

UNDERSTANDING COLLEGE STUDENTS WITH A LEARNING DISABILITY – A
PHENOMENOLOGICAL STUDY

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ABSTRACT

The purpose of this phenomenological research study was to describe the essence of what it means to be a college student at Midwest Christian University who is identified with a learning disability (LD) after beginning a collegiate learning experience. The theory that guided this study was three-fold. Combining Bandura's study of self-efficacy, the concept of resiliency, and a biblical worldview of learners, the study investigated the effects of a delayed LD identification on the academic and emotional lives of the participants. Additionally, the study analyzes steps that can be followed to alleviate the effects of the phenomenon. Data was collected during the research process by personal and focus group interviews and by document analysis of questionnaires. Research findings were analyzed in an attempt to ascertain recurring themes and patterns. Such themes and patterns provided clusters of meaning to more fully describe the experience of the college student who first learns about a personal learning disability after starting their higher educational journey. The data revealed that the participants struggled in many areas. Academically, the participants toiled in reading, writing, and mathematical courses; faced troubling transitional obstacles as freshman; and labored in large lecture courses. Emotionally, the participants were overwhelmed by frustration and discouragement about college in general and had high anxiety about interaction with faculty members. Institutionally, universities should create practices that encourage mentoring relationships, testing accommodations, lighter student academic loads, and interactive learning.

Keywords: Learning disability, college students, persistence, self-efficacy, resiliency.

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Dedication

I would like to dedicate this work to my best friend and spouse, Susan Licht. The seven year journey that has culminated in the completion of this document would not have been possible without her loving support and thoughtful encouragement. When my internal thoughts and the spoken words of others created doubt, you were always an encouragement. I thank God for you. May He bless you in return for all the hours you have spent waiting for me to finish.

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CHAPTER ONE: INTRODUCTION

Overview

In ever increasing numbers over the past 20 years, students with learning disabilities have entered higher education (U.S. Department of Education, 2008). These college students may or may not have been identified and assisted with their learning disabilities during pre-college experiences. Yet in either case, students with learning disabilities have extraordinary challenges when entering the world of higher education. The challenges and adaptations can be especially difficult if a college student first learns of a learning disability after beginning a college education (Abreu-Ellis et al. 2009; Foley, 2006).

Background

Currently, more students with learning disabilities have entered colleges and universities than any other time in educational history (Hadley, 2007). Because of the passage of the *Americans with Disabilities Act* (ADA) and the adoption of the *Individuals with Disabilities Education Act* (IDEA), high school graduates with learning disabilities seem to be more confident in their pre-college training, and are enrolling in post-secondary education in higher numbers (Zhang et al., 2010). Recent statistics have shown that the percentage of beginning college students who have self-disclosed learning disabilities has increased to 7.5% (U.S. Department of Education, 2008).

Perhaps surprisingly, however, many colleges and universities have concerned themselves principally with physical accommodations, while they have concentrated less on the academic needs of a significant segment of students who have been identified with learning disabilities (DaDeppo, 2009). Consequently, without the correct type of help, these students can struggle and ultimately fail in the collegiate environment (Canto, Proctor, & Pervatt, 2005).

Among this group of college students with learning disabilities are students who have only recently been identified with a learning disability. By examining students who have been identified only after the beginning of the collegiate experience, the experiences and difficulties of this select and understudied group can be investigated and understood with the desire to facilitate a more successful and fulfilling college experience.

Situation to Self

This research was tempered by social constructivism and a Biblical worldview. With that understanding, research was conducted that attempted to comprehend a phenomenon by discerning and interpreting the experiences of college students who were identified with learning disabilities. Transcendental phenomenology is an excellent way to capture and construct an understanding of the essence of a shared experience (Creswell, 2007; Moustakas, 1994). When using transcendental phenomenology the researcher attempts to ignore personal bias and perceive the phenomenon in a pristine way, thus telling the story of the subjects accurately (Creswell, 2007; Moustakas, 1994).

Additionally, an underlying Biblical worldview gives value and meaning to the subjects and the research. College students with learning disabilities, who are caught in the dilemma of attempting higher education while discovering their learning disability, need encouragement and support that aids their adaptation to the collegiate educational environment. These particular students have value and deserve our interest and support.

Problem Statement

Educators need to find a deeper understanding of the experiences of students who have been identified with learning disabilities after beginning a college education (Abreu-Ellis et al. 2009; Foley, 2006). Various studies have tracked the college experiences of students with pre-

college identified learning disabilities (Janiga & Costenbader, 2002; Newman, Wagner, Cameto, & Knokey, 2009). The bulk of these studies make comparisons between pre-collegiate disability services and collegiate disability services while looking at student persistence and resiliency (Miller, 2002; Thoma & Getzel, 2005).

By focusing on students who have entered college with unidentified learning disabilities, this study may provide a deeper understanding of the emotions, behaviors, experiences and coping mechanisms of the selected participants, which in turn may help higher educators more successfully guide this important and growing group of learners.

Purpose Statement

The purpose of my research, a transcendental phenomenological study, was to describe the essence of what it means to be a college student who is identified with a learning disability after beginning a collegiate learning experience. By studying the experiences of college students who first learn about a personal learning disability while enrolled in post K-12 education, insight was gained into the shared life experiences of the participants in order to fully define the phenomenon and understand its implications. This type of phenomenological research design allowed for a reflective analysis of the phenomenon that produced universal meaning and provoked ideas of constructive change.

Significance of the Study

The significance of this study can be detailed in several ways. According to recent research, about 7.5% of students who enter college have some type of learning disability (U.S. Department of Education, 2008). Since recent federal legislative efforts like the *Americans for Disability Act* and passage of the *Individuals with Disabilities Education Act*, students with learning disabilities have been more consistently identified and helped in both pre-and post-

secondary education (Zhang et al., 2010). More and more students with learning disabilities are entering the college scene. A recent national follow-up study measured that over one-third of high school graduates who have been identified with learning disabilities enrolled in college within two years of graduation (Newman, Wagner, Cameto, & Knokey, 2009). Yet at the same time, less than 30% of those same students are finishing a collegiate course of study (Newman et al., 2009). Nestled among those students who are attempting a college education is a significant population of undergraduates with learning disabilities – those who will be identified after beginning college coursework. Yet, little is known about the experiences of college students who are identified with learning disabilities after they begin collegiate work.

With the recent intensification of home schooling in American education, the potential for an increase in late identification may exist. According to numerous studies, the national percentage of K-12 students who are home-schooled has increased significantly since the 1970's reaching more than two million students or about three percent of the school population (Mackey, Reese, & Mackey, 2011; Ray, 2010; U.S. Department of Education, 2013). Understanding the struggles of this population may encourage intervention methods during and even before college. Gaining an understanding of the unique experiences of these students is valuable in forming a pathway to success.

Additionally, the number of students enrolled in non-public Christian education declined since 2002 by as much as 13% nationally (Erickson, 2012). Yet, some of these students may be outside of the safety net of federal legislation like the *Individuals with Disabilities Education Act* (IDEA) of 2004. IDEA 2004 required that all students in public education be treated fairly and be given a chance to learn. The law required research-based interventions for all students with learning disabilities that included an Individualized Education Program (IEP), parental

conferences, and transitional services for guidance into the post-secondary world (Zhang et al., 2010). It is possible that some students and parents navigate the world of non-public Christian education without sufficient guidance regarding learning disabilities.

By including students from home school and Christian school backgrounds, who may possibly have a greater chance of entering college with unidentified learning disabilities, this study may provide a deeper understanding of the emotions, behaviors, experiences and coping mechanisms of the selected participants. This might help higher educators more successfully guide this important and growing group of learners.

Research Question(s)

Central Research Question

What does it mean to be identified with a learning disability after beginning a collegiate learning experience? College students identified with learning disabilities will describe the essence of the experience, as participants in interviews, focus groups and by means of a questionnaire.

Sub-questions

1. How did a late identification of a learning disability affect the academic lives of the participants? Subjects will reflect on academic difficulties experienced as college students. Participant responses will be compared to the literature (Abreau-Ellis et al. 2009; Foley, 2006).
2. How did a late identification of a learning disability affect the emotional lives of the participants? Subjects will reflect on emotional difficulties experienced as college students. Participant responses will be compared to the literature (Abreau-Ellis et al. 2009; Foley, 2006).

3. What can be done to alleviate the effects of the phenomenon? Subjects will share information about how they were best helped to cope with their disability. Participant responses will be compared to the literature (Murry, Wren, Stevens, & Keys, 2009; Zhang et al., 2010).

Research Plan

This investigation was qualitative research analysis using transcendental phenomenology. Of the five qualitative methods, phenomenology is the closest to capturing the “essence” of the experience (Creswell, 2007; Moustakas, 1994). The researcher attempted to understand the shared life experiences of the participants and authentically describe their situations. According to Moustakas (1994), phenomenological research of this type may produce universal meaning and inspire ideas for improvement and change.

During the research process, interviews, focus group interactions and discussions and a document analysis of questionnaires were used to collect a montage of information about the phenomenon and the participants. The narratives were gathered until the depth of information reached the saturation point (Creswell, 2007). Saturation point is generally defined as the point in the research process when new data begins to provide repeated information (Mason, 2010). According to Mason (2010), phenomenological studies usually reach saturation point between five and twenty-five subject interviews. At that point the research findings were analyzed in an attempt to ascertain recurring themes and patterns. Such themes and patterns provided clusters of meaning that helped shape the description of what it is like to be identified with a learning disability as a college student (Moustakas, 1994).

Once the essence of the experience was described, the researcher was also able to relate the findings to previous literature and suggest changes in procedures. Additionally, ideas for future research and professional understandings of the phenomenon are suggested.

Limitations and Delimitations

This study had several limitations that could not be controlled. Given the unique nature and availability of the subjects, the sample was not as tightly defined as possible. Gender, ethnicity, and location of the subjects were random in nature. Age was only limited because of the necessity to be old enough to begin college work. Delimiting the sample size by the aforementioned characteristics would have potentially made it difficult to obtain enough participants in particular categories. Additionally, participants from a public school background, home school background, and Christian school background were not excluded from the participant group.

Conversely, the study was delimited in a number of ways. The research study was phenomenological, which inherently required a specific number of subjects that must be studied. Creswell (2007) states that the sample size should be somewhere between five and 25. The research was also confined to students who began their college-level academic work before being identified with a particular learning disability. Much research and writing already exists about the early detection of learning disabilities, but little research has been reported regarding students who are first identified with learning disabilities after beginning their journey in higher education. A final area of delimitation is the restriction that a college student must have been identified since 2004 in order to qualify as a subject. Since legislation like the *Individuals with Disabilities Act* (IDEA) was passed in 2004, more attention has been given to pre-college students with learning disabilities. Yet, recent research regarding the struggles of those students

who have slipped through the safety net into the university setting without detection is sorely lacking.

Definitions

The following terms are used throughout this research study. A working knowledge of this vocabulary is vital to the research plan and the application of the research results.

1. *Learning Disability* – The term learning disability “refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical skills” (Cortiella, 2011, p. 3).
2. *Biblical Worldview* - A system of Judeo-Christian ethics that has as a foundational element a “high regard for the individual soul endowed with sacred inalienable rights and intrinsic dignity” (Tarnas, 2011, p.321).
3. *Social Constructionism* - Social constructionism is a philosophy that attempts to make sense of the world by interpretation, looking beyond an individual and attempting to analyze a multifaceted web of social relationships and activities that construct individual and group experiences (Creswell, 2007; Dudley-Marling, 2004).
4. *Resiliency* - Resiliency is an internalized process of successful adjustment to challenging situations (Wright & Masten, 2005).
5. *Self-efficacy* - Self-efficacy is a self-belief about one’s capability for success or failure (Bandura, 1997).

Summary

As a result of scrutinizing the experiences of college students who first discover a learning disability while enrolled in post K-12 education, a deeper comprehension into the shared

life experiences of the participants resulted. This insight has helped more fully characterize the phenomenon and appreciate its implications. This phenomenological research design allowed for a thoughtful analysis of the phenomenon that produced universal meaning and created ideas for beneficial change in higher education practices.

CHAPTER TWO: LITERATURE REVIEW

Overview

During the past 20 years, the demographic landscape of American colleges and universities has changed, with more students with disabilities entering the world of higher education. Because of the passage of the *Americans with Disabilities Act* (ADA) and the adoption of the *Individuals with Disabilities Education Act* (IDEA), high school graduates with learning disabilities seem to be more confident in their pre-college training and have enrolled in post-secondary education in higher numbers (Zhang et al., 2010). Recent statistics have shown that the percentage of initial college students who have self-disclosed learning disabilities has increased to 7.5% (U.S. Department of Education, 2008). Additionally, a national survey of undergraduate students receiving student aid in 2007-2008 indicated that nine percent self-reported having a learning disability (Cortiella, 2011). It appears evident that students with learning disabilities that have academic ability are continuing to matriculate into the college scene. Nevertheless, many colleges and universities have a more concentrated focus on students that need physical accommodations, and have unwittingly overlooked a majority of the students who have been identified with learning disabilities (DaDeppo, 2009). Consequently, without the correct type of help, many of these students potentially struggle and ultimately fail in the collegiate environment (Canto, Proctor, & Pervatt, 2005; Eckes & Ochoa, 2005). Graduation rates for college students with learning disabilities reveal a problematic tendency. One study showed that only 29% of students with learning disabilities are completing programs of study – a much lower rate than students in general who graduate at a 54% rate (Newman, Wagner, Cameto, & Knokey, 2009).

If faculty and administration had a greater understanding of the academic and social modifications and stresses of students with learning disabilities during the transition from a high school education to a college education, additional achievement for these students in post-secondary education might be possible. An informed and caring community of professional support is vital for a successful collegiate experience for students with learning disabilities. To fully understand the phenomenon of students with learning disabilities coping within a collegiate environment, a comprehensive review of current literature is a necessity. The careful researcher must understand the foundations of the trend, as well as the methods and procedures being used in today's universities to assist students with learning disabilities.

Conceptual Framework

Several assumptions were made as this research was being compiled and analyzed. The theoretical framework of this research is built on the tenets of social constructionism, self-efficacy, resiliency, and a biblical worldview. These fundamental concepts have guided the research process.

A first assumption was that the real essence of the phenomenon being studied will be found using social constructionism. Social constructionism is a philosophy that attempts to make sense of the world by interpretation (Creswell, 2007). A social constructionist view of learning disabilities looks beyond an individual and attempts to analyze a multifaceted web of social relationships and activities that construct individual and group experiences (Dudley-Marling, 2004). According to Dudley-Marling (2004), "The construction of LD, like any identity, depends on the complex interaction of people, places, and activities" (p. 485). Using social constructionism as a philosophical lens will require the researcher to assess the social context of

the learner's situation and temper any research findings with the hypothesis that individual and group reality can be seen subjectively by different observers.

Educational researchers and practitioners have been debating for decades the causes and core essence of the learning disabilities label. The debate is often framed by two opposite conclusions about the origins of learning disabilities: Learning disabilities are caused by neurobiological factors, or learning disabilities are caused by psychosocial factors (Hadley, 2007).

Those who promote a neurobiological origin have studied the brain looking for defects and interrupted neural pathways that can cause a misperception of information resulting in unexpected underachievement in a school setting (Fletcher, Lyon, & Lynn, 2006). Yet, even those who are involved in neurobiological research readily admit that the science is at a preliminary stage, the concept is difficult to medically characterize, and the definition of learning disabilities is ephemeral at best (Fletcher et al., 2007; Hadley, 2007).

Proponents of the psychosocial foundation of learning disabilities contend that the learning disability label is a creation of the educational and social culture of the twentieth century (Gallagher, 2010; Parrish, 2002; Reid & Valle, 2004; Sleeker, 1987). According to Sleeker (1987), the creation of the learning disabilities label made a way for parents to “differentiate their children from low-achieving, low-income and minority children” (p.210). While Sleeker's conclusion may seem to be accurate to some, it is important to remember that minority groups are the most represented population among those identified with learning disabilities, and African Americans are 1-1/2 times more likely to be labeled with a learning disability (Parrish, 2002). This label is what Gallagher (2010) called a “self-immolating description” noting the social and cultural consequences of the LD categorization (p. 4). Some

who hold to the psychosocial view of learning disabilities believe that disabilities are nothing more than an evidence of human variety that “are a natural and productive part of normal human variation” (Denhart, 2008, p. 484).

Finding a compromise between the neurobiological and psychosocial perceptions of the phenomenon is potentially difficult but necessary for research relating to learning disabilities. It is certainly probable that learning disabilities begin as neurobiological factors and are developed and molded by psychosocial factors. When researching a difficult-to-define concept, it is important that the researcher realize that measurement of that construct is “imperfect because no single measure captures all the components of the construct and each measurement contains a certain amount of error” (Fletcher et al., 2007, p. 28). A social constructionist view of learning disabilities looks at the environment and culture that surrounds individual subjects and attempts to find meaning which might lead educators to better methods and techniques. This effort may ultimately help students with learning disabilities succeed in the school environment. As succinctly stated by Dudley-Marling & Paugh (2010), the problem of learning disabilities is not an individual problem. “All educators have a collective responsibility for children’s success or failure” (p.13). Obviously, a collective approach to solving the quandary of learning disabilities can be fruitful and rewarding.

Furthermore, the work of Albert Bandura is also foundational to understanding the phenomenon that was studied. Bandura’s concept of self-efficacy adds to the philosophical and psychological complexity of this research study. Bandura (1997, 2001) defined self-efficacy as a self-belief about one’s capability for success or failure. Self-efficacy is a self-perception of capability that inspires the confidence to try or creates doubt that paralyzes action. Self-efficacy is built largely by mastery experiences, but can also be increased by modeling and persuasion

(Pajares, 1996). The significance of self-efficacy in an academic setting cannot be overestimated. According to Pajares (2005), “self-efficacy explains approximately a quarter of the variance on the prediction of academic performance” (p. 343).

Educators can be trained to positively affect self-efficacy by helping learners develop skills related to social adaptation, modeling behavior, and successful school practices (Costello & Stone, 2012; Pajares, 2005). Yet, teacher-directed efforts cannot increase self-efficacy like authentically successful student-initiated experiences in mastery learning. Bandura discusses two types of self-confidence – one built on learning experiences that incorporate academic skill building and another built on personality and persuasion without academic achievement (Bandura, 2001). In order to distinguish the two methods of self-confidence, Bandura quoted Bruner who wrote, “The process of education is not the production of self-confident fools” (Bruner, 1966, p. 65). Pajares (2005) added that it is important for both social adaptation and for building self-confidence to allow students to fail at a task. In the effort of trying and failing, a broad-shouldered type of self-confidence is forged – one that treats failure as a stepping stone. In order to build self-efficacy, students need bona fide achievement experiences, which in turn can potentially produce durable academic self-confidence and increased academic success.

