

A TRANSCENDENTAL PHENOMENOLOGICAL STUDY OF STUDENT NURSES WITH
LEARNING DISABILITIES IN THE CLINICAL LEARNING ENVIRONMENT

by

Lorna Jean Woodhall

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

Doctor of Education

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APPROVED BY:

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Abstract

The purpose of this transcendental phenomenological study was to record the lived experiences of nursing students with learning disabilities while in the clinical learning environment.

Dewey's theory of education and Knowles' theory of adult learning were used to ground this study. Their theories provided a foundation to understand how the learning process is affected in nursing students with learning disabilities in the clinical learning environment. The study answered the following research questions: (a) What are the lived experiences of student nurses with learning disabilities in the clinical learning setting? (b) How are nursing students impacted by their learning disability during clinical learning experiences? (c) What are perceived obstacles that hinder nursing students with learning disabilities during clinical learning experiences? and (d) What are reasonable accommodations or solutions for students with learning disabilities during clinical learning experiences? Data collection for this study included student interviews, audio memos of the students' descriptions of their lived experiences, and analysis of documents. Data was analyzed and coded using Moustakas' (1994) transcendental phenomenological model and revealed the themes of negative emotions, disclosure, hands-on, negative faculty members, difficulties/obstacles, and determination. Implications for schools of nursing, nursing faculties, and nursing students with learning disabilities are discussed, and recommendations for areas of future research are included.

Keywords: clinical learning, learning disability, nursing education, nursing students

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Dedication

This dissertation is dedicated to my mother, Eleanor Parson-Hufnagel. She has been my greatest supporter throughout my entire academic journey. In life, she has shown me what it means to love unconditionally. And to “Pappy Ern”, because of you I am a saved sinner. Thank you for always reminding me to “run with perseverance the race marked out for us, fixing our eyes on Jesus, the pioneer and perfecter of faith” (Hebrews 12:1-3).

Acknowledgments

I would like to thank Jesus Christ, my Lord and Savior for lifting me up when I was at my lowest, carrying me when I could not stand on my own, and for giving me the strength and wisdom to complete this journey. Apart from Him I can do nothing.

To my children, Rachel and Shane, I love you both ‘so terribly’ and I am incredibly blessed that God gave you to me. Thank you for accepting why I was always in the attic and why dinner often came in a cardboard box.

To Dr. Joan Fitzpatrick, who passed away unexpectedly in November 2017, you were loved and were mourned as if you were family. You prayed with me and for me, and unceasingly encouraged me and kept me on track. You will never be forgotten.

I express deep appreciation to my committee chair, Dr. Carolyn McCreight, who stepped into that role without hesitation after the death of “Dr. Joan.” Your guidance, care and support made the completion of this study possible. To Dr. Mary Zabielski, I am eternally grateful for your wisdom, superb editing skills, and for being my friend.

To so many others that supported me on my journey, I am forever grateful. My dear “LU Sisterhood”, Dr. Mildred, Lauren, Monica, Bonnie, and Cora, your encouragement, support, and friendship was such an unexpected blessing. Thank you all for your prayers and love. Terry Ankney, you are a true formatting magician. Dr. Russell Yocum, you are an amazing teacher and gave me guidance when I needed it most. Dr. James A. Swezey, thank you for allowing this study to come to fruition.

Finally, to the participants in my study, thank you for having the courage to share your personal experiences. I promised to be your voice and I am honored to represent you. None of this would be possible without you and I wish you all the best in nursing and in life.

List of Abbreviations

Attention Deficit Disorder (ADD)

American Psychiatric Association (APA)

Americans with Disabilities Act (ADA)

Americans with Disabilities Act Amendments Act (ADAAA)

Associate of Science in Nursing (ASN)

Attention Deficit Hyperactivity Disorder (ADHD)

Bachelor of Science in Nursing (BSN)

Centers for Disease Control (CDC)

Individualized Education Programs (IEPs)

Individuals with Disabilities Education Act (IDEA)

Institutional Review Board (IRB)

Learning Disability (LD)

Licensed Practical Nurse (LPN)

National Institute of Mental Health (NIMH)

National Council Licensure Examination (NCLEX)

Nonverbal Learning Disorder (NLD)

Registered Nurse (RN)

Situation, Background, Assessment, Recommendation (SBAR)

Specific Learning Disabilities (SLDs)

Student Practice Learning Advisor (SPLA)

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CHAPTER ONE: INTRODUCTION

Overview

A learning disability does not simply “go away” after completion of high school or by obtaining a general education degree (Nalavany, Carawan, & Rennick, 2011). Adults with specific learning disabilities (SLDs) continue to face academic challenges when they pursue postsecondary education. What does “go away” are the automatic supports provided to preschool and K-12 students according to the mandates of the Education for all Handicapped Children Act (1975). Adult students with learning disabilities (LDs) must voluntarily disclose their disability and purposefully seek disability services if they desire academic accommodations in the classroom (Rehabilitation Act of 1973; Title II, ADA, 2008).

Postsecondary learning institutions are required by the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act of 1973 to provide reasonable accommodations to students with learning disabilities in the classroom (Thomas, 2015); however, they typically require substantial evidence of the disability. The qualifications of the evaluator, a history and description of the disability, recent and appropriate documentation describing the disability, identification of specific diagnoses, evidence establishing the rationale supporting the need for accommodations, and recommended accommodations are commonly requested by postsecondary schools to verify student eligibility for classroom accommodations (Disability Rights California [DRC], 2013; Tademy, Powell, & Worbs, 1999). Compounding these academic challenges of adult students with SLD, students in nursing programs at postsecondary institutions routinely participate in clinical learning environments where customary classroom accommodations are unavailable or impractical. Furthermore, nursing instructors are generally unprepared to manage

students with learning disabilities in clinical learning environments (Suplee, Gardner, & D’Emilia, 2014).

Chapter One provides background information about learning disabilities and describes my interest in this topic as it relates to nursing students, followed by the problem, purpose, and significance of this study. I will then explain the research study questions and provide applicable definitions related to the study.

Background

The term learning disability (LD) was first used in 1963 at a conference in Chicago, but the manifestations of this disorder were observed and described as far back as 1877 (LD Online, 2015). The federal law, the Children with Specific Learning Disabilities Act of 1969, documented the first functional definition of an LD, proclaiming it to be a medical problem (Crawford, 2016). Today, LD has two commonly recognized definitions. According to the American Psychiatric Association, a specific LD is “a cognitive disorder manifested by persistent difficulties with reading, writing, arithmetic, or mathematical reasoning skills during formal years of schooling” (American Psychiatric Association [APA], 2013, para. 2). Similarly, SLD is defined in the Education for All Handicapped Children Act of 1975, now known as the Individuals with Disabilities Education Act (IDEA), as a

disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Such term includes such conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia (IDEA, part A, 2004).

Learning problems that are primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage are not included in the definition of specific LD (IDEA, 2004). These types of disorders will not be examined in this study.

Despite the restructuring of the definition of LD over the years, widespread misunderstanding remains regarding the nature and impact of LD in adulthood. LD is a lifelong condition that cannot be cured or fixed. The National Institutes of Health estimates that 15 percent of the U.S. population has some type of LD (Department of Education, 2010).

Situation to Self

I have been a Registered Nurse for 29 years, primarily practicing in critical care and emergency nursing, including prehospital and flight nurse experience. I have been employed in a formal nurse educator role for 14 years, including clinical and classroom instruction for nursing students and in staff development as a critical care clinical education specialist. During the proposal phase of this research, I was employed as nursing faculty member at a college that provides both an Associate of Science in Nursing (ASN) program and a Licensed Practical Nursing (LPN) program. I am currently the Trauma/Emergency Department Education Manager for a tertiary hospital system in Western Pennsylvania.

Nursing is both an art and a science (Jasmine, 2009). Nursing education programs today are notoriously demanding, fast-paced, and condensed, and many students are not successful. I have encountered students who try very hard to learn and apply the material yet perform poorly, despite their earnest attempts to do so. As both a nurse and an educator, I have been frustrated and saddened by these situations but lacked any basis for understanding the problem or how to intervene. I merely notice something is awry and can only wonder if perhaps this student has an

LD. Despite my qualifications and experience in nursing education I knew very little about LDs or how to help these students learn prior to this research project. A review of the literature shows that I am not alone in my unpreparedness as a nursing faculty member to intervene with struggling students with LDs (Howlin, Halligan, & O'Toole, 2014; Lombardi, Murray, & Gerdes, 2011; Murray, Lombardi, & Wren, 2011; Nalavany et al., 2011; Suplee et al., 2014).

This study will be conducted based upon an ontological assumption; that is, the reality of what it means to be a nursing student with an LD will be discovered through the voices of the participants (Creswell, 2013). The paradigm that will guide this study is purely pragmatic. I strongly desire to help these students (i.e., nursing students with LDs) overcome challenges to learning and to provide some insight, through the experiences of the participants in this study, into what might be an acceptable plan and appropriate interventions for nursing students with LDs disabilities in the clinical learning environment.

Problem Statement

The nursing clinical learning environment is quite unlike learning in a traditional classroom. Communicating clearly with patients and staff, reading physician orders, documenting nursing care, and calculating drug dosages are just a few examples of learning activities that student nurses experience. Furthermore, these actions are regularly performed quickly, simultaneously, and amid chaos. From my experience, nursing students in general are often unprepared for this dynamic and participatory type of learning.

Unfortunately, the clinical learning environment may be particularly disconcerting for nursing students with LDs. The actions of communication, reading, writing, and mathematics required in this learning environment must be performed accurately and appropriately; these are precisely the actions that nursing students with SLDs may find challenging. Moreover, if

nursing students with SLD utilize accommodations in the classroom, they may find their classroom accommodations non-conducive for clinical learning.

Much has been learned about adults in general with SLD in the last 30 years. For students with a professionally diagnosed and documented LD, classroom accommodations must be provided by most educational institutions at the student's request (ADA, 1973; IDEA, 2004; Thomas, 2015). The problem is that accommodations utilized in the classroom arena may not be applicable, available, or safe to implement in the nursing clinical learning setting.

Many researchers acknowledge the lack of policy regarding reasonable accommodations in the clinical practice environment (Ashcroft & Lutfiyya, 2013; Howlin et al., 2014; Murphy, 2011; Tee et al., 2010; Wray, Aspland, Taghzouit, Pace, & Harrison, 2012). Nurse educators accustomed to utilizing policy and standards for the management of student-related issues lack guidance regarding students with LDs in the clinical learning setting (Howlin et al., 2014). Additionally, adult students with LD are reluctant to disclose their disability for a variety of reasons (Evans, 2014a; Howlin et al., 2014; May & Stone, 2010; Nalavany et al., 2011; Stewart & Collins, 2014). This lack of willingness to communicate special learning needs can negatively impact the safety of patients and it is plausible that this would also adversely impact student learning. Compounding the problem is that teachers in the nursing profession are usually not familiar with LDs or the specific needs or accommodations required by these types of students (Murray et al., 2011; Nalavany et al., 2011; Suplee et al., 2014).

Research on nursing students with LDs in the clinical learning environment is lacking. The transcendental, phenomenological framework of this study will allow the voices of nursing students with LDs to provide knowledge and understanding of their disorders so that others may also understand.

Purpose Statement

The purpose of this transcendental, phenomenological study is to record the lived experiences of nursing students with LDs in the clinical learning environment. At this stage in the research, LD is an umbrella term for mathematics, reading, and written expression disorders, and encompasses deficits that impact academic achievement (APA, 2013).

The theories guiding this study are Dewey's theory of education (1933) and Knowles' theory of adult learning (Knowles, Holton, & Swanson, 2012). One aspect of Dewey's theory of education (1933) is the importance of teacher/student communication and both parties' ability to communicate and collaborate in order to facilitate a learning experience for the student (Dewey, 1933). The clinical learning environment is an area where it is crucial for both teachers and students to communicate and collaborate to facilitate learning for the student. When based on Dewey's theory of education, this essential process may be negatively affected when a student is challenged with a disability in learning (Dewey, 1933). Knowles' theory of adult learning defines the art and science of helping adults learn and emphasizes the value of the process of learning for adults (Knowles, 1980; Knowles et al., 2012). A deficiency in an adult learner's ability to learn diminishes and devalues the learning process. These two theories work together to provide the framework to support understanding of the lived experiences of adult nursing students with LD in the clinical learning environment and the impact LDs have on their clinical learning experience.

Significance of the Study

The overarching goal of this transcendental, phenomenological study was to identify perceived obstacles that hinder clinical learning for student nurses with SLD. This research adds to the literature by giving a voice to nursing students with LDs in the clinical learning

environment. Obtaining first-hand perceptions of the study participants provides awareness into what it is like to be a student nurse with an SLD in the clinical learning environment and adds to the nominal existing body of literature from their perspective. For example, a common theme noted throughout the literature is that students with SLD are unwilling to disclose their disability to their teachers, feel embarrassment about their disability, and fear being negatively labelled (Kell, 2012; Kong, 2012). Participants in a study by Howlin, Halligan, and O'Toole (2014) implied that it was simply not acceptable for nursing students to have an LD and accommodations. This study provides additional insight into the feelings and implications of being a nursing student with an LD.

Another common theme in the literature was a lack of knowledge reported by faculty regarding nursing students with LDs (Kraglund-Gauthier, Young, & Kell, 2014). The voices of the co-researchers provide insight about the relationships between the nursing student with SLD and the faculty members that educate them. The firsthand reports of problems and challenges encountered by students with SLD in the clinical learning environment and the efforts taken to overcome those challenges are described in this study. This information is instrumental for nursing administration, faculty members, clinical preceptors, and other nursing students with SLD (Evans, 2014a; Murphy, 2011; Stewart & Collins, 2014). How nine nursing student co-researchers with SLD learn in the clinical learning environment and the impact their disability has had on their clinical learning experience is exemplified in this study.

Reasonable accommodations and solutions applicable to the nursing clinical learning environment are described, suggested, and discussed by the co-researchers (Murphy, 2011; Tee et al., 2010; Wray et al., 2012). Because of the dearth of information about accommodations in the clinical learning setting in the existing research, this study data could be used to plan for and

provide specific interventions for supporting learning in the clinical environment for future students with LDs in nursing programs worldwide (Ashcroft & Lutfiyya, 2013).

Research Questions

In order to provide the best learning experiences for nursing students with LDs, one must first examine the learning environments where their learning will take place. There is a plethora of research related to adult learners with LD in the classroom setting, but little research specifically examining nursing students and the clinical learning environment (Ashcroft & Lutfiyya, 2013; Howlin et al., 2014; Murphy, 2011; Tee et al., 2010; Wray et al., 2012). The central research question is:

What are the lived experiences of student nurses with LDs in the clinical learning setting?

It was anticipated that the participants' answers to this question would provide insight into what it is like to be a student nurse with an SLD in this type of learning environment (Ashcroft & Lutfiyya, 2013; Evans, 2014a; Evans, 2014b; Kraglund-Gauthier et al., 2014; Learning Disabilities Association of America, 2013; May & Stone, 2010; Stewart & Collins, 2014; Tee et al., 2010). The answers to the research questions will be answered in Chapter 4 and synthesized and explored in Chapter 5.

This research study was grounded in Dewey's theory of education (1933) and Knowles' theory of adult learning (Knowles et al., 2012). It is imperative that teacher and student are able to communicate and collaborate in order to facilitate a learning experience for the student in the clinical learning environment. This essential process is likely negatively altered when a student is challenged with an LD (Dewey, 1933). Knowles' theory of adult learning defines the art and science of helping adults learn and emphasizes the value of the process of learning for adults (Knowles, 1980; Knowles et al., 2012). A deficiency in an adult learner's ability to learn

challenges and potentially alters the learning process. Any misunderstanding about or unawareness of the learning challenges of the student by the teacher will also likely alter the learning process. Details about the lived experiences of these learners, anticipating the development of policies, accommodations, or solutions to the identified problem areas, were gathered using the sub-questions listed below:

1. How are nursing students impacted by their LD during clinical learning experiences?

Students with an LD have reported a multitude of factors impacting their clinical learning experiences. Some have reported a lack of confidence and unwillingness to disclose their LD to faculty members (Evans, 2014a; Kell, 2012; Tee et al., 2010). The consequences of non-disclosure include the potential for devaluing their experience as an adult with an LD and a rejection of themselves as a person (Knowles et al., 2012). Students with LDs often avoid disclosing their disability for fear of being treated differently or being ridiculed or unsupported by their peers (Kong, 2012; Stewart & Collins, 2014); they may also be embarrassed by being different and fear being labelled lazy or stupid (Kong, 2012).

2. What are perceived obstacles that hinder nursing students with LDs during clinical learning experiences?

Some specific obstacles cited in the literature by students with LDs included the feeling of a lack of advocacy and support in clinical practice, and isolation in the clinical learning environment attributed to a general lack of understanding about their learning disability (Child & Langford, 2011). One student nurse expressed self-blame for choosing to not disclose her LD to her clinical preceptor, worrying that the busy clinical environment prevented disclosure (Howlin et al., 2014, p. 568). Nursing faculty members have conveyed expectations that independence and efficiency supersede a student with SLD's need for accommodation in the clinical learning

environment (Evans, 2014b). Knowles' assumptions of adult readiness to learn, orientation to learning, and adult motivation to learn would be negatively affected by experiences perceived to hinder learning by nursing students with SLD during their clinical learning experiences (Knowles et al., 2012).

Dewey's theory of education is also applicable within the context of this sub-question. Dewey believed that a clinical learning environment is a "crucial test of a teacher's ability to diagnose the intellectual state of his pupils and to supply the conditions that will arouse intellectual responses" (Dewey, 1933, p. 260). In the literature, faculty members have reported a dearth of formal training regarding LDs, deficient guidance regarding teaching nursing students with LDs, and a lack of preparation in working with students with LDs in the clinical learning environment (Ashcroft & Lutfiyya, 2013; Howlin et al., 2014; Murray et al., 2011; Nalavany et al., 2011; Suplee et al., 2014; Tee et al., 2010). A lack of faculty training or understanding regarding how to manage a student with an SLD in the clinical learning environment could certainly be perceived as an obstacle by a student.

3. What are reasonable accommodations or solutions for students with LDs during clinical learning experiences?

To date there have been few studies that cite specific, reasonable accommodations or solutions for nursing students with SLD in the clinical learning environment. A study from Canada found that among the four medical institutions examined, none of the disability services departments had reasonable accommodations for the clinical practice setting (Ashcroft & Lutfiyya, 2013). Some students develop their own complex coping strategies to compensate for their SLD (Murphy, 2011, p. 132): Specifically, support groups, checklists for everyday clinical tasks, and professional role models were some of the ideas cited by participants in a research

study of radiology students by Murphy (2011). The co-researchers in this study identified solutions that they have utilized and the outcome of their use. They suggest reasonable accommodations that could be used to manage a SLD in the nursing clinical learning environment.

Dewey's theory of education is also germane to this sub-question. Dewey (1938) believed that in order for experiences to be educational, they must contain an assortment of information, facts, and concepts that are expanded upon and compounded during a constantly reassembled experience (Dewey, 1938). Knowledge expansion and the application of new knowledge is a basic and essential principle of the clinical learning experience. If a learner is challenged by the process of expanding upon knowledge attained because of an LD, no real learning has occurred. The framework of this study will allow the students with LDs themselves to provide the knowledge, understanding, and potential solutions for the management of their disorders in the clinical learning environment.

Definitions

1. *Accommodation* – a modification or adjustment to the tasks, environment, or to the way things are usually done that enables a qualified individual with a disability to have an equal opportunity to participate in an academic program or a job (Brennan, 2015; U.S. Department of Education, 2007; U.S. Department of Education Office for Civil Rights, 2010).
2. *Americans with Disabilities Act (ADA)* – a civil rights law implemented in 1990 that prohibits discrimination against individuals with disabilities in all areas of public life, including jobs, schools, transportation, and all public and private places that are open to the general public. The purpose of the law is to make sure that people with disabilities have the same rights and opportunities as everyone else. The ADA gives civil rights protections to

individuals with disabilities similar to those provided to individuals on the basis of race, color, sex, national origin, age, and religion. It guarantees equal opportunity for individuals with disabilities in public accommodations, employment, transportation, state and local government services, and telecommunications. The ADA is divided into five titles (or sections) that relate to different areas of public life (Brennan, 2015).

3. *Andragogy* – the art and science of helping adults learn; as a principle, it emphasizes the value of the process of learning for adults (Knowles, 1980; Knowles et al., 2012).
4. *Attention deficit hyperactivity disorder* – a disorder characterized by a pattern of behavior, present in multiple settings (e.g., school and home), which can result in performance issues in social, educational, or work settings (APA, 2013). Symptoms are divided into two categories: (a) inattention and (b) hyperactivity and impulsivity that interferes with functioning (National Institute of Mental Health, 2016).
5. *Auditory discrimination* – the ability to notice, compare, and distinguish the distinct and separate sounds in words (Cortilia & Horowitz, 2014).
6. *Auditory figure/ground discrimination* – the ability to pick out important sounds from a noisy background (Cortilia & Horowitz, 2014).
7. *Auditory memory* – short-term and long-term abilities to recall information presented orally (Cortilia & Horowitz, 2014).
8. *Auditory processing deficit* (or auditory processing disorder) – a weakness in the ability to understand and use auditory information (Cortilia & Horowitz, 2014).
9. *Auditory sequencing* – the ability to understand and recall the order of sounds and words (Cortilia & Horowitz, 2014).

10. *Clinical learning environment* – the direct patient care experience in a nursing education program, as distinguished from theoretical or basic sciences (“Clinical learning environment”, 2007).
11. *Disability* – an impairment that substantially limits a major life activity, such as learning (Crawford, 2016).
12. *Dyslexia* – difficulty with reading, characterized by an unexpected difficulty in understanding written word, by people who possess the intelligence, motivation, and schooling necessary to read (Cortiella & Horowitz, 2014; U.S. Department of Justice, 2012b).
13. *Dyscalculia* – difficulties with mathematics, such as poor comprehension of math symbols, trouble with counting, or difficulty memorizing and organizing numbers or telling time (APA, 2013; Cortiella & Horowitz, 2014; Soares & Patel, 2015).
14. *Dysgraphia* – an LD that affects writing abilities. It can manifest itself as difficulties with spelling, poor handwriting, and trouble putting thoughts on paper (Cortiella & Horowitz, 2014).
15. *Executive functioning deficit* – weaknesses in the ability to plan, organize, strategize, remember details, or manage time and space efficiently (Cortilia & Horowitz, 2014).
16. *Individuals with Disabilities Education Act (IDEA)* – the federal law that requires public schools to make available to all eligible children with disabilities a free, appropriate public education in the least restrictive environment appropriate to their individual needs. Formerly known as the Education for All Handicapped Children Act (1975), the name was changed to The Individuals with Disabilities Education Act in the 1990 amendments to this law. The law was reauthorized by Congress in 2004, prompting a series of changes in the way special education services are implemented. IDEA 2004 (P.L. 108-446) was passed December 3,

2004 and implemented July 1, 2005. IDEA requires public school systems to develop an appropriate Individualized Education Program (IEP) for each child. The specific special education and related services outlined in each IEP reflect the individualized needs of each student. IDEA also mandates that particular procedures be followed in the development of the IEP. Each student's IEP must be developed by a team of knowledgeable persons and must be reviewed at least annually. The team includes the child's teacher; the parents, subject to certain limited exceptions; the child, if determined appropriate; an agency representative who is qualified to provide or supervise the provision of special education; and other individuals at the parents' or agency's discretion (U. S. Department of Justice, 2012a; IDEA, 2004).

17. *Learning disabilities* – refer to specific learning disabilities
18. *Non-verbal learning disorders* – difficulty with math computation and problem-solving, visual-spatial tasks and motor coordination, and reading body language and social cues, such as seeing the “big picture” in social and academic contexts (Cortilia & Horowitz, 2014).
19. *Nursing process* – a systematic, rational, dynamic, and cyclic process used by nurses for planning and providing care for a patient. The five steps of the nursing process are assessment, diagnosis, planning, implementation, and evaluation (D'Amico & Barbarito, 2012).
20. *Objective data* – information observed or measured by the professional nurse (D'Amico & Barbarito, 2012).
21. *Pedagogy* – the term used to refer to the education of children (Billings & Halstead, 2012).

22. *Phenomenological* – a research method that explores how human beings make sense of experience and transform experience into consciousness, both individually and as a shared meaning (Moustakas, 1994; Patton, 2015).
23. *Phonemic awareness* – the ability to notice, think about, and work with individual sounds in words (Cortiella & Horowitz, 2014).
24. *Phonological processing* – detecting and discriminating differences in phonemes or speech sounds (Cortiella & Horowitz, 2014).
25. *Postsecondary education* – the provision of a formal instructional program whose curriculum is designed primarily for students who are beyond the compulsory age for high school. This includes programs whose purpose is academic, vocational, and continuing professional education, and excludes avocational and adult basic education programs (National Center for Education Statistics, 2015/2016; Snyder & Dillow, 2012).
26. *Pragmatism* – a philosophical worldview that emphasizes the nature of an experience and explores the experience using practical questions and seeking useful and actionable answers (Patton, 2015, p. 153).
27. *Reasonable accommodation* – a term used in the employment context to refer to modifications or adjustments employers make to a job application process, the work environment, the manner or circumstances under which the position held or desired is customarily performed, or that enable a covered entity's employee with a disability to enjoy equal benefits and privileges of employment (U.S. Department of Education Office for Civil Rights, 2016).
28. *Reasonable modification* – under a regulatory provision implementing Title II of the ADA, public entities are required to make reasonable modifications in policies, practices, or

procedures when such modifications are necessary to avoid discrimination on the basis of disability, unless the public entity can demonstrate that making the modifications would fundamentally alter the nature of the service, program, or activity (U.S. Department of Education Office for Civil Rights, 2016).

29. *Rehabilitation Act of 1973* – prohibits discrimination on the basis of disability in programs conducted by federal agencies, in programs receiving federal financial assistance, in federal employment, and in the employment practices of federal contractors. The standards for determining employment discrimination under the Rehabilitation Act are the same as those used in Title I of the Americans with Disabilities Act (U. S. Department of Justice, 2012a, para. 1). Section 504 of this act states that

no otherwise qualified individual with a disability in the United States...shall, solely by reason of her or his disability, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving federal financial assistance. (U.S. Department of Education, 2010)

30. *Response to intervention model* – a multi-tiered approach to the early identification and support of presecondary students with learning and behavior needs (Brown-Chidsey & Andren, 2012).

31. *Situation, Background, Assessment, Recommendation* (SBAR) – an acronym to aid in the use of consistent, structured communication between members of a healthcare team during a critical situation (Woodhall, Vertacnik, & McLaughlin, 2008).

32. *Spatial relationships* – the ability to understand how objects are positioned in space (Cortilia & Horowitz, 2014).

33. *Specific learning disability* – According to the American Psychiatric Association, an umbrella term for mathematics, reading, and written expression disorders. It is now a single, overall diagnosis, incorporating deficits that impact academic achievement. Rather than limiting learning disorders to diagnoses particular to reading, mathematics, and written expression, the criteria describe shortcomings in general academic skills and provide detailed specifiers for the areas of reading, mathematics, and written expression. The diagnosis requires persistent difficulties in reading, writing, arithmetic, or mathematical reasoning skills during formal years of schooling. Specific learning disorder with impairment in written expression includes possible deficits in spelling accuracy, grammar and punctuation accuracy, and/or clarity or organization of written expression (APA, 2013). Similarly, IDEA defines specific LD as

a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which disorder may manifest itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. Such term includes conditions as perceptual disabilities, brain injury, minimal brain dysfunction, dyslexia, and developmental aphasia. Such term does not include a learning problem that is primarily the result of visual, hearing, or motor disabilities, of mental retardation, of emotional disturbance, or of environmental, cultural, or economic disadvantage. (IDEA, 2004)

Mental retardation is now known as intellectual disability (Cortiella & Horowitz, 2014).

34. *Subjective data* – information that a patient experiences and communicates to the nurse (D'Amico & Barbarito, 2012).

