Exploration of experiences influencing the academic achievement of university students with learning disabilities in persistence to graduation

by

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To Mom and Dad –

for their constant and unwavering support.

I love you both!

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ABSTRACT

The purpose of this phenomenological study was to investigate and better understand the aspects and experiences associated with academic success for students with learning disabilities (SLD) in college. The information gathered was reflective of the experiences of juniors and seniors who were positively academically persisting toward graduation in the near future.

Three in-depth interviews were conducted with students who self-identified as having at least one type of documented learning disability, and who were receiving accommodations for said learning disabilities at Iowa State University. The participants included four students: two male students and two female students, all Caucasian, although race was not a deciding factor in who was chosen as a participant. The participants were all traditionally-aged college students; two were transfer students from a community college to a four-year institution.

Five themes emerged from the data. The role of family in providing support: All four participants had families that offered unwavering support to their students from an early age through admittance to college. Support ranged from involvement to activities at school to developing compensatory strategies to overcome challenges of the learning disability in school work. Self-awareness in relation to the learning disabilities: Participants in the study were able to become successful throughout college by not only learning where areas of weakness existed, but also where areas of strengths could be maximized in order to reach full academic potential. The sources of motivation for persistence toward graduation: Sources of motivation were internal and strengthened by support of family. The challenges of life with a learning disability in college: For all participants, the biggest challenge in college associated with the learning disability was the additional amount of time needed to complete

assignments. Moreover, each participant experienced having a negative interaction with an unhelpful faculty member at some point during his or her college career.

Higher education institutions must be aware of their role in the success of SLD in college. They need to recognize the challenges that are typical for SLD, as well as ways that faculty and staff on campus can be empowered to support SLD. Because this is a growing subpopulation on college campuses across the country, increased attention is needed to support awareness of the needs of this group by all on campus.

CHAPTER 1. OVERVIEW OF THE STUDY

A growing issue impacting college and university campuses in America is the presence of students with learning disabilities (SLD). The Encyclopedia of Learning Disabilities (2002) defined a learning disability as "a neurobiological disorder in which a person's brain works or is structured differently, affecting one or more of the basic processes involved in understanding or using spoken or written language" (p. 117). The 2000 edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR) estimated in 2000 the prevalence of SLD as "approximately 5% of students in public schools in the United States" (p. 50). As of 2002, 2.4 million schoolchildren in the United States were diagnosed with learning disabilities, and every year, "120,000 additional students are diagnosed" (Turkington & Harris, 2002, p. 117). The most common learning disabilities include dyslexia, dyscalculia, dysgraphia, and auditory and visual processing disabilities. "Attention deficits and hyperactivity sometimes appear with learning disabilities, but not always" (Turkington & Harris, p. 118). With an increasing number of SLD pursuing higher education, it is imperative that colleges and universities, and professors especially, understand the implications of educating SLD.

Learning disabilities are diagnosed when "the individual's achievement on individually administered, standardized tests in reading, mathematics, or written expression is substantially below that expected for age, schooling, and level of intelligence" (*DSM-IV-TR*, 2000, p. 49). It is pertinent for educators to be aware of SLD, not only because these students experience disabilities in acquiring knowledge, but as adolescents, they also have a nearly 40% drop-out rate from high school (*DSM-IV-TR*, p. 49). SLD who are accepted to a college or university will enter an environment of independence and autonomy, and must

therefore learn to be academically successful without the aid of parents or a familiar setting. SLD must learn to self-advocate in various aspects of college life, including seeking help and guidance and creating new skills for studying and being successful in the classroom. For example, at Iowa State University (ISU), the student with learning disabilities must initiate the instructor-student accommodation agreement form as outlined by ISU's Disability Resources office (DR) (ISU Dean of Students Web site) in order to receive classroom and exam accommodations.

In 1995, as specified on the official website for the Office of Civil Rights (OCR), Section 504 of the Rehabilitation Act of 1973 defined "a qualified individual with handicaps for postsecondary education programs as a person with a handicap who meets the academic and technical standards requisite for admission to...the college's education program or activity." These students are expected to provide proper documentation of the disability to the campus Disability Resources coordinator to request academic adjustments within the classroom. These academic adjustments allow SLD equality in learning opportunities in the post-secondary classroom setting. An instructor is expected to agree to and uphold an accommodation contract once the DR has approved it (ISU Dean of Students Web site). Furthermore, the mission of ISU supports innovative learning and instructional efforts in order to educate all students at the university (ISU Mission Statement Web site).

Purpose

The purpose of this phenomenological study was to understand the obstacles faced by SLD in the college setting, and what needs must be met in order for them to be academically successful at this level of education. This study focused on exploring what SLD believe to be aspects of their university lives that have impacted their academic achievements and failures.

The study also addressed how academic experiences in elementary and secondary school years affected success or failure in college. The findings of this study will help student affairs professionals to understand their roles in the lives of SLD.

Research Questions

The research questions that guided this study were:

1. What factors outside of the classroom lead to academic achievement or success for SLD?

2. When or how does academic success become salient for SLD?

3. What do SLD know about their disabilities, and how has their level of knowledge impacted them throughout school?

4. How do the stories of the students interviewed compare to the past research concerning factors influencing academic achievement for SLD?

Rationale

The subject of this study was inspired by my experiences as a graduate assistant in the Disability Resources (DR) Office at Iowa State University (ISU). Part of my job description involved academically coaching SLD to help increase academic success in areas where the learning disability has an affect on achievement. Since coming to ISU, I have been inspired by the challenges the students with whom I worked had overcome and interested in finding information on the subject of college SLD. Unfortunately, there is a dearth of information on the subject; therefore, I hope that this study will contribute to the current literature on SLD, as well as inform ISU of the information gathered from current SLD. My relationship with the DR office provided me with access to student records and complete student files; however, I chose not to take advantage of this avenue for collecting data and instead focused on the information that students provided through both interviews and observations.

When trying to gather information about SLD for professional development, I found that much of the information was statistical or derived from surveys. I wanted more details and descriptions from actual students who had lived the life of a college student with learning disabilities. Such testimonials were difficult to come by, and I was inspired to probe the student population with which I was involved. I wanted to gather data that was rich in details from which both student affairs professionals and other SLD can learn.

Crotty (1998) described that today, "critical inquiry keeps the spotlight on power relationships within society so as to expose the forces of hegemony and injustice" (p. 157). In working with SLD at a college campus, I began to see first-hand the issues faced by the students: professors did not understand why they needed accommodations, accommodations were not always provided despite the completed accommodation contract, and although they might have been able to move through the secondary school system unnoticed, the caliber of courses clearly set apart those with undiagnosed disabilities. The root of these problems was that the students had little control over many of the academically-related issues because instructors are figures of power and influence, especially once they have tenure. Some of the students I worked with admitted to giving up the fight for what they truly deserved out of fear of repercussions for asking more of instructors than is given to average students.