The concept of self-efficacy and its connection with students with learning disabilities is an understudied phenomenon. Only during the past 10 years have researchers begun to investigate the linkage between learning disabilities and self-efficacy. Some preliminary research has shown that students with learning disabilities possess lower academic self-beliefs, which can in turn lead to academic difficulty. (Klassen & Lynch, 2007; Lackaye, Marggalit, Ziv, & Ziman, 2006; Stamp, Banerjee, & Brown, 2014). According to Klassen, Krawchuk, Lynch, & Rajani (2008), college students with learning disabilities generally have low self-efficacy which impacts

practices of self-regulation and procrastination. The Klassen et al. study surveyed over 200 Canadian college students with approximately half of the subjects having identified learning disabilities. The researchers found a very strong inverse relationship between procrastination and self-efficacy for students with learning disabilities, a much higher inverse relationship than students without learning disabilities registered (2008). The Stamp et al. study revealed that 75% of the participants blamed themselves for their difficulties and would not seek help (2014). In accordance with the research, students with learning disabilities need more “support aimed at bolstering self-regulation behaviors, addressing fear of failure, and providing tools that improve the confidence to implement self-regulating behaviors” (Klassen et al., 2008, p. 145). More research that leads to a deeper understanding of self-efficacy theory as it relates to college students with learning disabilities would be a beneficial byproduct of sustained research.

Along with comprehension and application of self-efficacy theory, the related concept of resiliency was used in an attempt to comprehend the shared experiences of college students who are identified with learning disabilities. Resiliency is a relatively contemporary subject of educational research that is commonly defined as an internalized process of successful adjustment to challenging situations (Veselksa, Geckova, Orosova, Gajdosova, & Van Dijk, 2008; Wright & Masten, 2005). Individuals with a sufficient level of resiliency are able to deal with stressful events in a successful way – surviving and thriving – but dire consequences can be the result of low resiliency (Stanton-Salazar & Spina, 2000).

Both pre-collegiate and collegiate students with low resiliency can manifest a number of destructive emotional and academic difficulties that may damage any academic undertaking (Heiman & Kariv, 2004, Stamp et al., 2014). Students with low resiliency can exhibit a number of emotional difficulties like anxiety, stress, worry, anger, and shame. Low resiliency can also

have unconstructive academic consequences like hiding disabilities, slow progress, academic failure, lack of confidence, and the eventual abandonment of post-secondary education altogether.

Milstein and Henderson (2004) explained the significance of resiliency in a typical successful academic experience. According to the researchers, resiliency is based on both intrinsic and extrinsic factors. The educator's task is to cultivate both the intrinsic and extrinsic dimensions of resiliency by intentional plans and actions. According to Milstein and Henderson's resiliency model, educators can encourage resiliency in a number of specific ways. Teaching life skills such as conflict resolution may make an educational experience like collegiate life more navigable. Resiliency can also be developed by educators when caring support is offered and a positive family atmosphere is maintained. The social connections made in this positive environment can increase an individual's ability to deal with stressful situations. Moreover, Milstein and Henderson explain that educators who communicate elevated yet realistic expectations and set unambiguous policy boundaries also help build resiliency. Understanding the connection between self-efficacy and resiliency as they both relate to college students with learning disabilities will be a foundational theoretical underpinning of this research.

Additionally, the underlying paradigm that helped guide this research study is an understanding of a biblical worldview and all learners. The necessity for the inquiry itself and the importance of the results will be based on the overarching implications of a biblical worldview for struggling learners. The biblical worldview that guides this research is supported by biblical principles that champion necessary care and concern for all people no matter the physical or mental condition (Mark 12:31). The system of Judeo-Christian ethics is strongly undergirded

with a “high regard for the individual soul endowed with sacred inalienable rights and intrinsic dignity” (Tarnas, 2011, p.321). Christians and Christian organizations have been well-known for establishing orphanages, creating and maintaining educational institutions, treating the medically challenged, and showing compassion for elderly and infirmed. Caring for those who are less fortunate, like individuals with learning disabilities, has been a shaping principle of Judeo-Christian thought. Finding answers for struggling learners is the compassionate, Biblical response to the phenomenon in question.

Related Literature

Foundations: Legislative History for Students with Learning Disabilities

Prior to the 1970s, students with learning disabilities were rarely able to enroll in postsecondary education in the United States and experienced little success if enrolled (Finn, 1999). Most often these students had unidentified learning disabilities that made high school an unpleasant experience and postsecondary education an afterthought. However, the composition of traditional enrollees in American higher education has been radically altered during the last several decades. The passage of the *Americans with Disabilities Act (ADA)* in 1990 unlocked doors of opportunity for collegians with varied types of physical and learning disabilities. Both Section 504 of the *Rehabilitation Act of 1973* and the ADA require federally-funded institutions to avoid discrimination against individuals with physical or learning disabilities. Both laws protect college students with disabilities from discrimination by requiring reasonable accommodations for learners with disabilities including those with specified learning disabilities (Cortiella, 2011). Colleges and universities are therefore obligated to make necessary course modifications and alterations to assist students who have been identified with such a disability, but it is important to understand that the federal laws “do not mandate higher education for

individuals with disabilities but rather eliminate discriminatory practices” (Barnard-Brak, Davis, Tate, & Sulak, 2009, p. 190). Yet to insure compliance, a college or university can have federal funding including student financial aid withdrawn, if the institution does not allow reasonable accommodations (Cortiella, 2011). In 2008 Congress passed additional clarifying ADA language that defined a disability to include an impairment that interfered with reading, thinking and concentrating (Cortiella, 2011). With the passage of several federal legislative initiatives beginning in the 1970s, the outlook and experiences for students with learning disabilities in the United States began to change for the better (National Council on Disability, 2003).

With the doors of opportunity swinging open, the number of students with disabilities attending colleges has increased. Numerous studies since 1990 have demonstrated an increase of approximately 10% in the enrollment of students with disabilities in higher education (Thomas, 2000; Zhang, et al., 2010). Additionally, since the adoption of the *Individuals with Disabilities Education Act* (IDEA) in 2004, high school graduates with learning disabilities are more confident in their training and are attempting collegiate coursework in larger numbers (Allsopp, Minskoff, & Bolt, 2005). Obtaining an accurate measure of the number of students with disabilities in American higher education has been attempted as part of frequent studies. Some studies completed during the past 10 years have found the percentage of college students with all types of disabilities to range from seven to 15% (Brinkerhoff, McGuire, & Shaw, 2002). Certainly, more students with disabilities are entering colleges and universities yearly, and an increasing number of those students have been identified with learning disabilities. As of 2008, the reported percentage of college students with learning disabilities stood at 7.5% (U.S. Department of Education, 2008). The fluctuating number of students with learning disabilities in multiple studies is a matter of concern, as well as an inherent research weakness in many studies.

Since students must self-report learning disabilities to college authorities, currently the actual number of students affected is a matter of estimation at best.

With increased access comes additional responsibility from college educators. When the ADA was passed in 1990, institutions of higher learning were required to recognize the importance of disability law and make necessary policy changes. In most cases, issues of accessibility become paramount. However, if colleges and universities excessively concern themselves with physical accommodations, they risk overlooking a large number of all students who have been identified with disabilities – students with learning disabilities. An accurate definition of what constitutes a learning disability is necessary.

Types of Learning Disabilities Experienced by College Students

As the number of students with disabilities has increased on college campuses since the 1970s, so too has the number of particular types of disabilities represented among student bodies across the nation. Although students attend colleges with physical limitations, mental illnesses, behavior and emotional disorders and autism, those disabilities are not the focus of this research study. Instead the focal point of this study is students with learning disabilities.

As a result of the new legislation, college educators have attempted to better understand the definition and nature of learning disabilities. One possible understanding of the phenomenon is defined as “discrepancies between a student’s ability and his or her achievement or performance” (Hadley, 2007, p. 11). Fletcher et al. (2007) defined the phenomenon as unexplained underachievement in contrast to expected capability. According to Gallagher (2010), those who are initially identified are students who “seem bright enough but nevertheless could not keep up with classmates academically” (p. 4). It should be noted that the definition of a learning disability is still a matter of intense and ongoing study and that measuring something

that is not unequivocally defined and remains unsettled by nature is problematic (Fletcher et al., 2007; Hadley, 2007).

According to many but not all scholars, learning disabilities are neurological deficiencies that create difficulty in information construction and processing. According to the National Center for Learning Disabilities (NCLD), learning disability is a designation 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 skills” (Cortiella, 2011, p. 3). Most often college students with learning disabilities are challenged by reading and writing activities or by the lack of organizational and study skills necessary for successful collegiate academia (Hadley, 2007).

According to statistical information from a national study of college freshmen, learning disabilities are the most commonly self-reported type of disability in colleges and universities numbering 43% of all disabilities (Henderson, 2001). The results of the Henderson study nearly match the results from the 2009 *Individuals with Disabilities Education Act* (IDEA) data that reported 42% of all students who received IDEA services in K-12 public education were identified with learning disabilities (Cortiella, 2011). The typical freshman student with a learning disability is a white male who has earned Cs in high school. Henderson reported that these students often have parents who are college graduates, but because of pre-collegiate learning experiences, the students believe they will need help with writing, mathematics, and developing self-confidence. Researchers Abreau-Ellis, Ellis, and Hayes (2009) indicated that students with learning disabilities articulated that they had the most difficulties in mathematics, reading, and writing, but most particularly in written expression.

The most commonly experienced learning disability found in college students is a reading disorder, which some researchers believe makes up nearly 75% of all learning disabilities observed (Murray, Lombardi, Wren, & Keys, 2009; Cortiella, 2011). A reading disorder or dyslexia can vary in intensity but usually impinges on numerous components of the collegiate academic experience. According to the International Dyslexia Association, “Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with fluent word recognition and by poor spelling and decoding abilities” (Factsheet, 2008). The National Center for Learning Disabilities (2015) lists some common warning signs of dyslexia:

- Difficulty summarizing and expressing ideas
- Difficulty when memorizing
- Difficulty reading aloud and at a proper speed
- Difficulty consistently spelling correctly

Other significant learning disabilities found in college students include math disabilities (dyscalculia), writing disabilities (dysgraphia), and listening processing disabilities among others (Miller, 2002). According to the National Center for Learning Disabilities (2015), dyscalculia is a learning disability that affects an individual’s ability to understand spatial concepts and do basic mathematical activities, while dysgraphia is a learning disability that affects an individual’s ability to organize written expression, transmit ideas into words on paper or even spell words correctly. Researchers and professional organizations do not classify attention-deficit/hyperactivity disorder (ADHD), autism, behavioral disorders, and intellectual disability as particular learning disabilities (Murry et al., 2009). However, there is some concurrence of learning disabilities and ADHD with approximately one-third of students who are identified with a learning disability also being identified with ADHD (Cortiella, 2011). Regardless of the

specific learning disability, instructors need to be willing and ready to help students who have been identified.

The Predicament of Late Identification of Learning Disabilities

Most researchers agree that a late identification of a learning disability can put an adult learner at a great disadvantage (Abreu-Ellis et al. 2009; Gerber, 2012; Gregg, Colman, Davis, Lindstrom, & Hartwig, 2006; Kane, Roy, & Medina, 2013). Adults who are recently identified with learning disabilities usually do not have a history of self-advocacy. According to Gerber (2012), a successful adult with a learning disability will “know who they are, how LD affects them in a variety of adult settings, and how they should compensate for any deficiencies” (p. 43). Without a long-standing understanding of a personal learning disability, a college student may be disadvantaged. Not only would helpful collegiate services be delayed to the unidentified student, but the transitional planning mandated by IDEA 2004 before high school graduation would not have taken place (Abreu-Ellis et al. 2009; Gregg et al. 2006).

Although there seems to be an insufficient research foundation regarding the time of identification of learning disability and potential academic success, the Abreu-Ellis et al. (2009) study attempted to compare the collegiate success of students with an early-identified learning disability (K-12) with students with a late-identified disability (post-secondary). Both groups experienced more difficulty than students without a learning disability in the following key areas as measured by the LASSI Survey: anxiety, concentration, study aids, and test strategies (Abreu-Ellis et al. 2009). Additionally, the Abreu-Ellis et al. (2009) research also revealed a significant difference in two areas between early-identified and late-identified students. Students who had their learning disability identified after high school graduation were more likely to have difficulty with testing strategies and writing papers in college than those who were identified

earlier. Although more research is needed, the Abreu-Ellis et al. (2009) investigation may be revealing the value of K-12 remediation services.

Faculty Responsiveness to Students with Learning Disabilities – Academic and Social Implications of the Phenomenon

A vital brace in the social support network of the college student with disabilities is the encouragement and support of the student's professors. Professors hold a wide range of opinions and ideas concerning learning disabilities, accommodations, and to what degree students with learning disabilities should be assessed and treated in unique ways academically. Students with disabilities clearly perceive the level of faculty cooperation and also identify the lack thereof based on the treatment they receive from their professors.

One research study probed the attitudes of professors about students with ADHD by surveying 253 professors at Central Washington State University. The results were fascinating. The researchers found that the professors who responded seemed to know the basics about ADHD, yet 26% of the respondents did not believe they needed to offer accommodations for the disability (Vance & Weyandt, 2008). Vance and Weyandt (2008) also related that a surprising 41% of the professors did not consider ADHD a hindrance to the learning of a student who had been identified with ADHD.

Open communication between faculty and students with learning disabilities is vital for student success. Cawthon and Cole (2010) observed in a study that only 32% of students with learning disabilities interacted with faculty about their individual learning disability, making faculty-student interaction impossible for the majority of students with learning disabilities. Although the Cawthon & Cole study lacked complete external validity, since it was done at only one university, the results are worthy of contemplation. Corroborating with the numbers in

Cawthon & Cole's research, the National Longitudinal Transition study (NLTS2) found that only 35.5% of postsecondary students with learning disabilities self-disclosed their learning needs to their college or university (Lightner, Kipps-Vaughan, Schulte, & Trice, 2011). The Lightner et al. (2011) research produced several significant explanations to the ongoing dilemma: Why are college students reluctant to self-disclose a learning disability? According to the research, the fear of developing a stigma with faculty, lack of knowledge about disability services, and a lack of a complete understanding of the ramifications of a personal learning disability were primary reasons for non-disclosure. The Lightner et al. (2011) mixed method study revealed that more than one-half of all students with learning disabilities who delayed disclosure did not want to produce a potentially negative stigma with professors. The study also revealed that about one-third of the college students who delayed disclosure did not believe they understood their own learning disability sufficiently and also did not understand how disclosure would help them in their transition to the college environment. Denhart (2008) reported similar results, concluding that many students avoid self-disclosure because they did not want to be misunderstood and feared the stigma that accommodations usually bring. The results of Black's (2005) phenomenological study revealed that an amazing 90% of the subjects with learning disabilities were reluctant to ask for accommodations, and 90% of the same subjects were misunderstood by at least one faculty member during their collegiate experience.

When a student with a learning disability approaches a professor and does not receive an accommodation or perceive any support, the vital social support structure that leads to a successful collegiate experience for that student begins to crumble. One study revealed that 21% of subjects encountered obstacles when attempting to receive accommodations. This was usually characterized by professors who were unwilling to grant accommodations (Cawthon & Cole,

2010). Worley and Cornett-DeVito (2007) pointed out in their work on teacher power and students with disabilities that receptive and open teacher responses are critical to empowering and enabling students to grow and succeed. According to the researchers, “students with learning disabilities are to receive not only appropriate accommodation but also the supportive communication which is critical to their academic survival and progress” (p. 31). Key factors in the social support network of students with learning disabilities are supportive attitudes that generate open and ongoing communication with professors.

One interesting yet troubling result of poor communication between faculty and students with learning disabilities is an expanded student workload. One theme found in the research by Black (2005) is a student-perceived heavier workload in courses without accommodations. Students indicated that they avoided the stigma of accommodations and refrained from self-identification and then, consequently, had to grapple with reading assignments and written assignments without specialized help and learning aids such as audio textbooks.

Multiple studies have explored the manifold types and the characteristics of accommodations given to students with learning disabilities. Examples of commonly used accommodations would include extended or unlimited time on exams, the oral reading of exams, providing notes or note takers for courses, alternate course evaluation methods, use of audio textbooks, course tutors or coaches, reading assistance, and recorded lectures (Cawthon & Cole, 2010; Denhart, 2008; Hadley, 2007). According to Cawthon and Cole (2010) the most commonly used accommodation was extended or unlimited testing time.

Extended testing time for students with disabilities and its consequences have been the focus of noteworthy current research (Lee, Osborne, & Carpenter, 2010; Lovett, 2010; May & Stone, 2014). While most studies concentrated on the K-12 educational setting, several general

implications can be gleaned from the research. Decisions about how much extended time to provide for students with learning disabilities is generally inconsistent and arbitrary in nature in academia (Lovett, 2010). Although accommodations for testing time are often doubled or totally untimed, a recent study revealed that a 25% extension was appropriate for test takers with learning disabilities, and that on average students with disabilities used only about 14% more time than those without identified disabilities (Cahalan-Laitusis, King, Cline, & Bridgewater, 2006). Furthermore, extended testing time has been found to benefit all students – both those with or without an identified disability (Sireci, Scarpati, & Li, 2005). Recent research by Lewandowski, Cohen, and Lovett (2012) involving college students with learning disabilities and extended test times concluded that those with disabilities were able to score higher on tests than their non-disabled subjects when given 50% extra time. Somewhat surprisingly, when students were given 100% extra time “the LD group had a large advantage in both items attempted and number correct” (p. 333). When all subjects had lengthened testing times, all scores rose significantly. Clearly, educators need to remove the inconsistent and arbitrary nature of extended testing times to significantly improve the learning of all students.

Moreover, some researchers established that students with learning disabilities had a considerable appreciation for the ability to access class notes or documents prior to class, which allowed them to more successfully concentrate during course activities and lectures (Hadley, 2007). Being able to carefully review and more deeply understand instructional material prior to a particular class session is highly valued by students who may process and understand written or oral information in a non-traditional manner. Not only is it important that professors facilitate the success of students with learning disabilities, but other campus professionals must also be

supportive in order for students with disabilities to persevere to success in a university environment.

Administrative and Staff Support for Students with Learning Disabilities – Academic and Social Implications of the Phenomenon

Beyond the support of professors, students with learning disabilities need the reinforcing help of administrators and support staff who can provide and also promote advantageous campus programs. At most university campuses, professional support is offered through a disability services office. In spite of this, research indicates that most students with learning disabilities believe they have insufficient social and academic encouragement while at college (Troiano, Liefeld, & Trachtenberg, 2010).

Several studies reported that when students with disabilities enter college, they look for similar structures of learning assistance as they have experienced in earlier educational situations (Heiman, 2006). Heiman reported that college students with learning disabilities “had a higher locus of control than did students without LD... attributing their success to external aid” (p. 474). The addition of professional support, even without accomplishing much, appears to add a psychological safety net for students with learning disabilities. Knowing that a structure of support exists can give the impression of academic and emotional security. The security factor at work may be evidenced by the research results that show levels of academic anxiety of students with learning disabilities are reduced in universities with well-developed disability support programs (Heiman & Kariv, 2004).

A positive atmosphere of collaboration can be fostered by a knowledgeable and supportive university staff. Although not many researchers have studied the perceptions of university staff, the Murray, Flannery, & Wren (2008) study provided some initial insight. On a

large urban university campus with a mature support services system for students with learning disability, selected staff was surveyed. Staff members from specific offices that were most likely to interact with students with learning disabilities were chosen to participate – career services, library, student life, financial aid, and student accounts. Although the staff members that were surveyed generally had positive views toward students with learning disabilities, the research indicated that the staff had gaps in understanding disability law, the necessity for accommodations, the types of accommodations normally granted, and the extent of university disability support programs (Murray et al., 2008b). A well-trained university staff is significantly helpful in producing productive and enabling interactions with students with learning disabilities.