35. *Tactile processing disorder* – involves an alteration in the way physical sensations are experienced by an individual which can affect behavior and influence the way they learn and move (Hancock, 2016; Kranowitz, 2005).
36. *Transcendental phenomenological research* – research focused on the description of the experiences of the research participants rather than the interpretations of the researcher (Creswell, 2013).
37. *Visual closure* – the ability to know what an object is when only parts of it are visible (Cortilia & Horowitz, 2014).
38. *Visual discrimination* – the ability to notice and compare the features of different items and to distinguish one item from another (Cortilia & Horowitz, 2014).
39. *Visual figure-ground discrimination* – the ability to distinguish a shape or printed character from its background (Cortilia & Horowitz, 2014).
40. *Visual memory* – an individual's short- and long-term recall of visual information (Cortilia & Horowitz, 2014).
41. *Visual motor processing* – using visual feedback to coordinate body movement (Cortilia & Horowitz, 2014).
42. *Visual Processing Deficit (or Visual Processing Disorder)* – involves difficulty understanding visual input without physical sight limitations (Cortilia & Horowitz, 2014).
43. *Visual sequencing* – the ability to see and distinguish the order of symbols, words, or images (Cortilia & Horowitz, 2014).

Summary

LD is a lifelong condition that cannot be cured or fixed. Adults with LDs encounter academic challenges when they pursue postsecondary education. At postsecondary schools, adults with SLD must voluntarily disclose their disability and purposefully seek disability services. Students with SLD in a school of nursing may find that accommodations available in a classroom may not be appropriate or safe for the clinical learning setting. Additionally, nursing faculty members are generally unfamiliar with LDs and the associated challenges (IDEA, 2004; May, 2014; Suplee et al., 2014). The objective of this research study was to gain insight into how nursing students with SLD learn in the clinical learning environment, the impact their disability has on their clinical learning experience, and to learn what types of accommodations or solutions may be appropriate in the clinical learning setting.

CHAPTER TWO: LITERATURE REVIEW

Overview

This chapter presents a discussion of the research and literature that relates to nursing students with LDs. The theoretical framework for this study is grounded in Dewey's theory of education and Knowles' theory of adult learning, as they are linked to postsecondary students with LDs. The related literature will provide an overview of the pertinent definitions of disability, a synopsis of the myriad of dynamics of specific LDs, and a discussion of the history and mandates of U.S. disability-related laws. The remaining sections of the chapter review the current research on adults with LDs and the literature that identifies challenges related to nursing students with an LD.

Theoretical Framework

The processes of teaching nursing and the procedures utilized in the evaluation of learning related to the education of nursing students are multifaceted. Of all the teaching and learning processes involved in the education of nurses, the notion of a nursing student with an LD in the clinical learning environment has received minimal attention in the research.

Within this framework, two theories will be used to guide this research study: Dewey's theory of education and Knowles' theory of adult learning. Although Dewey and Knowles did not report adult learning challenges as a disability, their theories provide a foundation for understanding the challenges facing a nursing student with an LD in the clinical learning environment. My research was conducted through the lens of pragmatism. Understanding the research problem and identifying potential solutions are the goals of the pragmatist researcher and I conducted this study guided by this philosophy.

Dewey's Theory of Education

Dewey (1938) believed that in order for experiences to be educational, they must involve an assortment of information, facts, and concepts that are expanded upon and compounded during a constantly reassembled experience (Dewey, 1938). Knowledge expansion and the application of new knowledge is a basic and essential principle of the clinical learning experience. If a learner is challenged by the process of expanding upon knowledge attained because of an LD, the experience becomes merely an experience and no real learning has occurred.

In his book *How We Think* (1933), Dewey discussed the process of recitation, a time when the teacher comes into the most intimate intellectual contact with their student (1933, p. 260; 1938). Although Dewey described this process with child learners, his concept of recitation is not unlike the clinical learning environment for the adult nursing student. He explained that the teaching methods utilized during this time of recitation are a “crucial test of a teacher’s ability to diagnose the intellectual state of his pupils and to supply the conditions that will arouse intellectual responses” (Dewey, 1933, p. 260), precisely describing the teaching/learning process involved in the clinical learning environment.

Although Dewey did not specifically address teaching students with LDs, this particular aspect of Dewey’s theory of education is applicable within the context of the framework of this study. Nursing faculty members are generally prepared for teaching in clinical education only by virtue of an earned Master of Science in Nursing, and they are often hired based upon their clinical experience rather than their teaching ability. In the literature, faculty members reported a dearth of formal training regarding LDs, deficient guidance regarding teaching nursing students with LDs, and a lack of preparation in working with students with LDs in the clinical learning

environment (Ashcroft & Lutfiyya, 2013; Howlin et al., 2014; Murray et al., 2011; Nalavany et al., 2011; Suplee et al., 2014; Tee et al., 2010). If the clinical learning environment is indeed a “crucial test of a teacher’s ability to diagnose the intellectual state of his pupils and to supply the conditions that will arouse intellectual responses” (Dewey, 1933, p. 260), it will be essential to provide nursing faculty members with specialized preparation when teaching students with LDs. The framework of this study allowed the students with LDs themselves to provide the knowledge and understanding of their disorders so that others may also understand.

Knowles’ Theory of Adult Learning

Knowles’ theory of adult learning is exemplified by the term andragogy, an understanding how adults learn best. Knowles defined andragogy as the art and science of helping adults learn and emphasized the value of the process of learning for adults (Knowles, 1980; Knowles et al., 2012). Although Knowles did not specifically address adults with LDs, if a learner has a deficiency in their ability to learn, the learning process is negatively diminished.

Knowles’ andragogic model is built upon six basic concepts of adult learning. The six concepts are: (a) need to know, (b) the learners’ self-concept, (c) the role of the learners’ experiences, (d) a readiness to learn, (e) an orientation to learning, and (f) motivation (Knowles et al., 2012, pp. 63-67). I will explain how each of Knowles’ ideas about the adult learner may be related to nursing students with LDs in the clinical learning environment.

Need to know. By virtue of being enrolled at a school of nursing as a nursing student, it is likely that the learner already has some ideas regarding why they need to learn. However, Knowles suggested that facilitators of learning raise the level of awareness of the need for learning by utilizing “real or simulated experiences in which the learners discover for themselves the gaps between where they are now and where they want to be” (Knowles et al., 2012, p. 63).

This can be challenging for nursing instructors to achieve in the clinical learning environment for students without LDs. Nursing students *with* LDs may require special consideration when presented with real or simulated learning experiences whose end goal is for self-discovery. From the literature, nursing instructors are not prepared to provide such specialized education (Ashcroft & Lutfiyya, 2013; Murray et al., 2011; Nalavany et al., 2011, p. 73; Suplee et al., 2014).

The learners' self-concept. According to this area of the anagogical model, the assumption that adult learners are independent decision-makers is conflicted with a tendency to regress into the habit of pedagogical dependency, creating a psychological conflict. Knowles attributed high attrition rates in voluntary adult education to this concept (Knowles et al., 2012). Adult students with an LD may be especially challenged by the need to be independent learners. Nursing students with LDs, especially those accustomed to the disability supports automatically provided in pre-college school experiences, may be strongly tempted to abandon their course of education (IDEA, 2004). Once a learner is an adult and enrolled in a postsecondary school, it becomes the responsibility of the student to seek out and obtain disability services and assistance (ADA Amendments Act of 2008 [ADAAA]; Kraglund-Gauthier et al., 2014; Latham, 2015; Thomas, 2015; U.S. Equal Employment Opportunity Commission, 2015a).

The role of the learners' experiences. The assumption here is that there will be a wider range of individual differences within a group of adults than there will be in a group of youths (Knowles et al., 2012, p. 64). Adult learners generally define themselves by the experiences they have had. The benefits for adult learners include sharing and utilizing the experiences and differences within the group as a resource for learning. However, the experience of being a student with an LD may make the learner reluctant to disclose their unique challenges. Student

nurses with LDs have cited a reluctance to disclose this part of their identity in the clinical learning setting (Evans, 2014a; Howlin et al., 2014; Kraglund-Gauthier et al., 2014; May & Stone, 2010; Nalavany et al., 2011; Stewart & Collins, 2014). The consequences of non-disclosure are many and varied, but include the potential for a devaluation of their experience as an adult with an LD. The implication of these consequences may be perceived as “rejecting not only their experience but rejecting themselves as persons” (Knowles et al., 2012, p. 65). I have personally witnessed students with learning challenges being ostracized by some groups of adult learners. Nursing students who struggle to keep up with the pace of learning required of their nursing courses are often simply left behind by their peers.

Readiness to learn. The challenge related to this area of Knowles’ theory of adult learning for students with LDs is straightforward: These students may be ready to learn, but they must be able to master the skills or information necessary to progress to the next level (Knowles et al., 2012, p. 65). Nursing programs are notoriously fast-paced and little time is allotted for remediation. Students with LDs have reported in the literature that they often simply require more time for learning to occur (Howlin et al., 2014; Murphy, 2011).

Orientation to learning. The fifth assumption of Knowles’ theory of adult learning is that adults will be motivated to learn “to the extent that they perceive that learning will help them perform tasks or deal with problems that they confront in their life situations” (Knowles et al., 2012, p. 66). Similar to readiness to learn, students with LDs may have both the motivation to learn and the discernment to understand the rationale for the learning, but may require extra time and effort to achieve learning (Howlin et al., 2014; Murphy, 2011).

Motivation. Knowles used this assumption to explain that there are both external and internal motivations to learning for the adult. Internal motivators such as self-esteem or

increased quality of life are the stronger of the two. Regarding motivation, Tough (as cited in Knowles et al., 2012) explained how this motivation in “normal adults” may be blocked by barriers such as a negative self-concept or lack of access to opportunities or resources (Knowles et al., 2012). The co-researchers in my study challenged by an LD were expected to cite additional external and internal challenges with motivation.

Pragmatism

In addition to the conceptual framework of overarching themes related to adults with LDs and the theories of Knowles and Dewey, my research was conducted through the lens of pragmatism and strictly utilized the emic perspective of the participant. According to Creswell (2013) the pragmatic lens focuses on “actions, situations, and consequences of inquiry” (p. 28) rather than preset conditions. The core of pragmatic theory posits that truth can be verified and confirmed by testing ideas and theories (Patton, 2015). A pragmatist researcher is concerned with applications and solutions rather than methodology. The goal of the pragmatist is to understand the research problem and identify potential solutions, and I conducted this study guided by this philosophy.

Related Literature

The following review of the literature will delineate pertinent definitions of disability, including a discussion of the history and mandates of U.S. disability-related laws. The literature reviewed in this section includes the current research on adults with LDs and describes the multifaceted challenges related to nursing students with LDs.

Learning Disability Defined

It is important to include an overview of the definitions of disability and SLDs, discuss the various aspects of LDs, and to provide an outline of the mandates of disability law in this

chapter. The concept of disability has changed over time. LDs are often misunderstood by the general public, professional educators, and medical professionals. Disability-related laws have been enacted, implemented, amended, and renamed. LD diagnostic tools have been executed, revised, and altered, resulting in changes to diagnostic criteria. Differences in terminology related to disability and LD and the use of that terminology in context can create misperceptions. For example, LD is defined from a legal perspective as “various groups of disorders manifested by significant difficulties in the acquisition or use of listening, speaking, reading, writing, reasoning or mathematical skills” (IDEA, part A, 2004). In the medical context, LD is a neurologically based processing problem that impacts a student’s ability to learn (Learning Disabilities Association of America, 2014). Delineating the nuances of LDs is essential to understand the perspectives of the nursing student with an LD.

A disability is generally defined as a physical or mental impairment that substantially limits one or more of the major life activities of an individual (ADA, 2008; Weis, Sykes, & Unadkat, 2012). In contrast, the concept of a disability related to learning is that it is a dysfunction of cognition rather than a developmental, neurological, sensory, or motor disorder (APA, 2013; IDEA, 2004). From yet another perspective, the National Joint Committee on Learning Disabilities proposed an alternative definition of LD, arguing that the definition provided by IDEA had verbiage that was unclear and was difficult to use to identify children with LDs.

Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual and presumed to be due to central nervous system dysfunction and may occur

across the lifespan. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions or with extrinsic influences, they are not the direct result of those conditions or influences. (National Joint Committee on Learning Disabilities, 1990, p. 3)

LDs, as currently defined in the IDEA, include conditions such as perceptual disabilities, brain injuries, minimal brain dysfunction, dyslexia, and developmental aphasia (IDEA, part A, 2004). The term LD is now considered an umbrella term also used to describe other more specific disabilities related to learning, such as dyscalculia and dysgraphia.

The term specific LD has two commonly acknowledged definitions. From a medical standpoint, the American Psychological Association (APA) defines a specific LD as “a cognitive disorder manifested by persistent difficulties with reading, writing, arithmetic, or mathematical reasoning skills during formal years of schooling that impact academic achievement” (APA, 2013, para. 2). From a legal standpoint, specific LD is defined in The Education for All Handicapped Children Act (1975) as a disorder in one or more of the basic psychological processes involved in understanding or in using language, spoken or written, which manifests itself in the imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations (IDEA, part A, 2004). Although most nursing students are above the age range applicable to the Individuals with Disabilities Education Act (ages 5 to 21), this definition of specific LD is described here because most adults with an LD are identified and diagnosed during these years (Nalavany et al., 2011; National Association of Special Education Teachers

[NASET], 2006/2007, para. 9; National Institute of Mental Health [NIMH], 2016; Wilson et al., 2015).

Learning problems that are related to visual, hearing, or motor disabilities, mental retardation, emotional disturbance, or environmental, cultural, or economic disadvantages are not included in the definition of specific LD (IDEA, 2004). Again, it is noted that mental retardation is now referred to as intellectual disability and is incongruent with LD (Cortiella & Horowitz, 2014; IDEA, 2004). The terms “learning disabilities” (LDs) and “specific learning disabilities” (SLDs) are used interchangeably in this paper.

Disorders of Learning

A review of the fundamentals of disorders of learning is necessary in order to better understand the accounts and perspectives of the co-researchers in this study. Disorders of learning are based upon four stages of information processing used in learning: input, integration, storage, and output (Hancock, 2016; National Dissemination Center for Children with Disabilities [NICHCY], 2004). Weakness in one or more of these rudimentary stages of information processing is often the basis for difficulty with learning (Cortiella & Horowitz, 2014).

Input is information perceived via the senses such as auditory, visual, or tactile perception. A disorder of visual perception can cause problems with shape recognition, position, or size of items. Persons with problems with sequencing can have difficulty with understanding or recognizing patterns (see visual processing disorders). A disorder of auditory perception (see auditory processing disorders) can result in difficulty focusing on one sound while screening out competing sounds (Biotteau, Chaix, & Albaret, 2015; Cortiella & Horowitz, 2014; NICHY,

2004; Hancock, 2016). A tactile disorder (see Tactile Processing Disorders) may result in an aversion to touch or apparent insensitivity to pain (Hancock, 2016; Kranowitz, 2005).

Nursing students in a clinical learning environment are required to utilize all of their senses. For example, part of a neurological physical examination is assessing patients' pupils and determining their shape, position, and size. Students who have with difficulty with visual perception may be challenged by this task. Similarly, a student nurse in the clinical learning setting would routinely be required to compare and distinguish between various drug names and recall information obtained verbally—all skills requiring auditory perception. A student with a tactile disorder would be challenged by reciprocal physical assessment practice or physical contact with patients.

Integration occurs when perceived input is categorized, interpreted, placed in a sequence, or related to previous information learned. Disorders of knowledge integration can result in a poor vocabulary, problems with comprehension, difficulty learning facts, or applying new concepts to other areas of learning (Hancock, 2016; NICHY, 2004). Nursing students in the clinical learning setting are consistently involved in applying concepts learned in the classroom to the clinical patient situation. For example, the disease of congestive heart failure is a cardiac malfunction but is manifested through physical signs and symptoms. A thorough understanding of the flow of blood through the heart to the lungs and body is imperative in order to rationalize why the patient is demonstrating certain physical assessment findings. Additionally, if an LD includes poor vocabulary, the nursing student may find it challenging to compose their assessment findings in the nursing documentation format.

The third stage, storage, is related to memory. Disorders related to storage can result in the need for increased repetition when learning new material. The need for a functional storage

ability for a clinical nursing student is multifaceted. From simply remembering computer and door access codes to more critical activities, such as being able to recall and report assessment findings, the utilization of memory is essential in the nursing clinical area. In addition, visual memory disorders can affect the ability to spell (Hancock, 2016; NICHY, 2004).

Output is information coming out of the brain, such as language output or motor output. Disorders of language output create problems with spoken language, such as answering a question, retrieving information from storage, organizing thoughts, and/or putting thoughts into words (NICHY, 2004). Nursing students in the clinical learning setting are routinely required to communicate clearly and succinctly. Clinical tools such as the SBAR communication technique have been developed to assist all medical providers with clear communication. However, utilizing the SBAR technique tool requires the assessment of a situation, the organization of those assessment findings into thoughts, and then communicating pertinent information to others (Institute for Healthcare Improvement [IHI], 2015; Woodhall et al., 2008). Output disorders related to fine motor function can result in difficulty with learning-related activities such as handwriting (Hancock, 2016; NICHY, 2004).

Specific Learning Disabilities

SLDs are LDs manifested by persistent difficulties with reading, writing, arithmetic, or mathematical reasoning skills (APA, 2013). SLDs may co-occur with disorders of attention, language, and behavior, but are noteworthy for their effect on learning (DuPaul, Gormley, & Laracy, 2013; DuPaul, Pinho, Pollack, Gormley, & Laracy, 2015; Soares & Patel, 2015; Wei, Yu, & Shaver, 2014). Specifically, dyscalculia and dyslexia have a combined prevalence of 10 percent or more, and a comorbidity rate of around 40 percent (Wilson et al., 2015). Based upon a review of the literature, the three main classifications of SLDs that I anticipated would be

reported by the participants in my study included dyslexia, dyscalculia, and dysgraphia. The actual breakdown of SLDs that were reported by the co-researchers will be described in Chapter 4. These three main classifications of LDs will be discussed in more depth and I will illustrate how each may impact the learning of a nursing student in the clinical learning environment.

Dyslexia. Developmental dyslexia, or reading disability, is defined as an unexpected and severe difficulty reading, unexplained by general cognitive abilities or inadequate teaching (APA, 2013). Dyslexia is the term associated with SLDs in reading and is the most prevalent of the subtypes of LDs (Cortiella & Horowitz, 2014; Wilson et al., 2015). Dyslexia is often thought of as a disease or misunderstood to involve problems with just reading (Australian Dyslexia Association, 2014; Nalavany et al., 2011). The word dyslexia is made up of two different parts: “dys”, meaning “not” or “difficult”, and “lexia”, meaning “language”, “words”, or “reading”. Derived from the Greek language, dyslexia literally means difficulty with words (Australian Dyslexia Association, 2014; Cortiella & Horowitz, 2014). The incidence of dyslexia in nursing is unknown but has been estimated to affect approximately 12 percent among undergraduate nursing students in the United Kingdom (Evans, 2014a; Wray et al., 2012).

Dyslexic symptomology varies from person to person. General characteristics of dyslexia include (a) difficulty with reading (e.g., skipping a letter and reading a different word), (b) difficulty with writing (e.g., adding extra words, exchanging letters, or mixing the order of words), (c) difficulty with speaking (e.g., exchanging sounds such as “psi” and “spi”, skipping sentences during conversation), (d) difficulty with listening (e.g., difficulty hearing any difference between a “p” and a “b” in a word, adding information when listening that was not said), (e) difficulty with copying (e.g., transcribing incorrectly, exchanging letters with similar sounds), (f) difficulty with dictation (e.g., hesitation regarding whether a word should be written

with “au” or with “ou”, forgetting letters when taking notes, exchanging parts of the text being dictated), and (g) difficulty with reading aloud (e.g., exchanging words with similar pronunciation, or words that look similar; skipping sections while reading out loud; altering sentences when reading aloud) (Tamboer & Vorst, 2015; Wilson et al., 2015).

From personal experience, a nursing student in the clinical learning setting with dyslexia described her challenges with this type of learning environment. While discussing a written assignment that involved outlining the plan of care for a specific patient, she stated, “everything that takes a fellow student one hour takes me four times longer to complete” (Anonymous nursing student, personal communication, 2015). The student explained that in situations where a word meaning or the spelling of a word would come naturally to a student without dyslexia, it took her far longer to arrive at the same result. She used the analogy of a file cabinet—in order to write certain words or spell certain words correctly, she would need to mentally locate the proper “file cabinet,” open the correct “drawer,” locate the “folder,” and pinpoint the correct page. Clearly, this is a remarkably time-consuming process (Anonymous nursing student, personal communication, 2015).

Dyscalculia. Dyscalculia is described as a mathematical ability substantially below what is expected based on chronological age, measured intelligence, and age-appropriate education that significantly interferes with academic achievement or activities of daily living that require mathematical ability (APA, 2013; Soares & Patel, 2015). Dyscalculia may also be referred to as mathematical disability (Wilson et al., 2015). It is estimated that 17 to 70 percent of children with dyscalculia also have dyslexia and that 11 percent of children with dyscalculia also have attention deficit hyperactivity disorder (ADHD) (Soares & Patel, 2015).

Although features of dyscalculia will vary from person to person, common manifestations include (a) difficulty with number facts (e.g., counting; telling time; difficulty with multiplication or subtraction tables; inability to recall basic math formulas, procedures, or rules), (b) difficulty with computing numbers (e.g., misreading signs, carrying numbers incorrectly, forgetting what they are doing in the middle of a math problem), (c) difficulty with knowledge transfer (e.g., difficulty telling time using an analog clock, difficulty estimating the cost of items for purchase, inability to draw a shape after being given a description of that shape, difficulty differentiating between left and right), and (d) difficulty with spatial organization (e.g., unable to judge the relative size among multiple dissimilar objects, difficulty estimating number quantities, inability to describe what a three-dimensional object would look like if the object is rotated and viewed from a different angle) (Cortiella & Horowitz, 2014; Hancock, 2016; PBS Parents, 2016; Soares & Patel, 2015; Wilson et al., 2015). Wilson et al. (2015) noted that dyscalculia has not been well studied in adults.

Askenazi and Henik (2010) found that adults with dyscalculia demonstrated difficulty with calculating multidigit numbers, fractions, and decimals. However, they were unable to determine whether the cause was related to mathematical difficulties seen in childhood, comprehension difficulty, or procedural memory (Askenazi & Henik, 2010). Soares and Patel (2015) cited difficulty among high school and college adolescents with doing mental math, learning math concepts (e.g., multiplication tables, formulas, rules), budgeting money, and balancing a checkbook (Soares & Patel, 2015).

This information was applicable to my study because nursing students are repeatedly required to solve mathematical problems using multidigit numbers and compute drug dosages using decimals and fractions. It is my personal observation that nursing students frequently

struggle with basic mathematical tasks necessary in their pharmacology courses. Although it is unknown whether these students suffer from dyscalculia, this inability to successfully navigate classes involving mathematical skill can cause early dropout from nursing school.

Kirk and Payne (2012) described specific areas of challenges related to mathematics for nursing students in the clinical learning environment, including difficulties estimating the size of a number, substituting one number for another (even while using a calculator), and difficulties with drug calculations and calculating medication dosages. Additional challenges cited include the miscalculation of patient care assessments, such as fluid balance or nutrition, or calculating assessments correctly but documenting the numerical result incorrectly (Kirk & Payne, 2012).

The use of numbers and numerical symbols in the clinical nursing environment persists. Even seemingly innocuous uses of combinations of numbers, such as door codes, analog clocks, and medication cart access codes could cause difficulty for a nursing student with dyscalculia in the clinical learning environment.

Dysgraphia. Dysgraphia is a learning disorder related to writing, including both the physical act of writing and the quality of written expression (Chung & Patel, 2015; Cortilia & Horowitz, 2014). Manifestations of dysgraphia include illegible handwriting; slow rate of writing; inconsistent spacing between letters or words; difficulty spelling; switching between cursive and print; tiring easily with writing; a tight, awkward pencil grip or body position when writing; and difficulty with written organization of thought (Chung & Patel, 2015; Cortilia & Horowitz, 2014).

Clinical nursing practice involves a multitude of writing tasks: transcribing physician orders, writing nurses notes, charting a variety of assessment findings, and completion of forms. Simply taking notes during change of shift report between nurses can be challenging for a

nursing student with this type of LD. Additionally, the clinical nursing learning environment for nursing students generally involves multiple, various written academic assignments: nursing diagnoses and care plans, medication analysis/reference sheets or cards, a written explanation of the pathophysiology of their patient disease, physical assessment documentation, and nursing care documentation. Chung and Patel (2015) suggested that for students with dysgraphia, teachers should consider alternatives to written assignments such as oral reports or presentations. Nursing students with dysgraphia may benefit from having their written assignments modified. For example, from personal experience, I have requested that students verbally state which nursing diagnoses would be appropriate for their patient. I then ask them to orally recount which nursing interventions would be applicable to their patient situation. Again, it is unknown whether these particular students had a specific LD such as dysgraphia. However, via their oral recitation, they were able to demonstrate to me as their instructor that they had the nursing knowledge and applicable rationales for their nursing plan of care as clearly as a student would that had written down the same information.

Associated Deficits and Disorders

There are a number of areas of information processing that are commonly associated with disorders of learning but are not themselves LDs. Problems with auditory or visual processing, motor coordination, reading body language and social cues, difficulty organizing or recalling details, and inattention and/or hyperactivity-impulsivity are a few examples that create problems with learning (“Attention deficit hyperactivity disorder,” 2016; Cortilia & Horowitz, 2014; Hancock, 2016). Because the ability to process information is fundamental to the provision of nursing care in the clinical learning setting, I will briefly define and discuss these disorders.

Auditory processing disorder. The term auditory processing deficit, also known as central auditory processing disorder, is a weakness in the ability to use and understand auditory information. Specifically, it is the reduced or impaired ability to discriminate, recognize, or comprehend complex sounds, such as those used in words, even though the person's hearing is normal (Auditory Processing Disorder Foundation, 2012). Students with auditory processing problems often have difficulty (a) understanding speech (especially with background noise, a person speaking quickly, or more than one person speaking) and/or expressing themselves with speech, (b) distinguishing similar sounds from one another (e.g., the words "fifteen" and "fifty"), and (c) pinpointing where a sound is coming from. They may also have difficulty concentrating or remembering verbal instructions (Auditory Processing Disorder Foundation, 2012; NHS England, 2015). For example, a student may physically hear information correctly but is unable to comprehend the meaning of the words being spoken or how to use the spoken words. Students with auditory processing disorder may have difficulty understanding verbal direction, difficulty following a conversation, or be easily distracted by noise (Hancock, 2016).

Although not classified as a specific LD, nursing students with an auditory processing disorder in the clinical learning environment would clearly be at a disadvantage that could significantly impact both their learning and their patient care. Nurses are often given directions verbally and are continuously required to converse with one another, with other colleagues, and with their patients and their patients' families. The patient care environment is frequently filled with the sounds of human voices, machine alert systems such as IV pumps, heart monitors, and ventilators, and equipment and communication systems. Being distracted by noise or having difficulty understanding verbal directions are disadvantageous to the nursing student in the clinical learning environment.

Visual processing disorder. Visual Processing Disorder (or Visual Processing Deficit) involves difficulty processing or interpreting visual information in the absence of physical sight limitations (Arky, 2016; Cunningham, 2014). Students with visual processing problems may encounter challenges such as (a) visual discrimination (e.g., difficulty distinguishing the difference between two shapes, difficulty finding a specific piece of information on a page), (b) visual figure-ground discrimination (e.g., difficulty distinguishing an object from its background), (c) visual sequencing (e.g., difficulty seeing and distinguishing the order of words, images, or symbols), (d) visual motor processing (e.g., difficulty using visual feedback to coordinate body movement), (e) visual memory (e.g., difficulty with short- or long-term recall of visual information), (f) visual closure (e.g., difficulty identifying what an object is when only part of the object is visible), and (g) spatial relationships (e.g., difficulty understanding how objects are positioned in space) (Arky, 2016; Cortilia & Horowitz, 2014; Cunningham, 2014). Again, although not classified as a specific LD, nursing students with a visual processing disorder in the clinical learning environment could be negatively impacted in both their learning and potentially their patient assessment and care abilities. For example, visual figure-ground discrimination is essential when describing the layers and features of a wound, observing a change in a wound, or when identifying the characteristics of a skin condition. Both visual sequencing and visual discrimination are necessary when looking at an electrocardiogram rhythm tracing or the recording from a fetal monitor.