This power struggle frustrated me as a practitioner because I saw the importance of the law related to individuals with disabilities on a college campus; instructors who refuse to accommodate when appropriate risk sending the university into a lawsuit. More importantly, when one instructor refuses to help a student, it can set a precedent for what that student comes to expect from future instructors. A major reason I did this study was to be able respond to students by saying, "I am trying to help! This is what I am doing."

Significance of the Study

This study offers a new avenue of information regarding SLD that will specifically benefit professionals in student affairs in higher education. It is not only the professionals in the Disability Resources office who help SLD become academically successful in college; there are mentors, instructors, and professionals in other offices who are all helping the students on campus. It is important for both new and veteran student affairs professionals to understand the range of roles that they may play in the college experiences of SLD.

Theoretical Perspective

I designed the study using the theoretical perspective of critical inquiry. Crotty (1998) described that today, "critical inquiry keeps the spotlight on power relationships within society so as to expose the forces of hegemony and injustice" (p. 157). Persons with disabilities can be viewed as less powerful due to the definition of a disability, which says that a disability is a major impairment in one or more life functions (Office of Civil Rights Web site). Merriam (2002) explained critical qualitative research: It "raises questions about the influence of race, class, and gender (and their intersections), how power relations advance the interests of one group while oppressing those of other groups, and the nature of truth and the construction of knowledge" (p. 10). Persons with disabilities are oppressed by the ablebodied majority. The use of a critical perspective focused this study on exploring what factors help or hinder SLD to be academically successful in college. In addition, the findings of this study provide implications for what changes an institution needs to make in order for SLD to be successful in college.

Researcher Perspective

I first began studying about learning disabilities as an undergraduate, when I took a psychology course about reading. This course formed my foundation of knowledge of reading disabilities and prepared me to work with students with reading and other learning disabilities in my graduate assistantship in the Disability Resources office at Iowa State University.

When working with students, one of the first questions we asked at the beginning of each term meeting was "How did last semester turn out?" I tended to get two answers: one positive, and one negative. The former was usually filled with a lot of elaboration and exclamation of academic success. It was obvious that these students were excited to share their accomplishments, and it was my experience that for many of the students in this group, this was one of the first times in their lives that they were able to proclaim such an announcement.

Unfortunately, I also encountered students who just didn't make the grades they worked toward. It is important to note that many of the students in this group worked just as hard, if not harder, than the students in the first group, but for some reason, their hard work was less effective and did not provide the expected outcome. I hoped that this study would shed some light on what SLD were doing right and wrong, as well as what they had learned from earlier experiences in elementary education, secondary education, and post-secondary education. I believe that such testimonials will not only help other professionals in the field, but also SLD who may be like the students in the latter group, who are working as hard as they can and still not seeing the results they dream of receiving.

Tentative Presuppositions

My graduate assistantship and the completed pilot study led to several assumptions as I undertook the current study. My first assumption was that student affairs professionals, both in disability resources and around campus, can play a significant role in the college experience of SLD. This has been documented by several studies and is elaborated on later in this thesis.

My second assumption was that experiences from elementary and secondary school years can impact the academic success or failure of a college SLD. From my professional working experience at ISU, I have observed that students tend to be diagnosed at two specific times: in elementary school and in college.

Third, parents' income and involvement will impact self-advocacy and resources already obtained. I assumed that those SLD with more involved parents who could afford testing would have been tested at an earlier age, therefore gaining earlier access to accommodation resources, which would affect academic success in a positive way.

Definitions

This section describes various key terms that were used throughout this study.

Accommodations – Academic accommodations are approved by the DR office as appropriate for each individual student. Academic accommodations for SLD may include a reader or scribe for exams, extended time on exams, a quite room for exams, or textbooks on tape. **Auditory Processing** – "The full range of mental activity involved in reacting to sounds (especially speech sounds) and in considering their meanings in relation to past experience and to their future use" (Turkington & Harris, 2002, p. 32).

Comorbidity - The Encyclopedia of Learning Disabilities (2002) defined comorbidity as "a medical term that refers to a relationship or association between one condition and other psychological or learning disorders. For example, dyslexia is comorbid with ADHD in as many as 40 percent of children with ADHD" (Turkington & Harris, 2002, p. 56)

Dyscalculia – Dyscalculia is a "significant learning disability involving mathematics that affects between two percent and six percent of elementary school-age children in the United States" (Turkington & Harris, 2002, p. 73). The Encyclopedia of Learning Disabilities (2002) defined dyscalculia as "a medical term associated with brain dysfunction that is presumably present at birth" (Turkington & Harris, p. 73).

Dysgraphia – Dysgraphia is:

A medical term for a brain condition that causes poor handwriting or problems performing the physical aspects of writing (such as an awkward pencil grip or bad handwriting), spelling, or putting thoughts on paper. This disorder causes a person's writing to be distorted or incorrect. (Turkington & Harris, 2002, p. 74)

Dyslexia – Dyslexia is a "specific type of learning difficulty, usually with spelling and writing, and sometimes with reading and numbers. It is characterized by problems in coping with written symbols, despite normal intelligence" (Turkington & Harris, 2002, p. 75). The Encyclopedia of Learning Disabilities (2002) estimated that dyslexia occurs in about eight percent of the population. It is a permanent disability.

DR – Disability Resources office. This abbreviation specifically refers to the DR office at Iowa State University.

ISU – Iowa State University. All participants were enrolled students at ISU at the time of the study.

SLD –Students with learning disabilities; Only those students with documentation approved by the Disability Resources office were eligible to participate in this study.

Visual Perception Disabilities – "Students with visual perception disabilities have trouble making sense out of what they see, not because they have poor eyesight but because their brains process visual information differently" (Turkington & Harris, 2002, p. 236). The Encyclopedia of Learning Disabilities (2002) explained that visual perception disabilities involve trouble organizing, recognizing, interpreting, or remembering visual images.

CHAPTER 2. LITERATURE REVIEW

This second chapter focuses on a review of the literature pertaining to college students with diagnosed learning disabilities. I begin by providing background information on learning disabilities, including statistics on prevalence of SLD in college today. Next, I describe how transitioning from high school to college can affect a SLD. Then, I describe the impact that support systems during college years can have on the academic achievement of SLD. In juxtaposition, I compare the importance of self-reliance of SLD as they progress through college years. I then explain the comorbidity of ADHD and LD and clarify the differences between these terms. Finally, I discuss how my study built on existing research.