On most university campuses, the office of disability services fulfills the most important role in supporting students in higher education. These offices can organize and coordinate needed services for students with learning disabilities, and they provide “valuable human connection to the institution’s services” (Dowrick, Anderson, Heyer, & Acosta, 2005, p. 43). Nevertheless, the researchers additionally discovered that offices of disability services lacked adequate institutional financial backing and therefore could not provide adequate help to students who needed it. Given the fact that these offices have a significant role in promoting academic success, leaders in higher education ought to review funding priorities. Offices of disability services are the visible, tangible lifelines that encourage many students with learning disabilities to persevere (Troiano, Liefeld, & Trachtenberg, 2010). These offices do much to promote student self-efficacy and resiliency. According Denhart (2008), 80% of the participants who participated in the research study considered the professional staff of the learning disabilities office to be indispensable to their own individual collegiate success.

Furthermore, ADA regulations stipulate that an office of disability services cannot support students who do not self-report. According to Cawthon and Cole (2010), a majority of students with learning disabilities in the study did not contact a campus office of disability services. The research revealed that only 43% of the subjects interacted with the disabilities staff. Cawthon and Cole surmise that most of the subjects indicated that anonymity was superior to the self-disclosure that could potentially label a student permanently and produce a negative stigma. The Stamp et al. study found that 75% of the participants failed to contact the appropriate office for accommodations (2014).

Some thought should be given to the motives behind non-disclosure. Getzsel and Thoma (2008) hypothesized that students with learning disabilities might be “anxious for a new beginning,” not wanting to repeat the experiences of K-12 interventions (p. 77). Barnard-Brak et al. (2009) postulated that the transition between a hands-on K-12 experience to a more *laissez-faire* post-secondary situation might disconnect some students with learning disabilities with the essential help that is necessary. Instead of parents or school personnel initiating accommodations in a K-12 setting, post-secondary students are entirely responsible for initiating any accommodations. As successful as an office of disability services may be in helping an individual student, help can only be given to those who ask for it.

Best Practices for Today’s College Student with Learning Disabilities – Mitigation of the Phenomenon

When considering the conclusions and recommendations of research studies regarding the plight of college students with learning disabilities, several best practices become apparent. With the aim of maximizing the success of college students with learning disabilities, a university faculty and support staff needs the appropriate training with an understanding of

proper accommodations and successful curricular design. Students themselves must be identified early and develop successful coping strategies, and the more supportive nature of a junior college experience should be maximized.

The willingness of faculty members to understand the phenomenon of learning disabilities and make appropriate accommodations is a vital component in a successful experience for students with learning disabilities. The McCleary-Jones (2008) study revealed patterns of experiences and behaviors that pointed to the need to more adequately train faculty in techniques to facilitate students with learning disabilities including allowing suitable accommodations. Without a proficient comprehension of the nature of learning disabilities and some suggested methods of adjustment, certain professors will not allow any accommodations or give students needed support. Other researchers have come to a similar conclusion regarding the positive connection between faculty training and the use of appropriate accommodations (Finn, 1999; Lee et al., 2010; Murray et al. 2009; Murray, Wren, & Keys, 2008; Thomas, 2000). For example, the Murray et al. study (2009) surveyed faculty on a large urban private university. The research results revealed that 46% of the faculty had no learning disabilities training whatsoever which might include any number of possibilities like workshops, courses, reading books or journals. The researchers also concluded that the training that produced the most positive results were specific learning disability workshops or courses designed for university instructors about learning disabilities (Murray et al., 2009).

Additional investigations have attempted to compare faculty gender, academic department affiliation, and faculty experience level with perceptions and attitudes about students with learning disabilities (Murray et al., 2008b). Although the overall mind-set of faculty members about students with learning disabilities was positive in the 2008 survey, the

researchers discovered that female faculty members were more likely to offer accommodations. Also apparent in the research were differing attitudes about learning disabilities dependent upon academic department and program. While the Education, Music, and Computer Technology departments made more accommodations, the Business, Liberal Arts, and Science departments made significantly less accommodations. If students with learning disabilities are to succeed, not only must faculty have the appropriate knowledge of the phenomenon, but they also must be knowledgeable regarding the proper way to design an accommodation.

Over the past decade some initial research has been completed regarding an altered curricular design and the adoption of innovative instructional strategies for college students with learning disabilities. At the forefront of the research is the curricular and instructional concept of Universal Design for Learning (UDL). In 2002, Rose and Meyer postulated in their seminal work that the composition of learners in college and university student bodies was growing more dissimilar. Consequently, curriculum should not be one size fits all but rather follow the principles of UDL.

The concept of UDL is built on the presupposition that no learners are exactly alike and that curriculum should be both inclusive and active (Chodock & Dolinger, 2009; Edyburn, 2010; Orr and Bachman-Hammig, 2009; Pace & Schwartz, 2008). College curriculum that follows the model of Universal Design is created “to anticipate the need for alternatives, options, and adaptations to meet the challenge of diversity” (Rose, Harbour, Johnston, Daley, & Abarbabbell, 2006, p. 136).

The curricular concept of UDL is built on three undergirding principles that must revolutionize the foundation of learning on the collegiate level. According to Rose and Meyer (2002, p. 75), the following principles must be present in a successful college curriculum:

- Instruction must be accomplished with “multiple, flexible methods of presentation”
- Learning must be demonstrated in “flexible methods of expression and apprenticeship”
- Engagement must occur using “multiple, flexible options”

The presentation of information within a course must be varied and flexible in nature. With a heavy reliance on technology and web-based organization, course content must be balanced carefully between lectures, discussions, textbooks, video-recorded information, and collaborative learning. According to Rose et al (2006), “there is not one way of presenting information or transferring knowledge that is optimal for all students” (p.137). Additionally, the flexibility of UDL also demands that students must be allowed to express their learning and engagement about course content in alternative ways. The traditional course research paper might be supplemented by non-traditional presentations or projects that allow students with learning disabilities to demonstrate their learning in a format that does not resemble the typical research paper constructed with sentences, paragraphs, and footnotes written in either APA or MLA research styles.

When using a construct like UDL, which allows for variety, flexibility, and a more individualized curricular program, students with learning disabilities reported a more positive college experience (McGuire, & Scott, 2006). The Rose et al. (2006) research group applied UDL to a Harvard University graduate education course about learning differences with noteworthy results. While the researchers freely admitted that the number of students with learning disabilities in the graduate course was unknown and possibly small, they still drew some conclusions regarding the use of UDL. According to the Rose et al. (2006) research, UDL greatly increased the students’ ability to choose among alternatives within the course. This freedom was a positive encouragement to diverse learners looking for the best way to present scholarship.

Secondly, the curricular emphasis on differentiated presentation of course content and an emphasis on technology improved courses in general. The concept of UDL deserves more implementation and study, particularly with students with learning disabilities.

Additional efforts at curricular redesign have been attempted. Instruction stratagems like Paired Associated Strategy (PAS) have also been studied and have shown encouraging results (Cooper, Lingo, Whitney, & Slaton, 2011). PAS is a system of instructional lessons designed to increase a student's recall of facts, usually accomplished in pairs of information. The Cooper et al. (2011) research study discovered a significant improvement in identification and recall of information when students with learning disabilities had practiced PAS. Trainin and Swanson (2006) reviewed metacognitive learning strategies and found that students with learning disabilities could improve their collegiate academic success by understanding the way their minds worked. The knowledge about the mind helped students adapt their learning techniques and become reflective learners. The process made them more effective learners. Learning and then applying effective learning strategies is imperative for the student with learning disabilities.

An added best practice for students with disabilities is the development of successful coping strategies. Coping strategies can include developing attitudes of personal determination, learning additional study skills, developing enhanced self-advocacy skills, and establishing a mentoring relationship with another student. For example, the Janiga and Costenbader (2002) qualitative study surveyed 74 coordinators of service for students with disabilities at colleges and universities in New York State. The researchers were attempting to evaluate transition success as well as the quality of disabilities service in postsecondary education.

The Janiga and Costenbader (2002) survey of respondents indicated two important conclusions about transitions. First, high school services were much better than postsecondary

services for students with learning disabilities (Janiga & Costenbader, 2002). Gil (2007) indicated in his work that interventions in K-12 under *Individuals with Disabilities Education Act* (IDEA) were superior to post-secondary help mandated by either *Section 504* of the *Rehabilitation Act of 1973* or the *Americans for Disability Act* (ADA). The cooperative nature of the creation and implementation of an individualized education plan (IEP) stands in contrast to the minimized efforts of collaboration in the post-secondary world. Second, student self-advocacy was a crucial component to university success (Janiga & Costenbader, 2002). Rather than relying on a team of adults to manage a personal plan of education, the college-age student with learning disabilities must exclusively manage a collegiate educational plan. Barnard-Brak et al. wrote (2009), “The transition from high school to college is marked by a transfer of responsibility” (p. 190). Consequentially, any collaboration with professionals from the university office of disability services will significantly ease transition issues and better allow students with learning disabilities to cope.

Other studies point to the necessity for college support staff endeavoring to train self-identified students with disabilities with a number of specific coping strategies that build self-confidence and a self-advocacy mindset (Heinman & Kariv, 2004; Miller, 2002; Murry, & Wren, 2003; Thoma & Getzel, 2005). In recent years, one such innovative program has been the emphasis on executive function coaching. In some institutions, an emphasis on executive function coaching methods has replaced traditional tutoring services.

Rather than using a model of intervention that concentrates on class content and learning strategies, executive function coaching is designed to encourage the intensification of self-management skills for students with learning disabilities (Parker & Boutelle, 2009). According to Parker, Hoffman, Sawilowsky and Rolands (2011), executive function coaching is a process of

“teaching self-regulatory mechanisms that organize, direct, and manage other cognitive abilities, emotional responses, and overt behaviors” (p. 116). Executive function coaching is designed to help students with ADHD and learning disabilities learn skills that promote academic planning and behaviors that allow the successful accomplishment of educational goals. Two recent phenomenological studies attempted to measure the effectiveness of executive functioning coaching on the academic and emotional lives of university students with learning disabilities (Parker & Boutelle, 2009; Parker et al. 2011). Both studies compared executive function coaching with more traditional tutoring models. Executive function coaching was deemed a more successful approach, because the collaborative methods used were shown to produce much higher levels of self-efficacy, self-confidence, stress reduction, time management, and organization. Although limited in nature, the preliminary research on executive function coaching indicated that its usage is a highly effective way to help students with learning disabilities.

An additional best practice for college students with learning disabilities includes utilizing the more supportive nature of the junior college experience. Chang and Logan (2005) suggested that two-year colleges typically have a mostly local student body, which allows college students to remain more connected to family. The importance of a connection with home and family for the student with learning disabilities was emphasized as a key imperative in creating an attitude of success (Nielsen, 2001). Moreover, a junior college usually has supplementary developmental and remedial instruction for beginning college students that could potentially assist the student with learning disabilities (Chang & Logan, 2005).

In a groundbreaking quantitative study, Johnson, Zascavage, and Gerber (2008) studied two groups of students with learning disabilities at a southwestern four-year university – students

who had previously attended a two-year college and students who had not previously attended any college. The researchers concluded that the two groups had no significant differences in GPA, but had a significant difference in graduation rates. Students who attended a two-year college beforehand had a graduation rate of 54%, while students who did not attend a junior college had a graduation rate of 26.5%. Johnson et al. (2008) hypothesized that students with learning disabilities were able to build confidence, self-efficacy, and self-esteem during the more supportive junior college experience thus enabling them to have a greater likelihood to graduate from a four-year college. The Johnson et al. (2008) results were supported by a related demographic study of over 800 junior college students by Mamiseishvili & Koch (2012) who indicated that “2-year institutions are doing an adequate job of accommodating students with learning disabilities in a way that facilitates persistence (p. 332).

An added area of best practices research was an attempt to measure the effects of early identification of learning disabilities. Abreau-Ellis et al. (2009) used the *Learning and Study Strategies Inventory* (LASSI) to compare similarities and differences between students with learning disabilities and students without disabilities. The researchers also factored into their work the importance of the time of identification of a learning disability. Students with disabilities were found to have more anxiety, have less concentration skills, be less positive about school, and to more significantly struggle with test strategies than students without learning disabilities. In particular, students who were identified during their college experience had greater difficulty writing papers and taking tests than did students who were identified during their pre-college years. Early identification, prior to college, often allows time to teach students educational skills and coping mechanisms that are necessary to succeed in the more

difficult college learning environment that requires heightened skills in detailed written expression and test-taking (Abreau-Ellis et al. 2009; Foley, 2006).

A final best practice in higher education and learning disabilities would require opportunities for faculty to be more fully informed. The Murry et al. (2009) study revealed that faculty training positively changed perceptions and attitudes toward students with disabilities. Since 1999, the U.S. Department of Education has funded more than 70 university initiated grants that have been used to educate faculty about college students with learning disabilities (Murry, Wren, Stevens, & Keys, 2009). Most of the published descriptions of these projects are narratives that detail training programs that instruct faculty about learning disabilities, college support services, proper accommodations, and teaching strategies. According to Murry et al. (2009), these programs are becoming more common in colleges and universities, although the research revealed that more can be done. A properly trained faculty is essential for the success of students with learning disabilities.

Summary

Opportunities for future research regarding the collegiate success of students with learning disabilities abound. Several examples are worthy of consideration. One of the most nagging difficulties when researching college students with learning disabilities is quantifying the number of students who are subjects nationally. Students with disabilities are only known to colleges when they self-disclose, and local studies have shown that the majority of college students with learning disabilities remain hidden in the university system (Cawthon & Cole, 2010). Some researchers have speculated about the reasons why so many students do not self-disclose their learning disabilities to college professors and support staff, however a meticulous research study that explores that topic would be beneficial to all parties involved. Methods and

tactics to increase reporting rates need to be explored and adopted. Evidently, students with disabilities who do seek help have a much better success rate.

Furthermore, very little is known about the future accomplishments of college students with learning disabilities. A longitudinal study that compares students with learning disabilities who are college graduates with those who dropped out of college would be informative and useful. Moreover, the tracking of students' elementary and secondary IEP experiences might additionally reveal some trends that may suggest best practices for optional success. An understanding of best practices of pre-college programs and successful strategies that increase collegiate graduation rates would do much to shape assistive programs that have a positive impact on students with learning disabilities.

Future study in instructional approaches and strategies in college instruction that can better support students with learning disabilities would be advantageous. Initial attempts at curricular redesign using constructs like *Universal Design for Learning* seem to have had a positive impact. Giving college professors and support staff additional tools to aid students in effectively compensating for a particular disability is a worthwhile and needed venture. This would require additional funding of offices of disability services and faculty training. Studying the money trail to disability services would be both valuable and enlightening.

A comparison study of colleges designed specifically for students with learning disabilities like Beacon or Landmark colleges, with traditional universities would be instructive. Both Beacon and Landmark colleges are designed exclusively for students with learning disabilities or disorders. Does higher education with an exclusive focus on learners with disabilities have better success? What strategies and procedures used at these carefully designed colleges are most successful? Do the support staff and faculty at Beacon or Landmark colleges

operate and teach in a distinctly different manner? How do these colleges teach written expression and test-taking skills in innovative and helpful ways?

More research needs to be done comparing learning modes and students with learning disabilities. Do students with learning disabilities fare better in traditional classrooms or enrolled in online courses? Do students with learning disabilities have greater success in traditional courses or technology-laden and skill-building courses? Surprisingly, little research has been done understanding the dynamic of learning disabilities and learning modes. With a significant increase of online coursework for college credit during recent years, how does that learning modality impact a student with learning disabilities? Do students with learning disabilities fare better academically in an online learning environment or do they have more success in a traditional face-to-face course? What accommodations are commonly used in online classes? Do online faculty and staff have enough of a personal connection with a student with a learning disability to effectively intervene and guide learning successfully? One recent study provided mixed and inconclusive results about online success and students with learning disabilities. The Hollins and Foley research revealed some students had better success in the online modality, while others specifically struggled with organizational skills and reading information on a computer screen (2013). Obviously, much more research and study is needed to fully understand and effectively help students with learning disabilities as they encounter a wide variety of curricular offerings.

A final area that is neglected in the study of college students with learning disabilities is students from non-public pre-college experiences. Although the vast majority of students (87.5%) enrolled in secondary education attend public schools, a growing number of secondary students are enrolled in home schools (3.5%) while those enrolled in private education (9%) has

gradually diminished recently (U.S. Department of Education, 2012). How do students with learning disabilities who have been home-schooled or schooled in parochial schools progress when they enter the college scene? Do these students experience a more troubling adaptation to college academic life? Does a limited access to K-12 interventions hinder these students? How many of these students enter college without being identified with learning disabilities? What policies and programs can be instituted to help this particular audience?

Without question, students with learning disabilities are enrolling in college and universities in greater numbers than ever. It is obligatory for leaders in higher education to study the phenomenon and carefully craft policies and programs to meet the needs of this important group of learners.

CHAPTER THREE: METHODOLOGY

Overview

This study was designed to develop a fuller understanding of the academic and social experiences of students with learning disabilities who are identified after beginning a collegiate experience. In order to obtain a more complete perspective, a transcendental phenomenological qualitative research study was designed and implemented. This chapter includes an overview of the chosen research design, the research questions, the participants, the site, the procedures, data collection, data analysis, trustworthiness of the design, and ethical considerations.

Introduction

During the past 20 years, the demographic landscape of American colleges and universities has changed. More students with disabilities have entered the world of higher education than ever before. Since the passage of the *Americans with Disabilities Act* (ADA) and the adoption of the *Individuals with Disabilities Education Act* (IDEA), high school graduates with learning disabilities seem to be more confident in their pre-college training and are enrolling in post-secondary education in higher numbers (Zhang, et al., 2010). Recent statistics have shown that the number of beginning college students who have self-disclosed learning disabilities has increased to 7.5% (U.S. Department of Education, 2008). Currently, students with learning disabilities that have academic ability are matriculating into college. However, many colleges and universities have principally concerned themselves with physical accommodations, while they have overlooked a significant segment of students who have been identified with disabilities – students with learning disabilities (DaDeppo, 2009). Consequently, without the correct type of help, these students can struggle and ultimately fail in the collegiate environment (Canto, Proctor, & Pervatt, 2005). If faculty and administration had a fuller understanding of the

academic and social transitions and stresses between secondary school and college for students with learning disabilities, more success for these students in post-secondary education might be possible. Some researchers have attempted to analyze and understand how colleges and universities can better facilitate a successful college experience for students in this select category (Cawthon & Cole, 2010; Hadley, 2007; Troiano, Liefeld, & Trachtenberg, 2010; Vance & Weyandt, 2008). Yet, few have explored the fate of those who are identified with learning disabilities late in their educational journey.

The purpose of this phenomenological study was to describe the experience of a college student who is identified with a learning disability after beginning a collegiate experience. By focusing on students who have entered college with unidentified learning disabilities, this study may provide a deeper understanding of the emotions, behaviors, experiences, self-efficacy, and resiliency of the participants, which in turn may help higher educators more successfully guide this important and growing group of learners.

Design

This investigation was a qualitative research analysis using transcendental phenomenology. Of the five qualitative methods, phenomenology is the closest to capturing the “essence” of the experience (Creswell, 2007; Moustakas, 1994). Following the Moustakas (1994) interpretation of Husserl’s theory of bracketing, the researcher will attempt to describe the experiences of the participants without predetermined opinions or bias. As an example of transcendental phenomenology, the research study attempted to accurately describe the phenomenon of being identified with a learning disability as a college student, while attempting to understand the educational and social phenomenon being depicted (Groenewald, 2004). The researcher endeavored to gain insight into the lived experiences of the participants in order to

fully define the phenomenon and understand its implications (Van Manen, 1990). According to Moustakas (1994), empirical transcendental phenomenology will produce the “essences of an experience” (p. 100). The researcher, after careful analysis, was then able to produce a description of the shared experiences with shared similarities.