Nonverbal learning disorder (NLD). Nonverbal learning disorder is defined as a condition that impairs the ability to process and learn nonverbal information and is often associated with SLDs (Cortilia & Horowitz, 2014; Nonverbal Learning Disorders Association, 2016). This disorder may often go undiagnosed due to the relatively good verbal and reading

abilities of those with NLD. Although there is no conclusive diagnosis of this disorder from the literature, the characteristics of NLD include difficulty with: (a) visual-spatial skills (e.g., inability to tell their left from their right, propensity to get lost easily) but have a relatively good verbal intelligence, (b) fine motor skills (e.g., poor coordination, problems with balance, illegible handwriting), (c) emotional and social situations (e.g., inability to gauge personal space, inability to read body language, misunderstanding common nonverbal communication, exhibiting immature behavior), and (d) difficulty with mathematical problem-solving coinciding with a relatively good reading-decoding ability (Cortilia & Horowitz, 2014; Mammarella & Cornoldi, 2014; Nonverbal Learning Disorders Association, 2016).

Because of their visual-spatial challenges, older students with NLD may be perceived as poorly organized and generally inattentive. Students with this disorder are fine-detail-oriented and are overwhelmed by trying to see the “big picture.” Those with NLD often struggle with slow, awkward writing and difficulty identifying important lecture material (Mammarella & Cornoldi, 2014; Nonverbal Learning Disorders Association, 2016). Adult students may struggle with taking notes during lectures, a common method of instruction at the college level. Organization and the ability to evaluate situations and communicate findings clearly and concisely are hallmarks of nursing practice and may overwhelm students with nonverbal learning disorders.

Attention deficit hyperactivity disorder (ADHD). ADHD is defined in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) as a disorder “characterized by a pattern of behavior, present in multiple settings (e.g., school and home), that can result in performance issues in social, educational, or work settings” (American Psychiatric Association, 2013, p. 1). Symptoms are divided into two categories: (a) inattention and (b) hyperactivity and impulsivity

that interferes with functioning (“Attention deficit hyperactivity disorder,” 2016; DuPaul et al., 2015).

Under IDEA (2004), children who are diagnosed with attention deficit disorder (ADD) or ADHD are classified as Other Health Impaired (see Disability Law). ADHD is not a category in IDEA unless the child also meets the criteria of SLD under this law. According to the mandates of IDEA (2004), other health impairment means “having limited strength, vitality, or alertness, including a heightened alertness to environmental stimuli, that result in limited alertness with respect to the educational environment” due to a health problem such as ADHD. Although not considered an LD, ADHD can negatively disrupt learning and, as noted above, is often seen in combination with LDs (Al-Yagon, 2016b; Cortilia & Horowitz, 2014; IDEA, 2014; Smith & Segal, 2019). The Centers for Disease Control estimates that as many as one-third of presecondary students with an LD also have ADHD (Centers for Disease Control, 2015).

There is no cure for ADHD and children with this disorder grow up to become adults (over age 17) with ADHD (APA, 2013). Adults with ADHD may exhibit similar behaviors as those seen in childhood, such as an inability to pay close attention to details; difficulty organizing tasks and activities; excessive talking, fidgeting, or an inability to remain seated in appropriate situations (APA, 2013). They may become easily distracted and forgetful, have difficulty following directions, and have trouble finishing tasks, such as homework assignments (LoGiudice, 2008; NIMH, “Attention Deficit Hyperactivity Disorder,” 2016). Adults with this disorder may be especially challenged by their symptoms, as their responsibilities increase in adulthood. Adults with ADHD in the workplace may have difficulty being on time, perform carelessly, appear distracted, and their work may be disordered (APA, 2013; LoGiudice, 2008). Adult students who have this disorder may be negatively viewed as “a dreamer, a goof-off, a

slacker, a troublemaker, or just a bad student” (Smith & Segal, 2016). Nursing involves a huge amount of responsibility. Problems with distraction could result in serious mistakes or the oversight of critical information.

The Attention Deficit Disorder Association (2015) estimated that over 4 percent of the adult population is affected by ADHD. A national survey of first-year college students indicated that 5 percent of that population has a diagnosis of ADHD and 2.9 percent have an LD (DuPaul et al., 2015). According to Smith and Segal (2016), a person with ADHD is six times more likely than the general adult population to have an associated learning disorder (Smith & Segal, 2016).

ADHD and LDs are the two most commonly reported disabilities among college students. Academic challenges experienced by college students with ADHD are likely attributable to both the core symptoms of the disorder and compounded by difficulties with academic and study skills (Al-Yagon, 2016b; DuPaul et al., 2015). Similar to college students with LDs, students with ADHD are at increased risk for withdrawing or failing courses compared to college students without ADHD (Al-Yagon, 2016a; Al-Yagon, 2016b; DuPaul et al., 2013; DuPaul et al., 2015). Based upon my review of the literature, I anticipated a large percentage of participants in my study would have a co-diagnosis of ADHD that may impact their academic progression in the clinical learning setting. The study data on this co-diagnosis will be delineated and discussed in Chapter 4.

Disability Law

In the last 40 years, great strides have been made to facilitate equality for all persons with physical disabilities or LDs. Providing an overview and timeline of disability-related laws is

important in order to understand the rights and responsibilities of both students with LDs and the postsecondary educational facilities where they are enrolled.

Rehabilitation Act of 1973. One of the earliest disability enactments was the Rehabilitation Act of 1973. Often referred to simply as the “Rehab Act,” this legislation became the first U.S. federal civil rights protection for people with disabilities. The basic charge of this legislation prohibits discrimination because of a disability in programs run by federal agencies, programs that receive federal financial assistance, and in federal employment (Rehabilitation Act of 1973).

Similar to many laws, the Rehabilitation Act of 1973 contains multiple sections. Specifically, Section 504 requires schools and universities to provide reasonable accommodations and create equal program access to all students. Section 504 also prohibits discrimination against people with disabilities in federally funded programs and activities and allows the withdrawal of funds from programs that fail to comply with the law. Persons with a physical or mental impairment that substantially restricts one or more major life activities are eligible for services under Section 504 (Rehabilitation Act, 1973). Pertinent to my study, the rules of Section 504 are applicable to postsecondary students with LD that require accommodations or modifications in the learning environment (ADA, 2008; ADA, 2008; Rehabilitation Act of 1973).

The Education for All Handicapped Children Act of 1975. The Education for All Handicapped Children Act of 1975 was enacted by the United States Congress in 1975 to implement fair treatment of students with all types of disabilities in their schools. This act guaranteed all primary and secondary school students a free appropriate public education delivered in the least restrictive environment appropriate to the child’s needs (Education for All

Handicapped Children Act, 1975). It should be noted that most LDs are diagnosed while children are in primary or secondary school. Although the participants in my study are adults and past the age of coverage under this law, LD is a lifelong condition (NASET, 2006/2007, para. 9; NIMH, “Attention Deficit Hyperactivity Disorder,” 2016; Weis, Dean, & Osborne, 2016; Weis, Erickson, & Till, 2016; Wray et al., 2012).

The Education for All Handicapped Children Act of 1975 has been amended several times. In 1986, a provision was added aimed at children from birth through age two with developmental delays or disabilities. In 1990, The Education for All Handicapped Children Act was renamed The Individuals with Disabilities Education Act (IDEA). In 1997, IDEA was amended to require states to describe how a student with disabilities would be involved with and progress in the general education curriculum and to address assistive technology needs. This amendment also required that students with disabilities be included in statewide and districtwide assessment programs or given alternative assessments to meet their unique needs.

IDEA was reauthorized in 2004 and officially referred to as the Individuals with Disabilities Education Improvement Act. The amendments of 2004 allowed school districts to use the Response to Intervention model to determine whether a student has an LD; this is discussed in more detail below (Lechtenberger, 2013; NASET, 2006/2007). It should be noted that the definition of an LD has not changed since the original enactment of the Education for All Handicapped Children Act of 1975 (IDEA, part A, 2004; P.L. 94-142).

The Individuals with Disabilities Education Act. The IDEA and the Individuals with Disabilities Education Improvement Act, provides specific educational assistance to students with LDs during their primary and secondary school years. This Act does not pertain to the postsecondary educational arena (IDEA, 2004). However, it is noted that this Act specifies 13

possible educationally handicapping conditions, including SLDs that are eligible for educational assistance under this law. To qualify for such educational assistance, the child must have one of the identified disabilities and the disability must adversely affect their educational performance (Center for Parent Information and Resources, 2016; IDEA, 2004; Lee, 2014).

Although not directly related to LDs, it is noted that in 2011 the Equal Employment Opportunity Commission issued revised regulations of the employment provisions mandated by the ADA. The revised regulations reflect the changes to the definition of disability made by the Americans with Disabilities Act Amendments Act (ADAAA), in particular, Congress's mandate that the definition of disability be construed broadly (ADAAA, 2008; ADAAA, 2011; U.S. Equal Employment Opportunity Commission, 2015b).

Americans with Disabilities Act (ADA). In 1990, the Americans with Disabilities Act was enacted to protect “any individual with a physical or mental impairment that substantially limits a major life activity, has a record of having such an impairment, or is regarded as having such an impairment” (ADA, 1990). Directives outlined by this law include protections from discrimination in schools, the workplace, public areas, and in telecommunications (ADA, 1990; U.S. Equal Employment Opportunity Commission, 2015a).

Relative to my study, the 1990 Americans with Disabilities Act protects eligible persons with disabilities from discrimination in areas of postsecondary education, such as admissions and academics, and applies to all postsecondary educational programs regardless of federal financial aid. The Americans with Disabilities Act was amended in 2008 due to the need for clarity regarding the definition and interpretation of disability (ADAAA, 2008; U.S. Equal Employment Opportunity Commission, 2015a, 2016).

The 2008 Americans with Disabilities Act Amendment Act. The 2008 ADAAA clarifies that the ADA applies to persons who have impairments and that these must “substantially limit major life activities such as seeing, hearing, speaking, walking, breathing, performing manual tasks, learning, caring for oneself, and working” (ADA, 2008; ADAAA, 2008; U.S. Equal Employment Opportunity Commission, 2015b). Because of this amendment, students of any age with an LD that substantially limits learning are eligible for access to reasonable accommodations (ADAAA, 2008; U.S. Equal Employment Opportunity Commission, 2015a).

Specific Learning Disabilities in Adulthood

Despite the enactment of childhood disability laws, explicitly defining LDs and providing educational support and accommodations, children with learning disorders become adults with learning disorders (Chung & Patel, 2015; Nalavany et al., 2011; Wilson et al., 2015). According to the National Center for Education Statistics (2015/2016), approximately 11 percent of students in postsecondary education have some type of disability (Snyder & Dillow, 2012). In 2010, the National Institutes of Health estimated that 15 to 20 percent of the United States population has some type of LD (Department of Education, 2010; National Institutes of Health, n.d.). It has been reported in a LDs position paper that an estimated one-third of students enrolled in adult basic education, literacy, and general education diploma (GED) programs have a disclosed or undisclosed LD (Learning Disabilities Association of America, 2013). Based on these statistics, a large percentage of nursing students can be expected to have an LD.

There is an abrupt change in the support that learners with disabilities receive once they enter the postsecondary education arena. The individualized education program (IEP) processes and accommodations that are offered automatically to presecondary students are no longer

automatic. Postsecondary students must request LD services from their schools and specifically request detailed academic accommodations (ADAAA, 2008; U.S. Department of Education, 2007; Kraglund-Gauthier et al., 2014; Thomas, 2015; U.S. Equal Employment Opportunity Commission, 2015a). These services likely also require current documentation of their LD (DRC, 2013; Kraglund-Gauthier et al., 2014; Liberty University Online, 2015). Although many high schools and support services offer transition programs for these types of students, many students with an LD may not be prepared or adequately supported in their postsecondary education programs (Frink, Whitmire, & Bogdan, 2015; Learning Disabilities Association of America, 2013).

To help adult students transition to postsecondary education and understand these changes in disability law and procedures, White and Case LLP (2018) developed an overview of how to manage an LD for college students. In her synopsis, she explained that the student must disclose their disability to the college, request specific accommodations, and may need to supply supporting professional documentation. She also explained that college accommodations depend upon the particular disability of the student and their impact on the student in the college setting. She provided specific accommodations that may be available to the student (e.g., taped textbooks, use of a tape recorder, instructions orally and in writing, use of a note taker, priority seating, extended test time, reader, quiet room) and encouraged students to be specific about the accommodations that they need (White & Case LLP, 2018, para.15). It is imperative that students with LDs transitioning to higher education understand this information. In presecondary education, the school system has a duty to identify students with disabilities; in college, however, the student is responsible for disclosing their disability and requesting

necessary accommodations (ADAAA, 2008; Latham, 2015; U.S. Equal Employment Opportunity Commission, 2015a).

According to Morin (2014b), 67 percent of young adults with LDs are in a postsecondary program eight years after high school—the same percentage as the general population. However, only 46 percent of Americans with an LD are employed, compared to 71 percent of Americans without an LD (Morin, 2014b). An LD cannot be outgrown, and the effects of an LD do not end with graduation from high school. In fact, the impact of an LD in adulthood may intensify as environmental demands change and learning requirements differ (NASSET, 2006/2007, para. 9; NIMH, “Attention Deficit Hyperactivity Disorder,” 2016). Because of the unique challenges associated with learning the role of the nurse, it is anticipated that nursing students with LDs in particular may suffer negative effects related to the demands of nursing school.

Common Themes Identified Regarding Adults with Learning Disabilities

After a thorough review of the available literature on the concept of nursing students with SLD in the clinical learning environment, I have identified and categorized five overarching themes related to adults with LDs:

- Students’ reluctance to disclose having an LD;
- Teaching students with an LD;
- Lack of policy regarding LD accommodations in the clinical learning environment;
- Being a student with an LD; and
- Supporting students with LDs.

Reluctance to disclose. Worldwide, adult students with LDs are reluctant to disclose their disability for a variety of reasons (Evans, 2014a; Howlin et al., 2014; Kong, 2012; May &

Stone, 2010; Nalavany et al., 2011; Stewart & Collins, 2014). Howlin, Halligan, and O'Toole (2014) found that students with LDs described a lack of confidence to approach their teachers and reported having no privacy to discuss the specifics of their LD. Some of the participants in their study implied that it was not acceptable for students to have an LD and accommodations. Others reported feeling that the busy clinical environment prevented disclosure to their clinical teachers. This sentiment was noted by Newton, Jolly, Ockerby, and Cross (2012), who reported an ongoing struggle by preceptor teachers to balance the learning needs of all nursing students with the demands of clinical practice.

Another common reason for not disclosing an LD cited in the literature was not wanting to seem different or less intelligent by their peers. For example, May and Stone (2010) found that 53 percent of the participants with LDs reported meta-stereotypes of LDs that referred to intelligence or ability level. Only 38 percent of the group without LDs reported an intelligence-related meta-stereotype (May & Stone, 2010). Similarly, participants in a study by Evans (2014a) reported that a fear of being seen as stupid impacted their decision to disclose their LD. Specifically, nine of the 12 participants from this study stated they would not disclose their LD in clinical learning settings, fearing they would not be understood and would lack support (Evans, 2014a). Perhaps most striking, the process of disclosing an LD has been compared to the momentous "coming out" process for non-heterosexual persons (Stewart & Collins, 2014).

In 2012, Kell studied the feelings of students regarding the disclosure of an LD. According to Kell (2012) students with an LD reported a lack of confidence and unwillingness to disclose their LD to faculty members. In her study of chiropractic students with dyslexia, Kong (2012) reported that some students felt embarrassed by being different and feared being labelled as lazy or stupid. Similar to the study by Kell (2012), the participants in the study by Kong

(2012) avoided disclosure of their disability and did not ask for help, fearing “ridicule, exclusion by their peers or being treated differently” (Kong, 2012, p. 135). In a study by Kraglund-Gauthier, Young, and Kell (2014), a student described challenges with interacting with faculty members: “Some professors treated me like I was globally delayed and kind of ignored me because of my learning disability and I was older and I was a woman” (Kraglund-Gauthier et al., 2014, p. 5). Other participants in the study reported being frustrated with the amount of print they encountered on a daily basis and feeling overwhelmed. One particular student illustrated this frustration by stating, “every time I needed help or wanted to ask a question or get information, everybody presented me with print” (Kraglund-Gauthier et al., 2014).

Similar to the information noted in the studies cited above, the majority of the educational materials utilized at the college where I am employed are in print form. Traditional educational materials and activities that utilize technology nearly always require an ability to read and process information visually. Furthermore, some technology-related learning activities require not only the ability to read and process information visually but are required to be performed within a designated timeframe. Nursing faculty members are not provided any formal training on teaching students with LDs.

Teaching students with a learning disability. As illustrated above, adult learners with LDs are reluctant to disclose or discuss their needs with those entrusted to facilitate their education (Evans, 2014b; Howlin et al., 2014; Kraglund-Gauthier et al., 2014; May & Stone, 2010; Nalavany et al., 2011; Stewart & Collins, 2014). However, research has also demonstrated compelling justification for transparency for students with LDs in higher education. Wray, Aspland, Taghzouit, Pace, and Harrison (2012) encouraged the prescreening of nursing students for LDs, citing financial benefits, access to appropriate support for the students, and preparation

for the nurse educators who would be teaching these types of learners. These researchers emphasized the importance of students with LDs accessing learning support as soon as possible, noting that students may struggle to be successful in their first year in higher education (Wray et al., 2012).

The clinical learning environment is indeed an area where it is crucial for teacher and student to communicate and collaborate to facilitate learning for the student, especially when a student is challenged with an LD. It was my hope that the participants in my study would feel free to express ideas and thoughts about having an LD in the clinical nursing environment and add to the literature on the benefits of transparency. The data provided by the co-researchers on this topic is discussed in Chapter 4.

Teachers in the nursing profession usually have little knowledge or education about working with nursing students with LDs (Child & Langford, 2011; Murray et al., 2011; Nalavany et al., 2011; Suplee et al., 2014). A participant in a study by Nalavany et al. (2011) reported feeling that their scholastic efforts were misunderstood by others, stating “just because I am not doing the best that I want doesn’t mean I am not doing my best” (Nalavany et al., 2011, p. 73). A participant in a study by Howlin, Halligan, and O’Toole (2014) sensed that their preceptor had a lack of knowledge regarding the study participant’s particular disability. This thought process is very relevant to nursing clinical learning environments in that many nursing instructors, due to not understanding LDs, may dismiss poor performance or school assignments as meaning the student is lazy or apathetic. Specifically, nearly 75 percent of adult students with dyslexia thought that their school experiences could have been better had someone understood their difficulties (Nalavany et al., 2011). Lombardi, Murray, and Gerdes (2011) found that

postsecondary faculty members generally expressed a willingness to provide accommodations to students with LDs but feel unprepared to do so.

Ashcroft and Lutfiyya (2013) examined nursing educators' perceptions of students with disabilities and found a dichotomy between the nursing faculty members wanting to be supportive of students with disabilities and concerns that the disability may affect patient care. The researchers noted that this may reflect a lack of knowledge regarding how different disabilities impact student learning (Ashcroft & Lutfiyya, 2013). Participants expressed concern that classroom-accommodated students may be "unable to provide patient care" (Ashcroft & Lutfiyya, 2013, p. 1318) in the clinical learning environment. Study participants also expressed uncertainty with regard to how to support student learning for clinical courses when accommodations are unavailable and concern that disabled students require more supervision than other learners. It was duly noted that these researchers reiterated the lack of policy regarding the provision of accommodations in the clinical learning setting (Ashcroft & Lutfiyya, 2013). At the colleges where I have been employed, nursing faculty members do not receive any formal training on teaching students with LDs. However, students eligible for accommodation related to an LD do traditionally receive either private rooms for taking tests or are permitted extra time for exams—both classroom-related accommodations.

Not only are nurse educators generally unfamiliar and uninformed about students with LDs, they have little guidance provided to them in the form of policy, as would be the norm with other student-related issues. Howlin, Halligan, and O'Toole (2014) indicated that better communication and interdependent support among all stakeholders (e.g., faculty members, students, school administration) is essential to ensure that the student has a positive learning experience during clinical learning. These researchers recommend that regulatory organizations

play a greater role in the endorsement of reasonable accommodations for students. Greater guidance for faculty members, preceptors, and mentors may positively impact anyone who supports students with disability to create a level playing field, facilitating success in learning the art of nursing (Howlin et al., 2014). Likewise, Tee et al. (2010) found that students' success is directly influenced by their teachers' skill at facilitating learning, ability to understand students' learning needs, and quality of practice supervision, especially when a student's disability necessitates adjustments to accommodate these needs (Tee et al., 2010).

Suplee, Gardner, and D'Emilia (2014) supported the ideas and concerns discussed in this section of this study. These researchers interviewed 74 nursing faculty members teaching in a variety of nursing education programs from the northeastern United States in order to assess their preparation for clinical teaching. The top three clinical challenges that the participants of this study reported as being least prepared to handle included "working with students with learning disabilities" (41.89 percent), "working with students with physical disabilities" (39.19 percent), and "managing students with emotional disturbances" (39.19 percent) (Suplee et al., 2014, p. S40). Participants also indicated that these topics were less likely to be addressed in their graduate education programs or continuing education (Suplee et al., 2014). Clinical nurse educators are untrained and ill-prepared to deal with students with LDs (Child & Langford, 2011; Murray et al., 2011; Nalavany et al., 2011; Suplee et al., 2014).

Lack of policy regarding accommodations. Adult students with LDs have a legal right to appropriate accommodations in the classroom (ADAAA, 2008; Latham, 2015; U.S. Equal Employment Opportunity Commission, 2015a). However, learning the role of the nurse requires the integration of theory and practice. Student nurses also learn outside of the formal classroom arena, in a clinical learning environment, and accommodations for the classroom may not be

available or appropriate in the clinical learning setting. Many researchers acknowledge the lack of policy regarding reasonable accommodations for adult students with LDs in the practice environment (Ashcroft & Lutfiyya, 2013; Howlin et al., 2014; Murphy, 2011; Tee et al., 2010; Weis, Speridakos, & Ludwig, 2014; Wray et al., 2012). Wray, Aspland, Taghzouit, Pace, and Harrison (2012) noted that there is little evidence as to what extent policy and practice regarding delivery of support and reasonable accommodation has been implemented (or not) in both academic and practice settings. Murphy (2011), in a study of radiology students with dyslexia, also noted that despite the enactment of disability law in the United Kingdom (the Special Educational Needs and Disability Act) where this study was conducted, academic support in the clinical setting is significantly lacking compared to the disability accommodations available in the academic arena. Similarly, Tee et al. (2010) also cited the lack of published work related to disability accommodations in the practice environment/clinical setting in their study of the impact of the Student Practice Learning Advisor (SPLA) provided to disabled students enrolled in higher education institutions in the United Kingdom. As recently as 2013, Ashcroft and Lutfiyya reported in their study of nursing faculty members that while each of the four institutions involved in their study had policies in place for reasonable accommodations in the classroom, none had policies regarding accommodations in the clinical practice setting (Ashcroft & Lutfiyya, 2013).

It was hoped that the co-researchers in my research study would provide insight into what constitutes reasonable accommodations or solutions in the practice setting. Their thoughts and ideas on this topic are recorded in Chapter 4. Child and Langford (2011) examined the learning experiences of nursing students with dyslexia from the United Kingdom in their clinical learning environment. Students were asked to recommend key tools that would be helpful in achieving

their learning objectives in the clinical practice setting. Suggestions included information about their clinical placement that they could read before they arrived and an orientation day or visit to the clinical site. Additional aids included using an action plan as a planning tool to aid learning and providing education about dyslexia by the university for the clinical mentors and staff (Child & Langford, 2011). Obtaining similar examples and suggestions from my study participants regarding how they learn in the practice setting may assist with the development of applicable accommodations policies for schools of nursing or any academic trade with a clinical practice learning environment.

Murray, Lombardi, and Wren (2011) assessed the ability of nursing faculty members to support nursing students with LDs based on prior LD training. The results of their study showed that the nursing faculty participants who had experienced some form of formal LD training had greater general knowledge, greater sensitivity, and lower ratings of insufficient knowledge regarding students with LDs (Murray et al., 2011). Furthermore, the participants who had prior LD training indicated positive disability-related attitudes and perceptions (Murray et al., 2011). The LD training experiences that were longer in duration were more likely to have a positive impact than shorter training sessions (Murray et al., 2011). Just as nursing faculty members aspire to educate all student nurses, nursing faculty members could benefit from becoming educated regarding aspects of LD and understanding the students that have this disorder (Child & Langford, 2011; Murray et al., 2011; Nalavany et al., 2011; Suplee et al., 2014). Nursing students are taught about and learn about disease processes and medical situations by interacting with and caring for patients with various medical and psychological conditions. Seeing jugular vein distension, hearing rales in a patient's lungs, and assessing the extent of ankle edema can be the best teacher about the disorder of heart failure. It is anticipated that nursing faculty members

may best learn about LDs and how to support these types of learners by “seeing, hearing, and assessing” the experiences of being a nursing student with an LD.

Being a student with a learning disability. In a study by Stewart and Collins (2014), students with a variety of both learning and physical disabilities reported that they all had personal challenges stemming from their particular disability, including lack of peer support, inappropriate use of humor regarding disabilities, and generally an “extreme lack of awareness” concerning disabilities (Stewart & Collins, 2014, p. 28). The participants of this study suggested creating supportive environments, including removal of structural barriers such as retesting requirements, more education for professionals regarding types of disabilities, and “improving the climate” for those with disabilities (Stewart & Collins, 2014, p. 30).

Murphy (2011) explored the clinical experiences of radiography students with dyslexia and the potential impact of this disability on their practice (Murphy, 2011). The goal of his study was to identify barriers and risks in clinical training and develop recommendations for the support of students with dyslexia. The themes of adjustments and support from this study coincide with the research I have conducted. Participants from my study provided practical suggestions and ideas for obstacles encountered in a learning/practice environment. It is of particular interest that the study by Murphy (2011) was conducted from the perspectives of the students themselves and was an important piece of research that provided insight into the question what is it like to be a student with learning disability in the practice environment. Murphy found that dyslexic students “took extra responsibility for their own learning and some had developed complex coping strategies to overcome any difficulties” (2011, p. 132). It is particularly notable that the dyslexic participants reported having a full awareness of their disability and describe working especially hard to overcome their particular shortcomings. The

most common theme to emerge was the need for more time, and tiredness was commonly cited as a contributor to making mistakes (Murphy, 2011). Specific suggestions such as support groups, a national forum, checklists for everyday clinical tasks to be completed prior to acceptance into programs, and professional role models were ideas gleaned from the participants during the in-depth interview process (Murphy, 2011). In a similar tone, Child and Langford (2011) studied nursing students from the United Kingdom with dyslexia in the clinical practice environment. They found that these students felt there was a lack of support in clinical practice and felt isolated and without an advocate because of a general lack of understanding about dyslexia (Child & Langford, 2011).

Unless one is a student with an LD, it is impossible to really understand the emotions and challenges involved in learning in a clinical practice environment (Child & Langford, 2011; Kong, 2011; Murphy, 2011; Stewart & Collins, 2014). As a practicing nurse educator, I was particularly struck by a comment made by a participant in a study by Howlin et al. (2014). A student nurse expressed self-blame for choosing to not disclose her LD to her clinical preceptor, worrying that the busy clinical environment prevented disclosure (Howlin et al., 2014, p. 568). I was impacted by this thought process, as disclosure from student to teacher, even while busy, is not unlike the reports nurses give during shift changes or upon an adverse change in a patient's condition. Communication about "abnormalities" (my word) is normal, acceptable, and essentially expected in healthcare (Howlin et al., 2014). While I appreciated the honesty of this participant, I found it rather disheartening that this student would assess and care for all the "abnormalities" of their patients encountered on that day yet felt unwilling or unable to share an important personal issue that might affect something as essential as personal learning.

Clear communication is paramount in the medical profession. Communication methods have been adopted by medical and nursing staffs to facilitate the safe and effective transmission of information (IHI, 2015; Kosnik, 2002). No studies were found describing the effect of an LD on patient care or patient safety. However, because of the significance of utilizing clear communication during the care of patients, a lack of willingness to communicate special learning needs will inevitably impact the safety of patients.

An aspect of the impact of student difficulties on patient safety was addressed in an article written by medical physicians involved in medical student clinical education (Hicks et al., 2005). The authors of this study primarily focused on student issues such as substance abuse and behavioral/professional problems, but it also included students with cognitive problems (i.e., LDs). These authors acknowledge that a student who has “significant difficulties” may impact their ability to deliver safe patient care (Hicks et al., 2005, p. 1921). This study was somewhat broad and not conducted with nursing students with specific LDs, but nevertheless reiterated the importance of clarity, safety, and communication in the patient care environment.