In this section, I describe several articles that provide information about current trends related to college-bound SLD in the U.S. These statistics describe the growing numbers of SLD preparing to attend college and convey the importance of awareness of this

Background and Statistics

expanding population on college campuses.

Dudley-Marling (2004) reversed the traditional way of thinking about LD. Instead of seeing the student as having a problem because he or she has a LD, Dudley-Marling instead demonstrated that LD should be viewed as a social construction; "therefore, the essential question in response to the appearance of learning difficulties is, What's going on here?" (p. 488). The point of this approach is to make a student feel less like a problem in the classroom.

At the time of its publication in 1994, Shea's article "Invisible Maladies" reported that 21,000 of the 1.8 million students who took the Scholastic Assessment Test (SAT) that year had a learning disability (Shea, 1994). The article addressed not only the mentality of

SLD advocates, but also that of critics. Obvious advocates of SLD included those affiliated with the disability services office or other social justice offices on campuses. However, critics sometimes included college instructors who were skeptical of SLD who needed academic accommodations. These instructors worried about over-labeling or classist opportunities to diagnose only those who could afford the testing (Shea). Although the study did not acknowledge other offices with similar sentiments, it can be expected that any individual may hold his or her own personal values, which may in turn impact the interaction with a SLD who has self-identified.

The National Learning Disabilities Data Bank "was designed to determine the incidence of students with documented LD enrolled in a nationally representative sample of 502 post-secondary institutions drawn randomly from the total list of approximately 3,000 such institutions" (Vogel, 1998, p. 12). The percentage of students with documented LD enrolled in the sample institutions ranged from "0.5% in the most highly selective institutions to 10% in open admission colleges" (p. 12). The number of students with LD enrolled at institutions varies by institution type, size of student body, and degrees offered (Vogel).

At a land-grant institution such as Iowa State University, it is to be expected that there is a higher percentage of students with documented LD enrolled than there would be at a more academically selective institution. Moreover, the above information can be used on college campuses to identify how their population of SLD will grow. For example, admissions offices who are trying to boost numbers may extend resources to attract SLD by displaying information during on-campus visits or in information packets about accommodation resources available. The statistics are showing that the numbers of SLD

attending college are growing, and college campuses should determine how or if they will welcome this group.

Transition to College

In this section, I discuss the facts that SLD should know, but often do not, about transitioning from high school to college. Moreover, the transition to college differs from student to student depending on when diagnosis of LD took place.

Pagels (1998) informed not only school psychologists, but also students and parents, of the important differences between high school accommodations compared to college-level accommodations. Pagels claimed that "there has been a failure to prepare the student with a disability for college life" (p. 7) because the students have not adequately been transitioned from high school to college. He explained that teachers and instructors have a unique impact on the success of the transition.

In a study by Beiler (1976), there were found to be two distinct groups of students: those diagnosed with learning disabilities during elementary and secondary school years and those diagnosed after enrolling in post-secondary higher education. According to Beiler, "kindergarten and primary-grade teachers have a great deal of responsibility, since younger children, whose problems are discovered at a very early age, can be much more easily and quickly remediated than older children, whose patterns of failure have become firmly entrenched" (p. 136).

My study acknowledged that such differences in learning accommodations exist, and investigated how the academic achievement of students diagnosed at an early age differs from those diagnosed during college. This study has implications for elementary education in support of Beiler's claims that SLD will identify a more positive outlook on personal academic achievements when diagnosed at younger ages.

Support Systems

In this section, I describe the impact that support systems have on academic success. Support systems on a college campus can include friends, roommates, professors, and student affairs professionals across campus.

Hauser (1994) described SLD from the perspective of an academic advisor. He found that many SLD will not succeed in college without academic assistance in situations where required work exaggerates limitations. In these situations, the instructor is forced to devise special techniques, often without guidance. This issue relates to this study because if instructors are not sure how to accommodate class requirements or teaching techniques for individual students, academic success is jeopardized.

Smith and Nelson (1993) conducted a study to investigate the conceptions of students with disabilities about the factors that affect their academic success or failure. At the time of this study, no previous research had been conducted with students with disabilities. Twenty-five percent of the participants indicated that they had a learning disability, therefore making the findings of the study pertinent to my study. Additionally, 30% of the participants reported that faculty were supportive or made attempts to work closely with them in the classroom, and noted that this was important for their academic success. The findings of the study suggest that faculty interaction contributes to academic success of SLD.

One of the aspects of academic success that was explored in my study is the support that students receive in education. According to Sridhar and Vaughn (2001), "the same difficulties that cause learning problems in students with LD are believed by some to cause difficulties in social functioning" (p. 65). In terms of long-term social implications, this could explain why there were such a large number of students with LD failing to graduate from high school. According to Margalit and Levin-Alyagon (1994, as cited in Sridhar & Vaughn), students with LD "receive higher ratings on measures of loneliness and view themselves as deficient in social skills across grades and cultures" (p. 70). Moreover, according to Rourke (1989, as cited in Sridhar & Vaughn), "students with LD who demonstrate social problems tend to exhibit increasing levels of social withdrawal as they grow older and appear to be at a higher risk for developing internalized psychopathology, such as anxiety and depression" (p. 70). It is therefore imperative to explore the coping mechanisms of students with LD in college environments to understand how the long-term social implications of LD have contributed to either academic success or failure in higher education.

Siegel (1999) supported the relationship between academic success and self-esteem: "People with learning disabilities often experience difficulties with self-esteem and selfconcept, and, as they proceed in school, experience more and more failure" (p. 171). For those students who have survived this procedural failure through secondary education, how are they surviving post-secondary education? This study investigated not only students' attitudes toward school, but also what factors impact these attitudes.

For SLD, role models can have a significant impact on academic success. In a study by Perlmutter and Bryan (1984), as cited in Wong (1984), adult ratings of social acceptability of children with learning disabilities based entirely on nonverbal behaviors were investigated. "The results indicated that children with learning disabilities were rated lower on social adaptability than those without" (p. 104). These findings are important "because they showed that social devaluation and rejection of children with learning disabilities occurred on a

nonverbal basis" (p. 105). The current study explored what mentors or advisors, if any, SLD had found at college, and why those mentors were chosen over other faculty and staff in the university setting.

Support systems change during the transition from high school to college, especially for SLD, who, once diagnosed, learn to rely heavily on parents and teachers during elementary and secondary years. In a study of Israeli college students, Heiman and Kariv (2004) found that the students interviewed found much more support from friends in college, as opposed to parents during secondary schooling, and that they used more learning strategies, such as marking up reading material, than secondary school children. Moreover, students have more choice over how much coursework they take, and can choose to take fewer classes than in a structured secondary education. Students reported to have used accommodations for classes "significantly more in the university than in school" (p. 319).