This new understanding may prompt practical suggestions for action and reform. This type of phenomenological research design allows for a reflective analysis of the phenomenon that may produce universal meaning and provoke ideas of change (Moustakas, 1994). Using transcendental phenomenology to study the experiences of college students who are initially identified with learning disabilities after beginning college coursework is ideal methodology to produce a rich quintessence of the educational and social crosscurrents in the participants’ educational, social, and psychological lives.

This study has as a philosophical underpinning, the philosophies of social constructivism, self-efficacy, resiliency and a Biblical worldview. Social constructivism is a philosophy that attempts to make sense of the world by interpretation (Creswell, 2007). This is often done through qualitative research and, in particular, a phenomenological approach that interacts with participants to create meaning. Using the compatible concepts of self-efficacy and resiliency, the foundation of the study was also framed by an analysis of the self-beliefs of students with learning disabilities and how those self-impressions affected adjustment to the challenges of college life (Bandura, 1997, Milstein & Kariv, 2004). Additionally, the researcher approached the phenomenon with a Biblical worldview that desires truth and shows concern for college students with learning disabilities who must adjust and adapt to their educational surroundings.

Using personal interviews, focus groups, field notes by the researcher and document analyses of questionnaires, a mosaic of information was heard, collected, analyzed and

comprehended. With the aim of fully understanding the complex issues involved, multiple types of data was found and recognized (Creswell, 2007). Following the principle of least possible structure and greatest depth, participants answered open-ended questions until enough information was gathered to begin an analysis. The analysis looked for recurring themes that gave essence to the phenomenon. Although phenomenological research can have limitations of credibility and researcher bias, measures were adopted to maintain ethical integrity and trustworthiness of the research results.

Research Questions

Creswell (2007) suggests that research questions in phenomenology be divided into two main categories: the central question and issue sub-questions. The central question is a very broad statement of the research problem, while the issue questions concentrate on matters to be resolved by the research study (Stake, 1995).

Central Research Question

What does it mean to be identified with a learning disability after beginning a collegiate learning experience? College students identified with learning disabilities will describe the essence of the experience as participants in interviews, focus groups, and by means of a questionnaire.

Sub-questions

1. How did a late identification of a learning disability affect the academic lives of the participants? Subjects will reflect on academic difficulties experienced as college students. Participant responses will be compared to the literature (Abreau-Ellis et al. 2009; Murry et al. 2011).
2. How did a late identification of a learning disability affect the emotional lives of the participants? Subjects will reflect on emotional difficulties experienced as college

students. Participant responses will be compared to the literature (Abreau-Ellis et al. 2009; Heinman & Kariv, 2004).

3. What can be done to alleviate the effects of the phenomenon? Subjects will share information about how they were best assisted to compensate for their disability. Participant responses will be compared to the literature (Murry, Wren, Stevens, & Keys, 2009; Parker et al., 2011; Rose et al., 2006).

Participants

The participants in this study were randomly chosen by criterion sampling. From a list of individuals who are identified with a learning disability after graduating from high school and beginning college, participants were chosen. Each participant must have been identified since 2004 in order to qualify as a subject. Since legislation such as the *Individuals with Disability Act* (IDEA) was passed in 2004, more attention has been given to pre-college students with learning disabilities. The names of current or former students were acquired from the Academic Success Center located at the site. The specific sampling criteria was as follows:

- Enrolled as a full time (12 credits or more) student sometime between 2004 and 2014
- Identified with a learning disability after post-secondary enrollment

This purposeful criterion sample gave ample numbers to reach the appropriate size for a phenomenological study according to Creswell (2007). Creswell states that the sample size should be somewhere between five and 25. For this study a sample size of 10 was easily attainable. Ten participants satisfied issues of sufficiency and saturation (Seidman, 2006). The age, gender, year in college, type of K-12 education, and type of learning disability of all participants were noted, and each participant was given a pseudonym to safeguard potential identification.

Demographics of Participants

After a meticulous search was made for potential participants by the University's Office of Academic Success, 12 individuals that met the sampling parameters of the study were contacted by the office's director and 10 of the 12 consented to participate. Even though individual distinctiveness and traits were not explicitly needed as part of the research, the following information was gathered and may shed additional light on the group of individuals that were studied.

The participants' age range was 18 to 58 with the median age being 22 years old. Six males and four females participated in the study, and their college classifications were mostly upperclassmen with only one participant classified as a freshman. All participants had their learning disability discovered as either a freshman or sophomore in college (see Table 1). Four of the participants (40%) were educated in a multifaceted setting that consisted of a combination of homeschooling and private schooling. Six of the participants (60%) were educated in one setting. Three participants attended public school from kindergarten through grade 12 exclusively. Two participants were homeschooled exclusively during their pre-college years, and one participant was exclusively educated in a non-public school. Only four participants (40%) attended public school at any time, while only four participants (40%) attended non-public school at any time. Six participants (60%) were homeschooled for some part of their K-12 experience. Two participants (20%) had completed degree programs. Of the eight remaining participants, three (30%) were attempting to attend college on a full-time basis, while Five participants (50%) were part-time college students who were trying to find their footing academically after a rough beginning to their college experience.

Dyslexia was the most commonly reported learning disability described by the participants (70%). Two participants (20%) were identified with dyscalculia, and one participant (10%) reported dysgraphia as a significant learning disability. Additionally, three participants (30%) also reported the identification of attention deficient hyperactivity disorder.

Table 1

Demographics of Participants

Pseudonym	Age	College Year	Year of LD Identification	Gender	Type of K-12 Education	Type of LD
Erin	25	Sr.	Freshman	Female	Home school	Dyslexia and processing disorder
Larry	19	Soph.	Freshman	Male	Public	Reading disability
Cindy	22	Jr.	Sophomore	Female	Non-public and home school	Dysgraphia and expressive-receptive language disorder
Bob	58	Sr.	Sophomore	Male	Public	Dyscalculia
Mary	20	Jr	Sophomore	Female	Home school, public	Dyscalculia
Steve	18	Fresh	Freshman	Male	Public	Dyslexia
Sally	23	Jr.	Sophomore	Female	Home school	Dyslexia
Fred	21	Soph.	Freshman	Male	Non-public and home school	Dyslexia and processing disorder
Sam	24	Sr.	Sophomore	Male	Non-public	Dyslexia
Leon	20	Soph.	Freshman	Male	Non-public and home school	Dyslexia

Site

This study took place at a small private university in the United States. The site will remain anonymous and given a pseudonym but will be commonly described without revealing a

particular location. The site, named Midwestern Christian University (MCU), is located in an urban environment near a large Midwestern city. With a current enrollment of approximately 1400 students, the college mirrors the demographics of the American Upper Midwest. The institution opened in 1968 with an enrollment of 173 students (MCU Catalog). In 1993, the institution received regional accreditation by the Higher Learning Commission, and the student population has increased over the past 20 years (MCU Catalog). The population has a student body with a 10% minority component, as well as a veteran faculty. With 31 majors in seven schools or colleges, Midwest Christian University has a broad range of curricular choices (MCU Catalog). This university is known nationally both for its academic rigor and its ministry mindset. The student body is drawn mostly from the Midwest and almost equally from three sources: home schools, public schools, and Christian schools. The large segment of home-schooled students is a recent phenomenon.

Procedures

Before any data collection commenced, the appropriate permissions were secured. Institutional Review Board (IRB) approval was received from Liberty University and at the site of the study, Midwestern Christian University. All participants were instructed that the study was voluntary and that they could withdraw at any time.

Participants were purposely chosen by criterion sampling at Midwestern Christian University. Criterion sampling ensured that the participants of the study had experienced the phenomenon being researched, and such sampling is especially recommended for phenomenological research studies (Creswell, 2007). All participants signed an informed consent form before contributing to the study.

Data was gathered by the following four methods: Personal interviews, focus group interviews, field notes, and questionnaires. Interviews were conducted using open-ended questions. Focus groups were also used to collect data. The researcher wrote field notes, and questionnaires were reviewed and analyzed. All interviews followed an interview protocol instrument (see appendix C and D). After collecting the information, a careful analysis of the data began to paint a description of the experiences of college students with recently identified learning disabilities.

All information gained by interviews and focus groups was recorded and transcribed for scrutiny (Creswell, 2007). Written documents were digitally scanned and saved for analysis as well. Having the information in an electronic version allowed the researcher to use electronic analysis procedures.

The Researcher's Role

The researcher in a phenomenological inquiry plays a vital role. The researcher is the primary instrument of measurement. Consequently, the researcher became closely involved in the lives of the participants and was affected emotionally and psychologically as the phenomenon was studied. Additionally, the researcher acquired a deep-seated interest in assisting students with learning disabilities. Philosophically bound to love those in need as God loves, the researcher was disposed to personally advocate for fair treatment and accommodations for students with learning disabilities.

Additionally, the researcher has recently received notification of a promotion to the position of Vice President for Academic Affairs at Midwestern Christian University for the fall semester, 2014. As the Vice President for Academic Affairs, the researcher will supervise the academic aspects of all the colleges and schools of the university. This supervision also includes

all faculty and student academic services including organizations like the Academic Success Center. The researcher will also be a member of the Executive Council of the university which plans and implements change on campus.

The predisposition to advocate for fair treatment of students with learning disabilities must be carefully balanced by bracketing. Moustakas explains this neutral attitude as a “freedom from suppositions” (1994, p. 85). Accordingly, the researcher must set aside preconceived ideas and conclusions and attempt to understand the world from the participant’s viewpoint (Creswell, 2007; Moustakas, 1994). Moustakas (1994) advocated that the researcher “set aside prejudgments regarding the phenomenon being investigated...to be completely open, receptive and naïve in listening to and hearing research participants describe their experiences” (p. 22). According to Groenewald (2004), “the aim of the researcher is to describe accurately as possible the phenomenon, refraining from any pre-given framework, but remaining true to the facts (p. 5). Bracketing, if done correctly, allows the researcher to convey the true essence of the experience from the fresh, unbiased perspective of the participants. As the data collection began, the researcher’s mindset was to be an accurate reflection of the voice of the participants.

Data Collection

Data collection could be considered one of the most important aspects of qualitative research. As was indicated by Creswell (2007), the complexity of data collection can be ascertained by the “depth and variety of data collection” (p.132). Gaining productive data and organizing it in an understandable fashion is a necessity if the true essence of the phenomenon is to be described accurately. In order to correctly calibrate data collection methods, three pilot interviews were conducted with college students who have identified learning disabilities. The pilot interviews tested the proposed interview protocol instrument (see Appendix C) and the

proposed research questionnaire (see Appendix B). According to Bartholomew, Henderson, and Marcia (2000), pilot interviews can be a valuable method of checking the accuracy of interviewing documents. The pilot interviews revealed several small issues with the proper wording of certain questions; accordingly, the data collection tools were revised in small non-consequential ways. The pilot interviews did not reveal gaps in the questioning, so additional questions were not added to the data collection tools. Data-collection continued until saturation occurred which meant that no new perceptions on the subject matter were being offered by the participants of the study (Groenewald, 2004). Several methods of data collection were used and are explained in the following paragraphs.

Personal Interviews

Students with learning disabilities who agreed to participate were interviewed in a purposeful sample of all current or former students who have registered learning disabilities at MCU and were identified with a learning disability after beginning higher education. Ten students were interviewed in a semi-structured manner using an interview protocol instrument to guide the dialogue (see Appendix C). Interview questions were mostly open ended questions designed to allow the participant's voice to be heard. Sideman's tiered method of interviewing was followed in this research plan. Each interviewee experienced an interview that was divided in focus. At first the interview focused on the details of the shared experience, while the second focal point of the interview was on the meaning of the shared experience (Seidman, 2006). All interviews were recorded and transcribed, and participants were not identified in any research report except by use of pseudonyms.

Focus Group Interviews

Students with learning disabilities were interviewed in two separate focus groups. Two focus groups were assembled by a convenience sample of students and former students with learning disabilities who were personally interviewed previously. The two focus groups were comprised of three and four individuals respectively. The focus group interviews were semi-structured using a focus group protocol instrument (See Appendix D) that contained several prearranged open-ended questions and follow-up questions. The interviews were recorded and transcribed for future study and analysis. Participants were not identified except by use of fictitious names.

According to Bogdan and Bilken (2007), the use of focus groups in qualitative research is designed to encourage participants to talk to each other about their concerns. The role of the researcher was to facilitate group interaction and engagement so that a deeper understanding of the group's shared experiences was uncovered. A facilitation of a deeper understanding of the phenomenon and prolonged interaction among the participants occurred during both focus group sessions.

Surveys/Questionnaires

Each participant completed a general background questionnaire that included personal educational biographical information (see Appendix B). The questionnaires were completed both electronically and in hard copy format and saved electronically for research and archival reasons. The questionnaires provided some of the necessary background information on each of the participants, and also allowed another avenue of reflection for participants who might be reluctant to share information orally. These documents are confidential, and participants were not identified except by use of assumed names.

Field Notes

The researcher recorded his thoughts in a journal after each personal and focus group interview. This process is what Miles and Huberman (1984, p.69) call “Memoing.” It is important that the researcher reflect holistically on the phenomenon as data is being gathered. Creating field notes after each interview allowed the researcher to carefully reflect on attitudes and impressions about the process and the subject being studied (Groenewald, 2004).

Data Analysis

Analyzing data and determining how to communicate data “presents a challenging task for qualitative researchers” (Creswell, 2007, p.147). Nevertheless, it was critically important that data be scrutinized and organized effectively. According to Moustakas (1994), the examination of data that is retrieved by transcendental phenomenology should follow a process that includes stages.

- Setting aside personal bias – bracketing
- Discovering and defining units of meaning by analysis of data gathered
- Collecting units of meaning into thematic topics
- Writing extended descriptions of thematic topics
- Recreating an amalgamated description of the essence of the shared experiences

To accomplish an accurate data analysis, this study used categorical coding and second-tier coding that led to clusters of meaning about the phenomenon being studied. According to Groenewald (2004), the researcher in a phenomenological inquiry is not simply tasked with breaking data into small subunits, but rather must never lose sight of the entire scope of the phenomenon. When data analysis was completed, the resulting amalgamated description accurately portrayed the essence of the life experience being researched.

Categorical Aggregation

Once saturation was achieved, the data was organized into relevant categories with the expectation that issues and themes would become observable. Interview transcripts, focus group transcripts, field notes, and background questionnaires were sorted by the researcher for significant information. This process of open-coding allowed the researcher to view the entire scope of the data to facilitate a careful synthesis of the records and move toward an accurate interpretative pattern. This aggregation consisted of carefully sifting through each document and designating important phrases or sentences that describe the phenomenon (Moustakas, 1994; Colaizzi, 1978). This list of “units of relevant meaning” was then analyzed for redundancy before patterns and themes are explored (Groenewald, 2004, p. 19).

Patterns and Themes

Themes are most commonly discovered by aligning units of meaning together (Moustakas, 1994; Groenewald, 2004). The categories or significant phrases once aggregated were collapsed into recurring themes or patterns, or what Moustakas (1994) labels *clusters of meaning* (p. 180). From multiple categories, a list of several themes materialized which applied to the participants in the study and added meaning to their phenomenon. An attempt was made to use two-tier coding in an effort to find additional themes within individual categories. These supplementary themes helped organize the discussion of the participants’ experiences. This process took data and reorganized it in a logical and understandable fashion that allowed the researcher to write a comprehensive description of the essence of the participants’ experience (Creswell, 2007). The common themes that were discovered led the researcher in communicating the essence of the experiences of college students with learning disabilities and how those common themes relate to the research.

Naturalistic Generalizations

Although phenomenology has as its goal the description of the essence of an experience, clusters of meaning that were discovered were discussed as they relate to previous literature and various practices in K-12 education and higher education. Certain generalizations were made about future research, and suggested changes can be proposed to institutional practices relating to students with learning disabilities as a result of the research. The researcher suggested implications that relate to the literature review, future research, and professional or social meanings (Moustakas, 1994). This process allowed the phenomenological researcher to give an additional nuance to the study and suggest future investigation.

Trustworthiness

The validation of qualitative research findings is important. Without dependable results, the credibility of research findings can be questioned and potentially disregarded by readers. Establishing credibility is essential if research is to be read and have influence in the educational community. The trustworthiness of research findings can be verified by criteria that measure credibility and dependability of findings (Lincoln & Guba, 1985). To ensure adequate trustworthiness, several measures of credibility will be used to verify the accuracy of data analysis.

Member Checks

A small group of three participants chosen by a convenience sample examined a draft of the research findings of the phenomenological study. The participants were allowed to ask questions and suggest changes to the conclusions of the study so that the true essence of the experience was captured in the documentation. This process allowed the participants to improve

the precision and creditability of the study by correcting any misinformation or faulty descriptions (Creswell, 2007).

External Audit

Midwest Christian University's Strategy Council acted as an auditor and reviewed the research process and a draft of the research study. The Strategy Council serves as the instruction's research and quality improvement champion. The use of an auditor is an excellent way to evaluate the analysis to ascertain the credibility of the procedures and conclusions (Lincoln & Guba, 1985). The researcher responded to the audit and the findings of the Strategy Council, but did not need to adjust the research process and procedure. The details of the audit report and researcher reaction are available upon request by contacting the researcher.

Triangulation

The design of the phenomenological study enabled triangulation of data by use of four data collection instruments: surveys, personal interviews, field notes, and focus group interviews. Making use of multiple types of data sources increased the likelihood that corroborating evidence captured the essence of the phenomenon (Creswell, 2007). The use of triangulation increased the dependability of the study.

Bracketing

Phenomenological research often demands bracketing (Creswell, 2007; Moustakas, 1994). To create a credible, non-biased description of the life experience being studied, the phenomenological researcher must attempt to remove any preconceived bias or personal interpretations regarding the participants and their particular phenomenon. When interviews and focus group discussions were conducted, the researcher refrained from sharing personal experiences and presumptions about the research topic with the participants. Although removing

all bias from the human mind was difficult, bracketing done properly, improved the trustworthiness of the research.

Ethical Considerations

During the duration of this research, the researcher faithfully followed the ethical standards of the *American Educational Research Association* (AERA) (Strike, 2002). Specifically, this research study purposely adhered to three AERA principles that guided the inquiry. First, all data and resulting representations of that data must be truthful and accurate. Second, all participants must understand the ramifications of the study, including potential risks. Third, the participants are not to be exploited in any way for personal gain. As a corollary to these principles, anonymity and informed consent will be discussed in more detail.

The confidentiality and anonymity of the participants and the college involved has been protected without fail. This phenomenological study could be construed as a composite picture of a certain college and certain individuals with learning disabilities. Whenever individuals or colleges were referenced, a pseudonym was used to protect anonymity. Participants were reminded to use pseudonyms for any identifiable person, course, instructor and institution during interviews sessions. Any identifying remarks were removed from the transcripts to guard confidentiality and anonymity.