Supporting students in the practice environment. When a student with an LD transitions into postsecondary education, the onus of responsibility for managing their disability rests upon the student (ADAAA, 2008; White & Case LLP, 2018). Having become accustomed to an education based on pedagogical methods, students are abruptly transitioned to an analogical style of teaching and learning (Knowles et al., 2012). Moreover, the clinical nursing environment can be particularly challenging, as most students are unaccustomed to this type of learning (Luckowski, 2016). Even if a nursing student does seek out traditional disability services such as classroom accommodations, there is vital learning that must occur in a clinical practice setting where classroom accommodations may not be available or applicable.

There is a dearth of information regarding specific accommodations utilized in the nursing clinical practice setting (Child & Langford, 2011). It was anticipated that the participants in my study would provide ideas and suggestions regarding reasonable accommodations or solutions that could be utilized to support learning-disabled students in healthcare practice settings. The voices of the co-researchers in my study provide thick, rich data on this topic, which is presented in Chapter 4.

Tee et al. (2010) examined the impact of an SPLA service in a school of nursing, evaluating the nature of the support provided for disabled students and the availability of reasonable adjustments (Tee et al., 2010). The practical applicability of this study is limited, as it does not describe the strategies employed for the disabled students nor does it describe the level of involvement of the student in deciding on which strategies to employ. I was interested in knowing what strategies the students in my study might suggest, keeping with the theme of disabled persons: “nothing about us without us” (Charlton, 1998). Their voices are chronicled using thick, rich data, which is presented in Chapter 4. Tee et al. (2010) noted that adjustments to the learning environment were conducted by the SPLA in consultation with a mentor and the student and based upon the lived experience of the student involved (Tee et al., 2010), but unfortunately their research did not include the actual voice of the student.

According to Kraglund-Gauthier et al., an accommodation “involves minor changes that assist a student’s functioning in the classroom by offering alternate ways of handling a task” (2014, p. 2). Adaptations are also provided to students with LDs that generally involve changes to instructional methods or materials “that enable students to learn or do something they would not otherwise be able to easily accomplish” (Kraglund-Gauthier et al., 2014, p. 2). The mandates of the 2008 Americans with Disabilities Act Amendment Act stipulate that, when requested,

postsecondary learning institutions provide reasonable accommodations to learning-disabled students in the classroom (ADAAA, 2008; U.S. Equal Employment Opportunity Commission, 2015a). However, nursing students also learn in a clinical practice environment where customary classroom accommodations are unavailable or impractical (Suplee et al., 2014).

Summary

The active learning and experiences that occur in the clinical learning environment are a crucial aspect of nursing education. If a learner is challenged by the process of expanding upon knowledge attained because of an LD, their clinical experience becomes merely an experience deficient of real learning. If a learner has deficiencies in their ability to learn, the learning process is weakened and diminished (Dewey, 1938; Knowles, 1980; Knowles et al., 2012).

Implications from the studies above support the foundation of my research project.

Understanding the needs of learning-disabled nursing students and how to individualize and facilitate their clinical learning experiences and activities may best be obtained from the learners themselves. The methodology of my study has allowed nursing students with LDs to share their personal experiences of being a nursing student with an LD in the clinical learning environment and to report accommodations or solutions that have helped them.

There are many aspects of LDs that need to be understood, including insight into the adult learners who suffer from this disorder. Understanding the psychosocial aspects of LDs and the unique challenges encountered in the clinical learning environment may attract greater public attention and assist professionals, such as nurse educators, to intervene more empathetically and efficaciously.

Overarching themes from the literature reviewed included students' unwillingness to disclose their LD, inadequate teacher knowledge about LDs, limited accommodations available

in the clinical learning environment, the personal challenges of being a student with an LD, and a need for student support in the clinical learning environment. Misunderstandings regarding LDs and the lack of initiatives and policy to assist nursing students with LDs in the clinical learning environment may potentially impact patient safety. The goal of this study was to gather the emic perspective of the participants in order to gain insight into their lived experiences in the clinical learning environment. The objective of my research study was to be a voice for my co-researchers, promoting a “help me help you” approach.

CHAPTER THREE: METHODOLOGY

Overview

The purpose of this qualitative, transcendental, phenomenological study was to record the lived experiences of nursing students with LDs while in the clinical learning environment. This study provides insights into how nursing students with LDs learn in the clinical learning environment and the impact their disability has on their clinical learning experience. The strategy regarding the chosen qualitative design, sampling, participants, data collection, and data analysis for this study is presented in detail below.

Design

This research was conducted using a qualitative methodology. A qualitative research design was appropriate because this method facilitates in-depth, detailed examinations of issues (Patton, 2015, p. 22). The transcendental phenomenological research method was used to understand and describe the lived experiences of a group of student nurses with LDs in the clinical learning environment. The nuance of transcendental phenomenology, discovering the essential meanings of individual experience, was employed in this study to gain robust insight into the perspectives of student nurses with LDs. Participants were co-researchers because the essence of what it means to be a nursing student with an LD in the clinical learning environment came from their experiences and perceptions (Moustakas, 1994).

The *epoché* process, a disciplined and systematic effort to set aside prejudgments about the phenomenon under investigation, is essential in phenomenological research. When using a transcendental phenomenological approach, the goal of the researcher is to initiate the study “as far as possible free of preconceptions, beliefs, and knowledge of the phenomenon from prior experience and professional studies” (Moustakas, 1994, p. 22). Moustakas (1994) encouraged

the phenomenological researcher to be open, receptive, and naïve when listening to the research participants talk about and share their experiences. The researcher must put aside their own preconceived notions, viewpoints, or assumptions about the phenomenon being studied and take care to avoid prejudging or prematurely imposing meaning to data (Moustakas, 1994). As I collected data for this study, analyzed the data collected, and transcribed the results, I recorded my thoughts regarding possible bias in a reflexive journal.

Phenomenological research begins with an identified question or problem to guide the study, but study discoveries may be used to further develop the topic being examined (Moustakas, 1994, p. 47). Husserl, according to his translator, maintained the stance that the term phenomenology could not and should not be explicitly defined. The phenomenologist's language must be flexible, and an exact definition would be inappropriate for this methodology (Husserl, 1970, p. xxii).

Husserl explained that in transcendental phenomenology, the character of the object of study "must be described rather than explained" (1965, p. 109). The transcendental approach "adheres to what can be discovered through reflection on subjective acts and their objective correlates" (Moustakas, 1994, p. 45). In keeping with the traditions of Husserl (1965) and Moustakas (1994), the transcendental phenomenological approach was used in this study to bracket out my views and experiences and allow the descriptions of the lived experiences of student nurses with LDs in the clinical learning environment to be the foundation for this study. The research study questions were answered based on the experiences recounted by the participant co-researchers rather than my interpretations of them.

Phenomenologists believe that "lived experience gives meaning to each person's perception of a particular phenomenon" (Polit & Beck, 2012, p. 495). This qualitative,

transcendental phenomenological research study was conducted using interviews, audio-memoing, and document analysis. Because dyslexia—difficulty with the written word—is the most prevalent type of specific LD, audio-memoing was utilized as a data collection strategy to obtain pertinent data in a suitable manner without requiring participants to record their thoughts and experiences in written form (Cortiella & Horowitz, 2014).

Research Questions

To arrive at the essence of the phenomenon regarding the experiences of nursing students with SLD in the clinical learning environment, the central research question is: What are the lived experiences of student nurses with LDs in the clinical learning setting? It was anticipated that this study would provide insight into how nursing students with LDs learn in the clinical learning environment and the impact their disability has on their clinical learning experience.

The sub-questions in this study are:

1. How are nursing students impacted by their LD during clinical learning experiences?
2. What are the perceived obstacles that hinder nursing students with LDs during clinical learning experiences?
3. What are reasonable accommodations or solutions for students with LDs during clinical learning experiences?

Setting

The setting for data collection for this study varied according to the meeting sites chosen for the interviews and the clinical learning facilities affiliated with undergraduate schools of nursing located in the Western Pennsylvania region of the United States. Students were recruited from applicable schools of nursing in the Western Pennsylvania region (undergraduate Bachelor of Science in Nursing [BSN]-granting institutions, ASN-granting institutions, registered nurse

[RN] diploma programs, and LPN diploma programs). For this study, the participants' schools of nursing were identified only by their type of program (BSN, ASN, RN diploma, or LPN diploma).

Participants

According to Moustakas (1994), the criterion for selecting participants for a phenomenological study is that they share a common experience. Creswell (2013) explained that a phenomenological study should include a heterogeneous group of individuals who have all experienced a particular phenomenon. This group may vary in size from three to four individuals to a group of 10 to 15 participants. This study recruited a purposive convenience sample of nine nursing students with at least one self-reported, previously documented LD. Creswell (2013) explained that purposeful sampling is the method of establishing a set of required criteria for inclusion in a study sample. Patton (2015) described the use of purposeful sampling to elicit information-rich data about the research topic (p. 53). Purposeful sampling as a research design strategy enlists participants who are able to provide insight into a phenomenon under investigation (Patton, 2015). Because the sample in this study was a core group of persons with specific qualities, a purposeful sampling strategy targeting student nurses with LDs was appropriate.

Each participant was freely willing to participate and was enrolled in a nursing education program with a clinical practice learning component. They were selected without regard to gender and were at least 18 years old. Based on the fact that females outnumber males in the nursing profession, it was anticipated that there would be more females in the sample. Eight of the nine participants were female. Pseudonyms were provided for all study participants.

The semi-structured interview questions were reviewed for content validity and to establish the clarity of the questions by three experts, two in the field of education and one in the field of nursing. The first educational expert earned his PhD in curriculum and instruction in 1976 from the University of Pittsburgh. Since that time, he has worked as both a high school principal and a supervisor of student teachers. Currently, he observes adult instructors and provides feedback and recommendations on teaching strategies, techniques, skills, classroom management, and teacher effectiveness. The second educational expert earned her PhD in education in 2014 from Walden University. She is currently the director of the center for teaching and learning at a technical college located in Western Pennsylvania. The third expert, from the nursing profession, earned a Doctor of Science in Nursing degree from Carlow University in 2011 and is an assistant professor of nursing at the University of Pittsburgh. He has extensive clinical experience, including the instruction of undergraduate nursing students and nurse practitioner students. Interview questions were altered at the first expert reviewer's suggestion that they be revised to avoid any subjectivity. He also suggested the questions be written very specifically in order to obtain every essential piece of information from the participants.

Procedures

The initial step in conducting this research study was to submit an Application for Institutional Review Board (IRB) approval to Liberty University. After IRB approval, the semi-structured interview questions were piloted by one student nurse with an LD and two practicing nurses with an LD, to ensure clarity of questions and wording. The procedure for audio-memoing was piloted by the student nurse and two practicing nurses with an LD to ensure the functionality of this research method and identify any unanticipated complications of this study

data collection method. The use of practicing nurses with an LD to pilot the study was done to prevent a decrease in the pool of possible nursing student co-researchers. One pilot participant reported the need to provide the co-researchers a fully charged USB recorder. It had to remain charged during use or it would lose power and not function as a voice recorder. Participants were informed of this and were asked to keep the USB in a private USB port between uses.

After the pilot of the study methodology was complete, an informational letter detailing the nature of the study, types of participants required, and my contact information was discriminated to online student nurse/nursing groups and social media (including Facebook). These recruitment platforms were utilized to inform and recruit potential participants from applicable schools of nursing (students attending LPN and/or RN diploma/ASN/BSN nursing schools in the Western Pennsylvania area) (see Appendix B).

Willing participants indicated their interest in participation by notifying me via email or text. I initially screened each potential participant verbally by asking the type of LD the student had and when and how it was diagnosed. The participant co-researchers were able to name their specific LD and were able to recall completing some type of evaluation (i.e., Woodcock-Johnson, Wechsler Individual Achievement Test, Test of Word Reading Efficiency-2), describe having an Individualized Education Program (IEP) during their K-12 education, and/or currently had accommodations in place for an LD at their school of nursing. If the initial screening confirmed evidence of an LD, a meeting place and time mutually agreeable to both the participant and researcher was arranged. During the initial meeting, details of the study were explained, including the participant's role in the study, and informed consent (Appendix C) was obtained. Each study participant was instructed to bring their student photo ID to confirm active enrollment in their school of nursing. Participant demographic information and the semi-

structured interview questions were asked during this meeting. The audio voice recorder and lanyard were given to the participant and the use of the recorder was demonstrated and tested. The participant then chose a pseudonym that was recorded on the voice recorder. This was done to ensure confidentiality should the voice recorder be lost or stolen. All participants were able to meet in person.

The consent form contained an explanation of the procedures used in the study: semi-structured interview, audio-memoing, and clinical document analysis. Emphasis was placed on the importance of their participation and thanks provided for their cooperation. Standard instructions, such as the ability to withdraw at any time and for any reason from the study, was provided in writing and verbally reiterated (Appendix C). The participants understood there would be no incentives for participation, but the participant could choose to keep the lanyard. I offered to read the consent form to the participant, and three of them asked to have the consent read to them. All questions were answered to the participants' satisfaction prior to obtaining their signature on the consent form.

The research study took place in relation to the participants' clinical placement setting, including the skills lab/simulation learning environment. Participants were given a small USB audio voice recorder on a safety lanyard with one hour of recording time. They were directed to use the audio voice recorder to record any thoughts, feelings, and/or experiences related to their LD and the clinical learning environment. The audio voice recorders were numerically coded for identification. The participant's pseudonym was recorded after the consent was signed and at the beginning of the semi-structured interview. This was done to demonstrate the use of the recorder and to identify to whom the data on the recorder belonged. Participants were directed to keep the audio voice recorder secure at all times, speak into the recorder in a private location as time

permitted, and to avoid recording any other voices or sounds. Data was collected until the participant believed they had dictated all of their thoughts, feelings, and/or experiences related to their LD and its impact on clinical learning, or until about one hour of voice data had been recorded. Recorders and lanyards were distributed in person. This was ideal so that (a) the participant could meet the researcher, (b) the participant could review and sign the informed consent for research document, (c) they could receive and review the functionality and procedures for use of the recorder, and (d) participant demographics and semi-structured interview questions could be asked and answered. The lanyard was offered to the participant at the completion of the recording of data. Six of the eight participants chose to keep the lanyard. One participant did not return the audio recorder or lanyard.

An examination of clinical-learning-related documents was conducted as an objective analysis of participant performance in the clinical education environment. Available clinical-learning-related documents were submitted only after the commencement of the study. All documents were obtained from the participants after the semi-structured interviews. I offered to make copies of the documents and return the originals to the participants. Only one of the eight who provided documents requested the originals be returned to them, and I did this when the participant returned their audio recorder. All participant documents are kept in a secure, locked location accessible only by me. Copies of clinical-learning-related documents were labeled only with the pseudonym chosen by the participant.

As the audio memos on the tape recorders were returned by the participants, I transcribed the data verbatim by myself into a readable document, including verbal ticks and grammatical errors in speech. Initially, the recorded data was transcribed using paper and pencil. When I recognized how labor-intensive this process would become, I utilized DragonWare transcribing

software to streamline the process. I listened to each participant's recording and verbally restated the data into the DragonWare microphone. The words spoken by the participants were then transcribed into print. I maintained the context and preservation of the true sentiments of the participants by transcribing their words and sounds exactly. Three of the participants provided typewritten data in addition to their voice recorder. These participants' distinctive transcripts are presented in Chapter 4 and include verbatim errors in grammar and spelling. All transcribed data was read and re-read multiple times for analysis and identification of themes. Similarly, the semi-structured interview questions were transcribed verbatim into a readable document and analyzed for themes. Clinical documents were also examined and compared to the themes from all transcribed data. All of the participant themes were then categorized and coded.

The Researcher's Role

In qualitative research, the researcher acts as a human instrument and cannot be separated from the research (Creswell, 2013; Lincoln & Guba, 1985). As the primary researcher for this study, my role as a human instrument was to facilitate the gathering of first-person data from the participants and to encourage their participation as co-researchers.

I was comfortable in my role as researcher to be in the background, without any expectations or preconceived notions. Once the data was collected, I carefully and repeatedly assessed the data for themes and similarities.

When one of my nursing students discovers an abnormal finding or symptom, my usual practice is to ask, "what are you going to do about it?" I am honored to present what the participants of this study had to say about being a nursing student with SLD in the clinical learning environment and to share what they suggest we might "do about it."

Data Collection

The triangle is one of the world's strongest geometric shapes (Kosmala & Kemmis, 2019). The concept of triangulation, a term derived from land surveying, when applied to research, means to utilize a variety of sources and methods to obtain data (Creswell, 2013, p. 251; Patton, 2015, p. 316). Triangulation is the combination of research methods to provide credibility by strengthening confidence in study conclusions (Lincoln & Guba, 1985, p. 306; Patton, 2015, p. 316, 661). Triangulation was utilized in this research study to capture and report multiple perspectives by collecting qualitative data using three separate data collection techniques: semi-structured interviews, audio-memoing information, and document analysis.

Because the hallmark of my study was to obtain the perspective of the participant, semi-structured interviews and audio-memoing were the initial data collection techniques. First, I performed an initial assessment of the student and their experiences in the clinical learning environment to date utilizing semi-structured interview data. A timely recording of the participant's thoughts, feelings, and experiences regarding their clinical learning was then done using audio-memoing. Semi-structured interview transcription and data derived from the audio-memoing data were then compared to and contrasted with the information obtained from the examination of the clinical learning documents.

In keeping with phenomenological tradition, the semi-structured interview data and audio-memoing data were analyzed in relation to the content of the documents provided by the students. Inconsistencies in interview and recorded data when compared to the document data were examined.

Semi-Structured Interviews

The initial semi-structured interviews allowed an opportunity for both the participant to describe their experience of being a nursing student with an LD at present in their nursing program and for confirmation of their appropriateness for participation in the study. Interviews were prescheduled at a time and location mutually agreed upon by the researcher and the participant. Moustakas (1994) encouraged the phenomenological researcher to be open, receptive, and naïve when listening to the research participants talk about and share their experiences. The researcher must put aside their own preconceived notions, viewpoints, or assumptions about the phenomenon being studied and take care to avoid prejudging or prematurely imposing meaning on the data (Moustakas, 1994). All participants were able to meet face-to-face. The study consent was reviewed and signed, basic demographic data was gathered, and then participants were asked the semi-structured questions. The interview process provides a participant freedom to express their ideas and feelings and for their thoughts and feelings to be valued (Moustakas, 1994, p. 39).

Data obtained from the semi-structured interview was audio-recorded using the same recording technique utilized by the participants during their audio-memoing clinical experiences (iGear Pro™). Backup recording was obtained using the audio-recording capability of an iPad. Written notes were taken when applicable during the interview process. The interviews lasted between 25 and 75 minutes, averaging about 45 minutes. I transcribed the data from each interview into a readable document as soon as possible following each session.

A pragmatic study framework relies intensely on the participants' "personalized seeing, hearing, [and] experiencing in specific social settings" (Van Maanen, 2011, p. 156). Because of

the pragmatic nature of this study and data collection methods, the semi-structured interview data provide thick, rich data that provide answers to the research study questions.

Interview Questions

- 1.1 What is your full name, age, marital status, address, children's names, previous education, etc.?
- 1.2 What is your specific LD diagnosis? Date of diagnosis? Age of diagnosis?
- 1.3 List any associated LD diagnosis (i.e., ADD, ADHD). Date of diagnosis? Age when diagnosed?
- 1.4 At what level are you currently in your nursing program? (example: third quarter of seven; second semester of five).
- 1.5 At your school of nursing, have you informed anyone about your LD? If yes, whom did you inform and why? If not, why not?
- 1.6 If you disclosed your LD, explain why, and describe how you felt about making the disclosure.
- 1.7 Are you utilizing any accommodations in the classroom and/or the clinical setting? If so, what type(s)? How were the accommodations arranged? If not, why not?
- 1.8 How many clinical rotations have you been enrolled in, and how many have you successfully completed to date?
- 1.9 Do you believe your clinical learning experience(s) are affected by having an LD? If so, how?
- 1.10 What methods or "tricks," if any, have you developed and used to overcome educational issues related to your LD?

1.11 Have any clinical instructors helped you? What did they do? Tell me about the relationship or rapport you developed with your clinical instructor(s).

1.12 Provide any additional information about yourself that you feel is important to share.

Questions one and two were written to establish a rapport and assess the applicability of participation of the student in the study. These questions provided factual information about the type of LD each participant has. The demographic information in question one was not used in the study but rather to get to know the participant better as a person and to understand their lifestyle. LD is an umbrella term for mathematics (dyscalculia), reading (dyslexia), and written expression disorders (dysgraphia), and incorporates deficits that impact academic achievement (APA, 2013; Cortiella & Horowitz, 2014, U.S. Department of Justice, 2012b). The terms LD and specific learning disability (SLD) are used interchangeably throughout this study.

Question three identified any additional problems the participant had that affected their ability to learn. For example, ADHD can result in performance issues in social, educational, or work settings (APA, 2013; “Attention Deficit Hyperactivity Disorder,” 2016). Auditory processing deficits (or auditory processing disorder), visual, visual figure/ground discrimination, visual memory, visual motor processing, visual processing, visual sequencing, and executive functioning deficit are all conditions that may also adversely affect learning (Cortilia & Horowitz, 2014).

Question four provided a basis for where the student is in the normal progression through a typical nursing program. It was anticipated that answers to this question may provide a theme among participants related to progression in their programs (i.e., repeated semesters, failures).

Questions five and six addressed potential reluctance to disclose an LD in the postsecondary setting (Evans, 2014a; Howlin et al., 2014; Kell, 2012; Kraglund-Gauthier et al.,

2014; May & Stone, 2010; Nalavany et al., 2011; Stewart & Collins, 2014; Tee et al.). A common theme noted throughout the literature is that students with SLD are unwilling to disclose their disability, feel embarrassment about their disability, and fear being negatively labelled (Evans, 2014a; Howlin et al., 2014; Kell, 2012; Kong, 2012; Kraglund-Gauthier et al., 2014; May & Stone, 2010; Nalavany et al., 2011; Stewart & Collins, 2014). Students with SLD in the literature have reported concerns such as being treated differently, being ostracized by their peers (Kong, 2012; Stewart & Collins, 2014), and labeled lazy or stupid (Kong, 2012). Knowles' (2012) theory of adult learning alludes to the negative consequences of non-disclosure of an LD, including a devaluation of their experience and a rejection of themselves as a person (Knowles et al., 2012).

Question seven was designed to assess whether and how the student manages their LD. When a student with an LD transitions into postsecondary education, the onus of responsibility for managing their disability rests upon them (ADAAA, 2008; Education for all Handicapped Children Act, 1975; Nalavany et al., 2011; White & Case LLP, 2018). Adult students with LDs must purposefully seek disability services if they desire academic accommodations in the postsecondary classroom (ADAAA, 2008; Rehabilitation Act of 1973; Title II, ADA, 2008; Thomas, 2015; White & Case LLP, 2018). Moreover, postsecondary learning institutions may require substantial evidence of an LD if the student requests such accommodation. The qualifications of the evaluator, a history and description of the disability, recent and appropriate documentation describing the disability, identification of specific diagnoses, evidence establishing the rationale supporting the need for accommodations, and recommended accommodations are commonly requested by postsecondary schools to verify student eligibility for classroom accommodation (DRC, 2013; Tademy et al., 1999).

Dewey (1938) believed that in order for experiences to be educational, they must contain an assortment of information, facts, and concepts that are expanded upon and compounded during a constantly reassembled experience (Dewey, 1938). The clinical rotation is where the student is expected to apply the information, facts, and concepts that they have learned. Knowledge expansion and the application of new knowledge is a basic and essential principle of the clinical learning experience. If a learner is challenged by the process of expanding upon knowledge attained because of an LD, quality learning is negatively affected. Question eight assessed the number of clinical rotations/semesters successfully completed and how many clinical rotations/semesters had been repeated, looking for indications of learning challenges.

Knowles' theory of adult learning defines the art and science of helping adults learn and emphasizes the value of the process of learning for adults (Knowles, 1973; Knowles et al., 2012). A deficiency in an adult learner's ability to learn diminishes and devalues the learning process (Knowles et al., 2012). The clinical nursing environment can be particularly challenging, as most students are unaccustomed to this type of learning (Luckowski, 2016). Compounding this academic challenge, customary classroom accommodations in the clinical learning setting may be unavailable, impractical, or simply unknown (Child & Langford, 2011). The impetus for questions nine and ten was to give a voice to the student nurse participant to describe whether and how their clinical learning experience was impacted by having an LD. Some students have developed their own complex coping strategies to compensate for their SLD, such as support groups, checklists for everyday clinical tasks, and professional role models (Murphy, 2011, p. 132). The pragmatic nature of this study anticipated that the participants would identify solutions they have utilized, the outcome of these solutions, and suggest reasonable

accommodations to manage their SLD in the nursing clinical learning environment. Their voices are recorded in thick, rich data and answers are provided in Chapter 4.

From the information gained from asking these questions, reasonable accommodations or solutions applicable to the nursing clinical learning environment can be developed (Murphy, 2011; Tee et al., 2010; Wray et al., 2012). Because of the dearth of information about accommodations in the clinical learning setting, this information could be used to plan for and provide specific interventions to support learning in the clinical environment for future students with LDs in nursing programs worldwide (Ashcroft & Lutfiyya, 2013).

Many researchers acknowledge the lack of policy regarding reasonable accommodations in the clinical practice environment (Ashcroft & Lutfiyya, 2013; Howlin et al., 2014; Murphy, 2011; Tee et al., 2010; Wray et al., 2012). Understanding how nursing students with SLD learn in the clinical learning environment and the impact their disabilities have on their clinical learning experiences constitute instrumental information to share with key stakeholders, such as nursing administrators, faculty, and clinical preceptors (Evans, 2014a; Stewart & Collins, 2014).

From the literature, nursing instructors are generally unprepared to teach students with LDs in the clinical learning environment (Howlin et al., 2014; Kraglund-Gauthier et al., 2014; Lombardi et al., 2011; Murray et al., 2011; Nalavany et al., 2011; Suplee et al., 2014). The clinical learning environment is an area where it is crucial for teacher and student to communicate and collaborate to facilitate learning for the student. Question 11 queried whether and how this essential process may be affected when a student is challenged with a disability in learning (Dewey, 1933). The answers from the participants to this question provide factual information for those who teach nursing students with SLD.

Question 12 allowed the participant the opportunity to introduce any other aspects of their LD not previously discussed. When all semi-structured interview questions were asked and answered, the audio-memoing data collection concept was introduced to the participant.

Audio-memoing

The intention of utilizing audio-memoing by study participants is to collect essential data in real time. This data collection strategy was chosen with two goals in mind. One, it is a simple way for participants to share thoughts, feelings, and experiences as they occur, and two, there is no need to use written communication. This creative method of data collection is designed to obtain subjective data in real time and in natural settings. Because dyslexia (difficulty with the written word) is the most prevalent specific LD (Cortiella & Horowitz, 2014), audio-memoing is a group-specific, appropriate data collection strategy that was used to obtain pertinent data in a suitable manner without requiring the participants to record their thoughts and experiences in written form.

A digital audio voice recorder flash drive, the iGearPro™ 16GB USB, and accompanying safety lanyard, was distributed to participants after they consented to participate in the study and a semi-structured interview. The audio voice recorder was physically coded for identification and each participant's pseudonym was recorded on their specific recorder during the semi-structured interview. The USB port on each audio voice recorder was secured with a label to avoid any inadvertent alteration or accidental deletion of recorded data. Each securing label also contained my name and phone number and a message to please call if the USB recorder was found.

Participants used the audio voice recorder to record any thoughts, feelings, and/or experiences about their LD as it related to their clinical learning environment. They were

instructed to record any thoughts, feelings, and/or experiences related to their LD as they thought of them. They were directed to keep the audio voice recorder secure at all times, speak into the recorder only in a private location as time permitted, and to not record any other voices or sounds. It was emphasized that in no way should their recording of data interfere with their clinical learning responsibilities and time, nor were they to record any patient-related information. Data was collected until they believed they had dictated all of their thoughts, feelings, and/or experiences related to their LD. Eight of the nine participants returned their audio voice recorder to me. One participant was text messaged four times requesting study data documents and the voice recorder. No response was received from the participant and no documents or voice recorder were returned.