This study gathered testimonials that described how various support systems in college affected students' academic success. A limited amount of data has been gathered describing how student affairs professionals on campus have played roles in support systems. Such testimonials show student affairs professionals the richness of impact that they can have on this invisible population.

Self-Reliance

In order to be successful at the college level, Beale (2005) explained that students have a responsibility to understand the laws regarding LD, what services are available at the school, what services they actually need, and be able to be effective self-advocates in the accommodation process. "There are three times as many full-time college freshmen with LD today as there were in the 1970s" (Beale, p. 24); therefore, it is important for students to

make themselves aware of what they should expect from a school prior to arrival at the college campus.

Veronica Crawford shared her personal story of living undiagnosed with LD and ADHD in *Embracing the monster: Overcoming the challenges of hidden disabilities* (2002). She discussed the difficulties of arriving at college on the first day and needing to register for classes and buy books, unable to read without the aid of her boyfriend or a friendly stranger. Although the disabilities services department offered "tremendous support," because she was not diagnosed, Crawford could not use the services. However, she explained that regardless of whether she had known about the services or not, she was at that time in her life consumed with "stubborn pride, fear, and uncertainty" (p. 86). This autobiographical example demonstrates the importance of learning self-determination in order to be academically successful in college. This current study explored which students had grasped this skill, and what obstacles kept them from obtaining self-determination.

According to Brinckerhoff, McGuire, and Shaw (2002), "testimonials from adults with learning disabilities, along with the literature on adult development as conceptualized by such leaders as Erikson and Knowels, illustrate that issues of independence, identity, and exploration are critical milestones for adults" (p. 141). In order to achieve academically, according to Brinckerhoff et al., students must possess self-determination: "Selfdetermination encompasses a number of interrelated components that can be specifically taught as skill areas: (a) self-actualization, (b) assertiveness, (c) creativity, (d) pride and (e) self-advocacy" (p. 139). Therefore, in order for a student to make a successful transition into college, these skills should have been taught to the student at an earlier point in life. This current study deconstructed which of these sub-skills had been instilled in the SLD, and how those skills were translated into academic achievement in college.

In terms of academic success, research by Ruban, McCoach, McGuire, and Reis (2003) has shown that students with LD, "with appropriate encouragement and scaffolding, have the opportunity to develop individualized academic self-regulatory methods that may favorably affect their academic and vocational success and better prepare them for challenging employment opportunities" (p. 283). Moreover, it is important to learn to frame having a LD in a positive way, and to find personalized ways to meet one's individual academic needs. This study explored how students learned to cope with the LD in an academic setting, and how those methods transcended to other parts of life, such as internships or jobs.

The findings by Ruban et al. (2003) are supported by those of Trainin and Swanson (2005). In their study of both students with and without LD, Trainin and Swanson found that students with LD benefit more from high strategy use during studying, and that those students who were strategic about their learning had as high a grade point average in college as those students without LD. This study expanded upon these findings by asking students to consider the metacognitive decisions that they had made toward academics in order to overcome the obstacles of LD in college.

In a study comparing SLD to students without, there were no differences observed in GPA between the two groups. There was evidence that the students with LD invested "intense effort to overcome their learning deficits" (Heiman & Precel, 2003, p. 255). The students with LD were also older, providing room for a factor of maturity not yet present in the students without LD. The students with LD preferred "more visual or oral materials than

did students without LD" (p. 255), where reading skills were not as influential on comprehension of information.

A study by Launey and Carter-Davis (2001) explored the capabilities of college SLD using a qualitative approach that included observations of non-participants, student interviews, and consistent conversations with the tutors of SLD (Launey & Carter-Davis, 2001). The study applied to the current study because it implied that the effects of positive attention from tutors might be similar to the effects of positive attention from instructors, thereby indicating that academic relationships can lead to academic success of SLD in the college environment.

Barga (1996) described that SLD adopted techniques for managing a disability in college: coping or passing. In coping, students may find a benefactor for support or understanding, may try self-improvement techniques, or try new study skills and management strategies. However, "all of the students in the study were selective in disclosing information about their disability to others" (p. 418), and six of the nine participants deliberately tried to hide the LD for fear of rejection and stigmatization at college.

A similar qualitative study by Hicks-Coolick and Kurtz (1997) investigated which personal characteristics contributed to the postsecondary academic success of SLD at nine postsecondary schools. One of the characteristics, self-advocacy, related to the present study in that students "have to be assertive and have self-confidence, and this is hard for many students" (Hicks-Coolick & Kurtz, p. 35). In forming a relationship with instructors early on, students were able to seek out help and advice for themselves, thereby getting on the right track academically from the start.

ADHD and Learning Disabilities

The Encyclopedia of Learning Disabilities (2002) also described what isn't considered a learning disability: attention deficit/hyperactivity disorder (ADHD), autism, blindness and deafness, emotional problems, hyperactivity, illiteracy, mental retardation, "slow learner," or physical disability. However, there is a "20 percent probability that someone with ADHD also has one or more learning disabilities" (p. 120). Because ADHD is not defined as a learning disability by either the Encyclopedia of Learning Disabilities, or the *DSM-IV-TR*, for the purposes of this study, students were selected based on the presence of an identified learning disability, but not discriminated against for the comorbid presence of ADHD, or any of the other non-learning disabilities described above. The Encyclopedia of Learning Disabilities (2002) defined comorbidity as "a medical term that refers to a relationship or association between one condition and other psychological or learning disorders. For example, dyslexia is comorbid with ADHD in as many as 40 percent of children with ADHD" (p. 56).

Although Attention Deficit Disorder with Hyperactivity (ADHD) is not categorized as a learning disability, there are, according to Wallace, Winsler, and NeSmith (1999), learning impairments such as working memory, effective use of learning strategies, problemsolving ability, and self-efficacy, which are characteristics of SLD. The survey results of their study revealed that students did not receive help for the specific characteristics noted above. The results apply to my study because if students with ADHD are not getting specific needs met, and these needs are similar to those of SLD, it is reasonable to suspect that this is a transcending problem for SLD. A recent article in *The Chronicle of Higher Education* by Farrell (2003) also addressed students with ADHD as having learning deficits. Farrell pointed out that "some professors view ADHD diagnoses with skepticism" (p. 4), which in turn, discourages selfadvocacy of students. Therefore, as with SLD, relationships with instructors can have an impact on academic success; if instructors are aware of a student's learning disability at the start, they can start intervening before academic failure. Unfortunately, in my personal interactions with SLD, I have found some of them to have had negative interactions with instructors. The data from this study expand upon this observation by providing examples of coping mechanisms that will help both other SLD and student affairs professionals who interact with SLD to work more effectively with instructors.