Likewise, all participants read and signed a consent form before any research began (see Appendix A). The participants understood that they were involved in a research study and understood the purpose of the study before any participation occurred. Informed consent forms that detailed the nature and procedures of the research were used to ensure that the participants fully comprehended the scope and consequences of the research study. At all costs, an ethical and trustworthy research process and report must be defended.

Summary

By using transcendental phenomenology that is tempered by a biblical worldview, the essence of being identified with a learning disability as a college student has been described. The rich and detailed life experiences of students with learning disabilities has been aggregated into themes and descriptions of what it means to be identified with a learning disability after beginning a college education. The data has been analyzed and used to paint a picture of the phenomenon that exists in most, if not all, college and university settings. It is the hope of the researcher that a deeper understanding of this shared life experience will better inform educators about the journey these students experience while navigating the world of college life.

CHAPER FOUR: DATA ANALYSIS AND RESULTS

Overview

The purpose of my research, a transcendental phenomenological study, was to describe the essence of what it means to be a college student who is identified with a learning disability after beginning a collegiate learning experience. I examined the phenomenon of college students who first learn about a personal learning disability while enrolled in higher education. The participants' words and experiences helped give insight into the shared life experiences of the participants. This research process enabled me to more fully define the phenomenon and understand its implications. Chapter four contains a detailed description of every participant and carefully explains the answers to each of the study's research questions. When looking at the personal history and personal experiences of the 10 participants, the essence of the phenomenon began to materialize.

Participants

Erin

Erin is a soft-spoken, 25-year-old college senior who has been working through her college experience for many years. She has attended four universities and changed her major three times in the hope of finding her niche and completing her college education. She discovered her dyslexia and processing disorder as a college freshman. Erin especially struggles with reading assignments and test-taking. Her journey through college has been emotionally challenging and financially costly. Being completely homeschooled prior to college, Erin's K-12 education was project-oriented and decidedly hands-on. Although she has persisted in her attempts at finishing because of family encouragement, personal doggedness, and the help of the

the college scene. She appreciates the help of the Academic Success Center can give, but wonders constantly if the effort is worth the emotional cost.

Bob

Bob is an unusual participant in several ways. By far, his age of 58 makes him the oldest participant in the study, and he is also the most opinionated and outspoken of the participants. Bob is a senior in his course of study and hopes to graduate soon. Bob attempted collegiate training several times after leaving the military and struggled each time until he discovered he had dyscalculia and processing disorders. He always experienced difficulties in math-related courses and reading assignments and dropped out of high school as a result. He struggles with organization of material and concentrating for long periods of time. Bob passionately believes that education is too regimented and that curriculum and method of instruction needs to be much more individualized, allowing students to build upon their individual gifts and intelligences. He is persisting in his quest to receive a college diploma because of the support of his wife and his personal determination to succeed. He has also used academic accommodations extensively.

Mary

Mary was the most quiet and reserved of all the participants in this study. Mary is a 20-year-old junior in college who has experienced difficulty in math-related courses and has issues with concentrating. As a sophomore in college, Mary was discovered to be experiencing dyscalculia and processing disorders. Most of Mary's K-12 educational experiences happened in a home school environment. She was briefly enrolled in both private Christian education and public education. Her parents have been very supportive through her collegiate educational journey, although Mary has entertained thoughts of dropping out, and she has decidedly slowed

the pace of her academic load since the learning disability was discovered. She believes that her K-12 academic background did not prepare her well for the rigors of the university experience.

Steve

Steve seemed anxious about participating at first, but as he talked about his educational journey, he shared many of his inner thoughts regarding the struggle with his learning disability. Steve was the youngest participant at age 18, and as a freshman in college, Steve recently discovered his dyslexia. During his K-12 experience in public school, he was sheltered from the discovery of a learning disability by his mother who wanted to deflect any stigma associated with a learning disability. Steve often thinks about quitting college and especially does not like a large lecture class which he has endured often during his freshman year. For Steve, college has been an intense emotional struggle.

Sally

Sally was eager to share her educational experiences and had much to say. Sally was home-schooled throughout her K-12 educational experience and entered college not completely understanding her learning disability. Sally felt as though her siblings and mother compensated for her learning disability as a home-schooled student without fully preparing her for collegiate academics. As a college sophomore she was evaluated and learned that she has dyslexia. Sally experienced emotional difficulties because of her learning disability both before and during college, often feeling unintelligent and misunderstood by those who worked with her, including faculty members. She especially struggled with reading and writing assignments, test taking, and had difficulty completing tasks on time. As a 23-year-old student, Sally eventually settled on receiving an associate's degree rather than continuing to slog through her original four-year

program. She was passionate about helping other students with learning disabilities avoid the emotional agony she experienced.

Fred

Fred was very willing to share the triumphs and failures of his academic journey. His K-12 educational experience included home schooling during the early years and private Christian education from grades 8 through 12. He discovered his dyslexia and processing disorder as a sophomore in college after struggling in English and math related courses. Fred, a thoughtful 21-year-old, was frustrated in a typical classroom learning environment with what he termed slowness of learning. That frustration led him into unfavorable encounters with some professors, and the fear of failure caused him to contemplate quitting college on many occasions. Fred seemed to expect to have a caring positive nurturing relationship with each professor, but he was quick to point out that such a relationship does not exist in many classrooms. Fred believes that a part-time college better fits his learning style. Doing college at a slower pace by having fewer credits per semester helps reduce Fred's fear of failure.

Sam

Sam is a 24-year-old senior who discovered his dyslexia as a sophomore in college. Sam was delighted to talk about his educational journey, sharing the insight regarding his struggles inside and outside the classroom. Sam attended public school in kindergarten, was home-schooled in first grade and spent grades 2-12 in a private Christian school. He remembers having trouble with reading beginning in grade 2 and lacking confidence in his reading abilities throughout school and producing emotional and academic struggles. He also experienced serious emotional struggles that were associated with his collegiate studies. Sam openly explained his battles with frustration, anger, and thoughts about giving up. He had several humiliating

experiences when attempting to interact with college professors. He eventually took time off from college life before returning to complete his degree. Sam found the typical classroom learning environment to be very distracting and preferred hands-on learning modalities rather than listening to lectures. He highly valued mentoring relationships that he developed with university faculty and staff.

Leon

Leon discovered that he had a learning disability as college freshman. Tests revealed a moderate form of dyslexia which explained Leon's reading problems that followed him through K-12 and into his freshman year in college. Twenty-year-old Leon was home-schooled through most of his K-12 educational experience. Once at college, he seemed to especially struggle with any reading and writing assignments. The academic battle produced some emotional issues in Leon's life. He felt embarrassed and out of place on the college campus. Thoughts of discouragement led him to contemplate dropping out altogether. Leo also shared his personal difficulties relating to several instructors. He rarely felt comfortable speaking with any adult about his learning disability and especially did not want to speak to an instructor about his academic difficulties. Leon recommended two ways he found that somewhat mitigated his struggle with learning disabilities. He recommended that students with learning disabilities need to be careful not to be overloaded academically with too many credits, and that having someone to talk through difficulties was vitally important.

Synthesis of the Data

To begin to understand the participants and their shared experiences, this study used categorical coding and second-tier coding that led to clusters of meaning about the phenomenon being studied. According to Groenewald (2004), the researcher in a phenomenological inquiry is

not simply tasked with breaking data into small subunits, but rather must never lose sight of the entire scope of the phenomenon. Interview transcripts, focus group transcripts, field notes, and background questionnaires were sorted by the researcher for significant information. This process of open-coding allowed the researcher to view the entire scope of the data to facilitate a careful synthesis of the records and move toward an accurate interpretative pattern and possible themes (Moustakas, 1994; Colaizzi, 1978). From multiple data sources, a list of several themes materialized which applied to the participants in the study and added meaning to their phenomenon.

Table 2

Summary of Developing Themes

Developing Theme
Pre-college education did not prepare adequately
Participants struggled in pre-college years in reading, writing, and math
Parents ignored, failed to understand, or did not trust a learning disability designation
Pre-college learning environment was inadequate
Participants struggled during college years in reading, writing, and math
Participants experienced transitional difficulties between high school and college
Issues with testing and the testing environment existed in college
Participants struggled in certain types of learning environments in college
Participants were frustrated, angry, and embarrassed in the college environment
Participants entertained thoughts of giving up
Participants experienced test anxiety
Participants felt a high level of anxiety when interacting with faculty

The Academic Success Center was a positive influence

Testing accommodations were useful and needed

Lighter academic loads made college easier and more manageable

Communication with a mentor was important

An attempt was made to use two-tier coding in an effort to find additional themes within individual categories. These supplementary themes helped organize the discussion of the participants' experiences. This process took data and synthesized it by category into a logical and understandable fashion that allowed the researcher to write a comprehensive description of the essence of the participants' experiences (Creswell, 2007). The common themes that were discovered led the researcher in communicating the essence of the experiences of college students with learning disabilities and how those common themes relate to the research.

Table 3*Summary of Significant Themes and Categories*

Pre-college Academics	College Academics	Emotional Effects	Ways of Alleviation
Participants struggled in certain academic disciplines	Participants struggled in certain academic disciplines	Participants experienced a range of emotions including frustration, anger, and embarrassment	Interactive, face to face learning works better
Math and reading were the most problematic	Participants struggled in reading the most	Participants entertained thoughts of quitting college	Lecture courses are the least likely to be a successful experience
Some parents were reluctant to pursue identification	Late work was a problem	Test anxiety was commonplace	Testing accommodations are needed for success
Some students were not in ideal learning situations	Varied types of transitional difficulties occurred	Participants experienced anxiety when faculty interaction was necessary	Lighter academic loads are more easily navigated
	Participants found the testing experience problematic	Participants believed some faculty members did not care	Talking through the difficulties with a mentor is very important
	Certain learning environments were more difficult to endure		

Results

Creswell (2007) suggests that research questions in phenomenology be divided into two main categories: the central question and issue questions. The central question is a very broad statement of the research problem, while the issue questions concentrate on matters to be resolved by the research study (Stake, 1995). This study was guided by a broad statement of the research problem and three issue-oriented questions. Each question was devised to establish a

deeper description of the experiences of college students who enter college and subsequently discover they have a learning disability. Trends and patterns in the answers to the research questions were discovered after a thorough investigation and analysis of the data that was collected by participant questionnaires and personal and focus group interviews. By exploring the data that was gathered through the research process, a better understanding of the essence of the phenomenon was realized.

Research Question 1

How did a late identification of a learning disability affect the academic lives of the participants?

The first research subquestion explored the academic ramifications of late identification of learning disabilities. The research data that was collected supplied information about both the pre-college and college academic difficulties that students with learning disabilities encountered. Participant questionnaires, individual interviews, and focus group interviews provided consistent and complementary data. As detailed in Table 2, the participants acknowledged numerous explanations and effects of academic struggles during their educational journey. These explanations and effects have been divided into two categories: pre-college and college.

Table 4***Themes in Research: Question 1***

Theme	# of Participants	%
K-12 academic difficulties	10	100
Parental disbelief and lack of action	4	40
Inadequate K-12 learning environment	6	60
College academic difficulties	10	100
Transitional difficulties	8	80
Testing difficulties	5	50
Lecture-based learning problems	8	80

Students with late-identified learning disabilities experienced pre-college academic struggles. These struggles were revealed in particular academic disciplines, were associated with a parental disbelief of a possible learning problem, and were indicative that some students were receiving education in a less than adequate environment. Additionally, the data showed that students with late-identified learning disabilities experienced collegiate academic struggles that were evidenced in academic transition from secondary to post-secondary education, were more obvious in particular academic disciplines, were associated with the testing problems, and were more pronounced in particular types of learning environments.

Participants explained in great detail their personal experiences while struggling through a K-12 education with an undiscovered learning disability. When discussing the undiscovered learning disability, participants invariably concentrated on three areas of concern in the K-12 environment. They emphasized the difficulty they experienced in particular courses, the attitudes

that parents exhibited toward the academic struggles, and the inadequacy of particular systems of education.

K-12 academic difficulties. Participants related numerous K-12 academic battles. All ten participants (100%) experienced reading, writing, or mathematical difficulties before entering college, and three had a combination of two areas of difficulty. Five of the ten participants (50%) mentioned reading problems as they experienced K-12 education, often expressing a hatred for reading and assignments that included any type of reading. Sally expressed the general dread of reading when she stated, “Reading was one of the subjects that I shirked the most, and I was good at shirking.” Other participants emphasized a great anxiety of mathematics. Five of the ten participants (50%) indicated that they struggled with upper level mathematics and math tests in particular. Bob reflected the general disdain towards math by stating, “Math was always hard...Anything to do with numbers and organization and arranging.” Writing assignments were particularly mentioned as an area of difficulty by three of ten participants (30%). For these students, accurately captured in the words of Cindy, “A writing assignment like a term paper took an entire school year to complete.”

K-12 academic battles were characterized by the participants in several ways beyond mere academic disciplines. Poor grades in elementary and secondary school were mentioned by four participants, while a general dislike for school was voiced by three participants. Sally expressed her opinion about K-12 in the bluntest way by saying, “I did not like school, and I dreaded it.” Other participants expressed the perception that academically they were simply left behind somewhere in the system and somehow, as Mary expressed, “we slipped by.” Bob’s K-12 journey culminated in dropping out in eleventh grade, and in his mind he “just felt stupid” and he “didn’t think he could make it.”

Parental disbelief and lack of action during K-12. Another trend that developed relating to late identification and pre-collegiate academics was a reluctance of parents to entertain the possibility of their child having a learning disability. Four of the ten participants (40%) articulated scenarios that occurred going through school that described a parent ignoring the academic and emotional warning signs or failing to take the necessary action. Steve explained by saying, “My teachers in public school suspected something at times, but my mother and father did not want to believe it and told me to work harder.” According to Larry, his father copped a similar attitude when he commented, “My dad was real stubborn and didn’t believe that there was anything wrong. He just called me a pain in the butt and said I didn’t want to learn.”

In other situations, parents (20%) contemplated the possibility of a learning disability, but did not move to take additional steps to ameliorate the dilemma. In Cindy’s situation her parents believed they could not afford testing and so they attempted to deal with the situation on their own. She reflected on her situation by stating, “Like it crossed my parents mind that I might have something, but they just couldn’t afford it (testing) at the time.” In Sally’s experience her mother accepted the possibility of dyslexia, but the environment and circumstances did not allow for any meaningful follow-up as she was homeschooled. Thoughts about K-12 learning environments were scattered throughout participant interviews.

Inadequate K-12 learning environment. A final trend revealed in the data was that a majority of participants felt their K-12 learning environment was inadequate. Six participants (60%) shared comments that revealed unfortunate practices in either elementary or secondary school that the participants had to endure and regretted. Four participants had complaints relating to a homeschooling practice that was less than satisfactory. For example, because of family circumstances, Cindy taught herself in high school. She explained, “Things happened in our

family that were non-school related that just made it difficult for my mom, you know, she was very distracted and if I struggled in something, I taught myself.” Sally shared that she never learned phonetics and that “Most of the time my younger sister would read everything for me.” And finally Fred related that his mother was a troubled home school teacher by stating, “My mom would get frustrated with me because I would not understand grammar.” Two participants (20%) suggested that their more traditional schooling was not designed to adequately help them learn. Sam related his experiences by stating that from “From second grade through twelfth grade, I was at a Christian private school that did not do much accommodating,” while Larry believed his public school faculty really did not care about him learning by concluding, “My high school was a joke.” According to the participants, academic struggles continued to beset them as they transitioned into the collegiate classroom.

The participants detailed the personal effects of continuing into the collegiate world with an undiscovered learning disability. When analyzing their undiscovered learning disability and the associated ramifications as a college student, the participants concentrated on four areas of concern in the collegiate academic world. They emphasized academic difficulties in particular disciplines, they described transitional problems that occurred, they explained negative experiences with testing, and they accentuated the struggles they experienced in particular learning environments.

Collegiate academic difficulties. The academic struggles that characterized pre-college education followed the participants into the collegiate arena. All ten participants (100%) had reading, writing, or mathematical difficulties after they entered college, and three had a combination of two areas of difficulty. Cindy summed the feeling of several participants by saying, “My freshman year was horrible. I failed half my classes.”

Six of the ten participants (60%) mentioned reading problems as they took college coursework. Reading an assignment or even an entire book was often an insurmountable obstacle. Bob stated his reading problems this way, “Reading a chapter – it was a real struggle.” Cindy particularly hated textbook reading that was evaluated by a reading quiz. In frustration she concluded that “I can’t read the whole thing (reading assignment). It would take me like four hours to read the entire chapter. Impossible.” The majority of participants simply gave up on many of their reading assignments, and according to Sally, she has not completed one entire book in her college experience.

Four participants (40%) were tortured by collegiate writing assignments. Whether it was a shorter essay or a longer research paper, some of the participants were severely challenged by the prospect of writing. Both Cindy and Sally struggled for months to complete writing assignments, and they both frequently handed in assignments late. Sally commented that she once had a paper that took “three months to complete and it was an eight-page paper.” Cindy lamented that she almost never turned a paper in on time and labored over it for weeks past the due date. She explained, “I would turn it in three weeks late, work on it until I finished.” English composition courses were a frustration to Leon, Bob, Cindy, and Sally because of the nature of the course. Cindy explained that the courses were designed for in-class composition work and that she “could not write in class during the work periods.” Writing issues also affected the participants’ testing and will be discussed as part of another research subquestion.

Two participants (20%) found mathematics-related courses to be very difficult. Because of their learning disorders, mathematical skills and procedures created substantial hurdles. Bob was unable to fulfill general education requirements in math. He explained that he “could not get through a basic math course.” When he attempted it, “It would take hours, and I would just get

tired.” Certainly, general difficulty in particular course and disciplines plagued each of the participants, but other themes were discovered that more generally related to college academics.

Transitional difficulties from pre-collegiate to collegiate education. Eight participants (80%) explained in various ways how they experienced a flawed transition from high school to college. Several participants shared the general feeling that they were blindsided by the rigor of college. Sam commented about the “extreme shock of the situation,” and Leon frankly admitted that he was “not prepared to handle academics in college.”

Four participants commented specifically on transitional issues that hit during the first year of college. Fred explained that it was “hard going to college and then finding out about a learning disability.” He then made the statement that even two years later, he “was still trying to adjust and salvage his grades.” Sally entered college with the thought she could take a full credit load of courses but experienced difficulty. She commented that she “didn’t know anything was wrong with me at the time.” Steve, Sam, and Erin felt lost in the academic world. Steve explained his feelings by saying he “didn’t really figure out what was going on until like the end of my first semester.” Both Sam and Erin were frustrated and because they “didn’t know how to study.”

The confusion during the transitional period at the beginning of college produced some introspection by some of the participants. Larry believed that if he would have known about his learning disability, the transitional period would have been easier. He concluded that “if I had known, I would have been getting help early.” Mary reflected back on her two-year journey and concluded that “college was harder than it needed to be because I didn’t realize that I had a learning disability. So I didn’t go to the learning center and get the help I needed early in college.” Cindy possibly speaks for many of the participants when she thought about her

transitional first months in the college environment by concluding, “My freshman year was horrible.”

The testing dilemma. Five participants (50%) explained difficulties they personally experienced while being assessed in a normal classroom setting. The two most common difficulties that were mentioned by participants were testing distractions and lack of time in a normal testing session.

Two participants spoke about testing distractions. In both situations, the comments described a testing environment that diverted the test taker from the task at hand. Sam was very frustrated by any test he had to take in a computer lab. The noise generated by others typing would unnerve Sam. He explained by saying, “All I can hear is typing and clicking, and I can’t read or remember anything I hear.” Bob simply said that he preferred a quiet spot outside a classroom to take a test because “the smallest thing can distract me.”