Document Analysis

An examination of clinical-learning-related documents was conducted as an objective analysis of participant performance in the clinical education environment. Documents provided included forms such as those used for nurse-to-nurse report, pre-clinical worksheets, nursing health history and physical assessment documentation, and patient physical assessment documents. Documents were supplied by the participant and did not contain any patient identifiers. As requested, all documents had been reviewed and evaluated by their clinical instructor prior to submission to me for the study. The subjective and objective data from these clinical documents were examined and compared to the themes from the transcribed data.

Patton (2015) explained that document analysis can provide a glimpse into situations where the researcher is not able to directly observe (p. 390). Analysis of applicable documents and alignment with verbal statements and experiences of the participants may assist the researcher in articulating information that they might not have otherwise considered.

Inconsistencies or variations between schoolwork and audio-memoing data were compared and contrasted (e.g., clinical documents completed by the student are graded as exemplary, but the student audio memo data reflected poor performance in this area, or the student reported difficulty completing schoolwork on unlined required forms). The semi-structured interviews, audio-memoing, and document analysis were an ideal combination of data collection techniques that helped answer the research questions (a) How are nursing students impacted by their LD during clinical learning experiences? (b) What are perceived obstacles that hinder nursing students with LDs during clinical learning experiences? and (c) What are reasonable accommodations for students with LDs during clinical learning experiences?

Data Analysis

The data analysis procedures in this study align with the phenomenological research process originated by Moustakas (1994). By employing phenomenological reduction, I purposefully bracketed myself and any ideas or preconceived notions regarding students with LDs out of the data analysis and carefully and repetitively looked at and garnered commonalities from the interview and audio-memoing transcript data and document analysis in order to identify themes (Moustakas, 1994, p. 90).

The systematic steps of *epoche*, defining preliminary groupings through horizontalization, identifying themes, then constructing structural and textural descriptions was followed carefully in order to produce the essence of the experience of being a nursing student with an LD in the clinical learning environment. The thick, rich data collected from the participants in this study provided the answers to the research questions.

Epoche

The *epoche* process is a disciplined and systematic effort to set aside prejudgments about the phenomenon under investigation and is essential in a phenomenological research process. When using a transcendental phenomenological approach, the goal of the researcher is to initiate their study “as far as possible free of preconceptions, beliefs, and knowledge of the phenomenon from prior experience and professional studies” (Moustakas, 1994, p. 22). Moustakas (1994) encouraged the phenomenological researcher to be open, receptive, and naïve when listening to the research participants talk about and share their experiences. The researcher must put aside their own preconceived notions, viewpoints, or assumptions about the phenomenon being studied and take care to avoid prejudging or prematurely imposing meaning on data (Moustakas, 1994).

Epoche is a primary and necessary procedure before beginning a phenomenological study (Moustakas, 1994; Patton, 2015). Throughout this study I purposefully investigated the phenomenon of being a nursing student with an LD in the clinical learning environment with an open mind and without judgement. As I collected data for this study, analyzed the data collected, and wrote the results, I recorded my thoughts regarding possible bias in a reflexive journal.

Horizontalization

Data derived from the semi-structured interviews, the audio-memoing, and the document analysis were analyzed for significant statements, relevant quotes, and similarities. Horizontalization, or the clustering of data “horizons” into themes, was performed to understand how the participants experience the phenomenon (Creswell, 2013; Moustakas, 1994). Data analyzed during the horizontalization process was clustered and grouped into common categories and associated themes were derived. Statements that are repetitive, overlapping, or irrelevant to

the study were omitted from the study data base (Moustakas, 1994, p. 97), resulting in only the “textural descriptions” of the phenomenon of being a nursing student with an LD in the clinical learning environment (Moustakas, 1994, p. 118).

Identifying Themes

The relevant topics identified during the horizontalization phase of the data analysis were grouped into units of meaning. I bracketed out any personal conjectures and meticulously dissected the data to establish codes and themes (Moustakas, 2014). The reflexive journal was utilized throughout this study where I recorded and bracketed out my thoughts regarding the data being analyzed (Appendix D).

Transcripts from the interviews, audio-memoing, and clinical-learning-related documents were reviewed, and marginal remarks added. This initial analysis of data was then re-reviewed multiple times as I immersed myself in the information. The transcript data from the interviews, audio-memoing, and marginal remarks were coded and enumerated. Categories of themes were then developed from the codes (Table 3). A Microsoft Access database was created to cross-compare the themes noted by hand and computer-analyzed once again for patterns and themes. The coding process and identification of themes were conducted with a flexible mindset. Presuppositions were bracketed out to allow the research data to unfold naturally (Husserl, 1970, p. xxii).

Constructing Textural and Structural Descriptions

Textural description is a generalization of the participant experience that “provides content and illustration but not yet essence” (Patton, 2015, p. 576). According to Creswell (2013), a textural description of a phenomenon is an account of a participant’s spontaneous, pre-reflective perceptions of the phenomenon from every perspective (Creswell, 2013). Textural

descriptions were developed from the identified themes and used to describe the perceived experiences of the participants (Moustakas, 1994, p. 118). The textural descriptions obtained from this study provide a description of the phenomenon of being a nursing student with an LD in the clinical learning environment.

According to Moustakas (1994), the constructing of structural descriptions is “the ‘how’ that speaks to conditions that illuminate the ‘what’ of [the] experience” (Moustakas, 1994, p. 98). The themes identified and verbatim data from the participants in this study were used to construct structural descriptions. The formation of structural descriptions defines the perceptions or meanings of how the participants experienced the phenomenon of being a nursing student with an LD in the clinical learning environment. The integration of the textural and structural descriptions constructs the essence of the phenomenon of being a nursing student with an LD in the clinical learning environment (Creswell, 2013; Moustakas, 1994, p. 118).

Trustworthiness

Establishing the trustworthiness of a research study and data is dependent on the validity of findings and interpretations. Lincoln and Guba (1985) established criteria, referred to as trustworthiness, which is akin to rigor in quantitative studies (Lincoln & Guba, 1985). The establishment of transferability, dependability, confirmability, and credibility in a study design ensure the quality of the study results (Lincoln & Guba, 1985; Patton, 2015, p. 685). A trustworthy study is “balanced, fair, and conscientious” and is comprised of diverse constructions of reality, multiple perspectives, interests, and experiences (Lincoln & Guba, 1985; Patton, 2015, p. 725). Research data from this study has been validated methodically, addressing the credibility, dependability, confirmability, and transferability to ensure trustworthiness.

Credibility

Credibility is similar to the internal validity established in a quantitative research study (Lincoln & Guba, 1985; Patton, 2015, p. 685). Bracketing out any of my own ideas or preconceived notions from the data analysis regarding students with LDs addresses any potential researcher bias, thus adding to the credibility of the study (Patton, 2015, p. 708). Notes describing this process and my thoughts and ideas about LDs were transcribed in the reflexive journal during the months of data collection and analysis.

The use of triangulation, member checking, and thick descriptive data were used to ensure the credibility of this study. Triangulation uses a combination of research methods to provide credibility (or “believability”) by strengthening confidence in study conclusions (Lincoln & Guba, 1985, p. 306; Patton, 2015, p. 316, 661). Triangulation was utilized in this research study using three separate data collection techniques: semi-structured interviews, audio-memoing, and document analysis.

Lincoln and Guba (1985) considered member checking “the most crucial technique for establishing credibility” in a study (p. 314). Member checking shifts the process of validity confirmation from the researcher to the participant with the goal of a mutual decision regarding overall credibility (Lincoln & Guba, 1985). Taking data and interpretations of that data back to the participants permits confirmation of the credibility of the information and their verbal account of the phenomenon (Lincoln & Guba, 1985). Because of the nature of the participants in this study, member checking was used in this study. Two of the participants agreed to be participants in the member checking process. A private meeting place and time was arranged. I provided them with their individual verbatim transcripts and the overall themes derived from all participant data. They were asked to confirm the accuracy of the information and to add any

opinions about the research data results. Some of my notes from their interviews were censored to ensure the privacy of the participants.

Thick, descriptive data was derived from the transcriptions of the semi-structured interviews and audio-memoing, as well as from the comments by the member checking participants on the accuracy of any researcher remarks. The use of thick descriptive data, including direct quotes from the participants that articulate their ideas, feelings, and points of view is the basis of establishing the credibility of this study.

Dependability and Confirmability

Dependability is similar to a quantitative study's reliability and focuses on ensuring that research data is "logical, traceable, and documented" (Patton, 2015, p. 685). Dependability considers factors of instability and factors of phenomenal or design-induced change (Lincoln & Guba, 1985). Similar to objectivity in a quantitative study, the establishment of confirmability requires a linking of data findings or interpretations to the actual data in clearly apparent ways rather than being a "figment of the inquirer's imagination" (Patton, 2015, p. 685). Lincoln and Guba (1985) suggested utilizing an audit trail as a criterion to determine the confirmability of a study. An audit trail was executed using a data collection timeline to establish the dependability and confirmability of this study.

Transferability

The concept of transferability indicates that a study provides sufficient information so that conclusions may be transferred to other similar study groups or situations (Lincoln & Guba, 1985; Patton, 2015, p. 685). In this study, transferability was established using thick, descriptive data. Lincoln and Guba (1985) defined thick, descriptive data as a narrative explanation of the similarity that others may make in order to apply the findings of one study to another. The thick,

descriptive data reported in this study provides an in-depth description of the phenomenon of being a student nurse with an LD in the clinical learning environment. The use of quotes from the study participants articulating their ideas, feelings, and point of view is the focus of this study. Transferability would likely be influenced by the future researcher and their personal bias/worldview regarding nursing education and LDs.

Ethical Considerations

Having an LD can be a very sensitive issue. Student participation was voluntary and pseudonyms were utilized for the co-researchers. Their schools of nursing were identified only by what type of nursing program they provided. Approval to proceed with a research plan was obtained from the Liberty University IRB (Appendix A) prior to any data collection or recruitment for participation.

Privacy and confidentiality were ensured by the use of a locked filing cabinet in a private home office for all study materials. Signed consent forms were kept in a locked filing cabinet separate from the collected study data. I will retain all consent forms and data for a minimum of three years before destroying them. Any information gathered in electronic format has been password protected on my computer and will be deleted once it is no longer needed.

Confidentiality was guaranteed throughout the study. I was at no time the instructor for any of the co-researchers during their participation in the study.

Summary

A detailed description of my study methodology was reviewed in this chapter. The research design I utilized is a qualitative approach with a phenomenological research method to understand and describe the lived experiences of a group of student nurses with LDs in the clinical learning environment. The four research questions used to guide this study were

reviewed, as well as the researcher's role. Methodology for the identification of participants, the setting for the study, and the procedures for conducting my study were also reviewed. Data collection included semi-structured interviews, audio-memoing, and the analysis of student clinical documents. Phenomenological reductionism was fundamental in data analysis. The participants were co-researchers. I bracketed myself out of the data analysis process and bracketed in identified commonalities to identify themes. To further strengthen the trustworthiness of my study, I utilized the elements of credibility, transferability, dependability, and confirmability. Because having an LD can be a very sensitive issue, ethical considerations were reviewed, and the plan approved by the IRB was stringently followed throughout this study.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this transcendental, phenomenological study was to record the lived experiences of nursing students with LDs while in the clinical learning environment. By focusing on nursing students with LDs, I hoped to gain insight into how nursing students with LDs learn in the clinical learning environment and the impact that their disabilities had on their clinical learning experiences. In this study I identified nine co-researchers who were all currently enrolled in a nursing program and had a previously diagnosed LD. Through interviews, audio-memos, and analysis of paperwork, I was able to gain an understanding of their shared experiences of being a nursing student with an LD in the clinical learning environment. Their stories and experiences are shared throughout this chapter, which provided the themes that answer the overarching research question about what it is like to be a nursing student with an LD in the clinical learning environment. Throughout this chapter pseudonyms have been used for all co-researchers to ensure confidentiality.

Four research questions were designed to understand the lived experiences of nursing students with LDs in the clinical learning environment. The research questions that guided this study were:

1. What are the lived experiences of student nurses with LDs in the clinical learning setting?
2. How are nursing students impacted by their LD during clinical learning experiences?
3. What are the perceived obstacles that hinder nursing students with LDs during clinical learning experiences?

4. What are reasonable accommodations or solutions for students with LDs during clinical learning experiences?

Nine participants were recruited from the Western Pennsylvania area using social media and word-of-mouth to participate in a brief interview that identified their specific LD and to provide details regarding their type of nursing program and length of time in the program. Nine individuals completed the interview and consented to be co-researchers in this study. Eight completed and submitted audio memos and examples of paperwork assignments from their schools of nursing.

Participants

This research began with a 12-question face-to-face interview focused on the lived experiences of the participant as a nursing student with an LD in the clinical learning setting. The nine participants were then provided an audio memo recorder on a lanyard and instructed to continue to audio record their thoughts and feelings about their lived experiences in the clinical learning setting. In transcendental phenomenological research, the term co-researcher is used to signify a partnership between the participants and the main researcher in the gathering of research (Moustakas, 1994). Each co-researcher was instructed to audio-memo their thoughts and feelings and experiences after their clinical experiences and to return the USB recorder to me after about three weeks or when they felt they had recorded all pertinent data. One co-researcher, Tracy, did not return the USB recorder or her school paperwork assignments. However, her interview data still provided valuable insight into her lived experience as a nursing student with an LD, so I have included her in the results. The clinical paperwork analysis was examined impartially in concurrence with the participant quotes, then compared and contrasted with the resultant themes.

In qualitative dissertations it is typical to provide a rich description or portrait of each individual who participated in the study. However, because of the sensitive nature of the research and the potential ability to positively identify the participants, the protection of their anonymity was paramount. Therefore, each participant is listed by their pseudonym in Table 1 below, which lists only the individuals' basic demographic information, LD, and age at which they were diagnosed.

Table 1

Demographic Information of Co-Researchers

Pseudonym	Age	Sex	Disability	Age at Diagnosis
Mackenzie	19	Female	Dyslexia/ADHD	6
Barbie	44	Female	Dyslexia	Unknown
Debbie	21	Female	Dyscalculia	19
Tracy	19	Female	Dyslexia/Concussion	18
Alice	32	Female	Dyslexia	8
Lisa	20	Female	Dyslexia	12
Pam	25	Female	ADHD, Combined Presentation, Unspecified Anxiety Disorder	22
Alan	34	Male	Dyslexia/ADHD	10/33
Layla	36	Female	Dyslexia, Unspecified Cognitive Disorder/ADHD	34

To provide an additional description of the participant group, I have included a list of educational programs and degrees completed by the co-researchers before attending their school of nursing (Table 2). According to Dewey (1938), if a learner is challenged by the process of expanding upon knowledge attained because of an LD, an experience becomes merely an experience and no real learning has occurred (Dewey, 1938). Outlining the current education and degrees held by some of the co-researchers prior to attending nursing school demonstrates a

level of intelligence required to attain their achievements and proves their ability to accomplish true learning. The general listing of completed education was used to describe this important aspect of the co-researchers while ensuring their confidentiality.

Table 2

Education attained by co-researchers preceding nursing school enrollment

1 - Bachelor of Science in Communications
 2 - Licensed cosmetologist
 1 - Licensed esthetician
 1 - Licensed massage therapist (LMT)
 1 - Licensed Practical Nurse (LPN)
 1 - Paramedic (EMT-P)

Results

The four research questions guiding this study formed the basis for the data collection and data analysis process. Six significant themes were revealed from the data provided by the co-researchers' semi-structured interviews, audio-memoing, and clinical documents: negative emotions, disclosure, hands-on, negative faculty members, difficulties/obstacles, and accommodations. A description of the steps taken to develop the themes is provided in the following sections.

Theme Development

Using the process of horizontalization, noteworthy statements were identified, coded and themes were developed based on those statements (Table 3). The themes were organized with supporting statements from the co-researchers and provided answers to the study's research questions.

Table 3

Themes and Codes

Theme	Codes
Negative Emotions	Overwhelmed
	Frustrated/Angry
	Stupid/Dumb
	Stigmatized
	Stressed
	Nervous/Anxious
	Embarrassed
Disclosure	Decision to Disclose
	Decision to Not Disclose
	Fear of Discovery
Hands-On	Preferred Learning Method
	Psychomotor Learning
	Having an Experience
	Tangibility
Negative Faculty Members	Judged
	Insensitive
	Presumptuous
	Incapable
	Student Tenacity
Difficulties/Obstacles	Time-Management
	Easily Distracted
	Forgetful
	Verbal Communication
Accommodations	Non-Applicability Clinically
	Visual Learning
	Spell-check
	Notes
	Slow Down
	Extra Time
	Repetition
	Checklists
Determination	Drive
	Confidence
	Comfortability
	Support

All quotes and written statements from the co-researchers are presented verbatim.

Grammatical errors in speech and writing has been included to capture the authentic, shared,

lived experiences of the co-researchers with the phenomenon of being a nursing student with an LD in the clinical learning environment. A significant narrative, provided by the co-researcher Lisa, is included at the end of the first theme “negative emotions.” Her own typewritten statements embody a multitude of the negative emotion themes identified in this study that she experienced as a nursing student with an LD in the clinical learning setting. The following seven themes emerged from the data provided by the co-researchers.

Theme One: Negative Emotions

Negative emotion was the most common theme that evolved from all of the research data, expressed in numerous ways by the voices of all nine co-researchers. Co-researchers described seven types of negative emotions: feeling overwhelmed, frustrated/angry, stupid/dumb, stigmatized, stressed, nervous/anxious, and embarrassed.

Feeling Overwhelmed

When describing their experiences in the clinical learning setting, three co-researchers shared statements about feeling overwhelmed. “I felt overwhelmed and I felt like I didn’t have time to do paperwork, enough time to bond with the babies, assist with feedings, assist with teachings and education” (Pam, personal interview, September 24, 2017). Similarly, Alan noted “my first time back in clinical I was very overwhelmed” (Alan, personal interview, November 28, 2017). Pam also described a feeling of being overwhelmed with associating her classroom work to the clinical learning setting:

There’s like seven books required per semester so it’s combining all the information from multiple books, reading it, understanding it, making notes. I think I took 70 some pages of handwritten notes for that one test and um, it’s debilitating because you don’t, I can’t,

and I can't not do it and I won't, if I don't do it, I know that my grade will slip or at least I think my grade will slip. (Pam, personal interview, September 24, 2017)

Frustrated/Angry

Frustration and anger were common emotions expressed by many of the co-researchers. There comments illustrate how this negative emotion was experienced in the clinical learning setting. Barbie expressed frustration and anger when dealing with others in the clinical learning environment:

Sometimes it just takes a little bit longer to familiarize yourself with everything. And that doesn't mean you need to repeat a semester; realize that I am getting it, but it may have taken me an extra week or two than somebody else. It doesn't mean you're dumb. But don't talk to the person like you're slow. (Barbie, personal interview, June 6, 2017)

Mackenzie also expressed feelings of frustration, and explained the effects that had on her completing clinical learning assignments:

I'm notorious for getting frustrated and shutting down completely...which is really bad. But I don't think a normal person understands what it's like to have knowledge and to know how to get an A on something but not have the capability of putting it on the paper holding you back. Cause if I just didn't know it, it would be easier to accept but knowing I know it and just can't get it down is not a fun feeling. (Mackenzie, personal interview, June 6, 2017)

Mackenzie also expressed frustration specifically related to her trouble with spelling:

Today, I was frustrated with taking notes because I can't spell that well. I get notes later, but I still want to be able to take notes. I want to be able to just do it like other kids and I was just having a really bad day. There were words that I just knew I knew how to spell

and just weren't writing but the thing that set me off was when I wrote a 3 backwards cause I haven't done that since, like, elementary school. So, at that point I knew I just needed to walk, so I just went to the bathroom for a while and cooled off and came back. (Mackenzie, personal interview, June 6, 2017)

An examination of clinical-learning-related documents was conducted as an objective analysis of participant performance in the clinical education environment. A clinical document that Mackenzie submitted for this study was a two-paragraph written assignment about patients and their living environment that was completed in the clinical learning area. Her paperwork illustrated her reports of frustration with spelling: Written almost as if by a young child, there were multiple misspelled words and words that were difficult to decipher, as she described doing purposefully during her interview. 'Nures' (nurses), 'safty' (safety), 'teihr' (their), 'nagative' (negative), 'impack' (impact), 'dengares' (dangerous). Her final sentence reads verbatim: "*like same one be abused. Or some one with copd live with a house of smokers.*" She explained that this was an assignment due at the end of clinical and she was unable to use tools to help her with her spelling. During her submission of the paperwork for this study, she openly acknowledged the multiple mistakes and "awful" handwriting (Mackenzie, personal communication, June 2017).

Pam discussed the paperwork that she submitted, and talked openly about her frustration about her LD and difficulty with focus:

Um, with the care plan that I provided you, that professor spent I think over an hour explaining the process of what to do, how to do it, and I think I exchanged emails with her for a solid week prior because I could not remember what she, like the directions, they weren't specific, like written on a piece of paper that I could like follow it, they were

verbally given to us. It crossed my mind I didn't even know where to begin. I had no sense of direction and I felt like lost so, that really affected me because a care plan, that would normally take somebody, I don't know, maybe three hours to do max, I spent 14 hours on mine. I got a great grade on it, but still, 14 hours. (Pam, personal interview, September 24, 2017)

Stupid/Dumb

Of the negative emotions expressed by the co-researchers, a feeling of being stupid or dumb, or being viewed as such by others, was a common sub-theme. Pam described this concern in her statement:

I'm always aware of the perception I give my professors and I'm always aware of how I want to be viewed as by my classmates. I don't want to be the student that has a scatter brain, misplacing things, forgets to bring her stethoscope or her watch, or blurts out questions without actually listening to what's being said, and it seems like I consistently do that at every clinical. (Pam, personal interview, September 24, 2017)

Layla also expressed similar negative feelings. "From the time I went to kindergarten until I was 34, everyone was like 'you can't do that' [learn]. So, like, you hear it so many times you'd like, believe it" (Layla, personal interview, February 5, 2017). Another comment describing her struggle with her LD was "I felt like I always had it [dyslexia]. That I always struggled" (Layla, personal interview, February 5, 2017). Layla described other examples of feeling frustration and stupidity due to her LD in the clinical learning environment.

Whenever I looked at the label, I read the label as 5 mg/mL and it's really 50 mg/mL and it was frustrating because I sat here and couldn't figure out why I got it wrong if my math

was correct but it's because I didn't see the zero in the 50 mg/mL on the bottle of the Benadryl, so that was frustrating. (Layla, personal interview, February 5, 2017)

She continued:

I can never remember (details about medications) because I literally only had like 20 minutes to look it up and I just looked up thirty meds. Um, so whenever I'm asked what's it for [the medication] I feel stupid because I can't remember what it was for. (Layla, personal interview, February 5, 2017)

Barbie described her negative emotions related to having an LD: "I always had such terrible feelings about me and not having the guts to go and learn things" (Barbie, personal interview, June 6, 2017). She also stated: "Having a learning disability puts your anxiety level for feeling, just your feelings about yourself looking dumb, so that on top of not feeling comfortable, makes it more difficult to open your mind and learn" (Barbie, personal interview, June 6, 2017).

Stigmatized

A sub-theme of feeling stigmatized because of an LD was another negative emotion described by the co-researchers. Lisa described feeling stigmatized due to her LD:

It wasn't something you talked about, it was very, like stigmatized, so it's like, I want to find someone else that has it but I didn't really want to tell anyone that I have it, so, no one's going to tell me if they have it. Because that's not something that's like in class, when you tell fun facts, that's not like my name is such and such, and I'm dyslexic, because that's not really a thing you do (laughter). (Lisa, personal interview, August 19, 2017)

Lisa had a great deal to say about the negative emotion of feeling stigmatized during clinical learning. She described her negative emotions specifically related to spelling and writing:

I have had instructors see me slip up on my charting and spell something incorrectly. And, I felt like they looked at me different. And it was uncomfortable because I didn't really know how to explain myself, which was... Because it's uncomfortable... Cause I can't be like 'by the way I'm dyslexic', so it's not because I can't spell, it's because everything looks the same pretty much. So, that's frustrating. (Lisa, personal interview, August 19, 2017)

Lisa also added:

Then the nurses, like, when they see that I'm writing, like just seeing me scratch over and over again, I feel like they might view me as disorganized, even though I am meticulously organized person, like very planned person (laughter). So, yeah. (Lisa, personal interview, August 19, 2017)

Alice also described being stigmatized because of her LD: "I was questioned when I first started if nursing was something for me because of my learning disability" (Alice, personal interview, May 17, 2017). She also described how clinical learning can be adversely impacted because of her unwillingness to approach a clinical instructor:

I can't explain, say anything for people with dyslexia, all of them, but it's very hard for us to meet with somebody and say "hey, we're having a hard time." Because we are criticized most of our life for being stupid, or a moron, or the word I dislike the most, retarded. (Alice, personal interview, May 17, 2017)

Stressed

Stress, anxiety, and feelings of nervousness were negative emotions expressed in a variety of ways by the co-researchers. Mackenzie mentioned:

On clinical, I'm very stressed out and nervous. Um, I don't like the paperwork process of it because I can't spell as well as others and I don't like to show it because then my...I'm afraid my teachers will think that this [nursing school] isn't for me or they'll fail me because you technically need to be able to spell things. (Mackenzie, personal interview, June 6, 2017)

Lisa also described feeling stressed knowing the volume of clinical paperwork that she needed to complete and illustrates how that affects her learning:

I know I [have] at least 2 hours left ahead of me before I am done. I know the more stressed I get the worse I am, but it is just such a vicious cycle that I can't seem to break. (Lisa, personal communication, August 19, 2017)

Nervous/Anxious

Alice described both negative emotions of stress and anxiety:

Being a person like me with a disability, we lack a, I want to say, self-confidence, and anxiety. Especially during test-outs and stuff like that we really stress out and the whole "two attempts to pass and then you fail the semester" issue, like I understand that, but it stresses us, it stresses me out knowing I only have two shots to do something correctly even though I've practiced and practiced and practiced. I know I worry about perfection and doing everything right the first time. (Alice, personal interview, May 17, 2017)

In addition, recall Barbie's expression of anxiety about looking dumb because of having an LD and how that makes learning problematic. "Having a learning disability puts your anxiety level

for feeling, just your feelings about yourself looking dumb, so that on top of not feeling comfortable, makes it more difficult to open your mind and learn” (Barbie, personal interview, June 6, 2017).

Embarrassed

Embarrassment was a prominent negative emotion among the voices of the co-researchers. The co-researchers identified embarrassment as an obstacle that hindered many aspects of their clinical learning and learning nursing in general. Mackenzie described a basic nursing task performed in the clinical setting and how she overcame that obstacle: “It was embarrassing when they were in close proximity to me and watched me take a report on a patient. Tips I learn to hold my paper on a clip board so they couldn’t see my notes” (Mackenzie, audio memo, June 2017). Pam told of a situation she encountered while on clinical that caused her embarrassment:

Like, I got to witness a birth about two weeks ago so in the heat of the moment somebody asked me a question and, um, I was not paying attention cause somebody was just about to have a baby and I completely missed the physician asking me the Apgar score, like what did it mean so then that night I was really embarrassed like that I wasn’t focused on what was going on um then I went home and I, I studied that Apgar score so intensely that I could have slept, instead of, I probably studied it for about two hours. I studied it. I knew the answer, I didn’t even hear him asking, he would, he would talk directly to me and just too many things going on around me and I had no idea. (Pam, audio memo, October 2017)

Pam went on to describe her emotion of embarrassment by stating, “I felt so forgetful and so embarrassed in that situation [lost the lid to a Vaseline jar for an infant]. Partially embarrassed to

tell the nurse I was working with” (Pam, personal interview, September 24, 2017). Pam also mentioned: “I felt embarrassed because it’s my responsibility as a nurse to give all levels of care not only to newborn children but mother and family. I was unable to do that” (Pam, audio memo, October 2017).

Barbie described always being embarrassed because of her LD: “I was always just so embarrassed and no confidence and didn’t think I could do anything, or, but I knew I was smart” (Barbie, personal interview, June 6, 2017).