Summary

This chapter provides a review of literature pertaining to SLD transitioning to and attending college. I provided current statistics on SLD heading to college, described the difficulties faced transitioning from high school to college, and emphasized the impact of support systems in the college environment. I also covered the importance of SLD becoming autonomous, as well as how ADHD is often associated with learning disabilities.

This review of literature also suggests a gap in the research on SLD in college. Specifically, there are very few qualitative studies that explore the aspects of academic life for SLD. As the numbers of SLD who are attending college increases, this will become an increasing problem. Statistics can only demonstrate figures and numbers; they do not tell us what we need to do to change our practices in order to make the college experience both more conducive to learning and more beneficial than dropping out. Moreover, academic achievement does not only take place in the classroom; student affairs professionals around

campus, parents, and other SLD can benefit from learning how students succeeded and failed in college, and what factors impacted achievement.

This qualitative study used testimonials from current SLD at a major land-grant university to explore what factors over a lifetime have contributed to academic success. In addition, this study added to what statistical surveys have already shown in categorical analysis: it helped to explain why some techniques work and others do not. The subject of "why" contributes a new avenue of information to the topic of academic success of SLD in college.

CHAPTER 3. METHODOLOGY

Methodological Approach

The methodological approach for my thesis was qualitative in nature. Esterberg (2002) described qualitative research as trying to "understand social processes in context. In addition, qualitative researchers pay attention to the subjective nature of human life- not only the subjective experiences of those they are studying but also the subjectivity of the researchers themselves" (p. 2). For my study, it was important for me to learn as much about the experiences of SLD as I could, in order to gather the most pertinent information. This information helped me search for connecting themes that were characteristic of the lives of SLD. These themes then helped me to provide information that will be helpful to others in the field or who have an interest in SLD. Esterberg explained that qualitative research "involves learning the art of interpretation" (p. 3). Interpreting the life experiences of the participants in my study enabled me to answer my research qualitative research

1. What factors outside of the classroom lead to academic achievement or success for SLD?

2. When or how does academic success become salient for SLD?

3. What do SLD know about their disabilities, and how has their level of knowledge impacted them throughout school?

4. How do the stories of the students interviewed compare to the past research concerning factors influencing academic achievement for SLD?

These questions guided my research, and are answered in my data analysis.

Epistemology

According to Hamlyn (as cited in Crotty, 1998), "epistemology deals with the nature of knowledge, its possibility, scope, and general basis" (p. 8). The epistemology used in this

study is constructionism, which Crotty (1998) described: "According to constructionism, we do not create meaning. We construct meaning. We have something to work with. What we have to work with is the world and objects in the world" (pp. 43-44). The purpose of this study was to co-construct meaning out of the experiences of SLD through the interviews with my research participants in order to understand the participants.

Theoretical Perspective

I designed the study using the theoretical perspective of critical inquiry. I explained in Chapter 1 my experiences working with SLD and the struggles they faced in the classroom. Persons with disabilities can be viewed as less powerful due to the definition of a disability, which holds that a disability is a major impairment in one or more life functions (Office of Civil Rights Web site). Merriam (2002) explained critical qualitative research: It "raises questions about the influence of race, class, and gender (and their intersections), how power relations advance the interests of one group while oppressing those of other groups, and the nature of truth and the construction of knowledge" (p. 10). The use of a critical perspective focused this study on exploring what structural factors help or hinder SLD to be academically successful in college. In addition, the findings of this study led me to develop implications for what changes an institution needs to make in order for SLD to be successful in college.

Methodology

Crotty (1998) described phenomenological research as "a single-minded effort to identify, understand, describe and maintain the subjective experiences of the respondents" (p. 83). The experiences of students with disabilities were explored and analyzed in this study to show the factors of college life that had been most salient as a result of the presence of learning disabilities. These experiences supported implications for institutional changes of

college practices by supporting factors that affect academic success of SLD, which is reflected in the critical inquiry perspective.

Pilot Study

The pilot study for this study was conducted in the Spring of 2006 as part of a course in qualitative methodology I completed as part of my degree requirements for a Master's of Science at Iowa State University. One student, Lucy (a pseudonym) was interviewed. Lucy was a junior at Iowa State University and volunteered for the pilot study after being contacted. I was given her name by the Disability Resources Coordinator because she fit the criteria of my study: she was a currently enrolled Iowa State student with adequate documentation of a learning disability. She was also currently using the services from the DR office. Our interviews and observation time took place over several months.

The interviews were structured similarly to those included in the qualitative design used by Smith and Nelson (1993), as described in the literature review above. Their study included 36 students with disabilities who had sought services from the Disabled Student Services Office at a northwestern university (Smith & Nelson). Also, the study included a range of disabilities. Students were assigned to the two authors and a graduate student, who then interviewed them individually, using a 12-question protocol (see Appendix A). These basic 12 questions were expanded for my pilot study to include 35 questions, which were then grouped together based on topical relevance and divided among interview sessions (see Appendix B). In the current study, interview questions were grouped together based on elementary and secondary experiences, college experiences, and reflection of experiences, accordingly. After gaining consent from the Office of Sponsored Programs Administration (OPSA) of ISU, which grants permission for research on human subjects to take place, and completing the Human Subjects form (OPSA Web site), three interviews and two observations of Lucy in an academic setting took place. The third interview also consisted of member checking to verify the information gathered from the previous two interviews and observations. The terms of the class project required that one student be studied and explored. Using phenomenological research as the methodology, I focused on the participant's experiences in college as a student with learning disabilities. The methods used in the research design included sampling, interviews, participant observation, theme development of the findings, and member checking.

After completion of the three interviews and two observations of Lucy, I transcribed my cassette recordings and coded my data to reveal four themes from the data collected: the perception of the roles of college faculty, the personal pressure to overcome the limitations of having a learning disability, the salience of learning disabilities on daily activities, and projected self-image. During this theme development process, I participated in peer debriefing with classmates, enabling me to get outside feedback.

This pilot study answered the research questions about SLD in college that I noted above in Chapter 1. I considered this pilot study successful because my participant helped me understand the challenges that a SLD may face in the college setting, and what she needed to overcome her challenges. I was able to interview Lucy three times and observe her in two interactive classroom settings; the observations upheld descriptions that Lucy had made about her activities for academic success. In the current study, I expanded my sample as well as my timeline for data collection. However, I decided not to incorporate observations into

my data collection in the current study because the academic majors of my participants did not allow me to observe them in small, interactive classroom settings as had Lucy's class curriculum at the time of the pilot study. I saw little benefit in observing them in the large lecture classes in which they were enrolled.