Four of the participants (40%) commented about testing time. They agreed that a regular class period was not enough time for them to complete the typical test. Sally, Erin, and Bob found that reading multiple choice questions carefully was very difficult and often confusing. Sally commented on the time it took her to analyze a single test question. “I have a hard time trying to understand what the question is because there are a lot of possibilities that go through my head.” Erin mentioned a similar predicament by saying, “Multiple choice questions with multiple answers bog me down and confuse me. I just can’t think after point.” Cindy has testing difficulties with writing assignments instead of more objective testing elements. She expressed her testing dilemma by saying “I can get multiple choice done within a class,” but when it comes to an essay question, “It takes me three or four times longer to do things than the average person.” The four participants who discussed the issue of testing time believed that the

accommodation was extremely valuable. According to Sally, “Testing without extra time... was terrible. I was the last one out pretty much every single time.”

Obstacles in lecture-based learning. Eight participants (80%) specifically mentioned that the most difficult collegiate learning environment for them was the emblematic lecture course. Only one participant (10%) preferred the lecture format because according to Mary, she can “just sit there – I have anxiety that I will have to...talk.” Sam’s comment that he “did not function well in a traditional lecture course” was the general consensus of 80% of the participants. Several reasons for the disdain bubbled to the surface during interviews.

The participants generally found it difficult to concentrate and learn in a lecture course. Bob, Larry, Sally, Steve, and Fred (50%) specifically mentioned not being able to concentrate and understand what was being said during a lecture. Larry described the situation by saying “to me it’s just teacher talk going over my head.” Steve added that he simply “could not listen for long periods of time; I can’t comprehend everything.”

Four participants (40%) additionally pinpointed the note-taking aspect of a lecture course to be especially frustrating. When another activity like note taking was added to a lecture course beyond simple listening, some participants struggled in a greater way. Erin shared that she “has a hard time taking notes unless I am copying something word for word.” Larry believes that note taking is another type of distraction that interferes with his learning. He commented that “when I try to take notes in class and listen, I’m missing half of what he’s saying.”

According to most of the participants, the lecture class was not a good learning environment for them. Mary and Sally were incredulous about the value of lecture courses with “zero variation.” Sally described her classroom dilemma in detail: “He had an outline, you know, there was a notebook that we had to purchase that was an outline and I couldn’t even fill in the

blanks.” Fred summed up the essence of the lecture experience by saying, “Sit through an hour of a lecture – not that it’s all bad, but it was not the most effective way for me to learn.”

Research Question 2

How did a late identification of a learning disability affect the emotional lives of the participants?

The second research subquestion explored the emotional ramifications of late identification of learning disabilities. The research data that was collected supplied information about emotional struggles that occurred in the lives of the participants of the study. Participant questionnaires, individual interviews, and focus group interviews offered reliable and consistent data. All participants (100%) reflected on one or more emotional ramifications that they experienced. As detailed in Table 3, the participants acknowledged five general themes which created numerous emotional stumbling blocks for them as college students. They described general frustration and anger, they articulated times of embarrassment and humiliation, they battled periods of discouragement and thoughts of quitting, they expressed exasperation with testing, and they experienced anxiety when interacting with instructors. These themes reveal an emotional battlefield that the participants experienced.

Table 5

Themes in Research: Question 2

Theme	# of Responses	%
Frustration and anger	7	70
Embarrassment and humiliation	5	50
Discouragement and thoughts of quitting	9	90
Exasperation over testing	5	50
Anxiety during faculty interaction	8	80

Frustration and anger. Seven participants (70%) described collegiate experiences that culminated in frustration and eventually anger. Sally and Mary described a level of frustration that often ended in tears. Sally communicated her frustration and emotional struggle by saying, “There were a lot of times that I just started crying, just because I didn’t know what else to do.” The cause of tears appeared to be mostly due to frustration about the difficulty and time spent on projects. Sally continued, “I cried a lot – all the time, whenever I had a big project.” And to that Mary added, “I cried too. It was a lot of frustration.” Cindy and Erin explained the frustration about the helpless feeling they often experienced. Erin commented that she “felt helpless and didn’t even know what questions to ask,” and Cindy was “just constantly asking why.”

Sam, Steve, and Fred described a frustration that turned to anger. When faced with academic challenges, some of the participants were challenged with controlling an internal rage over the circumstances of their learning disability. Steve mused about his experiences by stating, “It’s just very frustrating. I just get in these super bad moods because I go into the class knowing I’m not going to do well or understand what is being said, so I’m just super mad.” Fred

experienced some very distressing class periods especially when he began to compare his learning style to the learning styles of others. He commented that he “always found it upsetting when I came to class ready and prepared...but I struggled and struggled and asked questions, and there would be someone in front of me on their iPad on Facebook getting an A in the class.” As Sam looked back on his entire four years of college, he concluded that the emotional toll was great. He summed up his emotional college resume by lamenting that college was filled with “lots of frustration and even anger at times – that was the worst part.”

Embarrassment and humiliation. Five participants (50%) discussed experiences that created embarrassment and even humiliation. Times of embarrassment in the lives of the participants often occurred when connected to grades. The perception of being a failure fashioned a significant amount of awkward moments. Leon expressed the feeling this way, “You feel like you aren’t really smart enough to be in college. You feel kind of stupid.” Fred echoed Leon’s perceptions by saying, “There is nothing more demoralizing than when you ...do your best and get a D or F. There is nothing worse than the feeling of being a failure.”

Embarrassment grew into humiliation when the participants had to disclose their learning disability to individuals. If circumstances dictated a direct interaction with instructors or peers about a learning disability, some of the participants felt significant humiliation. Cindy expressed her emotional angst about talking about her learning disability. “I didn’t like saying I had a learning disability because in our circles it’s very misunderstood.” Erin avoided sharing her disability with others because she was very embarrassed because “you are different from everyone else.” Obviously, students with learning disabilities were forced to learn how to successfully manage uncomfortable topics and situations, or else keep that information locked up inside.

Discouragement and thoughts of quitting. Nine participants (90%) expressed thoughts about discouragement that led each one to contemplate the necessity of continuing a college education. Second guessing the college experience was a wide-spread phenomenon that appeared during the early years of the college experience. Several participants expressed the sentiment that the discouragement built quickly during the freshman year. Larry was insistent about his freshman experience when he interjected, “Quitting, oh yeah. I thought about just dropping out and working in a machine shop.” Fred experienced the same phenomenon during the freshman year and Cindy summed up this attitude well by concluding that “after my freshman year I almost didn’t come back. There were times I just felt helpless.”

Some of the discouragement was directly linked to feelings of inadequacy. Sam and Bob both verbalized thoughts about whether or not they were “cut out for college.” Bob shared that those feelings of failure pushed him toward disenrollment three separate times when he “came close to quitting” and “got very depressed about it.” Thoughts of inadequacy pushed Cindy to contemplate going home and resuming her former career. “Maybe I should stop college now and be a waitress for the rest of my life.” Bob felt inadequate when he compared himself to others in his program. He grew discouraged when he realized that he “could not get what everyone else was getting.” Mary, who “always wanted to give up and quit,” linked her thoughts of discouragement to “every time I got a bad grade.”

Seven participants (70%) arrived at a place of personal assessment when they decided to take time off from college or drastically alter their college experience in order to think things through as they dealt with their discouragement. Sam summed up his decision this way, “My sophomore year was the peak of those feelings (discouragement). I took a semester off.” Fred and Erin attended a community college near home for a time rather than return to the residential

campus. Cindy and Bob attempted online education as an alternative, and Sally changed from a four-year to a two-year degree. The waves of discouragement caused by the collegiate experience forced the participants to reevaluate their educational plans and mode of education. Bob summarized the experiences of many participants when he concluded, “I had at least three times when I came close to quitting, and I got very depressed about it.”

Exasperation over testing. Five participants (50%) indicated that testing environments affected them emotionally and produced test anxiety. Erin and Sally explained their emotional response to taking a multiple choice test in the classroom setting. As the classroom testing continued, Erin’s frustration built until “I would really get stressed.” Sally thought “it was terrible. I had a hard time trying to read the thoughts of the teacher.” Additionally, both Sally and Sam referenced testing in a computer lab as a source of stress because of environmental noise issues like typing or movement by other test takers or difficulty focusing on print on the computer screen.

The five participants also indicated that test timing issues added to the exasperation of college and created emotional turmoil for them personally. The participants used terms like “freak out, panicking, scared and stressed out” to describe their feelings during timed testing. Larry explained that during a normally-timed test he “just always had to worry about running out of time...and not being able to finish and feeling like an idiot.” Steve described the physical and emotional effects from timed testing by indicating that his “chest would hurt because (I) would get super scared and angry.” These emotional effects during testing continued until the participants were identified with a learning disability, and they were offered untimed or extended testing times. The emotional toll of pressurized testing experiences made a lasting impression on the participants.

Anxiety during faculty interaction. Participants wanted to talk at length about their good and bad interactions with faculty members with reference to learning disabilities. Eight participants (80%) indicated that they were emotionally challenged and developed a measure of anxiety when collaborating with faculty members. The participants' anxiety was created and cultivated in three distinct ways. They became anxious about a reluctance to accommodate, about a lack of understanding of learning disabilities, and about an initial disclosure and meeting with a faculty member about possible accommodations.

Four participants (40%) indicated that they experienced some level of resistance to accommodations by a faculty member, and that produced personal anxiety. Fred, Cindy, and Sally described experiences where instructors seemed dubious and hesitant about providing course modifications. Fred remarked that his instructor "struggled with the concept of a learning disability initially." Bob recalled an experience with a department head that refused to allow a math accommodation – "He didn't see a real problem." Cindy and Sally described dialogue with and actions of instructors that made them uneasy. According to Cindy, "There were several occasions where they (instructors) were a little suspicious. They wanted to make sure I wasn't cheating or trying to get extra time to study." Sally found resistance from a faculty member who "didn't want to give me any favors by giving me as long as I wanted for the essays." These episodes of perceived opposition created an environment of heightened apprehension and nervousness for the participants.

Five participants (50%) became anxious when they perceived that a particular instructor had a deficient understanding of learning disabilities. These participant perceptions and anxieties were fueled by personal experiences with faculty members that left the student troubled emotionally. Sam tried to evaluate all his instructors while explaining the anxiety he had

interacting with faculty. “I know there were definitely instructors that were super good at handling it right, but there were also instructors that didn’t care about you personally, and some instructors just don’t understand learning disabilities.” Some specific examples of clumsy interactions would be illustrative.

Fred told a story about the anxiety created by an instructor who insisted on note taking in class. Fred found that he learned best by just listening and not trying to write at the same time. So his non-conformist behavior in class became such an issue that the instructor called Fred out. “I had a few problems with this one professor because I didn’t take notes in class, and it was imperative to him that people fill out his handouts.”

Sally detailed her multiple experiences attempting to speak with instructors about her learning disability and her emotional reaction to the experiences. The responses she received from faculty confused her, and they revealed a general lack of empathy and knowledge on the part of the instructors. She summarized her conversations with multiple instructors by saying,

Some of them kind of looked at me like, why are you telling me this? And a lot of times, I’d be trying to explain to them I’m not trying to get any favors, but I just want you to know my difficulties. And then I’d end up sitting down and there was something that neither of us understood. I didn’t understand what they weren’t understanding, and they didn’t understand what I was trying to tell them.

Sally left these interactions perplexed and anxious about the relationships she had with her instructors.

Sam had an unusually difficult and fretful experience with an instructor over classroom quizzes. Because of his learning disability, Sam was eventually given extended time on tests and quizzes. In the particular course in question, the professor dismissed Sam from class when each

quiz was given. Sam explained, “I would walk into the hall during a quiz the entire semester and was told I didn’t have to take it fast. It was very public and intimidating”.

A final area of anxiety associated with faculty interaction is related to the disclosure of a learning disability to a faculty member and the issue of trust. Four participants (40%) indicated that they were fearful about fully disclosing a learning disability to a faculty member and thus creating some emotional anguish, complicating their collegiate experience. Some participants experienced unfortunate interactions with instructors that created a climate of distrust. Leon, Erin, and Cindy expressed a reluctance to discuss learning disabilities with their course instructors. Leon commented that he “didn’t like speaking to them, because it made him feel stupid,” while Cindy said she was careful what she told to professors. “I pick and choose what I tell a professor, but I don’t explain everything.” Larry was the most vocal about the topic of full disclosure to faculty members. He commented that he did not think he “ever actually discussed with a professor even a little bit of the detail of what I struggle with.” When questioned about the cause of his feelings, Larry said that “Some students are very afraid to go and talk to their teachers, because they do not want to feel stupid. Later, as he commented about the same topic while part of a focus group, he added that his reluctance to talk to instructors stemmed from the fact that “Some instructors, unfortunately, they are maybe more apt to judge you or label you or just immediately have this thought about you as soon as you tell them.” Evidently, some participants developed a dread of complete disclosure and interaction with faculty. They would do enough to obtain some form of accommodation through the Office of Student Success, but feared what an instructor might do with too much information, or what might happen if they had a candid conversation with an instructor.

Research Question 3

What can be done to alleviate the effects of the phenomenon?

The third research sub-question explored practical ways to alleviate the effects of a late identification of learning disabilities. The research data that was collected offered significant insight about how the detrimental effects of late identification might be mitigated. Participant questionnaires, individual interviews, and focus group interviews presented practical insight and dependable data. As detailed in Table 4, the participants suggested several behaviors that they believed helped enable them to learn more effectively and have more success in the collegiate environment.

Table 6

Themes in Research: Question 3

Theme	# of Participants	%
Interactive learning environment is important	9	90
Academic Success Center is critical	6	60
Testing accommodations are needed	8	80
Light academic loads are better	6	60
Communication with a mentor is vital	8	80

An interactive learning environment is important. When talking with the participants about learning environments and learning styles, nine participants (90%) said they preferred a learning environment that was more interactive than passive. Participants generally discussed learning environments in three categories: negative, positive and mixed.

Classroom lectures were an overwhelmingly negative experience for the participants.

Seven individuals (70%) specifically mentioned lecture-based learning as a negative experience. Fred summarized the thinking of the participants when he said that a lecture “was not the most effective way to learn.” Cindy, Larry, Steve, Mary and Sally indicated that lecture courses were “boring, hard to follow, confusing, droning, hated, and slow.” Sally described her experiences in lecture classes this way, “The PowerPoint lectures were all the exact same, and it was like there wasn’t something different to look at – nothing to keep your focus.” Mary was the one voice of dissent concerning the lecture environment. She felt safe in a lecture course because she would not be called upon to talk or interact with others. She summed her situation up by saying, “If there’s just a lecture...and it’s a big class, I just have to sit there.”

Additionally, several participants (30%) observed that note taking during lectures was extremely difficult for them. Steve and Erin mentioned difficulties “comprehending everything” going on in a lecture environment, and trying to take notes while listening was very difficult. Larry explained his note-taking dilemma by saying that he’s found something that works better than note-taking in class. “I’m trying to...listen more to the lecture and then go back and study.”

In contrast to the hated lecture, four participants (40%) voiced their approval of collaborative project-based coursework as a positive learning experience. Sam was sold on project-based learning rather than being a passive learner. He commented that “showing what I can do would trump everything. Student teaching like I am doing now would be evidence of that.” Erin agreed with Sam’s conclusion about project-based learning. She added, “I do like presenting and doing activities; project-based learning seems to work best for me.” Larry agreed and wanted to emphasize that “just because you interact with other people around you, as well as just getting up and moving, does not mean you are not learning.” To these participants, an

interactive, project-based college education was educationally successful and personally gratifying.

Surprisingly, students generally disagreed about the educational suitability of on-line learning. Three participants (30%) liked online learning, while three participants (30%) had misgivings about it. Those who favored online learning proclaimed its flexibility and project-based nature. Larry, referring to an online course said, “I enjoyed it because I got to go at my pace for all of it.” Bob continued along with the same theme when he explained the flexibility that online coursework provided for him. “I’ve been able to work at this at my own pace, and I don’t mean that you have all the time in the world; you don’t. But I can get up in the morning and work early in the morning until late at night without going to school.” Both Larry and Bob mentioned the project-based nature of online learning as a real plus.

Conversely, some participants (30%) did not have a good experience with online learning. Erin was concerned that there was more reading when courses were offered online, and that she could not do as well in the online environment as she could in a face-to-face classroom. She also mentioned that online courses were “too fast and...there wasn’t enough interaction.” Bob lamented that online learning did not have the personal touch of the classroom. “Not really having any interaction with individuals, the teacher...was hard for me.”

Overwhelmingly, the subjects of this study valued interactive learning experiences. Interactive learning environments captured the participants’ interest and created a stimulating environment that led to more perceived success.

The Academic Success Center is critical. In order to survive the college experience, six participants (60%) said interaction with the university Academic Success Center was a crucial part of what is necessary for a flourishing experience in higher education. The participants

pinpointed two functions of the Academic Success Center that were especially appreciated – tutoring services and advocacy services.

Mary and Steve appreciated the one-on-one nature of the tutoring offered by the Academic Success Center. Mary found tutoring a very effective method of learning. She commented that she “found when I was in a really quiet place, and it was just me and my tutor. I was able to understand things so much better and could retain it longer.” Tutoring that was targeted on writing skills seemed to help Cindy. Although the tutors approached Cindy’s situation too globally at first, after a period of fine-tuning the tutoring became more refined and effective. Cindy reflected that at first,

They focused on everything, you know, time management, studying, all that. And I really didn’t have trouble making a schedule....I had no problem studying, I knew how to study. It was really just writing assignments and in the past year we focused on writing ...and that helped immensely because we could focus on that.

Several participants mentioned the great value of having someone on campus looking out for them. Participants seemed more comfortable discussing their educational situation with the Academic Success Center staff rather than with faculty members. Steve ruminated about the positive value of the advocacy services that the center provides. He believed that this insulated and protected the student with learning disabilities from undue disclosure and embarrassment. He said,

I like it because I don’t have to go to all the instructors and tell them about it....I don’t have to have that discussion or have the instructor worrying or me worrying that the instructor doesn’t believe me and that I’m making it all up. It’s nice that the program exists just to help you out and make you feel more comfortable.

Sally also saw the importance of the advocacy of the Academic Success Center. She added the center would “communicate with the teachers really well, and I didn’t have to do a lot of communication because of them. I am very appreciative of that.”

Clearly, the majority of the participants of this study appreciated the work of the Academic Success Center. The center helped college students with learning disabilities cope in at least two ways: tutoring services and advocacy with faculty.

Testing accommodations are needed. Eight (80%) of the participants believed that some type of testing accommodations were critical to their collegiate success and well-being. Most participants mentioned the value of extended time testing, while some appreciated a non-classroom atmosphere which better accommodated their testing needs.

Extending the testing time seemed to be one demonstrative way to assure a student with a learning disability that even they could be successful. All eight participants who mentioned testing accommodations expressed the relief that extending testing time brought to them. Bob remarked that “just knowing that I can have extra time on exams and quizzes – that made a big difference.” Erin made a similar comment about her extended-time testing by saying the “longer test times really helped a lot – I could relax.” Not having to race against the clock allowed the participants to focus their attention more specifically on the course assessment and not on the amalgamation of anxiety created by the clock and their learning disability.