Alan chose to not disclose his LD because of embarrassment and not wanting to feel different from his peers:

No, it’s embarrassing. I don’t want, like sympathy to pass, I want to prove it to myself that I can do it but it’s kind of hard. I don’t want to be treated differently either. Like, by other students like, oh, he’s not smart or something. It’s embarrassing, plus I’m an adult, it’s not like I’m a child. It’s not, like the norm. I’m with other adults. (Alan, personal interview, November 28, 2017)

Lisa’s Negative Emotions

Lisa provided a graphic description of negative emotions related to LDs and being a nursing student in the following paragraphs. She preferred to type some of her answers to the question of what it is like to be a nursing student with an LD in the clinical learning setting rather than audio memo. I have included six of her descriptions and illustrations verbatim, including her own typographical errors and corrections. Her feelings and stories, including her own grammar and spelling, are a powerful illustration describing what it is like to be a nursing student with an LD in the clinical learning environment:

The pre-cinical work is absolute hell because [because*] I first have to read an online article. Reading is hard enough as it is but having to read something on a computer is damn near impossible. I need to follow each line with my finger and be close to it in order to actually be able to read at a semi-decent rate. (Lisa, personal communication, August 19, 2017)

This assignment is my worst nightmare. [Reading on a computer and typing a summary of my day]...I just looked at it and got upset and I didn't even start it yet. (Lisa, personal communication, August 19, 2017)

He told [told*] the nurse he wanted the NG secured with tape and a safety [safety*] pin. (he has a thick accent btw) To which the nurse responded, "So you want it secured with a safety pin and tape?" Another nurse nearby laughed and said that's literally what he just said but backwards. To which the surgeon responded with a laugh, "Oh no don't tell me I have a dyslexic nurse." Then they all laughed. All of a sudden I got this crushing feeling in my chest and started tearing up. I was finally starting to believe that being dyslexic isn't horrible & that I can be a safe nurse. That there was nothing to be ashamed of. But all of those horrible feelings of self-doubt came rushing back. I can't even describe what I was feeling. I felt absolutely crushed. Maybe I should be ashamed. Maybe talking about it is wrong. It's nothing to be proud of. It's a label that I hate. I hate that this is a part of me. I hate that people think I'm less of a person because of it. I hate that I have to waste time thinking about this. I hate that I feel like this. I hate that my brain doesn't work the way that I want it to. I hate that I get this upset. I hate that one comment can ruin my whole day. I hate that someone's ignorance can make me cry.

I hate that noone understands. not evem [even*] me.” (Lisa, personal communication, August 19, 2017)

Today I wis [was*] wit [with*] the _____ Visiting Nurse. As you kow [know*] home care nurses are always o [on*] the go and opperating out of their car. So since I was there she used me s [as*] a tool. She had me making phone calls, talking to doctors, giving her numbers, and reading her directions. Of course I can’t tell my left from my right but I didnt [didn’t*] want to tell her that. I was o [so*] terrified that I would make a mistake and embarssas [embarrass*] myself. I messed up giving her directions a couple times and she wasn’t too happy.” (Lisa, personal communication, August 19, 2017)

She pointed them out and I instantly knew that it wasn’t the speeling [spelling*] it was the fact that half of these letters look or sound the same to me. she laughed it out [off*] and said with a smile it’s okay I can’t spell either. I know she meant well but I wish I could just say without fear or scrutiny or a sympathetic look that I am dyslexic and I have thoughts that m [my*] hands just can’t connect with like there is a missing link or something. It is so frustrating. I wish I didn’t have to take all these extra steps and feel so ashamed of something that I can’t even control. (Lisa, personal communication, August 19, 2017)

Today is day two of typing my nurses note, care plan, and teaching plan. Today I have already put in 3 hours. yesterday I put in 4 hours. 7hours so far. I saw a classmate finish his over lunch. I was so jealsouse [jealous*]. I wish I could just make someone else type this for me. I have everything in my head and know what to say but my brain jjust [just*] cant [can’t*] seem to connect with these keys. I know I at least have 2 hours

left ahead of me before I am done. I know the more stressed I get the worse I am but it is just such a vicious [vicious*] cycle that I can't seem to break. (Lisa, personal communication, August 19, 2017)

Theme Two: Disclosure

Disclosure

Five of the nine co-researchers chose to disclose their LD to their school of nursing. Of the four who did not disclose, an unwillingness to have their disability made known to their peers and/or faculty members was expressed in that group. Tracy described the impact that disclosing her LD had on her clinical learning:

I kinda was more upset when, um, I found that they didn't really want to hear it. So they were like "okay I need this from you and that from you" and I get it and give them what they needed and they'd still give me a hard time. You could tell they didn't want to help. It was both the nursing school and the centers for learning that gave me a hard time. When the center gave me my accommodations my teacher was, like, questioning why I'm having my problems and need accommodations and things, which is really none of her business. You have the paper from both the doctor and my school so you should just be doing my accommodations, but she would ask like about one million questions, and that would make me frustrated and now I don't want to talk to you anymore because you're giving me a hard time even though you have all the information that you needed, so just help me. (Tracy, personal interview, August 5, 2017)

Mackenzie described the inadvertent impact that disclosure created on her clinical learning:

Yeah, um, I actually informed, the school did inform [the Dean of the School of Nursing], and the way I found out she was informed was on my second day of school, she

came up to me and questioned my ability to do this. When I asked her how she thought the Dean found out, she stated “I don’t know”. All I know is she pulled me aside and asked me why I have my accommodations and, um, questioned my ability to be in this program. (Mackenzie, personal interview, June 6, 2017)

Pam chose not to disclose her LD, and explained the impact that decision had on her learning nursing in both the clinical and classroom settings.

Don’t let that be a reason for people to look at you differently, you know, don’t let them know. You know, don’t ask for extra time to take tests, don’t ask to go take tests somewhere else, don’t stand out.... (Pam, personal interview, September 24, 2017)

Pam went on to describe an experience that uniquely impacted her clinical learning. She had tested positive for drugs, which would automatically bar her from attending clinical. It was also because of this experience she was forced to disclose her LD.

Well, it was actually really embarrassing [disclosing to Dean]. I tested positive for drugs related to taking meds for ADHD. So I didn’t, I didn’t really like that, but that enabled me to never let that happen again. So, like, for this semester I was on top of it. I called them (the drug testing company) myself. After I took it [the drug test] and made sure the steps were all in place prior to um, the Dean ever being notified that they came back, so she, she asks me, did they come back positive, and I say yeah, I have ADHD and I’m prescribed Adderall once a day, I said it would come back on my drug test but I’m medically diagnosed and prescribe it so I have proof, and I proved that to her. (Pam, personal interview, September 24, 2017)

Lisa chose to disclose her LD only to one clinical nursing instructor and explained the impact of that decision:

She didn't do the things that I noticed people do when you tell someone you have a disability, and they give you that look. Like, I don't know how to describe the look, but it's sort of, like, a, a pity look or a sympathetic look, and it just kind of makes me uncomfortable and she was the first person to never do that and she'll hold me to the same standard and not, just not make me feel uncomfortable about it. That was very cool. (Lisa, personal interview, August 19, 2017)

Lisa also described a negative impact that disclosure as a child had on her:

I had a teacher in eighth grade and he was like, "everything you're doing is right but your numbers are switched." And he told me I was dyslexic, and he helped me and I went to tutoring and my mum had no idea, so, it kind of was just our secret. (Lisa, personal interview, August 19, 2017)

Keeping her LD a secret also impacted her decision to disclose as a nursing student. Lisa explained:

Anyone I've ever told before, which isn't many, have, especially in this field [nursing], have been like "well, how are you going to do it then? How are you gonna like, you're in charge of people's lives, you're being irresponsible, you need to figure something else out, um, you can't be handicapped in the real world." (Lisa, personal interview, August 19, 2017)

Alan chose to not disclose his LD because of embarrassment.

Don't give me something that's gonna not be like my NCLEX (National Council Licensure Examination) that's not how the real world is. On the embarrassing part, I mean, that's another reason why I don't like coming forward because you're not gonna

be like “we’re going to modify the NCLEX for you.” (Alan, personal interview, November 28, 2017)

Alan also explained regarding disclosure of his disability:

No, it’s embarrassing. I don’t want, like, sympathy to pass, I want to prove it to myself that I can do it but it’s kind of hard. I don’t want to be treated differently either. Like, by other students like, “oh, he’s not smart or something.” It’s embarrassing, plus I’m an adult, it’s not like I’m a child. It’s not, like the norm. I’m with other adults. (Alan, personal interview, November 28, 2017)

Debbie chose not to disclose her dyscalculia but realized in the clinical setting that perhaps it would have been helpful.

I’ve always been like that. I wasn’t like “well I, I’ll figure out ways to get through something like that,” and I know before I go to anybody so, and aside for math I definitely, I think I should’ve gone to somebody first, but I try and figure out a way to do it on my own. Because, I’ve just always been like that. I don’t really seek a whole lot of help. (Debbie, personal interview, June 7, 2017)

Barbie knew that she would need to disclose her LD in order to be a successful learner. She explained:

I made the disclosure to be successful. I knew I needed the extra time, and I used to need quiet...I don’t need quiet anymore. I’ve overcome that. Um, I just knew I was going to have to...if I was going to pass and be successful, I was going to need that, and that’s the channel you have to go through in order to do it. (Barbie, personal interview, June 6, 2017)

The impact of disclosure of an LD was also expressed as a positive by some of the co-researchers. For example, Mackenzie stated “I am clear from the start with relationships, friends, teachers. I’m clear from the start and if they don’t take me as is then I’m better off without them. I don’t want to live in fear” (Mackenzie, personal interview, June 6, 2017).

Layla chose to disclose her LD in an effort to get help and be successful in her clinical and classroom learning:

I figured if I can get that help that I, like if I can get extended time, or if I can get any of the help that they can offer I was going to take it. You know, if I struggled through school for however many years I was in school, why not get the help that...so, you know, that’s why. (Layla, personal interview, February 5, 2017)

Layla also described the usefulness that disclosure had in the classroom setting:

I didn’t have a problem with it [disclosing] because, I was glad that I got extra help or extra time for tests. I didn’t rush through it. I read things wrong, so it was, I can read the question like, six times and I know that I’m like, I should be finishing but I’m only on question two because I have read it 40 times [laughter] that kind of thing. Like it was a little bit of a relief that I got the time. (Layla, personal interview, February 5, 2017)

According to the co-researchers, the effects on learning by nursing students with LDs in the clinical setting are impacted by their decision to disclose their LD. Disclosure had both positive and negative connotations for the co-researchers. They openly described why some chose to disclose and why some did not.

Theme Three: Hands-On

Hands-on

A second theme related to nursing students with LDs in the clinical learning setting was how indispensable it was to be able to learn by doing and the impact this possibility had on the co-researchers. Alice stated, “I like the hands-on aspect of clinicals” (Alice, personal interview, May 17, 2017). Layla expressly described a preference for hands-on learning rather than lectures: “I think it helps more, especially when we’re like in the simulation lab—like they oversee it rather than teaching it in [a] lecture. I understand it and remember it better” (Layla, personal interview, February 5, 2017). Alan also expressed a preference for hands-on learning:

I’m a psychomotor, um, you show me what to do and I can do it. Like if I can’t put my hands on it, I’ll do it, but I struggle with that because I don’t do well with verbal communication. (Alan, personal interview, November 28, 2017)

Mackenzie explained: “I don’t really struggle with the physical part of nursing, like hands-on. My issue is like mostly paperwork” (Mackenzie, personal interview, June 6, 2017). Barbie also used the phrase “hands-on” to describe her way of learning.

Hands-on. Sometimes when people are just talking at, to you, it’s just, kind of going in one ear and out, you know, you are not catching it, but when you are actually, “okay, I want you to put your hands on this and feel how this works,” you know, the hands-on repetition helps me gain my confidence. And then I have to find my own way. (Barbie, personal interview, June 6, 2017)

Alice also used the description of “hands-on” learning and illustrated how important this method of learning is for her rather than the classroom setting:

I got to experience how a nurse actually gets to hand out meds and do her job. I really like that aspect of nursing, the hands-on more than the books. [...] People with disabilities do not like to sit down and have something read to us. We like to hold objects in our hand, we like to have tangible things to look at and really work with them. (Alice, audio memo, May 17, 2017)

Alice was resolute that clinical learning was essential to nursing education for nursing students with an LD, and explained:

The more hands-on and the more we move around, the more that we interact, the better the, the better nurses, or lawyers, or whatever we want to be, we can be. That's why we thrive in clinical settings better or any aspect that we can be more hands-on because it makes sense once we do. (Alice, personal interview, May 17, 2017)

An example from her paperwork submission that supports her statements and led to the development of the hands-on theme included a final clinical assignment for Alice. She was required to present a patient head-to-toe assessment to her clinical group, including abnormal labs and the medications the patient was taking. She also needed to use some type of demonstration/visual aid as if she were teaching something to her patient, and then to identify how she (as the nurse) would evaluate her teaching strategy. She scored 10/10 on the rubric submitted. While discussing this assignment, she explained her rationale for the perfect score. She had time to prepare for this assignment, so the work submitted was neat and clean, and using a visual teaching technique was an ideal learning method for her as a student with an LD. Therefore, executing this area of the clinical assignment came quite natural to her. She mentioned that she even helped some of the other students choose a teaching tool that would be visual rather than the customary written instruction.

Layla described a scenario where she would have learned better if she would have been able to perform a skill rather than watch a skill performed by another.

She [the nursing instructor] told me exactly what buttons to press and I think I could have learned it better if I told her what buttons I should press before I press them (to make sure I was right). I really didn't see what the screen said because she was going so fast and she seemed to be in a rush to pass meds with other students. (Layla, audio memo, February 2017)

The co-researchers clearly explained why learning in the clinical environment could be a positive aspect of their learning. The clinical setting was their opportunity for hands-on learning, which is precisely what many of them described as their preferred method of learning and critical for them to truly learn.

Theme Four: Negative Faculty Members

Negative Faculty Members

Five of the nine co-researchers described experiences with faculty members who demonstrated negativity towards them because of their LD: Barbie, Alice, Tracy, Lisa, and Mackenzie. Barbie described the need for faculty members to be positive in their role despite the learning challenges of their students.

Even if a person is not doing something right and not meeting the objectives, it could be said in a way and taught in a way that's positive, not, I think, it's very hard on someone who's fighting a disability to have to be condemned for their disability, so to speak.

(Barbie, personal interview, June 6, 2017)

“I was told by an instructor at [name of hospital] ‘I don’t know how you’re going to be able to do nursing. I don’t think you’ll be able to be a nurse. Maybe somewhere slow-paced, like a nursing home’” (Barbie, member checking interview, June 2019).

Alice was particularly vocal regarding the obstacle of negative faculty members:

[A nursing instructor said] that people with dyslexia do not handle nursing well, and will fail out. I guess she was right. I was so determined to prove her wrong in that aspect that I ended up doing what she thought I would do. As a person with dyslexia, the last thing we need is for any teacher or any superior to tell us that we cannot do something. We have been told that our whole life, that we would not be able to do something. (Alice, personal interview, May 17, 2017)

Alice explained her perspective of negativity about LDs and how administrative faculty members particularly created obstacles for Alice. The experience described by Alice was not unlike the perceptions of a student quoted by Kraglund-Gauthier, Young, and Kell (2014), who described her challenges with interacting with faculty members: “some professors treated me like I was globally delayed” (p. 5). Alice also explained:

There has been a lot of negativity behind dyslexia. And now that it is becoming more popular and people are seeing that there’s a lot more that we can do, we still need the support, we still need the staff, not to really hold our hands, but to really work with us. And not try to make it more difficult for us and make us feel like we’re failures. Especially from [the] administration. (Alice, personal interview, May 17, 2017)

She continued:

Since I disclosed my dyslexia to these two [nursing administrators], that any help I want or I need, I’m not going to get it. They’re giving me the bare minimum to just say, “well

we helped you.” And that hurts, because I’ve been to college and I’ve, I’m a very smart person. But, nowhere has anybody ever told me that “we won’t do this for you.” That’s just how I feel right now. (Alice, audio memo, June 2017)

[...]

I feel like the teachers get frustrated with us, with me in general. With me cause I continue to ask questions and you, I like to think out loud, and make sure I’m on the right track and sometimes the nursing instructors will look at you or have this face of frustration and that makes you, makes me want to really not ask questions because I feel like I’m being a bother to them. (Alice, personal interview, May 17, 2017)

Alice also shared her thoughts on a possible solution to negative faculty members being an obstacle:

I think all teachers should take a class about learning disabilities. It’s easy to understand them on paper, but until you really see the world in our eyes and how we have to walk through it daily and the struggles that we have, the teachers won’t understand. And there’s some teachers out there that believe dyslexia and ADHD and other things aren’t real. It’s all whole bunch of malarkey. And it’s really not. (Alice, audio memo, June 2017).

Alice also mentioned:

After meeting with the two heads of the nursing, I still struggle with them, or with one of them. Especially after the first initial meeting her and I ever had, was with dyslexia, she offered me to go to the cooking department [laughter]. That caught me a little off-guard. So, I’m trying my darndest to show her that I can get through the nursing program and I can do this. (Alice, personal interview, May 17, 2017)

Tracy described an experience she had with faculty members being negative related to her accommodations:

My nursing instructors, I had a class, it was lifespan development that was a major requirement, she was my nursing teacher, she was going, she really gave me a hard time with my accommodations, she didn't really want to help she had a problem with me having a notetaker. I guess she thought it was more like me being lazy and didn't want to take notes. I can take notes but then I'm not going to understand when I get back to my room. There are all the spaces in between them so, um, I wouldn't really understand them, or, I don't know if she didn't care, or just didn't understand, but she was very rude about it. I kind of got used to it, trying to deal with her. (Tracy, personal interview, August 5, 2017)

Barbie also experienced some negative assumptions from nursing faculty members:

It definitely doesn't help when someone assumes that you automatically, assumes that you can't do it. When someone's not teaching you the clinical, their teaching, assuming they need to be teaching to a dyslexic, not to a student. That maybe you might have to slow down a little bit and have some consideration about the dyslexia but they're not impaired. (Barbie, personal interview, June 6, 2017)

Barbie mentioned a particular faculty member by name, stating: "[she] doesn't make it easy to talk to her" (Barbie, personal interview, June 6, 2017).

Lisa described her negative experience with faculty members as a lack of understanding of LDs on their part:

Like, my [pharmacology course] teacher, I told her [about having an LD], and she was just, like very, not understanding about it, like, well, you know, in the real world, do you

really think this is safe, and what if you give the wrong med, what if you do the wrong calculation, what if you round wrong, and just kind of filled my head with all these thoughts like, am I going to kill someone? Is it wrong for me to do this profession? Because I know if I, if I ever screwed up, because of this I know I would never forgive myself. I would absolutely hate myself. Because I would feel like, I wanted it so bad that I let it get in the way of my judgment and I was blind to it, and she really just terrified me. So, yeah. (Lisa, personal interview, August 19, 2017)

Mackenzie described her experience with negative faculty members publicly sharing an objectionable example about a nurse with an LD and the impact that had on her:

[The faculty member] didn't think I should be in nursing. She even said in front of the class that her friend was dyslexic and was a nurse but quit because it was dangerous and she could kill somebody. She made sure to make direct eye contact with me. Then on clinical she would follow me around or watch me a lot closer than the rest, making me feel uncomfortable and [incapable]. (Mackenzie, personal interview, June 6, 2017)

Theme Five: Difficulties/Obstacles

All nine of the co-researchers in the study described circumstances and told stories related to their LD being an obstacle in the clinical nursing setting. I have labelled their described circumstances generally as difficulties/obstacles and listed their experiences using their voices by name:

Layla

Layla described a difficulty she had with medications:

I wouldn't be able to say what it was for, even though I just literally read it like two seconds ago. That's one problem that I had. Or, like, the meds were so hard to say.

That's another problem I had. I'm terrible at sounding things out, so like when I go to say it I sound like an idiot because the patient is probably like, "okay this girl can't even say what she's giving me." But, that's one thing that, like, I knew what it was, I just read it and I can't tell you what it was. (Layla, audio memo, April, 2017)

She had previously mentioned:

When growing up I always heard "you're not smart enough for nursing school," which is why I went to [a different profession].

[...]

I think whenever I do things, I get like all over the place. I even like told her [the clinical instructor] that like I felt like, I think it was in the clinical evaluation, where I'm like, I just start thinking oh I gotta do this, and I'm so scattered and then before you know it I have this, all this crap on the paper that I don't need. I think too much into it kind of thing. I think it's because I'm afraid I'm going to miss something, then I just like overdo it. And that's just maybe because like I did get a lot of things wrong before. So I don't want to get it wrong and by doing that I get it wrong (laughter). (Layla, personal interview, February 5, 2017)

Barbie

Barbie was open about the difficulties and challenges with having an LD in the clinical learning environment:

Maybe we're the more advantaged because we have to fight harder. It's really hard in the beginning, when you're young, when people say something like what was just told to me; maybe you are just not meant to do this or you need to do a different job or you repeat.

When you're younger, it's kind of like, well, okay. Maybe I'm not good enough.

(Barbie, personal interview, June 6, 2017)

She also mentioned that she was

not always good at explaining. There's plenty of times where I know exactly what I'm saying but it just won't come out of the mouth, and that's part of the dyslexia too.

[...]

I know I'll be a good nurse; I will know how to improvise and think it through. I'm just slower, and if unfamiliar I'm even slower.

[...]

You know, if they can slow down and help me say it, I know everything. It's like you're locked. Something from here to here [points from head to mouth] is locked. It's funny, it's like it's the input and the output, the eye is the input and the mouth is the output and your input and output aren't right. (Barbie, personal interview, June 6, 2017)

Barbie expounded further on her thoughts about input and output:

Okay, here's a good example: when I'm on clinical, and [the clinical instructor] will ask me a question sometimes I absolutely, I'm thinking and know one thing but something completely different comes out of my mouth, and then she automatically assumes that I don't know it. That's part of dyslexia. Getting it from the head to the mouth. (Barbie, personal interview, June 6, 2017)

Alan

Alan described organization and focus as difficulties for him: "Trying to stay organized and detailed-oriented is still a difficult task. Hopefully the next clinical rotation won't be so hard

because I'll be used to the repetitiveness of doing assessments and clinical tasks" (Alan, personal interview, November 28, 2017).

He provided further examples:

I have a hard time in the morning trying to remember everything I need for that day even if set it out the night before. I keep backup material in my car because I usually forget something. I sometimes get distracted during clinical and lose track of time. I am working on better time management and getting things done more efficiently.

Another difficulty Alan described was basic reading and writing:

I could read just fine it just didn't seem to compute. I just had trouble translating it. Like I said I would get the numbers all jumbled sometimes. I never saw them wrong, I just put them in the wrong spot. Like wrong placement. And she [the clinical instructor] thinks that was because of the ADD/ADHD and not paying any attention, like doing a drug calculation like I really focus and put everything I have into it to pass.

My problem is books. Like you show me, that's why [his previous profession] was so good for me, you show me what to do and I'm good. Show me once, you put a book down in front of me and I'm, like, this isn't going to go well. That's just not how I learn. But with nursing school it's really not an option. (Alan, personal interview, November 28, 2017)

[...]

You have to read and translate the nurses notes and you have to give a report to your clinical instructor, well, it took me longer to do that because I can't always understand what the nurses notes say.

[...]

Sometimes I would, I would write down like I would start writing down like and I would catch myself because I be writing down all the wrong information on the wrong patient, so instead of just rewriting everything I would just cross out the patient's name and write the other one. (Alan, personal interview, November 28, 2017)

Alan described one particular difficulty for him that is a common teaching technique in nursing:

Lectures in class kinda' help um, depending on the teacher. Like, some teachers tell stories and I get lost.

[...]

I think having ADHD that was undiagnosed the first time around was one of the reasons I failed and I think having ADHD treated is like a double-edge sword, I can focus and get good grades but I don't feel like myself most of the time. (Alan, personal interview, November 28, 2017)

Alice

Alice shared a variety of difficulties she has encountered as a nursing student with an LD.

For example:

As a person with dyslexia, I'm learning that the advanced track is probably not the best option.... We can't retain information just from reading a book. As much as you think it's helpful, with people with disabilities, we don't learn like that. (Alice, personal interview, May 17, 2017).

Time and organization were specific difficulties for Alice:

A lot of these projects take up a lot of our time, it doesn't seem like it to the teachers, but as a person with dyslexia filling out a book that I have to look up all the pharmaceutical

information on, doesn't seem like a lot but when you have two other projects that are due, it's very difficult to do.

[...]

Uh, it's just trying to get all the information in and trying to stay organized. That's the biggest thing that I feel that I struggle with, with dyslexia is staying on top of things and being organized" (Alice, personal interview, May 17, 2017).

Other aspects of her course that Alice found difficult included finding help and writing and spelling: "One of the major things is finding outside help. Not a lot of tutoring goes into the [nursing] program or having the groups that we need" (Alice, personal interview, May 17, 2017).

When asked how her clinical learning was affected by having an LD, Alice stated:

I think me trying to correctly write what I want, like articulate what I want, and correctly spell it hinders what I want to say and how well it comes out, I guess. Trouble with expressing and writing. Written expression. I can tell you verbally what's going on, that's not a problem. Examples, um, just when I first started because we had to write up our own, um, care plans it was mostly my spelling that got me into trouble. (Alice, personal interview, May 17, 2017)

Alice submitted two handwritten assignments from her Spring 2017 clinical rotation that were to be completed at the clinical site and turned in immediately after completion. It was noted that Alice had multiple words misspelled and words scratched out attempting to correct mistakes. Some of the words she misspelled were "dow" (down), "can" (cane), "alter" (altered), "say (stay), "someon" (someone), "differnt" (different), "topicas" (topics), and "anixty" (anxiety). Her paperwork illustrated her reports of struggling with spelling and written expression. She also stated:

I struggle with more and more as the nursing school goes on is trying to stay organized and on top of things, and prioritizing, 'cause everything, every teacher has a different priority, and every teacher says mine is a priority, this is a priority, and as an adult learner it's hard for me to prioritize. What is really important? (Alice, personal interview, May 17, 2017)

Pam

Pam was able to describe a multitude of personal difficulties she encountered in the clinical learning setting—for example, hiding a lack of understanding,

I didn't want her to know that! That I didn't understand it [care planning] when I didn't understand it. I also didn't want her to become frustrated with having to take time for the clinical experience in the clinical rotation, to answer multiple questions about something I believe she feels she had answered by giving us an example. (Pam, personal interview, September 24, 2017)

Time management, remembering and retaining information, and struggling to understand the learning environment were some of the difficulties Pam encountered. "I felt overwhelmed and I felt like I didn't have time to do paperwork, enough time to bond with the babies, assist with feedings, assist with teachings and education. I just didn't have enough time" (Pam, personal interview, September 24, 2017).

She also commented:

I'll say, she'll say, she'll say it to me fifteen times and it's gone in like five minutes because something else catches my attention and if I don't meticulously study it, or like memorize it over and over and over a period of time I won't remember it. (Pam, personal interview, September 24, 2017)

Regarding her difficulty with understanding, she explained:

And like in that [the clinical] setting you can't record so there's a big difference between class and clinical and theory. Theory I can record the whole class and re-listen to it, I can listen to it multiple times. Clinical you can't do that, that would break HIPPA. Because I'm constantly in contact with patients so I struggle a lot, understanding what they're saying, what to do. (Pam, personal interview, September 24, 2017)

A major topic discussed by Pam in the personal interview and on the audio-memoing was her inability to focus. She provided multiple examples and stories describing this difficulty as it related to her LD:

I never take my cart into the room with them [the patients] and document at the same time because if they're talking to me I do not hear them. Or vice versa. They could be talking to me and, and everything that I'm writing, it would make no sense. I can't do two things at once. It would save me a ton of time, but it's not possible for me.

[...]

If I'm doing a task or like I'm doing a head-to-toe assessment I have to just write it down on a piece of paper which I write these pink papers and I write it down on that piece of paper um, and, unfortunately I forget things on that paper, or like I'll just go in, I'll do the whole head-to-toe, leave confident then realize I forgot to check their pupils, and then I'll have to go back in and that happens at least once, at least once every clinical, maybe multiple times, sometimes I don't listen to their stomach. Because it just gets my mind, I'm like oh, you've got swelling in your legs and I completely skip over the stomach so um, I'm working on that. It's like a slow process, I'm working on it. Um, just practicing like they say head-to-toe. (Pam, personal interview, September 24, 2017)

When I asked Pam what would happen if a patient was talking to her while she was performing her head-to-toe exam, she explained:

Um, like I can listen to them talk to me, but I would normally just stop what I'm doing so if they're talking to me and I was in the middle of checking pulses I just take my hands off and try to give them my undivided attention and just look straight at them. And I notice I've gotten better at that. (Pam, personal interview, September 24, 2017)

Pam provided another example about her difficulty with focus:

Over the summer the professor really shadowed you for your first head-to-toe, um, the first time you gave an injection, IV push, whatever it is, and they would be talking to me and, um, I'd be staring, I'd be looking directly at them as I'm looking at you, and I'd hear nothing that came out of their mouth because I'm, in my head, I'm like all right don't forget to wipe off the top, don't forget to inject air into the vial, I'm like doing the steps in my head. Um, and that's my hyperactivity, I can't calm myself down enough to listen, I can't do it. (Pam, personal interview, September 24, 2017)

Pam also noted that "If I had to walk away to write something down, I'd probably have to start over again" (Pam, personal interview, September 24, 2017).