Setting

The current study took place at Iowa State University. Participants were gathered with the aid of the DR Office at ISU, which served students who had documented disabilities that met the qualifications set by DR to receive accommodations or services in the college classroom setting (Disability Resources Web site, 2006). For the purposes of this study, only students receiving current classroom accommodations for learning disabilities were considered for participation, with the implication that if a student was receiving an accommodation for classes through DR, then the student had presented appropriate documentation of the disability. I trusted the staff in DR to help me locate participants who met the needs of my study, as described below.

Participants

Esterberg (2002) explained that in qualitative research, "qualitative researchers usually choose research participants for the specific qualities they can bring to the study" (p. 93). For this study, I selected participants who held the appropriate characteristics for this phenomenological study of college students with learning disabilities. I used purposive sampling in order to find volunteer participants; Esterberg described this process as occurring when one "intentionally sample[s] research participants for the specific perspectives they may have" (p. 93).

I approached the professional staff at the DR Office at ISU for assistance in locating participants for this study. With the cooperation of the DR staff, I formed a list of students who had little or no prior interaction with me, and who the office staff identified as SLD. I did not review documentation as part of this study, so it was imperative that the DR staff determine from documentation analysis which students appropriately met all the criteria of my study: a currently enrolled ISU student; a traditionally-aged student; a student with at least one or more documented learning disabilities; a student currently using accommodations from the DR office at ISU; and a student who qualified for junior or senior status. This method of selection has been referred to as chain referral sampling (Biernacki & Waldorf, 1981, as cited in Esterberg). Esterberg (2002) explained that "in this technique, you begin with an initial interviewee – often, a key informant. Then you ask that person to refer you to friends or acquaintances or others who might be appropriate to interview," (Esterberg, 2002, p. 93). Individual emails were sent to the list of approximately eight students suggested by the DR staff informants to inquire if they would be interested in speaking about their experiences with a learning disability (see Appendix C).

It was my original intent to have six participants in the study because I had hoped that with more participants, greater richness of experiences would be described. I had personal assumptions of how different personal backgrounds and life histories might impact the adjustment to academic success strategies, and the increased number of participants would better demonstrate any findings from my data analysis. However, because of the nature of the criteria to participate, only four students were eligible to begin the study, and all four ultimately completed the required interviews and member-checking. It was difficult to find student volunteers who were both traditionally-aged college students and who qualified as

having junior and senior status. I attempted to recruit more participants by having a similar email to that in Appendix C sent to an email list serve managed by the DR staff for all SLD utilizing the office. I adjusted the email to include the participant criteria described above; however, the respondents to the adjusted emails to the list serve did not meet all criteria needs of the study. In the end, the four participants who completed the study were excited to voice their experiences. Because of my limited number of participants, in Chapter 6, I discuss the need for future research with SLD in order to best understand the experiences of SLD. *Data Collection Procedures*

Once consent was obtained from my participants, a series of interviews was scheduled (see Appendix D). I structured the order of the interview questions after Esterberg's (2002) recommendations, as I attempted to do in my pilot study: "As a general rule, you should place easier, less threatening questions at the beginning and save the more controversial or sensitive questions for the middle or end, once you have developed some rapport and established some trust" (p. 96). Following Esterberg's suggestions, I designed the first interview to last approximately one hour and focused heavily on discussion around the diagnosis of the learning disabilities and life prior to college, throughout elementary and secondary school years (see Appendix E). I anticipated that the current and most recent college experiences would be more "threatening" or harder to answer because there had been presumably less time for the participants to reflect on the experiences. In retrospect, I understand now that discussing childhood experiences and family relationships could indeed be just as controversial, but my participants demonstrated openness to share details about these experiences throughout the interviews. As stated in the Informed Consent document (see Appendix D), my participants were informed that they could choose not to disclose

information at any time. Moreover, I re-emphasized this to my participants throughout all of our interviews to ensure that I conveyed my desire to help my participants feel comfortable discussing experiences related to the interview questions.

I also incorporated Seidman's (2006) three-interview series for my interview design because my methodology is phenomenological. Seidman (2006) explained that "phenomenological interviewing involves conducting a series of three separate interviews with each participant. People's behavior becomes meaningful and understandable when placed in the context of their lives and the lives of those around them" (pp. 16-17). Dolbeare and Schuman (as cited in Seidman)

designed the series of three interviews that characterizes this approach and allows the interviewer and participant to plumb the experience and to place it in context. The first interview establishes the context of the participants' experience. The second allows participants to reconstruct the details of their experience within the context in which it occurs. And the third encourages the participants to reflect on the meaning their experience holds for them. (p. 17)

Although I did not follow this model intentionally during my pilot study, I inadvertently structured my interviews in much the same way as described in the three-interview series. I utilized this interview design in my thesis research because it employed phenomenological methods and helped guide the construction of the order of questions to collect more detailed responses from my participants.

In keeping with Esterberg's (2002) suggestions of covering more sensitive information later in the interview process, I designed the second interview to last approximately two hours, and focused on follow-up questions regarding the first interview

and life in college. As discussed before, I presumed that these questions would be more sensitive topics because of their relatively recent occurrence in the participants' lives, and I recognize that this presumption could impact the comfort of participants in future studies. The third interview focused on more reflective questions regarding experiences with the learning disability and anticipation of experiences in the future, after college.

Data Analysis Procedures

All interviews were transcribed from recorded cassette tapes before being coded for themes and key phrases. Esterberg (2002) suggested transcribing tapes before moving on to the next interview so that tapes do not pile up; in my pilot study I was unable to do so given the circumstances of having already planned to attend a national conference out of state during the time of my pilot study, but I heeded Esterberg's advice in the current study. I transcribed tapes prior to the succeeding interviews, performed preliminary coding and made notes, and formulated follow-up questions for the succeeding interviews.

Upon completion of the transcriptions, I read over all interviews and preliminary notes once before making any notations, repeating the process separately for each participant. Throughout the second reading of the transcriptions, I color-coded sections of thoughts that seemed related, and circled or labeled key words that represented each thought. During the third reading of the transcripts, I titled each colored category of thoughts with potential theme names. Esterberg referred to this as "the construction of a typology, which is simply a system for categorizing types of things" (p. 169). This strategy of color-coding related parts of data served me well in my pilot study because it helped me as the researcher to visually illustrate how pieces of the puzzle fit together, and I was able to adapt this process in the current study for four participants using developed organizational and analytical skills.