The best testing environment also became part of the discussion as it related to testing accommodations. Two participants spoke up about the value of testing outside the usual classroom. Sally was adamant about her need for oral testing and how the typical classroom environment never worked well. Sally perceived that oral testing was very important to her. “Someone to read my tests to me – that worked out a lot better than just sitting in class and

reading it on my own. When I didn't have a reader, I got very frustrated." Erin also experienced a similar phenomenon. Erin liked to read tests aloud, and this was not readily possible in the typical classroom setting. She remarked, "When I could take my tests outside the classroom, I noticed that I did a lot better – reading aloud helps."

Most students perceive assessment activities as difficult hurdles and often become anxious. But when a student with a learning disability enters into the assessment environment, anxiety can reach more significantly elevated levels. Testing accommodations that manage the environment and accommodations that extend testing time seemed to ease some of the frustrations that were central to the participants of this study.

Light academic loads are better. Six (60%) of the participants suggested that attempting a lighter than typical academic load per semester was a beneficial way to cope with a learning disability and succeed in college. Most of the participants who spoke about lighter academic loads recommended taking 12 credits or less per semester. Cindy reflected on the path that brought her to this conclusion, "Some semesters I started with more than I knew I could handle. I thought I should challenge myself. I thought it would get better." But the academic situation did not improve for Cindy when she overloaded herself academically. Fred came to the same conclusion after several semesters of attempting a heavy academic load. He reflected, "I learned that taking a full-time class load for me and doing it in a classroom setting was not best for my learning."

When participants quantified a lighter academic load, they most often set the bar at 12 credits or less per semester. With financial aid requirements for fulltime students set at 12 credits per semester, the 12-credit limit may be a natural niche for a student with a learning disability. Fred expressed his rationale about a self-imposed credit limit per semester this way, "I need to

cut back on my class load and not take so many classes. Even though a lot of people I know can take 18 credit hours, maybe I can take only 12.” Erin explained the success that she had at community college by taking only two courses per semester, “I think that made a big difference.”

When discussing lighter academic loads, some of the participants indicated that they had experienced some negative reactions toward a light academic schedule. Students with learning disabilities attempt to cope with the financial and social pressures to save money and keep on pace that most college students confront. Fred reflected on his academic load struggle and outside pressures by saying, “Don’t be afraid to appear lazy and maybe take only 10 credits.” Cindy also communicated about pressures she felt to fill out her schedule with a full load by saying, “There’s just this idea that you have to finish in four years because, otherwise, then if you don’t graduate until your 26... you’re not up to date in life or whatever.”

Removing the pressures of a full academic load and planning college at a slower pace was much preferred by the participants of this study. Helping students with learning disabilities feel comfortable about pacing themselves is a crucial cog in the mechanism that brings a measure of success.

Communication with a mentor is vital. The participants of the study strongly suggested that targeted guidance through the collegiate experience was a life saver. Eight (80%) of the participants recommended periodic guidance, and they believed that the advice could be offered through a number of different sources including family, professional staff, other students with learning disabilities, and faculty. Sam summed up the general consensus by saying, “Find someone who can help you through the routine of going to college. It helped... to motivate me and provided accountability.” Talking through the difficult moments that punctuate the collegiate experience of a student with a learning disability can offer a great deal of reassurance

and support. Bob strongly encouraged a mentor-student dialogue by concluding, “Talk to somebody about it. Trying to keep it inside the whole time is not good for anybody’s health.” Participants went onto pinpoint and specifically describe the help they received from several dissimilar types of mentoring sources.

Family members can have a profound influence in the success or failure of students with learning disabilities. Both Sally and Mary commended a particular parent who helped them navigate the collegiate world. For Mary it was a father who was also beleaguered by a learning disability. She commented that she gained appreciation and inspiration from “my dad. He has a learning disability, and he has been really helpful.” For Sally, her mother was a positive motivating factor and sounding board. “She’d constantly be an ear for me to just lay out all my troubles and she’d say, okay, you can do it and keep going.” In contrast, Steve specifically kept his struggles with a learning disability from his family. He commented that his family did not handle difficult situations well. “When something happens, they all take it to the max - the extreme. So they think it’s like the worst thing possible, so I kind of just kept it quiet and tried to do my own thing.” The academic and emotional results of Steve’s choice to avoid accountability with family were not positive.

Professional staff can also develop positive mentoring relationships with students with learning disabilities. Leon spoke about the value of the interaction he received at the Academic Success Center. “They just talked to me and encouraged me. I felt like they really cared about me.” A psychologist provided a sense of security and stability for Fred that encouraged him to continue on academically. Fred recalled the impact by saying, “He told me that it would take longer, and that’s ok.” Sam found a listening ear and encouraging words from an academic staff member. Sam reflected on the value of the relationship he developed. “I received a lot of help

from an adult on campus who helped me step-by-step through a lot of decisions and choices...find someone like that who can actually help you.” In fact, participants did search a wide-ranging spectrum for mentoring support.

One of those additional sources for mentoring support was other students with learning disabilities. Several participants mentioned the value of simply knowing someone else who had a learning disability and having the opportunity to share experiences and strategies together. Sally was able to connect with a former student who had a similar learning disability. Her interaction was useful and she suggested that “just having someone else knowing what you’re going through and having the same difficulties really helped.” Several participants reflected on times of positive encouragement they received from other students with learning disabilities and even the valuable opportunity to participate in a focus group during this study. Sally summed up the mind-set of one focus group by stating, “Upperclassmen can be a big help. If there’s an upperclassman that has a learning disability, to go to the...freshmen or whatever, that would be very comforting. I know it helped me when it happened.” One final mentoring relationship was mentioned in both a positive and negative light.

University faculty can be instrumental in providing a positive mentoring connection with a student who has a learning disability. Students who were interviewed were looking for evidence that their professors cared about them personally. Erin challenged faculty members to do more mentoring when she commented, “I think patience from a teacher and encouragement can help a lot. Show them that you care about them.” Larry echoed Erin’s comments about faculty mentorship and encouragement. According to him, positive personal interaction with faculty was “really important...I just feel like that’s so big – really having a personal relationship with students.”

In contrast, some of the participants in the study seemed to indicate that a positive mentoring relationship with faculty was not also a commonplace occurrence, although they wished for such an occasion. Sally explained that her interaction with faculty was mixed throughout her collegiate experience, but she also greatly valued the occasional encouraging faculty mentoring she received. She explained it this way:

Some teachers were pretty encouraging. One professor would keep on saying – you can do it, you can do it, keep it up. I know you can do it. I know how brilliant you are by the work that you’ve given me. I know you can tackle this. That was very encouraging; even if I had five other professors that really didn’t say anything... one teacher saying I know you can do it was very encouraging.

Larry indicated that he also found a general lack of willingness to mentor by faculty members. As a consequence, he was very reluctant to begin a dialogue about learning disabilities with a professor. He believed that “some instructors...are apt to judge you or label you.” As a result, he looked for mentorship in other places.

Summary

This chapter was an elaboration of the research results of this study. The data that was analyzed was gathered by using questionnaires, field notes, interviews, and focus group interviews. In spite of the unique nature of each participant’s experience, the data was used to investigate and eventually describe the essence of the experience of a student who was belatedly discovered with a learning disability after beginning collegiate life. The pooled data revealed a fascinating composite picture of the stresses experienced by the participants. Personally struggling with self-efficacy and resiliency, the participants labored emotionally and academically to keep their collegiate experience afloat. By both uninformed trial and error and

by employing valuable advice, the participants learned ways to cope and make sense out of their collegiate experiences.

CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Overview

The purpose of my research was to describe the essence of what it means to be a college student who is identified with a learning disability after beginning a collegiate learning experience. By studying the experiences of college students who first learn about a learning disability while enrolled in post K-12 education, insight was gained into the shared experiences of the participants. The accumulated insight was extremely beneficial and enabled me to more fully define the phenomenon and understand its implications. This chapter will summarize the findings, discuss the connection of the findings to previous research, draw attention to implications derived from the study and suggest recommendations for future research that might shed more light on the topic.

Summary of Findings

As discussed in the literature review, the conceptual framework of this study was built on the theories of self-efficacy and resiliency and the philosophical foundation of a biblical worldview. Self-efficacy is a developed self-belief that either creates personal confidence or creates a level of personal doubt (Bandura, 2001). College students with higher self-efficacy adapt well to a college environment and are usually successful, while college students with lower self-efficacy manifest more academic and social difficulties. Resiliency is an internalized course of action that enables an individual to adapt to challenging situations (Milstein & Henderson, 2004). College students with higher resiliency find ways to adapt to the stresses of college life, while college students with lower resiliency exhibit more emotional and academic difficulties. The results of the research suggest that the participants in this study struggled with both self-

efficacy and resiliency. Additionally, the participants uniformly indicated that a caring mentor who portrayed the essence of a biblical worldview was an invaluable help.

By taking into consideration the associated theories of self-efficacy and resiliency balanced by a biblical worldview, a deeper understanding of the essence of the participants' experiences can be comprehended more fully. Established by the outcomes of the study, the essence of what it means to be a college student who is identified with a learning disability after beginning a collegiate learning experience can best be understood by thoughtful consideration of the major themes that were identified in the data of the study.

Pre-college Academics

Three subthemes regarding the pre-college academics of college students with recently discovered learning disabilities were evident within the data: (a) K-12 academic difficulties, (b) parental disbelief and lack of action during K-12, (c) inadequate K-12 learning environment.

K-12 academic difficulties. All participants experienced academic difficulties in the K-12 environment. Reading and math struggles were the most common participant experiences. The participants expressed the feeling that particular academic struggles gave them a negative perspective on their abilities and in school in general.

Parental disbelief and lack of action during K-12. A majority of the participants indicated that a parent was either reluctant to entertain the possibility of a learning disability or was simply slow to act in finding ways to help. The resulting lack of action or slowness in action was detrimental to the participants' K-12 educational experience.

Inadequate K-12 learning environment. A majority of the participants believed that their K-12 learning environment was inadequate. For the most part, the inadequacies related to a lack of accommodations. Four of the participants who reflected negatively on their elementary

and secondary years were home-schooled during most of their pre-college educational experiences.

College Academics

Four subthemes regarding the college academic experience of students with recently discovered learning disabilities were evident within the data: (a) academic problems in certain disciplines, (b) academic transitional obstacles, (c) testing difficulties, (d) problems with lecture-based learning.

Academic problems in certain disciplines. All participants had academic difficulties in reading, mathematics, or writing and some had a combination of two of the aforementioned difficulties. The most prominent academic problem was completing and comprehending college reading assignments, while a significant number of participants struggled with college writing assignments of any length. Academic difficulties in reading and writing had a pervasive effect on academic success.

Academic transitional obstacles. Many of the participants believed that their transition to college was flawed. Most felt overwhelmed by collegiate academic expectations and often did not know how to look for help. The participants believed that a lack of knowledge of their particular learning disability was the most significant hindrance. This lack of knowledge prevented the participants from securing help from the Academic Success Center and potential accommodations early in their collegiate careers.

Testing difficulties. At least half of the participants expressed personal difficulties with taking a test in a typical classroom environment. Participants spoke about both testing distractions and a lack of time to complete a classroom evaluation. The majority of participants

who commented about testing time agreed that it was very difficult for them to read multiple choice questions, analyze the choices, and complete a test during a normal classroom period.

Problems with lecture-based learning. Lectured-based learning was highly disdained by the participants of the study. The participants explained that lectures were hard to understand, and they had difficulties concentrating during a lecture. Additionally, note-taking during a lecture was exceedingly difficult for most of the participants. Being able to hear a lecture and then translate the words into written language was very complicated. Participants preferred a more hands-on approach to learning that avoided the lecture format.

Emotional Effects

Five subthemes regarding the emotional effects on college students with recently discovered learning disabilities were evident within the data: (a) developing frustration and anger, (b) experiencing embarrassment and humiliation, (c) feeling discouragement and thoughts of quitting, (d) suffering exasperation during testing, e) living with anxiety over faculty interaction.

Frustration and anger. A majority of the participants experienced frustration regarding the difficulty and time commitment of college assignments and projects. In many situations, the frustration led to tears and anger which appropriated an incredible emotional and academic toll on the participants.

Embarrassment and humiliation. Embarrassment and humiliation were too often part of the academic and emotional lives of the participants. Embarrassment and humiliation often grew from being required to disclose personal information about the existence of a learning disability. Students with learning disabilities had to cope with personal revelations regarding uncomfortable topics, and some chose to be silent rather than being humiliated.

Discouragement and thoughts of quitting. Most college students with recently discovered learning disabilities were faced with repeated bouts of discouragement, which caused them to reevaluate their educational plans. Most of the discouragement was linked to feelings of inadequacy when comparing themselves to other college students. Most of the participants interrupted their collegiate experience with time off to reassess their educational goals and mode of education.

Exasperation over testing. Many participants indicated that testing and testing environments produced personal stress and test anxiety. Test-timing issues and environmental noise were the principal factors that created emotional turmoil. Some participants cited testing exasperation as a major reason for their academic struggle.

Anxiety during faculty interaction. Potential and actual interaction with faculty about possible learning disabilities produced some of the most intense feelings among the participants. Participant anxiety was heightened because students perceived that faculty had both a measure of misunderstanding about the nature of learning disabilities and a degree of reluctance to provide accommodations that were requested. Some participants mistrusted faculty to the point that they were reluctant to share any information about their learning disability and often chose not to share any information at all.

Ways of Alleviation

Five subthemes regarding ways to help alleviate the academic and emotional effects on college students who have a recently discovered learning disabilities were evident within the data: (a) the importance of interactive learning, (b) the critical nature of the Academic Success Center, (c) the need for testing accommodations, (d) the significance of lighter academic loads, e) the impact of communication with a mentor.

Interactive learning environment is important. Overwhelmingly, participants preferred an interactive learning environment to a passive learning environment. Classroom lectures were rated as a very negative experience by a large majority of the students, while most favored a collaborative project-based approach to learning. Online courses received a mixed response with as many participants liking the online learning approach as disliking it. Participants perceived that they had better academic and emotional success in an interactive learning atmosphere.

Academic Success Center is critical. Many participants in the study believed that the campus Academic Success Center was vital to their personal educational journey. The participants identified two functions of the Academic Success Center that were especially valued – tutoring and advocacy services. The participants were thankful that someone on campus was looking out for them. Having an advocate on campus helped to insulate the student with learning disabilities from undue disclosure and its associated results.

Testing accommodations are needed. The participants of this study believed strongly in the value of testing accommodations. To them, the most important accommodation was extended time on testing. Extended testing time allowed the participants to relax and concentrate on the test rather than be frustrated and anxious about timing issues and the pressure of the typical classroom testing environment.

Light academic loads are better. Many participants suggested that maintaining a lighter than normal academic load was one way for them to cope with collegiate academics. With the recommendation of 12 credit hours or less per semester, participants believed they could better focus on a few primary courses and release some of the academic pressure of a fuller schedule. Finding the proper level of academic pacing that did not push the participants beyond what is

attainable was one key way to alleviate some of the negative effects of living with a learning disability.

Communication with a mentor is vital. The participants thought that finding someone knowledgeable with whom to talk about college life and academics was vitally important for success. The mentoring relationship seemed to be a life-line for most who mentioned its existence in their personal experience. They believed that a mentor could come from any number of sources including faculty, professional staff, family, and friends. Some strongly suggested the value of talking through college experiences and choices with a mentor who also discovered a personal learning disability. These participants mentioned that conversations with others who had attempted college and also personally battled with a learning disability were most rewarding. Participants were looking for an individual who could give advice, motivate when needed, and offer accountability. Interestingly, some participants longed for a mentoring relationship with a faculty member and were saddened by fact that the faculty they encountered seemed to be ambivalent toward facilitating such a relationship.

Discussion

In this section of chapter five, current literature related to college students and learning disabilities is connected to the results of my research. Conclusions are drawn about whether or not my research findings contradict or corroborate previous research findings. Additionally, I will suggest several ways my research has built on previous studies and added depth to the study of learning disabilities and college students.

Self-Efficacy

Albert Bandura's concept of self-efficacy is an interconnected theme that permeates literature related to learning disabilities, college students, and the research findings of my study.

Bandura's theory of self-efficacy as a self-perception of capability that could create personal doubt which may paralyze academic success is corroborated in the research findings of this study (Bandura, 1997, 2001). Recent research has discovered that college students with learning disabilities hold inferior academic self-beliefs, which sometimes lead to academic impediments like procrastination and self-doubt (Klassen et al., 2008). Klassen et al. additionally pointed out that students with learning disabilities needed help in developing self-regulating behavior (2008). The results of my study strongly corroborate Klassen's work. The majority of participants in my study experienced difficulties with academic regulatory behaviors like finishing projects and papers on time. Many of the participants labored over large assignments, often submitting the projects weeks late. Overall, 90% of the participants of my study had academic self-doubts during their college career. College students with learning disabilities not only struggled with issues related to self-efficacy, but they also had a crisis with resiliency.

Resiliency

The concept of resiliency as an internalized process of successful adjustment to challenges is another foundational theme that permeates literature about learning disabilities and college students (Heiman & Kariv, 2004). Most commonly, college students with low resiliency exhibit emotional difficulties including self-doubt, stress, and general anxiety which can lead to emotional difficulties (Milstein & Henderson, 2004). Once again the results of this study strongly corroborate the current literature about resiliency and its effects. All of the participants experienced emotional problems of some type. Ninety percent of the participants experienced bouts of discouragement and recurring thoughts about quitting college. These feelings of inadequacy made it difficult for the participants to complete their projects and feel comfortable in a collegiate environment. Most significantly, it was difficult for them to interact with faculty

members when they needed extra help or additional instructions regarding a particular course. Because the participants of my study seemed to lack resiliency, adjusting to the challenging experiences of college life was not an easy matter. This lack of academic adjustment had deep roots.

Pre-college Academics

According to Newman et al. (2009), as many as 30% of students with learning disabilities that were discovered during their K-12 education are enrolling in college after high school graduation. Because of academic difficulties during the K-12 years, these students were tested and received accommodations and transitional planning services as mandated by IDEA (Gregg et al. 2006). In many ways my research added depth to the study of the effects of a late discovery of learning disabilities. Very little is written about the consequences of a late discovery of learning disabilities.

The participants of my study struggled in various academic areas during their K-12 experience, including poor grades and a general dislike for school. Yet, because of parental fear or lack of information, these students passed through the K-12 years without a discovery of a personal learning disability. Accordingly, 80% of the participants characterized their transition to college as “flawed.” They felt “blind-sided” and were in “extreme shock.” No transitional services were in place for the participants because they lacked a discovered learning disability. Unlike some who have their learning disability discovered in the elementary years, a managed transition to college was not possible for the participants in my study. Since 70% of the participants experienced less traditional forms of K-12 education, it is possible that their K-12 educational experience promoted non-discovery. With an earlier K-12 discovery, it could be assumed that some of the transitional problems that were experienced could have been decreased

and better managed by the participants and the Student Success Office. The poor transition had long-lasting collegiate ramifications.

College Academics

College students with learning disabilities struggle more significantly than their nondisabled peers. When the literature was reviewed, it provided information regarding a number of issues and practices relating to learning disabilities and college students. Yet, in my review of the literature, very little was found regarding the predicament of late identification or the actual essence of what it means to be identified with a learning disability while enrolled in the college experience. Only two previous studies provide some data about the academics of college students and the late identification of learning disabilities. The Murry et al. study (2011) revealed that 75% of college students with verified learning disabilities have some type of reading disorder. The results of the Abreu-Ellis et al. (2009) study that pinpointed college students who were identified with a learning disability after beginning the college experience. Abreu-Ellis et al. discovered that the study's participants struggled more significantly in test-taking and writing than did early discovered individuals. The results of my study both corroborate and contradict some of the previous findings.