Other examples of difficulties with focus that Pam provided included statements such as the following:

I struggle with knowing if I'm a learner or if it's my ADHD. I do, like trying to figure out well did I make that mistake like because I'm not paying attention and because I have ADHD?"

[...]

Sometimes I can say yeah this is, this is because I'm not focusing and this is ADHD, and sometimes it is because I'm still just learning, and I think like with this study, that's can it be, that's a big thing, is it just because I'm still learning? Is it just because we're going to make, like common mistakes because we're new or because we've never done it? Or is it because our disabilities are affecting how we work, and I always struggle with which one is it? But that's when I go home and I and I study and, ah, study and study and study and study. And I'll never let myself make that mistake again. (Pam, personal interview, September 24, 2017)

She also mentioned:

Something I do struggle with is, is it just because I don't know that information, is it just because I, I don't have my skills as honed yet, or is it because I physically just, I'm unable to concentrate because there's just too many things going on?

[...]

So for me extra, like, stimulation from multiple, different things around me throw me off completely so I just kinda tried to pay more attention, give undivided attention, look at the mother directly in the eyes when I'm talking to her and listen to what she is saying, write it down, try to get everything that she has to say before I start doing any tasks.

(Pam, personal interview, September 24, 2017)

She later returned to the subject:

It doesn't come up in my head while on the clinical. But when I leave clinical and I go home and I, and I think I mentioned this to you, I go home and I, I think about my day. Um, I'm studying while I'm getting everything prepared for the next day, I think out my day, and I can say well this is, could this be ADHD? Or is this just because I didn't know

it? Was this just because there was too much going on? (Pam, audio memo, October, 2017).

Pam did provide some positivity about being a nursing student with an LD, but explained just how difficult learning is for her:

Every day I am growing more. More aware, more focused, and able to give more competent care. But to each individual without my disability, know that my learning disability, my lack of focus, my hyperactivity, interferes with my profession that I so deeply love. (Pam, audio memo, October 2017)

Mackenzie

Mackenzie described having difficulty with spelling and listed examples of her personal struggle in this area:

Sometimes the teacher would give us like help with our tests that were coming up and they'd be, like, take these notes. I couldn't take those notes; it was too fast and I couldn't read it later if I wrote it because I can't spell. (Mackenzie, personal interview, June 6, 2017)

She also added:

The clinical paperwork that was hardest for me was the paperwork that we did on site. I'm nervous for next quarter with all these drugs. I don't think a normal person can spell some of these, but that's going to be even harder on me. (Mackenzie, personal interview, June 6, 2017)

Debbie

When Debbie was asked how her LD might be an obstacle in the clinical nursing setting, she replied: “Oh definitely pharmacology applications...the way that it is, the class itself. It’s technically a math class for part of it. (Debbie, personal interview, June 7, 2017).

Other examples of difficulties Debbie encountered in the clinical setting included:

I definitely have to slow down and just stop, read the question a couple times and then, either like, I have scratch paper, so I can write the problem down several different times so I can just like, double check and recheck myself that I’m doing every step that I need to, the math is correct, like it’s just double check and double check, it’s double checking for me. (Debbie, personal interview, June 7, 2017)

Debbie expressed having difficulty with disclosing her disability, saying:

I’m very stoic I guess, I don’t like to ask for help, you know, I think I can do it myself. But if I get myself into a sticky situation, then I’m like, well, I know that’s not happening [laughter]. I don’t, I, end up going to people, reluctantly, but I do it. I don’t know, I just, I’m not, I’m not really sure. (Debbie, personal interview, June 7, 2017)

A clinical paperwork submission from Debbie supports her challenge with asking for help. On a care planning document she submitted, Debbie was required to list the indications for laboratory testing that her patient had done. Debbie explained during the participant interview that she had intentionally left the lab test areas blank because she did not understand the numbers of the lab tests and therefore was unable to process the reasons the labs would have been ordered. Rather than ask her clinical instructor for clarity or explanation, she simply left the assignment undone.

Lisa

Lisa was able to provide specific examples of how her LD affected her clinical learning experience:

Oh yeah, definitely. When I have to document, and I have to type nurses notes and stuff like that it definitely takes me more time. They don't have spell-check on the computers, so if I put the wrong letter or the wrong number it, it messes with it. So I really gotta double check everything. When I write my handoff reports, to the next nurse, I gotta make sure it looks good, and everything looks spelled correctly, so I'm scared that it, they would catch something or if I made a mistake, that it would harm a patient, or they would look at me differently, or think I'm not as good as them or as equipped for the job so it's just like anxiety there with that, um, doing meds. I'm constantly triple-checking and making sure just 'cause; there's never been a mistake, but I'm just scared that one day I'm not going to triple check myself and there will be one. Um, but I do think it makes me safer in a sense, because I'm never going to trust myself with it, whereas other students will just trust themselves with it and get comfortable with it, where I never will so it's kind of an advantage to a point. I know I'll never have the luxury of getting comfortable, if you want to call it that. (Lisa, personal interview, August 19, 2017)

Theme Six: Accommodations**Accommodations**

The final common theme identified among the co-researchers was the use of accommodations. This theme also helped to answer research question four: What are reasonable accommodations or solutions for students with LDs during clinical learning experiences? It was noted that while many of the co-researchers offered answers and suggestions for managing their

LD, nearly all were applicable only to the classroom setting. None of the co-researchers had formal clinical accommodations. For example, Alice mentioned that “I find it easier doing a flipped classroom and doing the test after you teach it” (Alice, personal interview, May 17, 2017). Tracy also acknowledged that her accommodations were not applicable in the clinical setting: “We did writing stuff [in the classroom] but I had the notetaker” (Tracy, personal interview, August 5, 2017).

Mackenzie described many of the methods she utilized to manage in the classroom setting:

If I’m having a bad day with reading, I’ll slide a paper down, so I can like, cut out the middle, and put tape in it, or just cut out the middle of the paper or use two note cards so I can only see one line at a time. And that’ll keep me focused more and it’ll cause things to not move as much. Um, to help me pay attention, I fiddle with things in my hands. I’ll move my knee and I’ll just kind of fidget. Um, if I’m really in a tight spot and I can’t spell something, but I know the beginning, I will make it look right, but I’ll also make it look like I have really bad handwriting so they know what the word is, they just can’t see every letter ‘cause my handwriting is bad. So, they don’t know that I spelled it wrong.

(Mackenzie, personal interview, June 6, 2017)

Regarding test taking, Mackenzie also noted:

I’ve been sitting in a separate room to take my test and that helps me because, any time I take a test I always don’t want to be that person that’s holding up the classroom moving on, because I’ve been that person so I tend to rush, and I end up doing pretty bad. So, if I don’t see everyone else, then I can’t tie myself and I take the test as I need to.

(Mackenzie, personal interview, June 6, 2017)

Alice provided multiple specific suggestions for instructors regarding accommodating nursing students with an LD:

The more visual you are with a person with disabilities or more expressive you are, engages us more to want to learn. The worst thing that a teacher can do is sit down, read from a book, and expect us to understand it. It doesn't work that way. I can read the book, but it doesn't mean I'm comprehending what I'm reading. (Alice, personal interview, May 17, 2017)

She also mentioned that "it's easier, math-wise, to have a visual aid for us" and that "I find it easier doing [the homework] after you teach it because it clicks better than when I have to read it" (Alice, personal interview, May 17, 2017). Specifically, she pointed out:

If there was a way, for a person with a learning disability, that we could sit down and organize with the teachers and the staff and look at the time management and how to break it down, I think that would be the best. (Alice, personal interview, May 17, 2017)

Other "tricks" that Alice shared included:

I have learned to talk into my cell phone for spelling on clinical, that helps. Um, tricks I've learned, If I have to read something and I don't know what it is, I skip over the word and then by reading the other context I can figure out what that word was I missed. Um, because I'm not a really good notetaker, that's why I choose to listen in class it's easier for me than it is for me to write out notes, and then I go back and read what was in the book, so that makes it easier. (Alice, personal interview, May 17, 2017)

[...]

A person with a learning disability tends to want to type all their information; it's easier for us to process and organize our thoughts because we can see it in front of us. Versus

writing it. And we also have the advantage of spell-check and grammar check. It just looks neater and nicer. (Alice, personal interview, May 17, 2017)

Pam described her use of paper on both in clinical and in the classroom:

I tried to have like a little piece of paper on me. I write tasks, and I'll order them, what priority needs to be done first.

[...]

Yeah, any kind of paper; that's great, because with that I can review back and when I review back through it not only are her notes that were already written in there, but then I can add to it, so that's great for me. (Pam, personal interview, September 24, 2017)

Mackenzie described tools she used to overcome her struggle with spelling:

Thank God most of the times I had understanding teachers and I could use my phone for spell-check or they would spell-check it if I wrote it on a different piece of paper.

[...]

I [use] spell-check on my phone and other things. So, I just have to kind of be disguised and it's not fun, but I can't spell and I can't write things down incorrectly so I manage. I use a lot of the abbreviations because I've studied those pretty hard because that, that way I don't have to spell as much. (Mackenzie, personal interview, June 6, 2017)

Lisa also described various tools and "tricks" to aid her in the clinical and classroom learning setting:

Yeah, spell-check definitely saves my life most of the time. But sometimes spell-check doesn't even catch it, it's just like sometimes spell-check will just be like we don't know what this is, we just know that it's wrong [laughter].

[...]

I try to avoid typing at all costs, um, I do a lot of memory training, that way as another way to trust myself, because if I write down the wrong thing, I know that my memory is going to be there to be, like, no, I know this is right. Um, just repeating it to myself a lot. Trying to trust myself. I have, I always print out a hard copy of everything that I'm supposed to do, instead of writing down, which takes extra time, so I usually get to the clinical floor about 15 minutes sooner than everyone else. So lastly, I always have notepads on me, if I'm ever unsure I run it by everyone. And I triple check myself. Um, I used to write in cursive for a while so people couldn't see that I was making mistakes. Because it's like, cursive just looks like squiggles anyways [laughter] so it's like a B or a D, it doesn't really matter because it all looks the same. Um, but that kinda messed me up a little bit, so I stopped doing that. But, yeah, that's all I've really figured out so far. Also, I've been color-coding a lot of things. That's something that, or I'll like, draw. If I can draw a little picture instead of having to write something out, then that's pretty helpful. (Lisa, personal interview, August 19, 2017)

Layla noted:

I write everything down on one piece of paper and when I have to rewrite it because my spelling is all wrong and sometimes I write letters wrong. Like I'll write A B, I mean A P instead of A B. So I have to double check stuff like that at home.

[...]

I recopy everything. And then I usually have my husband check it. I'm allowed to use my cell phone to check spelling, etcetera, as long as I'm not anywhere anyone could see me. (Layla, personal interview, February 5, 2017)

Alan was an advocate of double-checking, focus, and memorization:

I walk into the wrong room. I looked at the number on the wall and it says room six and I'll go into room nine and I still walk into room six. And I'll be like, oh I'm sorry, wrong room. I catch it in time. I always double check, that's why we had the two identifiers, always name and date of birth. I just got that beat into my head, like on clinical so I apply that to my job. So yeah they get kinda mad at you if you do the wrong labs on the wrong patient. (Alan, personal interview, November 28, 2017)

[...]

Yeah it's, it's focus, it's, it's disciplined focus, memorization. Like, I could sit down and practice a million drug dose calculations and take the test the next day and—and bomb it because I forgot it. So it's not just repetitiveness that helps me, understanding why that's what helps me. (Alan, personal interview, November 28, 2017)

While discussing Alan's paperwork, it was noted that one concept map was folded in half and stapled onto another. He stated he did this because he had made errors on the original document. He re-wrote only the portion of the document where his mistakes were located so he did not need to re-write the entire document—re-writing everything would take a huge effort and a great deal of time. The overlay was neatly done and contained the correct information.

According to Barbie:

I have to go home in my own quiet, um, I know that I have to, like, for instance, if they teach us something in clinical to our class, I have to go home and read in peace and quiet sometimes. Especially in the classroom, if they're lecturing, I'm able to pick it up because I've been in there learning and stuff for a while. But in the beginning when it was newer, I tried to go home and break it down for myself. And if I didn't understand it

still, I would watch YouTube. And that really helps. (Barbie, personal interview, June 6, 2017)

Other ‘tricks’ that Barbie shared included: “I’ve learned to slow it down when I’m thinking,” “repetition is huge, repetition helps,” and “just ask for people to say something a little slower or to repeat it” (Barbie, personal interview, June 6, 2017). Her advice for the clinical learning setting included “offer a little extra time or like a study hall time with a tutor to go through, just to review some things [related to clinical learning]. It is a bonus, it offers more to the clinical site” and “[an audio] recorder could be very helpful on clinical” (Barbie, personal interview, June 6, 2017). She also mentioned:

Another thing I do is cheat sheets. I’ve slowly gotten more and more organized with how I keep them with me. Of course, there’s always the time now and then where you blank on one, and that’s part of the dyslexia, turning things around, but for the most part because I look at them all the time, have it with me all the time, it starts to become second nature. (Barbie, personal interview, June 6, 2017)

Theme Seven: Determination

Determination

Determination was an unexpected theme identified from the research data.

Determination played an important role in being a nursing student with an LD in the clinical learning environment. Mackenzie explained:

I think if you have a learning disability it depends on how much it affects you. And how willing you are to drive yourself maybe even sometimes drag yourself to the finish line. I don’t think you can say yes kids with learning disabilities can do and can’t do. We’re just all way too different. (Mackenzie, personal interview, June 6, 2017)

Mackenzie also explained how acceptance by her peers played a role in her resolve: “I was very fortunate to have wonderful classmates! They saw me as me then see my disability. They always said that I was so smart and that it’s okay that I can’t spell. Luckily for me I had acceptance” (Mackenzie, personal interview, June 6, 2017). Pam, Barbie, Lisa, and Alice also explained how important it was to them to be determined when learning nursing while having an LD. According to Pam:

I’ve been able to maintain the Dean’s list since I’ve started college in general. Um, but it’s been um, I don’t know if maybe I have different symptoms of ADHD but I know one of them is, I’m sure as you can see, I am like, very precise so, instead of, like a normal student would study for 10 hours maybe per exam over a span of time I know that for my final for clinical over the summer I calculated it and I studied over 56 hours for that exam. Um, and it wasn’t because I wanted that A...and it wasn’t even because I wanted that B, it was because I would not be able to sleep, I would not be able to eat, I would not be able to function if I didn’t go over every single bit of information. (Pam, personal interview, September 24, 2017)

Barbie illustrated the need for confidence to be determined when she stated:

I’m at a point where I know I can say well maybe I need another time with this because I know myself, but, no, you don’t know...I know myself. I know I’m fine. You know that you can fight back. You’re not behaving according to their [the nursing instructors] judgment, you’re behaving according to what you can do, but that takes time and confidence and age. So it’s a shame. We need to understand it [LDs] more at a younger age and do more. (Barbie, personal interview, June 6, 2017)

Barbie also described the importance of finding comfortability and support in the clinical learning setting:

On the clinical floor, I'll see a nurse that is very open to teaching and it helps to seek out somebody that I feel comfortable asking a bunch of questions to and feel comfortable saying "you know, I'm new to this, I don't understand, can you show me this?" or so forth. Finding that person you're comfortable with makes a big difference. (Barbie, personal interview, June 6, 2017)

Being competent and being seen as capable of becoming a nurse were important to some of the co-researchers. Alice and Pam described their determination to prove that they were competent and capable of becoming a nurse. Alice stated:

I was questioned when I first started if nursing was something for me because of my learning disability. And to me, that was, yeah, now I can prove somebody wrong I guess. Because that's been a question my whole life with people...do you think you can do this. Well, yes, yeah, I can, watch. (Alice, personal interview, May 17, 2017)

Similarly, Pam stated: "I want my Nursing Professor to look at me and think that...view me as a leader, competent, a nursing student that is really on top of her tasks, organized, and is able to prioritize care" (Pam, personal interview, September 24, 2017).

Alice was specific in her determination and how she demonstrated it:

The hardest thing that I had to do was organize my time. But I also realized during my clinical rounds or my nursing school that I have to, if I need to cut back, I have to cut back. It doesn't matter how long it takes me to finish something, I just need to do it. (Alice, personal interview, May 17, 2017)

Alice was able to see clinical learning through the lens of a nursing student with an LD and turn past negativity into a determination to succeed:

What I like about clinicals is the research. I enjoy looking up medical [diagnoses], I enjoy learning that aspect of it and the medications and why things go with what. I think being dyslexic, I think that's what makes it more intriguing because I know growing up I was told I would never, I couldn't, so now that I can and I am, especially with clinicals, it makes it awesome. (Alice, personal interview, May 17, 2017)

Lisa recounted a story about being determined to succeed despite having an LD.

My teacher let me leave the classroom for a test and a student asked why...and the teacher disclosed to them that I had special accommodations and the student made a comment and I just...I guess it was pride...and I said screw it. I'm gonna do the best I can with what I have to do. Like, I don't know, like I'm gonna show you that I can get a better grade than you with a disability. (Lisa, personal interview, August 19, 2017)

Alan reflected on how having the support of peers promotes determination:

I am fortunate to have the best classmates/clinical group anyone could ask for. This group has such great comradery. They helped me get back into the groove of doing clinical tasks and assessments. It's interesting that in my first time in clinical it was every person for themselves and this time it feels like we are in this together. Feeling that people in your group care makes a world of difference. We help each other with concepts we are learning in class. (Alan, personal interview, November 28, 2017)

Research Question Responses

The themes provided answers to the four research questions: How are nursing students impacted by their LD during clinical learning experiences, what are perceived obstacles that

hinder nursing students with LDs during clinical learning experiences, and what are reasonable accommodations or solutions for students with LDs during clinical learning experiences. The themes also provided insight into the overarching research question about what it is like to be a student nurse with an LD in the clinical learning setting.

Research Question One

What are the lived experiences of student nurses with LDs in the clinical learning setting? This study was conducted in an effort to understand what it is like to be a nursing student with an LD specifically in a clinical learning environment. This question identified one common theme: negative emotions. Negative emotions described by the co-researchers in this study included feelings of being overwhelmed, frustrated/angry, stupid/dumb, stigmatized, stressed, nervous/anxious, and embarrassed.

Research Question Two

The second research question, “how are nursing students impacted by their LD during clinical learning experiences?” was asked to identify the effects that having an LD had on the co-researchers clinical learning. This question revealed two themes: disclosure and hands-on.

Five of the nine co-researchers chose to disclose their LD to their school of nursing. Of the four who did not disclose, an unwillingness to have their disability made known to their peers or faculty members was expressed in that group. The four who did not disclose cited concerns about being viewed as incapable, having to deal with unjustified challenging attitudes, and feeling embarrassed and ashamed.

Hands-on learning was described as having a positive impact on the clinical learning of the co-researchers. Being able to see, touch, and do in the clinical learning environment was commonly cited as a preferred and effective method of learning nursing.

Research Question Three

The third research question, “What are perceived obstacles that hinder nursing students with LDs during clinical learning experiences?” was asked to understand the perceptions of obstacles the co-researchers had that hindered their clinical learning experiences. Based on the responses of the co-researchers, the perceived obstacles that hindered them as nursing students with LDs during clinical learning included negative faculty members and difficulties/obstacles. Examples of the difficulties/obstacles cited by the co-researchers included time management, needing more time, being easily distracted and forgetful, and verbal communication.

Research Question Four

Question four asked specifically “what are reasonable accommodations or solutions for students with LDs during clinical learning experiences?” A notable sub-theme was that many of the accommodations were not or could not be directly related to clinical learning. Many of the co-researchers described methods that they personally utilized to support their learning but were often applicable to the classroom setting and were in response to the personal interview question: “What methods or ‘tricks’, if any, have you developed and used to overcome educational issues related to your LD?” The framework of this study allowed the co-researchers to provide the knowledge, understanding, and potential solutions for the management of their disorders in the clinical learning environment.

Member Checking

Lisa and Barbie were the only two of the nine participants who agreed to participate in the member checking process. This was their opportunity to review the study data, the themes derived from this study, and my interpretations of that data. I provided each of them a paper copy of all of their individual interview data, transcriptions from their audio-memoing, and a

copy of the themes I had derived from the overall study participants. Each of their individual findings were listed under the research question they helped answer. The co-researchers were offered an opportunity to read the transcript data. Both opted to have me verbally provide an overview of themes. The themes I reviewed with Barbie and Lisa also included the themes derived from all the study participants. This process of member checking validated the credibility of the information and the accuracy of their verbal account of the phenomenon (Lincoln & Guba, 1985). Member checking shifted the process of validity confirmation from me as the researcher to them as a co-researcher with the goal of a mutual decision regarding overall credibility (Lincoln & Guba, 1985). Handwritten notes were taken during the member checking interviews, and expression of their feelings, ideas, and point of view of the study findings are discussed in this section.

Lisa

The themes derived from her semi-structured interview, audio-memoing, and paperwork analyses were presented to Lisa. These themes included negative emotions, accommodations, disclosure, negative faculty members, and difficulties. Speaking as a now-practicing nurse on a direct patient care unit, Lisa added thick, rich data to the themes derived from the time she was learning nursing. Regarding the theme of negative emotions, Lisa stated, “I still don’t understand it” and described feelings of pain, frustration, and confusion about her dyslexia: “It’s like hot and cold; some days are better than others [...] [The dyslexia] is worse with stress or when having a bad shift” (Lisa, member checking interview, May 2019). As we reviewed the transcript data, she reflected on her voice in the study findings: “Growing up I just thought I was stupid” (Lisa, member checking interview, May 2019). She also recalled that her parents refused to meet with the school when a teacher suspected that she was dyslexic. “Mom and Dad were

never accepting of it.... Parents need to be supportive” (Lisa, member checking interview, May 2019). Lisa also shared that during a recent visit with family, she learned that two close relatives also had dyslexia. Lisa expressed sadness and disappointment and wished her family had told her about it.

Regarding the theme accommodations, Lisa recalled feeling like she was a burden in nursing school. She also discussed memories of never wanting others to see her “getting special treatment” in nursing school. However, looking back she felt she “could have done better with extra time” (Lisa, member checking interview, May 2019).

As mentioned above, the study data indicated that Lisa chose to disclose her dyslexia to only one nursing instructor. Currently, as a licensed, practicing nurse, Lisa chose to not disclose her dyslexia to her employer. However, she told a story of how she was forced to disclose to her nurse manager because a spelling mistake became an issue with her nurse notes. In one of her notes, “one of the words was misspelled which made it...an obscene word” (Lisa, member checking interview, May 2019). Her nurse manager approached her about the word documented in the nurse notes, and Lisa felt compelled to disclose that she had dyslexia and did not purposefully write an obscene word. Lisa was lighthearted while telling the story and was able to laugh about the mistake. She also shared that her nurse manager was very understanding and was pleased that Lisa was able to share with her the reason for the misspelling. This support allowed Lisa to feel comfortable enough to disclose her dyslexia to a fellow nurse who also seemed to have similar struggles clinically (misspelling, time management, over-checking). She described this fellow nurse having a “lightbulb moment like I had” about her struggles being due to an LD, rather than just thinking they were stupid (Lisa, member checking interview, May 2019).

Lisa also shared during the member checking interview that when she was in nursing school “at least two times per semester” she would be required to “do a breathalyzer and urinalysis, and once had to have blood drawn” to determine if she was under the influence of drugs or alcohol (Lisa, member checking interview, May 2019). She explained that “of course [the results of these tests] were never positive,” but she theorized that she was suspected of substance abuse because of her difficulty with focus and attention (Lisa, member checking interview, May 2019). She reiterated that she remains uncomfortable with others knowing about her dyslexia and the reasons she has had throughout her lifetime for not disclosing her condition.

Finally, Lisa was asked to expound upon the themes labeled negative faculty members and general difficulties, and to add anything from that perspective on being a nursing student with an LD in the clinical nursing setting. She agreed with the data she provided during the data collection for the study. She recalled experiencing many discouraging faculty members and how they would convince Lisa, in her mind, that she may be unsuccessful as a nurse. She explained that, regarding school, “it’s not going to be like this in the real world” (Lisa, member checking interview, May 2019).

The final thoughts from Lisa during our interview were profound. “We test for eyes and hearing, but not learning disability. You grow up thinking there’s something wrong with you” (Lisa, member checking interview, May 2019). Regarding the study theme labels, she said: “It’s humanizing and really good” to know that there were others out there with LDs that had feelings and experiences similar to hers (Lisa, member checking interview, May 2019). “I really appreciate you showing me all of your data. This study means so much to me I can’t even explain it! I am beyond excited to see it when it’s finished” (Lisa, member checking interview, May 2019).

Barbie

The themes derived from her semi-structured interview, audio-memoing, and paperwork analyses were presented to Barbie. These theme labels included negative emotions, accommodations, disclosure, hands-on, negative faculty members, difficulties, and determination. Speaking as a now-practicing nurse on a direct patient care unit, Barbie added thick, rich data to the themes derived from my study and from the time she was learning nursing.

While reviewing the theme of determination, Barbie recalled that she had failed a semester while in nursing school and had to repeat it: “That made me a better nurse. The second semester they said I did fantastic” (Barbie, member checking interview, June 2019). Barbie also reiterated the need for nursing students and nurses to “overcome negativity and prejudgment” about having an LD: “I’m an excellent nurse” (Barbie, member checking interview, June 2019). She described her love for the job she has now, despite its challenges, which would be encountered at any job. She agreed that determination was a key factor in her current success and had been during her nursing school clinical education.

Negative emotions and disclosure were themes that Barbie identified during the initial research study. During the member checking interview she agreed with the theme labels and shared a story of being teased by a co-worker about typing slowly. She admitted that she is self-conscious about her typing and spelling challenges associated with her dyslexia, especially when being watched by others. She told the co-worker who was teasing her that she had an LD and even taught them a bit about the specific challenges her disability created for her in the clinical nursing setting. Barbie was open about her lifelong challenge with dyslexia and described it as “severe.” She disclosed it to her school of nursing and to her current employer and colleagues:

“Everybody I work with knows [about her LD] and is supportive” (Barbie, member checking interview, June 2019).

Barbie was vocal and descriptive during the initial study about accommodations for nursing students with LDs and offered many suggestions while she was a nursing student. As a licensed, practicing nurse, she now utilizes the spell-check feature on her phone and described it as an indispensable tool to aid in her documentation. She discussed the notion that there are really no specific accommodations available to a nurse with an LD in the clinical setting, as there are for nurses with a physical disability. She did explain that she manages distractions, such as when passing medications to patients. She described when a physician would stop by and talk to her, “I just give them a signal to indicate I need to concentrate, but to give me a minute then I can talk to them. It’s easier when it’s a doctor [I] know and [am] comfortable with...” (Barbie, member checking interview, June 2019). While this technique may also be effective for nurses and nursing students without an LD, it is one method Barbie described as helping her manage her challenge with distraction due to her LD.

Barbie and I reviewed her transcript memo comments from the research study about negative faculty members. This prompted her to recall a time during her clinical learning when “I was told by an instructor at [name of hospital]: ‘I don’t know how you’re going to be able to do nursing. I don’t think you’ll be able to be a nurse. Maybe somewhere slow-paced, like a nursing home’” (Barbie, member checking interview, June 2019). Barbie went on to share details of the types of patients where she currently works cares for and how acutely ill and injured they are. “We have patients with tracheostomies and LVADs [Left Ventricular Assist Devices] who are really, really sick, and I’m taking care of them and doing it well. I’m a really good nurse” (Barbie, member checking interview, June 2019).

Finally, Barbie and I reviewed the study transcript section about the general difficulties that she spoke about during the research study. She agreed with the theme label. Her member checking information, shared and described above, reflects her determination to be successful in nursing. Rather than focusing on the difficulties she shared during the data collection for the study, she shared a revised copy of the patient report sheet that she used on clinical during nursing school. She explained that she and a colleague (one without an LD) at her current employment expanded her “cheat sheet” and that they both used this paper tool exclusively during their work shifts to stay organized and on task. She reiterated the fact that she was a really good nurse and knew, despite the challenges associated with being a nurse/nursing student with an LD in the clinical setting, that she always will be.