In my pilot study, observations supported the findings in the interviews, and I had hoped to have similar success in the current study. However, as noted before, the structure of academic major curriculums of my participants did not permit easy accessibility for observations in small, interactive classroom settings for all of my participants, and I chose to forgo observations to maintain consistency of data collection throughout the study.

Trustworthiness

Peer Debriefing

In order to present the highest quality and most credible findings, I participated in peer debriefing, which Lincoln and Guba (1985) described as when "the inquirer's biases are probed, meanings explored, the basis for interpretations clarified" (p. 308). In my pilot study, my peers met and discussed positive points, points of concern, and points of confusion. The peer debriefing also clarified confusion over the methodology of this study, which was ultimately changed from action research to phenomenological research. Although all members of the peer debriefing group were members of the same qualitative research class, Lincoln and Guba justified this strategy as being appropriate: "The debriefer should be neither junior- lest his or her inputs are disregarded- nor senior- lest his or her inputs be considered as mandates, or lest the inquirer 'hold back' for fear of being judged incompetent" (p. 309). According to Lincoln and Guba, my cohort peers should suffice as appropriate peer debriefing members because they will be just as experienced in qualitative research as I.

In the current study, two peers volunteered to serve as peer debriefers. The first was a fellow master's student completing a qualitative research project with a parallel timeline to mine. His experiences in coursework and practical research were similar to my own

experience. The second volunteer was an individual who had recently defended his dissertation on a qualitative research project. His insight was beneficial because he offered critical thought from an experienced perspective, although his experiences were not so far from my own that he could not relate to my needs in this role. The peer debriefers served as individuals who helped clarify the connections between thematic descriptions throughout *Chapter 5*, and who helped adjust formatting to maximize consistency of style and thought. Moreover, the peer debriefers asked questions about some thematic development, which encouraged me to check my own perspective and biases.

Member checking

For the purposes of my pilot study, in addition to peer debriefing, I involved Lucy in member checking in order to provide what Lincoln and Guba (1985) considered "the most crucial technique for establishing credibility" (p. 314). After developing and analyzing the themes, I provided Lucy the findings and interpretation section of the study so that Lucy could support or question the results of the study. At the time of the member check, I was still developing the fourth theme of projected self-image. I utilized time with Lucy in order to work through some of the ideas for the theme, which Lucy confirmed as accurate interpretations.

I found this input from Lucy to be not only reassuring, but also incredibly persuasive. She adamantly agreed with my findings, which I let her read alone prior to the meeting. Moreover, Lucy explained during the member check that she liked this part of the process best because she liked learning about herself. This concept of self-reflection ties into the third stage of interviewing from Seidman's (2006) model: "The third [interview] encourages the participants to reflect on the meaning their experience holds for them" (p. 17).

In the current study, each of my participants was given the opportunity to read over the findings and to offer feedback in response to the information being conveyed. Two participants were able to physically meet with me to go over the findings together. The two other respondents conveyed their support of my findings via email, due to timing near finals. All participants felt that their stories were presented fairly and accurately.

Limitations

I encountered a significant limitation, or problem, during the development of this study. First, because of my graduate student status and intent to graduate, I was limited to approximately one year to conduct my interviews and analyze data. Lincoln and Guba (1985) explained that "because the design is emergent, time management becomes a problem. The schedule, always, always, slips. The naturalist must be psychologically prepared to accept this additional degree of control loss" (Lincoln & Guba, 1985, p. 285). In the time I allotted myself, I was unfortunately unable to find more than four participants who met the criteria of my study. For example, if data collection could have continued for an additional year, the increased time might have allowed for new students to at least meet the criteria of being traditionally-aged and at junior or senior status at ISU. A lack of time became the greatest limitation of this study.

Delimitations

The delimitations, or boundaries, of this study determined the participants and the location of the study. First, a delimitation of the study was that I sampled only SLD because that was the focus of the research questions in the study I replicated. Also, the students sampled were undergraduates only because the majority of students who use the Disability Resources Office at Iowa State University were undergraduate students. Also, there is a

limited amount of information regarding undergraduate SLD, so my intent was to build on the research involving this population through the study.

Due to my lack of means to travel far distances as a result of being a full-time student and part-time graduate assistant, only students at Iowa State University were asked to participate in the study. Last, a delimitation of this study was that only students with documented disabilities were asked to participate in the study. In order to determine documented disabilities, only those students currently receiving accommodations from the Disability Resources Office were sampled. Moreover, only those students who self-identified as having a learning disability from those currently receiving accommodations were asked to participate.

CHAPTER 4. PARTICIPANT PROFILES

This chapter contains descriptions of the personal backgrounds of each of my four participants. In order to be considered as a candidate for participation in this study, these candidates met the following criteria: they were enrolled in at least their third year of college coursework, they self-identified as having a learning disability, and they were currently receiving accommodations through the Disability Resources office on campus. Personal information about their backgrounds and personalities was gathered through three interviews over the course of several months.

Participant #1: Billy Bob

Billy Bob (pseudonym) is a fourth-year student at Iowa State University. His major is Sports Management, in the Health and Human Performance department. He was originally from Rhode Island, but came to ISU to follow a girlfriend and a dream of playing hockey at the collegiate level. However, soon after arriving at ISU his freshmen year, the aforementioned relationship ended, and he was left playing hockey for a school that had only a club level team for his sport. However, Billy Bob chose to remain in Iowa and to continue his sports career and education. This perseverance was repeatedly noticed throughout the interviews in a multitude of facets in Billy Bob's life, and will be discussed more in depth throughout Chapter 5.

Hockey is very important to Billy Bob's identity development in terms of coping with being a student with a learning disability. Especially throughout high school, hockey served as a an incentive to be academically successful to qualify to participate, as well as a goal to work towards when academic life was challenging because of the learning disability. Moreover, hockey served as a means for Billy Bob to adjust into what he described as a

popular social group, leaving behind his perception of the stereotypical "resource room students." He described those students as seeming to lack the motivation to appear clean and well-dressed, as well as being part of a lower socio-economic class than average students at his school. Image appeared to be very important to Billy Bob in high school, and he acknowledged that when he arrived at ISU for college, it was difficult to determine who might have a learning disability based on physical appearance alone, thus enabling him to work less at trying to blend in with average, academically-abled students.

