities in your program has increased and will continue to grow. Circle the number that corresponds with your response.

(1 = strongly not concerned, 2 = not concerned, 3 = slightly not concerned, 4 = slightly concerned, 5 = concerned, 6 = very/strongly concerned).

Cost of accommodations.

1 2 3 4 5 6

Reason: _____

Time required by faculty to accommodate Students.

1 2 3 4 5 6

Reason: _____

Impact on academic standards.

1 2 3 4 5 6

Reason: _____

Impact on clinical standards.

1 2 3 4 5 6

Reason: _____

Impact on quality of patient care.

1 2 3 4 5 6

Reason: _____

Nursing Instruction Faculty Perspective Survey

V. KNOWLEDGE OF DISABILITY ISSUES SECTION

A. Nursing faculty, rate your level of knowledge in the following areas. Circle the number that corresponds with your response:

(1 = no level knowledge, 2 = strongly low level knowledge, 3 = low level knowledge, 4 = slight level of knowledge, 5 = knowledgeable, 6 = high level knowledge)

Legal obligations of programs and faculty related to students with disabilities.

1 2 3 4 5 6

Reason: _____

Examples of successful nursing students and professionals with disabilities.

1 2 3 4 5 6

Reason: _____

How to teach and accommodate students with disabilities in classroom settings.

1 2 3 4 5 6

Reason: _____

How to teach, supervise, and accommodate students with disabilities in clinical settings.

1 2 3 4 5 6

Reason: _____

Nursing Instruction Faculty Perspective Survey

VI. INFORMATION NEEDS AND BENEFITS SECTION

A. Rate the extent to which you and other faculty members in your program need and would benefit from information about the same four knowledge areas identified in the Knowledge of Disability Issue section. Circle the number that corresponds with your response.

(1 = no need/benefit, 2 = strongly low need/benefit, 3 = low level need/benefit, 4 = slight need/benefit, 5 = need/benefit, 6 = high need/benefit)

Legal obligations of programs and faculty related to students with disabilities.

1 2 3 4 5 6

Reason: _____

Examples of successful nursing students and professionals with disabilities.

1 2 3 4 5 6

Reason: _____

How to teach and accommodate students with disabilities in classroom settings.

1 2 3 4 5 6

Reason: _____

How to teach, supervise, and accommodate students with disabilities in clinical settings.

1 2 3 4 5 6

Reason: _____

APPENDIX B

FACE VALIDITY EVALUATION

FOR

NURSING FACULTY PERSPECTIVES:
ENROLLMENT AND ACCOMMODATIONS FOR THE UNDERGRADUATE
DISABLED NURSING STUDENTS SURVEY TOOL

You have been selected to participate in a face validity evaluation on a survey tool titled **“NURSING FACULTY PERSPECTIVES: ENROLLMENT AND ACCOMMODATIONS FOR THE UNDERGRADUATE DISABLED NURSING STUDENTS SURVEY TOOL”**. The survey instrument was designed to measure nursing instructional faculty perspectives (beliefs and concerns) on enrollment, performing and developing accommodations, prior experience and exposure to the disabled nursing student, and impact of knowledge on perspectives towards the undergraduate disabled nursing student.

Complete this evaluation after reviewing the original survey instrument. Participant identities will not be disclosed but, are selected from the area of nursing and student disability resources. Upon completion the participant will return the face validity evaluation and the original survey instrument to the study researcher Zenora Thompson, MSN, RN this completion acknowledges a participation agreement.

Please read and circle your response to each question. A narrative space has been provided for rationale accompanying your response.

1. Has the survey identified the sample group as nursing instructional faculty?
Yes/No
Reason: _____
2. Was nursing faculty experience and exposure with the disabled student captured?
Yes/No
Reason: _____
3. Was the list of disabilities prevalent to undergraduate disabled nursing students?
Yes/No
Reason: _____
4. Faculty perspective questions covered enrollment, accommodations, and knowledge base of the disabled nursing student?
Yes/No
Reason: _____
5. Did the survey depict faculty concerns with disabled students in varied practice settings?
Yes/No
Reason: _____

APPENDIX C
INTRODUCTION LETTER

Date

To:

From:

RE: DNP Student, Research Participation Request

Hello Nursing Administrator:

My name is Zenora Thompson, MSN, RN and I am currently a DNP student at Case Western Reserve University. I am an educator at Cuyahoga Community College and my proposal is titled “Nursing Faculty Perspectives: Enrollment and Accommodation for the Undergraduate Disabled Nursing Student”. This letter is to solicit your assistance in performing the research for this topic.

The research abstract has been attached for your review along with a biography representing my experience as a student and educator. I would appreciate the opportunity to speak directly to your nursing administrative office and establish participation approval. I will follow-up with a call to answer any questions and to arrange partnering for this research study.

Thank You,

Zenora Thompson, MSN, RN
(216) 392-0650