Summary

Being a nursing student in the clinical learning setting is a notoriously challenging experience; being a nursing student in the clinical learning setting with an LD adds a unique challenge to an already rigorous educational program. The experiences and challenges shared in this study varied from co-researcher to co-researcher, but seven common themes emerged. Based upon the data derived from the voices of the co-researchers, examination of their clinical documents, and the input from the member checking interviews, the final theme labels for this study were determined to be: negative emotions, disclosure, hands-on, negative faculty members, difficulties/obstacles, accommodations, and determination. Negative thought processes about their ability to learn, challenging clinical nursing faculty members, and an unwillingness to let others know about their LD were experiences described by the co-researchers. Despite these common themes, the co-researchers in this study demonstrated a keen ability when it came to hands-on learn and were determined to succeed. From their experiences, it is the hands-on

aspects of the clinical nursing learning environment that validated their capability to learn and succeed in nursing.

Barriers to overcome in the clinical learning environment included obstructive faculty members and administration, a general lack of understanding about LDs, and a need for affirmation and support. As reported in this study, the biggest barrier to the nursing student with an LD is often their own adverse preconceived notions about their LD and persistent memories of the voices in their heads reminding them of their past negative experiences.

Finally, the co-researchers provided individual suggestions and ideas about accommodations in the clinical learning setting that worked for them. These personal accommodations helped them manage their LD and facilitated their success in the clinical learning environment. It should be noted that, to date, six of the co-researchers have passed their NCLEX-LPN and/or RN exam on their first attempt and two are pending successful completion of their educational programs.

CHAPTER FIVE: CONCLUSION

Overview

The purpose of this transcendental, phenomenological study was to record the lived experiences of nursing students with LDs while in the clinical learning environment. This study reported the lived experiences of nine co-researchers who were nursing students with an LD learning in a clinical practice environment. This chapter will present a summary and a discussion of the findings. The empirical and theoretical implications of the findings for nursing faculty members, nursing administration, and nursing students with LDs will also be presented. Finally, delimitations and limitations of the study and recommendations for future research will be discussed.

Summary of Findings

The first research question, “What are the lived experiences of student nurses with LDs in the clinical learning setting?” identified themes labeled negative emotions and determination. Negative emotions described by the co-researchers in this study included feelings of being overwhelmed, frustrated/angry, stupid/dumb, stigmatized, stressed, nervous/anxious, and embarrassed. The second research question, “How are nursing students impacted by their LD during clinical learning experiences?” revealed two themes: disclosure and hands-on. Five of the nine co-researchers chose to disclose their LD to their school of nursing. The four who did not disclose expressed an unwillingness to have their disability made known to their peers and/or faculty members. Kinesthetic/tactile “hands-on” learning was identified by all of the co-researchers as their preferred learning style and an essential component of learning nursing. The third research question, “what are perceived obstacles that hinder nursing students with an LD during clinical learning experiences?” resulted in two themes: negative faculty members and

difficulties/obstacles. The stories and reports of faculty members demeaning and discouraging the co-researchers because of their disability were extreme. The strain of this negativity was palpable from the voices and stories of the co-researchers. Question four asked “what are reasonable accommodations or solutions for nursing students with LDs during clinical learning experiences?” The co-researchers’ ideas and suggestions regarding what constitute reasonable accommodations or solutions for nursing students with LDs in the clinical learning environment were specific to each of them as an individual learner. It should be noted that the majority of the accommodations were not or could not be directly related to clinical learning and many of the co-researchers acknowledged this fact.

Discussion

In order to examine the topic of being a nursing student with an LD in the clinical learning setting, empirical and theoretical works were examined in Chapter 2. This section discusses the empirical and theoretical findings of my study as they relate to previous research and theory.

Empirical Literature

The current body of literature describes a variety of challenges for the nursing student with an LD. Two common themes identified from the existing literature were related to an unwillingness to disclose an LD and negative feelings in general about LDs. Adult learners with LDs are reluctant to disclose or discuss their needs with those entrusted to facilitate their education (Evans, 2014b; Howlin et al., 2014; Kraglund-Gauthier et al., 2014; May & Stone, 2010; Nalavany et al., 2011; Stewart & Collins, 2014). Five of the nine co-researchers in my study were open about their LD and had chosen to disclose their disability to their school of nursing. The four who did not do so expressed an unwillingness to have their disability made

known to their peers and/or faculty members. The nursing faculty members surveyed by Ashcroft and Lutfiyya (2013) expressed concern that classroom-accommodated students may be "... unable to provide patient care" (p. 1318) in the clinical learning environment. Similarly, the four participants in my study who did not disclose cited concerns about being viewed as incapable, dealing with seemingly unjustified challenging attitudes, and feeling embarrassed and ashamed. Stewart and Collins (2014) reported that the process of disclosing an LD has been compared to the momentous "coming out" process for non-heterosexual persons.

Although my co-researchers' decisions to disclose were statistically skewed from the previous literature, a common theme is that students with LDs have negative emotions about their LD and fear being adversely labelled (Kell, 2012; Kong, 2012; Kraglund-Gauthier et al., 2014). Despite the disparity between the decision made by the participants in my study to disclose and that reported in the literature, all of the co-researchers in my study expressed negative emotions about their LD. Negative emotions described by the co-researchers in my study included feelings of being overwhelmed, frustrated/angry, stupid/dumb, stigmatized, stressed, nervous/anxious, and embarrassed. Previous research supports this finding and many of their feelings are in alignment with those mentioned in the literature. Kong (2012) reported that some participants with LDs felt embarrassed that they were different and feared being labelled as lazy or stupid. In this same study, participants avoided disclosing their disability and did not ask for help because of a fear of "...ridicule, exclusion by their peers or being treated differently" (Kong, 2012, p. 135). In the study by Kraglund-Gauthier, Young, and Kell (2014), one participant stated that "some professors treated me like I was globally delayed and kind of ignored me because of my learning disability" (p. 5). May and Stone (2010) reported that students with an LD do not want to seem different or viewed as less intelligent by their peers

(May & Stone, 2010). Evans (2014a) reported that some participants expressed a fear of being seen as stupid and were concerned that they would not be understood or supported in their learning (Evans, 2014a). The co-researchers in my study consistently reported similar feelings as those found in the literature, predominantly stupid/dumb, stigmatized, and embarrassed.

Hands-on learning was noted as essential to the majority of the co-participants in my study, citing a veritable inability to learn using written or spoken language. They described difficulty with aspects of communication, including speaking and understanding what is being said, spelling, written expression, writing coherently and neatly, and reading and understanding the written word. There was a dearth of previous literature regarding the theme of hands-on clinical learning related to students with LDs. Kraglund-Gauthier, Young, and Kell (2014) reported that one participant illustrated this challenge to learning through written language by stating: “Every time I needed help or wanted to ask a question or get information, everybody presented me with print” (Kraglund-Gauthier et al., 2014, p. 5). Interacting by seeing or touching what is being taught was revealed by the co-researchers in my study as having the greatest positive impact on their ability to learn in the clinical learning setting. The clinical setting was their opportunity for hands-on learning, which is precisely what many of them described as their preferred method of learning and critical for them to truly learn.

According to Kraglund-Gauthier, Young, and Kell (2014), an accommodation “involves minor changes that assist a student’s functioning in the classroom by offering alternate ways of handling a task” (p. 2). Accommodations are also provided to students with LD which generally involve changes to instructional methods or materials “that enable students to learn or do something they would not otherwise be able to easily accomplish” (Kraglund-Gauthier et al., 2014, p. 2). The co-researchers’ ideas and suggestions regarding what constituted reasonable

accommodations or solutions for nursing students with LDs in the clinical learning environment were specific to each of them as individual learners. Suplee, Gardner, and D’Emilia reminded us that nursing students learn in a clinical practice environment where customary classroom accommodations are unavailable or impractical (Suplee et al., 2014). It should be noted that the majority of the accommodations suggested by the co-researchers in my study were not or could not be directly related to clinical learning. They contributed to the literature by describing methods that they personally utilized to support their learning in a clinical learning setting. Electronic spell-checking applications, notes to self, checklists, and simply slowing down were methods cited by many of the co-researchers as techniques necessary to help them be successful nursing students in the clinical learning setting. Many of my co-researchers also acknowledged the fact that classroom accommodations are not applicable to the clinical learning setting.

In the previous literature, Stewart and Collins (2014) reported that students with a variety of both learning and physical disabilities all had personal challenges stemming from their particular disability, including an “extreme lack of awareness” concerning disabilities (Stewart & Collins, 2014). The co-researchers in my study were particularly descriptive regarding nursing faculty members and their administration’s lack of support and general lack of knowledge about LDs. Their reports confirm the results described in the literature. From the previous literature, faculty members have reported a dearth of formal training regarding LDs, deficient guidance regarding teaching nursing students with LDs, and a lack of preparation in working with students with LDs in the clinical learning environment (Ashcroft & Lutfiyya, 2013; Howlin et al., 2014; Murray et al., 2011; Nalavany et al., 2011; Suplee et al., 2014; Tee et al., 2010). In my study, Alice described her negative feelings about her LD and how she felt that administrative faculty members in particular created obstacles for her:

There has been a lot of negativity behind dyslexia. And now that it is becoming more popular and people are seeing that there's a lot more that we can do, we still need the support, we still need the staff, not to really hold our hands, but to really work with us.

And not try to make it more difficult for us and make us feel like we're failures.

Especially from administration. (Alice, personal interview, May 17, 2017)

Lombardi, Murray, and Gerdes (2011) found that postsecondary faculty members were generally willing to provide classroom accommodations to students with LDs but felt unprepared to do so. Add to this challenge the fact that nursing students with LDs may require some type of accommodation beyond the classroom learning setting:

I [use] spell-check on my phone and other things. So, I just have to kind of be disguised and it's not fun, but I can't spell and I can't write things down incorrectly so I manage. I use a lot of the abbreviations because I've studied those pretty hard because that, that way I don't have to spell as much. (Mackenzie, personal interview, June 6, 2017)

There were no studies found in the previous literature that directly addressed accommodating a learning-disabled nursing student in the clinical learning setting. My study co-researchers add to the literature by suggesting a variety of accommodations that are applicable to the clinical setting, including checklists, electronic spell-check and grammar check, typing, voice-to-text devices, and the use of video references.

Alice exemplified how a lack of faculty members training or understanding regarding how to manage a student with an LD in the clinical learning environment is an obstacle:

After meeting with the two heads of the nursing, I still struggle with them, or with one of them. Especially after the first initial meeting her and I ever had, was with dyslexia, she offered me to go to the cooking department. (Alice, personal interview, May 17, 2017)

This data from Alice particularly supports the previous literature, which found that administrators and clinical nurse educators were untrained and ill-prepared to deal with students with LDs (Child & Langford, 2011; Murray et al., 2011; Nalavany et al., 2011; Suplee et al., 2014). The data from the co-researchers in my study regarding negative faculty members confirm the results of Ashcroft and Lutfiyya (2013), who examined nursing faculty members' perceptions of students with disabilities. Ashcroft and Lutfiyya (2013) demonstrated the dichotomy between nursing faculty members wanting to be supportive of students with disabilities while also being concerned that having a disability may negatively affect the quality of the patient care these nurses provide. The participants in their study admitted to a lack of knowledge regarding how different disabilities impact student learning, expressed uncertainty as to how to support student learning for clinical courses, and expressed concerns that disabled students require more supervision than other learners (Ashcroft & Lutfiyya, 2013). As many of the co-researchers in my study reiterated, the lack of knowledge about LDs on the part of faculty members is a fundamental issue.

Theoretical Literature

This study was grounded in Dewey's (1938) theory of education and Knowles's (1980) theory of adult learning. Dewey (1938) theorized that in order for experiences to be educational, they must contain an assortment of information, facts, and concepts that are expanded upon and compounded during a constantly reassembled experience (Dewey, 1938).

The clinical learning experience for the nursing student with an LD requires the application of new knowledge. If a nursing student is challenged by the process of expanding upon knowledge attained because of an LD, genuine learning is negatively affected. Comments from the co-researchers in my study support Dewey's theory: "Having a learning disability puts

your anxiety level for feeling, just your feelings about yourself looking dumb, so that on top of not feeling comfortable, makes it more difficult to open your mind and learn” (Barbie, personal interview, June 6, 2017). Negative feelings about having an LD affect the learning process. Furthermore, concerns that faculty members and administrators will adversely label nursing students with LDs negatively affect the learning process. Clinical learning is based upon classroom teaching. Deficiencies in reading, writing, or understanding verbal instruction, in both the nursing classroom and in the clinical learning setting, all contribute to a negative learning experience and adversely impact genuine learning.

Knowles’ (1980) theory of adult learning is the analysis of how adults learn and was built upon six concepts of adult learning. He used the term andragogy to define the art and science of helping adults learn and emphasized the value of the process of learning for adults (Knowles, 1980; Knowles et al., 2012). Although Knowles did not specifically address adults with LDs, if a nursing student with an LD has a deficiency in one or more of the six areas of adult learning, learning is affected.

Deficiencies in the areas of adult learning, and how they affect learning, were evident from the experiences of the co-researchers. Nursing instructors are ill-prepared to provide specialized education to students with LDs. Nursing students with LDs may require special learning considerations, such as assistance with reading, spelling, or writing in the clinical learning environment. Past negative experiences may cause the learner to be reluctant to disclose their LD. The consequences of non-disclosure are many and various, but include the potential for a devaluation of their experience as an adult with an LD. Nursing students with an LD may be ready for learning, but they must also be able to master the skills or information necessary to progress to the next level (Knowles, 2012, p. 65). Nursing programs are notoriously

fast paced, with little time allotted for remediation. Similar to the readiness to learn, both the co-researchers in my study and participants in previous literature described a motivation to learn and the discernment to understand the rationale for learning but simply required extra time and effort to achieve it (Howlin et al., 2014; Murphy, 2011).

Motivation to learn in “normal adults” may be blocked by barriers such as a negative self-concept or an inability to access to opportunities or resources (Knowles et al., 2012). The co-researchers in this study found learning challenging because of their LD and cited various associated negative emotions; their answers are in alignment with Knowles’ theory of the adult learner (2012). According to Knowles, the implication of these consequences may be perceived as “rejecting not only their experience but rejecting themselves as persons” (Knowles et al., 2012, p. 65). Based on Knowles’ theory of the adult learner (Knowles et al., 2012), a vicious cycle of barriers to genuine learning may exist for the nursing student with an LD, as is exemplified by the co-researchers in my study. My co-researchers illustrated how their identified themes of negative emotions, unwillingness to disclose their LD, negative faculty members, and specific difficulties and obstacles diminished their learning process in the clinical learning setting.

From a theoretical perspective, it must be acknowledged that neither Dewey nor Knowles explicitly addressed LDs. However, through inference and application of the practicalities of their learning theories, the co-researchers’ data in my study align with their theories.

Implications

This study of nursing students with LDs in the clinical learning setting provides theoretical, empirical, and practical implications for stakeholders such as nursing faculty members, nursing administration, and other nursing students with LDs. This section discusses

these implications as they relate to Dewey's (1933, 1938) theory of education and Knowles's (1980) theory of adult learning, the current body of literature, and current practices within nursing clinical education.

Theoretical Implications

Dewey's theory of education (1933) explains the importance of teacher/student communication and their ability to communicate and collaborate in order to facilitate a learning experience for the student (Dewey, 1933). The clinical learning environment is an area where it is crucial for teacher and student to communicate and collaborate to facilitate learning for the student. When based on Dewey's theory of education, this essential process is negatively affected when a student is challenged with an LD (Dewey, 1933). Nursing faculty members are generally prepared for teaching in clinical education only by virtue of an earned Master of Science in Nursing and are often hired based upon their clinical experience rather than their teaching ability. Students with LDs are reluctant to disclose this to their faculty members and administration. The result is a less-than-desirable learning environment where the teacher does not understand the challenges of the learner, and the learner is reluctant to explain their challenges and seek help. Knowles's (1980) theory of adult learning provides understanding into how adults learn best and emphasizes the value of the process of learning for adults. My co-researchers provided the insight that stakeholders such as nursing faculty members, teachers, and administrators of nursing students would benefit from knowing and utilizing to update current practices. They have also provided insight for other nursing students with LDs that suggest disallowing negative thoughts that might derail their learning and being determined to stay on their educational path.

Empirical Implications

From an empirical standpoint, the effect of understanding what it is like to be a nursing student with an LD is beneficial for other nursing students with LDs. This notion was expressed by co-researcher Lisa when discussing the study theme findings: She said that “It’s humanizing and really good” to know that there were others out there with LDs who had feelings and experiences similar to hers (Lisa, member checking interview, May 2019). The negative emotions described by the co-researchers in this study included feelings of being overwhelmed, frustrated/angry, stupid/dumb, stigmatized, stressed, nervous/anxious, and embarrassed.

Faculty members to teach nursing students with LDs and administrators admitting and processing these students would also benefit from the perspectives of the co-researchers. Understanding their reluctance to disclose an LD and acknowledging specific obstacles cited by the co-researchers can be utilized by these important stakeholders to make practical changes in their approach to these students. Requiring formal education about teaching nursing students with LDs, knowing about accommodations that may be useful to other students, and the development of specific policy related to clinical nursing education are all recommendations mentioned by the co-researchers. Alice reiterated these concepts when she stated:

We still need the support, we still need the staff, not to really hold our hands, but to really work with us. And not try to make it more difficult for us and make us feel like we’re failures. Especially from administration. (Alice, personal interview, May 17, 2017)

Practical Implications

The accommodations that the co-researchers used to overcome their challenges in the clinical learning environment are valuable information for other nursing students with LDs. Electronic spell-checking applications, notes to self, checklists, and simply slowing down were

cited by many of the co-researchers as techniques necessary to help them learn effectively in the clinical learning setting. Sharing this knowledge and their suggestions about how they learn best in the clinical learning setting with other nursing students with LDs could positively impact their clinical experiences, learning, and ultimate success in their nursing program.

Extrapolating on the insights provided by my co-researchers regarding specific obstacles encountered in the clinical learning setting could be transformative for all stakeholders. For example, realizing the negative emotions that were experienced by the co-researchers could help future students with LDs understand they are not alone. Appreciating that nursing students with LDs may be unwilling to disclose their condition could lead to the creation of administrative policies. Policies that evaluate all new students and offer an open-door invitation for formal LD diagnosis and support could positively transform the learning path for future nursing students with LDs.

Through the experiences of my nine co-researchers, the results of my study provide an understanding of the unique perspectives and challenges of the nursing student with an LD in the clinical learning environment.

Delimitations and Limitations

The delimitation of my study was choosing a phenomenological research perspective. I desired to keep with the theme of disabled persons: “nothing about us without us” (Charlton, 1998) and answer the research questions by exclusively listening to and reporting through the voices and stories of the co-researchers. The phenomenological approach was chosen to understand and appreciate the participants’ experiences (Wilson, 2014; Tuohy et al., 2013). This entailed that I bracket out my own preconceived notions, views, and ideas about nursing students

with LDs, and I used journaling to ensure that I accomplished this (Husserl, 1965; Moustakas, 1994).

A second delimitation of my study was that I needed the co-researchers to be able to articulate their thoughts and feelings about their experiences as nursing students with an LD without requiring them to perform extensive reading or writing. This delimitation was addressed by using the research data collection technique of audio-memoing. Using this method allowed them to simply speak their thoughts and feelings and stories. I also used documents that were already completed and graded for an additional perspective for analysis in this study.

Sample size was the main limitation of my study. A sample size of 10 was desired; nine co-researchers consented and were interviewed, and eight completed all aspects of the study. It is acknowledged that a small sample size may make study results ungeneralizable and policy makers may not value qualitative research (Rahman, 2017). According to Patton (2015), an adequate sample size “depends on what you want to know, the purpose of the inquiry, what’s at stake, what will be useful, what will have credibility” (Patton, 2015, p. 311). Despite this limitation, I have taken care not to overgeneralize but rather to report in-depth, purposeful data from the voices of my co-researchers.

Recommendations for Future Research

The current literature on nursing students with LDs in the clinical learning environment is profoundly lacking. The purpose of this research was to provide insight and knowledge into the obstacles these types of nursing students encounter in this learning environment. I have provided the stories and examples from nine co-researchers who described what it is like to be a nursing student with an LD in the clinical learning setting. More research is needed to add to my study that would provide additional voices and perspectives and experiences from these types of

students. If similar or disparate themes from my study findings resulted from future studies, this would allow faculty members and administrators in schools of nursing and other students with LDs an opportunity to gain even more insight into the obstacles and challenges of the nursing profession.

Future research could focus on the perspectives of the nursing faculty members who teach students with LDs. A quantitative study could be conducted to formally educate nursing faculty members about LDs and then analyze the delimitations and limitations derived from that perspective. Additional research could then be conducted to examine appropriate policies and procedures regarding accommodations in the clinical learning setting, such as what types and their applicability and feasibility. Other valuable future research could examine the success of the nurses with LDs, potentially allaying concerns that the nursing care they provide may be sub-par.

Summary

Chapter Five highlighted the findings from my research study on what it is like to be a nursing student with an LD in the clinical learning setting, the obstacles they encountered, and what ideas they had to overcome their challenges. This chapter underscored how my research correlates with and adds to previous research and discussed those empirical and theoretical relationships. The contents of this chapter included the theoretical, empirical, and practical benefits of the study information for stakeholders such as nursing faculty members, nursing school administrators, and future nursing students with LDs. This chapter also identified delimitations and limitations of my study. I concluded the chapter with a discussion of recommendations for future research.

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APPENDICES**Appendix A****Institutional Review Board Approval Letter****LIBERTY UNIVERSITY.**
INSTITUTIONAL REVIEW BOARD

May 4, 2017

Lorna Woodhall


IRB Approval 2853.050417: A Transcendental Phenomenological Study of Student Nurses with Learning Disabilities in the Clinical Learning Environment

Dear Lorna Woodhall,

We are pleased to inform you that your study has been approved by the Liberty University IRB. This approval is extended to you for one year from the date provided above with your protocol number. If data collection proceeds past one year, or if you make changes in the methodology as it pertains to human subjects, you must submit an appropriate update form to the IRB. The forms for these cases were attached to your approval email.

Thank you for your cooperation with the IRB, and we wish you well with your research project.

Sincerely,



G. Michele Baker, MA, CIP
Administrative Chair of Institutional Research
The Graduate School

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Appendix B

Social Media/Nursing Organization Recruitment Letter

Are you a NURSING STUDENT with a LEARNING DISABILITY?

- Are you currently attending an undergraduate nursing program in the Western PA area and have a documented learning disability?
- Are you willing to participate in a research study about being a nursing student with a learning disability?

Share your experiences and thoughts
about your
clinical rotations

privately and confidentially

simply by talking into a voice recorder!

- The goal of this study is for YOU to **describe what it is like** to be a nursing student with a learning disability in the clinical learning environment and **make suggestions** about how we can help you be **SUCCESSFUL!**
- If you are interested, I am inviting YOU to participate in my study.

Please email me at lwoodhall@liberty.edu for more information.

Appendix C

Consent Form

CONSENT FORM

A transcendental phenomenological study of student nurses with learning disabilities in the
clinical learning environment

Lorna Woodhall

Liberty University

School of Education

You are invited to be in a research study of nursing students with a learning disability who receive instruction in a clinical learning environment (clinical and/or simulation lab). You were selected as a possible participant because you self-identified as being a nursing student with a learning disability. Please read this form and ask any questions you may have before agreeing to be in the study.

Lorna Woodhall, a doctoral candidate in the School of Education at Liberty University, is conducting this study.

Background Information: The purpose of this phenomenological study is to record the lived experiences of nursing students with learning disabilities while in the clinical learning environment. It will provide insight into how nursing students with learning disability learn in the clinical learning environment and the impact their disability has on their clinical learning experience. The goal of this study is to identify perceived obstacles that hinder clinical learning for student nurses with learning disability and define reasonable accommodations or solutions applicable to this learning environment.

Procedures: If you agree to be in this study, I would ask you to do the following things:

- Obtain any documents outlining or describing your specific learning disability.
- A meeting place and time mutually agreeable to both you and I will be arranged. Please bring your student photo ID to confirm active enrollment at your school of nursing. Details of the study will be explained, including your role in the study, and informed consent will be obtained. During our initial meeting I will ask you specific questions about your experience with learning disability. The interview will last approximately 30 minutes unless you have additional information to share.
- During this meeting, the audio voice recorder and lanyard will be given to you and the use of the recorder will be demonstrated. You will then choose a pseudonym which will

be recorded on the voice recorder. This will be done to ensure complete confidentiality should the voice recorder be lost or stolen.

- If you are unable to meet in person, the details of the study will be explained to you via teleconference. Your role in the study will be discussed and a verbal informed consent will be obtained. During our initial teleconference I will ask you questions about your learning disability. You will then choose a pseudonym which will be recorded on the voice recorder and the use of the recorder will be explained. The informed consent form, audio voice recorder, lanyard, and self-addressed stamped envelopes will then be mailed to you. You will sign and mail the original signed informed consent form and your clinical-learning-related documents to me. Additionally, please send a picture via text or email of your student photo identification.
- Use the audio voice recorder to record any thoughts, feelings, and/or experiences about your learning disability related to your clinical learning environment. You may record any thoughts, feelings, and/or experiences related to your learning disability as you think of them. You should keep the audio voice recorder secure at all times, speak into the recorder ONLY in a private location as time permits, and not record any other voices or sounds. Data will be collected until you believe you have dictated all of your thoughts, feelings, and/or experiences related to your learning disability, or until one hour of voice data has been recorded. Your participation in this study should not interfere with your clinical learning responsibilities. It is essential that you NEVER record any patient-related information or identify patients or clinical facilities.
- An examination of clinical-learning-related documents will be conducted as an objective analysis of your performance in the clinical education environment. Any available clinical-learning-related documents should be brought with you to the interview, or you may send them via email or postal mail. Copies of the documents will be made and the originals will be returned to you.
- You may be asked to meet briefly with me again once I have compiled and analyzed all study data. In a process called member checking, we will discuss the data collected and I will ask you to comment on the accuracy of the themes I have identified.

Risks and Benefits of Being in the Study: All studies carry a risk; however, the risks for this study are minimal and are no more than you would encounter in everyday life. Multiple steps will be taken to protect your identity, and there will be no misuse of any information. Do not allow your voice recording to interfere with your clinical learning responsibilities. No direct benefits are provided as a part of your participation in the research study, but you may keep the safety lanyard after the audio voice recorder has been returned to the researcher.

Compensation: Participants will not receive any compensation.

Confidentiality: The records of this study will be kept private. In any sort of report I might publish, I will not include any information that will make it possible to identify you. Research records will be stored securely, and only I will have access to the records. Participation will be strictly voluntary and pseudonyms will be utilized for both you and the school of nursing you are attending. Privacy and confidentiality will be ensured by the use of a locked file cabinet in a private office for all study materials including the laptop containing any electronic material. Data will be retained for three years upon completion of the study per federal regulations.

Voluntary Nature of the Study: Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

How to Withdraw from the Study: You may submit a request in writing to be withdrawn from the study at any time. The individual information provided when you withdraw will be removed from the study and destroyed.

Contacts and Questions: The researcher conducting this study is Lorna Woodhall. You may ask any questions you have now. If you have questions later, **you are encouraged** to contact her at phone number 412-719-2478 or email at lwoodhall@liberty.edu. You may also contact the researcher's chair, Dr. Joan Fitzpatrick, via Liberty University email: jfitzpatrick@liberty.edu.

If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, **you are encouraged** to contact the Institutional Review Board, 1971 University Blvd, Green Hall Ste. 1887, Lynchburg, VA 24515 or email at irb@liberty.edu. Please notify the researcher if you would like a copy of this information to keep for your records.

Statement of Consent: I have read and understood the above information. I have asked questions and have received answers. I consent to participate in the study.

Please notify the researcher if you would like a copy of this information for your records.

- The researcher has my permission to discuss my clinical learning experiences with me in a private meeting, listen to and transcribe data that I have stated from the audio memo recorder, and examine clinical-learning-related documents that I have received from my clinical instructor/school of nursing as part of my participation in this study.

Signature of Participant: _____ Date: _____

Signature of Investigator: _____ Date: _____