The participants in my study did struggle with reading. Seventy percent of the participants eventually received accommodations for dyslexia which nearly mirrors the Murry et al. study. Conversely, although some of my participants mentioned struggles with test taking and writing assignments as found in Abreu-Ellis et al., most of the academic complaints in this study were related to reading and functioning in a typical classroom lecture. Eighty percent of the participants of my study experienced learning difficulties in a lecture-based learning environment, and 60% were afflicted with arduous course reading requirements that were nearly

impossible to complete. The research results seem to indicate that students with a late identification of a learning disability struggle in multiple areas of academia, including being able to function in a typical college classroom. Fighting to improve grades was not the only struggle for the participants.

Emotional Effects

The educational concept of resiliency has emotional components and associated effects. Multiple studies have revealed that students with low resiliency have issues with stress, worry, anger, and shame, while students with more resiliency deal better with stressful situations (Heiman & Kariv, 2004; Stanton-Salaza & Spina, 2000). Additionally, the Abreu-Ellis et al. (2009) study revealed that college students with learning disabilities had more anxiety, were less positive about school, and struggled with anxiety in testing situations. Several studies discovered ways to lessen the emotional effects of dealing with a learning disability as a college student. In particular, learning time management skills and involvement in academic coaching were indicated as successful ways to increase self-confidence and reduce the anxiety of struggling with a learning disability in a collegiate setting (Parker & Boutelle, 2009; Parker et al., 2011).

The data from my study successfully corroborated the research linking emotional effects and learning disabilities. Each participant indicated that they experienced one or more emotional ramifications because of the conjuncture of collegiate academics and learning disabilities. More than half of the participants encountered test anxiety and humiliation during their collegiate experiences. To an even greater degree the participants dealt with frustration, anger, and anxiety with faculty members. This anger and frustration with faculty colored their collegiate experience in lasting ways that become apparent during the interview process. Nearly all of the participants (90%) endured seasons of discouragement and entertained thoughts concerning quitting college

altogether. Clearly, college students with a late identified learning disability need help in mitigating the effects of their situation.

Ways of Alleviation

Upon reflection, the literature regarding college students with learning disabilities and the results of my study coalesced around several key ways to effectively alleviate the consequences of going to college with a learning disability, especially one that was discovered after beginning higher education.

First, the importance of faculty knowledge and training regarding learning disabilities is prevalent in the literature. Faculty members need to understand learning disabilities and the associated accommodations regarding testing, proper learning environments and curriculum that would most effectively help a college student with learning disability. Faculty awareness is an important tool in helping students alleviate some of the effects of dealing with a learning disability. Multiple studies reveal the importance and value of training in curriculum adaptation and types of accommodations for particular learning disabilities (McCleary-Jones, 2008; Rose et al. 2006). The results of the Murray et al. (2009) study revealed that 46% of the collegiate faculty had no training whatsoever in learning disabilities, and that training produced positive results by increasing the number of accommodations provided for students with learning disabilities. My study corroborated many of the previous findings. Nearly all (80%) of the participants were emotionally challenged when collaborating with college faculty. Fifty percent of the participants perceived faculty resistance to accommodations and a lack of understanding of the nature of learning disabilities. Faculty attitudes need to change.

The second key ingredient in the alleviation of the effects of a learning disability is the development of coping strategies for students with learning disabilities. Both the literature and

my study point to the importance of teaching and learning effective coping strategies as early as possible. The conclusions of the Parker & Boutelle (2009) and the Parker et al. (2011) studies revealed that the best coping mechanism for college students with learning disabilities is the attainment of self-management skills as the result of executive function coaching that begins early in school. This model of tutoring focuses on study skills, self-efficacy, and organizational skills rather than on specific course content. My study corroborated the critical nature of mentorship and coaching in the life of a college student with a late-identified learning disability. The vast majority (80%) of the participants experienced transitional difficulties as they began their collegiate journey, and all of the participants struggled academically. None of the participants received any executive function coaching prior to their evaluation and the discovery of their particular learning disability. Once the participants had their learning disabilities discovered sometime during their college career, they greatly valued the help of a mentor and the staff at the Academic Success Center. The majority of the participants (60%) felt that the assistance of the Academic Success Center was vital, and 80% believed that the counsel of a mentor was invaluable for success at college. The nature of the mentoring that was most valued was mentoring that addressed organizational, study, and life skills – skills that match the findings of Parker et al. (2011).

Leaders in higher education need to develop easier pathways for students with learning disabilities to make connections with mentors who could guide the students through the maze of life and career choices that occur during the college years. When battling the bureaucracy of college life, the distress of low self-efficacy can be most evident. The right mentor, with the correct focus on executive function coaching, can make a powerful difference as evidenced in several of the participants.

A third important factor that might be helpful in alleviating the effects of a learning disability would be more student freedom to choose learning options and learning environments. The research of Rose et al. (2006) pointed to the importance of a college curriculum that was designed for a variety of learners including students with learning disabilities. The curriculum variety being proposed would afford interactive learning options and multiple ways to accomplish course goals. My research corroborated the need for flexibility in course design. Eighty percent of the participants believed the traditional college lecture course was a bane to their academic success. Most of the participants did not function well in a lecture environment.

Although the creation of curricular alternatives and options might face some faculty opposition, students with learning disabilities would potentially benefit. The instructional principles of Universal Design for Learning promote variety in presentation of content and variety in student methods of demonstrating learning (Rose & Meyer, 2002). This would allow students with learning disabilities more flexibility for academic success. The relatively new flipped classroom approach to course design might also alleviate some of the participants' apprehension about the value of lecture courses. The flipped classroom approach could transform the usual lecture class into an interactive experience, which was universally enjoyed by the participants of this study. More research is needed regarding the effectiveness of the flipped classroom concept and students with learning disabilities.

A final factor that may be effective in the alleviation of the consequences of a learning disability during a collegiate experience is an improved emphasis on the community college approach to higher education. The research of Chang and Logan (2005) suggested that the local community college was potentially a more successful learning environment for students with learning disabilities. The study suggested that two-year colleges generally have remedial courses

to help students like the participants of this study, facilitate a lighter course load, and allow students to live at home which is potentially a more supportive environment than the traditional four-year university. The results for this study substantiate these findings in several ways.

Most (80%) of the participants in this study had difficulties as they began their college coursework. Many participants (70%) took at least one semester off during their academic career in order to return home and recuperate from the challenges of college life. Several participants (30%) enrolled in community college courses during those times and had better success in the local venue. The participants often cited the reduced credit load and the structure of home as an aid to their success. Educational leaders who find students with learning disabilities struggling in a four-year residential setting should be encouraged to support a change in the educational setting of these students. The non-residential student or community college option needs to be explored.

After pondering the research data and the lives of these participants, the need for higher educational transformation is apparent. I would like to suggest several implications that flow from this study.

Implications

When considering the implications of my study concerning struggling college students who have been discovered with a personal learning disability sometime after beginning their college education, I believe several recommendations would be both appropriate and helpful. Having a fuller understanding of the experiences of the participants of the study should be helpful to those in college leadership, to students with learning disabilities, to parents of these students and to collegiate educators in general.

Enhanced Early Identification

Too often, those in positions of authority ignored the warning signs and allowed the effects of a learning disability to shape the educational experiences of a young person. The consequences of late identification were keenly felt by the participants before and after the inauguration of a college academic experience. Sixty percent of the participants remembered their K-12 years as inadequate and academically troubled. Often parents feared the cost of possible testing, loathed the stigma of the learning disabilities label, or simply did not know enough to seek help for the problems they were observing in their child.

As a result, I would highly recommend a concerted effort to educate parents in home school associations and in smaller private Christian school venues about the nature and treatment of learning disabilities. Additionally, law makers and the insurance industry should be encouraged to consider legislation that would treat learning disabilities testing as a medical expense that would be typically covered by a medical insurance plan. Families outside the public school safety net need help in the alleviation of the problem of K-12 non-detection.

Proper Alleviation of Transitional Academic Penalties

Without their particular learning disability being discovered, the participants of my study entered the halls of collegiate academia largely oblivious to its rigor and requirements. No interventions were accomplished during the K-12 years to prepare the participants for what they would encounter – a very difficult transitional experience.

Hit by the realities of complex course expectations and an unattainable classroom environment, the participants felt “lost.” Totally unprepared, the participants were not ready for their educational experience and struggled academically. To a person they believed that their

collegiate beginning was harder than it needed to be. Many did irreversible harm to their academic record before their learning disability was discovered and understood.

Consequently, academic leaders should consider appropriate ways to erase the participants' flawed academic beginnings. The permanency of academic work that was completed before the discovery of a learning disability should be subject to careful review and possible forgiveness. Colleges and universities should establish procedures that assist students with recently discovered learning disabilities to potentially expunge transcripts of failing grades and replace academic records that were forged in an environment that lacked adequate self-knowledge and the appropriate tools for success.

Improved Faculty Training

The results of my research revealed that in general, college faculty members were not adequately prepared to properly deal with students with learning disabilities. Most participants agreed that meeting with faculty members caused heightened anxiety and feelings of uneasiness. Fifty percent of the participants perceived that faculty members they interacted with did not have an adequate understanding of learning disabilities. This was further evidenced by 40% of the participants having trouble receiving accommodations during certain courses. Faculty members who are ignorant, clumsy or suspicious about learning disabilities, put unnecessary hurdles in the path of the participants of this study.

With the apparent lack of appropriate faculty interaction, required faculty training regarding learning disabilities and accommodations should be universally required and repeated at regular intervals at the collegiate level. Periodic compulsory faculty workshops and in-service programs *vis-à-vis* learning disabilities and accommodations should be a universal expectation in

higher education. Educational leadership at the institutional level should eliminate the potentiality of a lack of training or faculty misperceptions about learning disabilities.

Thoughtful Facilitation of Lighter Academic Loads

In the course of this study, the majority of participants believed that a lighter academic load was one important ingredient in collegiate success. Taking 12 or less credits per semester enabled the participants to focus on fewer courses and assignments during any given semester. Yet at the same time, some of the participants felt a social, academic and financial pressure to take a heavier load of coursework. Going through college at a slower pace is not without challenges of various types. Socially, there is often a push for students to finish school and get on with life. Adapting a four- year program into a five-year or six-year plan raises eyebrows. Extending a program can also be a financial burden in some situations depending on the billing practices of institutions and financial aid eligibility requirements. Moving along at a slower pace can even affect things like athletic eligibility and scholarship requirements.

Accordingly, it would be beneficial for institutions to consider the removal of any internal barriers that discourage lighter academic loads. If range billing for academic credit is an institutional policy, consideration should be given for students who are at the lower end of the range. For example, one widespread method used in range billing is to charge a student taking 12 to 18 credits the same price. At MCU the tuition charge for 12 to 18 credits is \$5,990. But in reality a student taking just 12 credits is charged a \$499 per credit hour, while the student taking 18 credits is charged \$332 per credit (MCU Catalog). Establishing two or three tiers within the range billing makes more sense for students with learning disabilities who want to take college at a slower pace. Additionally students who are taking lighter loads for academic reasons, like a discovered learning disability, should be carefully advised about athletic and financial aid

requirements that are connected to academic load. Although national standards often must be maintained, individual institutions can improve the flow of information and the crafting of policies as they relate to students with learning disabilities.

Limitations and Delimitations

This research study had several limitations that could not be controlled. Given the unique nature and availability of the participants, the sample was not as tightly defined as may be possible at larger sites. Gender, ethnicity, and location of the subjects were random in nature. The age range was very large, 19-58, and more males than females participated. Also, some students lived on campus, while others were commuters living with parents. Delimiting the sample size by the aforementioned characteristics would have made it incredibly complicated to obtain enough participants at MCU. Furthermore participants from a public school background, home school background, and Christian school background were not excluded from the participant group and were not equally represented in the sample.

On the other hand, the research data was delimited in many ways. The study was phenomenological, which intrinsically required a specific number of subjects that must be studied. The research was also confined to students who began their college-level academic work before being identified with a particular learning disability. All of the participants discovered the existence of learning disability during the freshman or sophomore year of college. A final area of delimitation was the restriction that a college student must have been identified since 2004 in order to be eligible as a participant. Since legislation such as the *Individuals with Disability Act* (IDEA) was passed in 2004, more awareness and consideration has been given to K-12 students with learning disabilities which potentially might limit the number of students who go undiscovered during the K-12 years.

Recommendations for Future Research

After considering this research study and its results, several suggestions for future research can be made. First, the completion and success rates of the participants would be immensely interesting to follow. Since the discovery of a learning disability during the freshman or sophomore year of college, how have the participants fared? How many participants finished college successfully? At the present time the results are inconclusive, since many of the participants are still in the process of receiving a higher education. A study that looked at the completion rate of the participants and interposed the theories of self-efficacy and resiliency would be intriguing. Also, a follow-up study after 10 years might add some additional perspective to the successes and failures of the participants in a chosen career and in life.

Second, given the research data that pointed to the importance of mentoring, more research about both the right type of mentorship and best type of mentor would be helpful. Participants in the study greatly valued a personal confidant who would talk with them about the issues and choices of college life. Yet, little is known about what type of mentor is best – friend, faculty member, or Academic Success Center staff. What methods of mentorship are most profitable in the lives of these students? What works and what does not work? More research is needed.

Finally, research results regarding lighter academic loads and students with a late discovery of a learning disability would be valuable. Some studies have pegged graduation rates of college students with learning disabilities at a much lower rate than the normal college population (Johnson et al., 2008; Mamiseishvili & Koch, 2012). Would a slower pace help college students with a late identification? What type of course work best suits their needs and increases the potential for their success? As a part of a lighter load, what mode of course work

best encourages persistence and resiliency? Is a face-to-face course better than the online environment? Are larger lecture courses the worst environment for a student with a learning disability? More research is still needed in order to increase the possibility of a positive college experience for college students who experienced a late identification of a learning disability.

Summary

Every semester, students enroll in college without recognizing the fact that they personally have a learning disability. They have succeeded in completing a K-12 education in spite of an inherent learning disability, and they have received many academic and emotional scars in the process.

Upon entrance into the collegiate academic world, these students soon began to experience a wide array of academic and emotional complications. Eventually some individuals turned to professional help and testing to pinpoint their problems and a learning disability was discovered. My study entered this world, learned its nuances, and tried to accurately describe the essence of this phenomenon. Fundamentally, the essence of the phenomenon had two dimensions.

In one dimension was the world of academic difficulty. The participants of my study were drowning in college reading and writing requirements. They found the typical college testing environment impossible to conquer, and they were often lost in large lecture-based learning environments.

In the other dimension was a world of emotional struggle. The participants were overcome with various emotions as they tried to navigate the collegiate world. Often frustrated and sometimes angry, they battled both anxiety and discouragement regularly. All the

participants entertained feelings about quitting college permanently. And additionally, faculty members often behaved in ways that increased the emotional toll experienced by the participants.

As the world of the participants came into focus, several ways to help alleviate the effects of a late discovery of a learning disability became unmistakable. One of the most important methods to facilitate a better level of success was the participants' willingness to individually reach out for assistance. Contacting the Academic Success Center, asking for testing accommodations, and communicating with a mentor were all vital ways to join forces to improve the situation.

Not all students who are identified with a learning disability will succeed in a collegiate environment, just as not every college student will ultimately graduate. But I believe all students deserve a chance to succeed. Most importantly, the educational establishment must recognize the inherent danger in a late identification of learning disability and move to minimize its occurrence. At the same time, those in leadership must make the necessary adjustments to collegiate academia so that these important students have a better chance to realize their educational potential and undergo a more positive college experience.

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APPENDICES

Appendix A - Consent Form

Dear Participant,

My aspiration is to assist college students who have been identified with a learning disability (LD), especially those who have been identified after beginning a collegiate experience. To improve the help given to college students who have been identified with a learning disability, more information about the phenomena is needed. To that end, I need your help. Please understand that there are no risks associated with participating in this study and that you have the right to participate or not participate in this research.

The purpose of this study is to fully understand and describe the essence of what it means to be a college student who has been identified with a learning disability after beginning a collegiate learning experience. This information will give deeper insight into the experiences of the participants and the implications of being identified with a learning disability after beginning college. It is the goal of this study that the research will produce ideas of constructive change that will help college students with learning disabilities.

Qualitative data will be collected through questionnaires, personal interviews, and focus group discussions. Participants will be invited to take part in one personal interview and one focus group discussion. Both the personal interview and the focus group discussion will be recorded.

Participation or non-participation will not affect any services you receive, and it will not be used in your academic course work in any manner. You may also leave at any time from the investigation with no undesirable effect to you.

By signing this form, you give me permission to include you in this study and to collect data by the means mentioned above. **All of your information will be kept strictly confidential and your identity will not be linked with the research findings. Your confidentiality will be completely protected.** Nevertheless, the information may be seen by an ethical review committee and may be available in journal articles and in other places without revealing your name or divulging your identity. When the results of the research are completed, I would be honored to share the research findings with you.

By signing this consent form, you acknowledge your understanding of the purpose of this study and the confidentiality in which your data will be used.

Name of Participant (printed)

Signature of Participant

Date

William Licht
Doctoral Candidate and Researcher
Liberty University

Appendix D – Interview Protocol - Focus Groups

Date _____ **Time** _____

Place _____

Name of Interviewer _____

Name of Interviewee(s)

Questions:

- 1) Did your K-12 academic experience prepared you for the collegiate environment?**
 - What hindered and what helped?

- 2) How you ever experienced anxiety or stress in college because of your learning disability?**
 - Explain your circumstances.
 - What helped you deal with the situation, if anything?

- 3) Why do you believe your learning disability was discovered only recently (post k-12)?**
 - How has the belated identification impacted your college experience academically and socially?
 - In retrospect, how did the late identification impact your K-12 experience academically and socially?

- 4) What have been some of your academic successes since attending college?**
 - What do you think has helped you succeed?
 - What are learning strategies that work for you?

- What are some teaching strategies that faculty have used successfully?
- What is the best learning environment for you?

5) What have been some of your academic struggles since beginning your college experience?

- How often and to how many instructors do you disclose your learning disability?
- What type of frustrations has your learning disability brought? To you? To your instructors?
- How much do you collaborate with the campus professionals about your learning disability?
- What could campus professionals do better to help you?
- What type of teaching environment is most challenging for you?
- How have faculty reacted to your disclosed learning disability?
- What would you like faculty to know about your situation?

6) In summary, what else might you share to better help students who are identified with a learning disability after beginning their college experience?

To whom it may concern:

On January 21, 2014, The Institutional Review Board of [REDACTED] University reviewed the following research plan and associated documentation:

**UNDERSTANDING COLLEGE STUDENTS WITH A LEARNING DISABILITY ± A
PHENOMENOLOGICAL STUDY**

William Licht
Liberty University
School of Education

The Institutional Review Board of [REDACTED] University granted William Licht permission to conduct his research plan noted above that includes the study of [REDACTED] University students during the calendar year 2014.

Signed: [REDACTED]

Date: January 21, 2014

Dr. [REDACTED]
Executive Vice President
[REDACTED] University