Billy Bob was very close to his parents and family, and it is clear that his parents played a large role in his academic achievement throughout secondary school. He was first diagnosed with an Audio Learning Disability and with ADHD in first grade, when he failed and was required to re-take the year of school. He described this learning disability as being in his opinion, one of the worst, affecting all aspects of his learning. His original first grade teacher would put him in the hallway instead of encouraging him to participate in in-class reading, and another teacher witnessed the mistreatment. This same witness later became his first grade teacher the following year, and helped his parents to get the diagnosis of a learning disability at a local university. He then began attending a resource room throughout school for supplemental assistance until high school, when he chose to become more independent. His parents played a strong role in ensuring that he received the most appropriate accommodations throughout school; for instance, they were willing to obtain an attorney during instances with difficult teachers, such as the one in first grade. Throughout the interviews, Billy Bob reemphasized his perceived impact of the ADHD on his academic achievement in addition to the learning disability, although I attempted on several occasions

to refocus the discussion to the learning disability specifically. He perceived ADHD to be a learning disability until I discussed the subject with him.

Billy Bob was a hard worker throughout high school and even made the Honor Roll in high school. Although he spent most of his school years using the resource room for supplemental help, he eventually convinced the school to allow him to spend more time in core classes with schoolmates. The school administrators agreed that he could, on the condition that he maintained academic success without the supplemental aid, which he accomplished through hard work and dedication.

His work ethic changed in college to more doing what was needed to pass. Billy Bob had negative experiences his first and second years of college in which he would overprepare for exams, and then do academically less well than he expected. Since that time, he has prepared for exams by attending class and studying lecture notes, using the textbook as a supplement unless otherwise instructed.

Although Billy Bob has enough academic credits to graduate within a year, his future is undecided: he may choose a path that would take him to Europe, playing hockey indefinitely. In that situation, he would attempt to complete his degree overseas; his program in Health and Human Performance for Sports Management was discontinued at ISU, and the classes he would miss next year will never again be offered at this university. However, he is motivated to find a way to complete the coursework, either via internet courses or through another institution.

Participant #2: Patty

Patty (pseudonym) is a third-year student at Iowa State University, with a major in elementary education. She is originally from Illinois, where she predominantly lived with her

mother after her parents divorced when she was very young. Both parents have since remarried, but throughout her interviews, it was clear that Patty was extremely close to her mother. Before her mother remarried, she moved Patty around as her realtor career grew. As a result, Patty moved at least five times, each time attending a different school within the same school district. She felt as though she had similar experiences at each school in terms of education and needs being met.

Although Patty encountered many different schools, she was never diagnosed with a learning disability, nor did she receive any academic accommodations prior to coming to college. She remembers times when she would ask classmates to clarify questions on in-class assignments, but never questioned it because she sees herself as a talkative and friendly individual. Moreover, because she was so close to her mother, they worked on most academic assignments together. Her mother and she would take turns reading textbooks out loud to each other, and her mother would double-check all of her work before Patty turned it in throughout high school. She believes that it was this close aid from her mother that allowed her to pass under the radar of teachers.

Patty spent two years at ISU taking courses and having little academic success. After a discussion with her academic advisor, Patty was encouraged to seek out Disability Resources, who helped her find a local doctor who diagnosed her with dyslexia and ADHD. She had only received academic accommodations for one year at the time of the interviews, but in that time, Patty had made significant strides in her academic success. Throughout the interviews, Patty reemphasized her perceived impact on the ADHD on her academic achievement in addition to the learning disability, although I attempted on several occasions

to refocus the discussion to the learning disability specifically. She perceived ADHD to be a learning disability until I discussed the subject with her.

In Fall 2006, her semester GPA was strong enough to make the Dean's List, a first for her. She was surprised at the honor, but recognized that she had made many changes in her study techniques, including the addition of the Kurzweil computer program to read her textbooks and a reader for her exams. She was focused on becoming an elementary school teacher, and did not see the learning disability as hindering her in her success.

Outside of her academic success, Patty was elected to the presidency of her sorority in Spring 2007; ironically, after the former president stepped down due to academic probation. Her academic advisor is coincidentally also the advisor for the organization, and her relationship with him has been a supportive one. Patty acknowledged that the advisor, along with the staff of the Disability Resources office, has greatly contributed to her academic success in the last year. The DR staff assisted in helping her with accommodations and new learning techniques for studying; she admitted trying everything they suggested and she attributes much of her academic success to the staff who helped her.

Participant #3: Shortstack

Shortstack (pseudonym) is a transfer student in her first year at Iowa State University. She is majoring in business, but often considers going into education and teaching economics at the high school level so that she can help other students. Originally from Iowa, Shortstack grew up in the school districts in Des Moines. She identified her high school as being at a lower socio-economic class than some others in the district, such as in West Des Moines; as a result, she did not have access to advanced placement classes. Shortstack was first diagnosed with dyslexia around third grade, soon after her older sister was diagnosed. Her father was never diagnosed, but Shortstack explained that he feels as though he also has a severe reading disorder. After her diagnosis in elementary school, her father gave her activities to work through the disorder. She relies heavily on the support of her direct and extended family, and often speaks of her father. It is important to her to make him proud, and she speaks excitedly of moments of personal pride because, according to Shortstack, her father is aware of her academic success.

She spent her time throughout school attending a resource room for supplemental help, but for a long time, she did not enjoy school. In fact, she stopped going to her English class for several weeks at one point, and according to Shortstack, no one noticed. However, in her senior year, she was selected to participate in a college preparation course by a teacher who took interest in her academic success. That course changed her mentality about school; for the first time, she thought that college sounded like a reasonable goal. Before then, Shortstack had been working two jobs, and she realized that this was not the future she wanted for herself.

Shortstack is the first in her family to go to a two-year college, and the first to graduate and move on to a four-year college. Because she is a first-generation college student and from a lower socio-economic status, she is a student in the Student Support Services Program (SSSP). Shortstack received a lot of resource aid from the staff in this office, as well as from the Disability Resources office and the Vocational Rehabilitation office. The latter office provides financial aid to students with documented disabilities.

When Shortstack transferred to ISU to continue her college education, she had to get re-tested for learning disabilities because her documentation from elementary school was

out-dated and contained insufficient information about her needs as a student with learning disabilities. Based on the information provided in the updated documentation, the DR office, Vocational Rehabilitation, and SSSP have helped Shortstack adjust to a four-year institution and to overcome the challenges of her learning disability in the classroom.

Since being at ISU, Shortstack has recognized that her school under-prepared her for the curriculum of college, regardless of her participation in the college preparation course. She was still only taking basic math her senior year of high school, and had to take additional courses at ISU to bring herself up to speed. Shortstack estimated that she will most likely take longer than the traditional four years to finish her degree, but she is determined to do so, regardless of how long it takes, or how difficult it gets. Her motivation comes from the understanding that she is breaking down barriers by being the first in her family to complete a bachelor's degree, and she hopes to someday get a master's degree in business, as well.

Participant #4: Mark

Mark (pseudonym) is a transfer student in his second year at Iowa State University. Originally from Iowa, he moved around as a middle school and high school student due to his parents' divorce. In high school, his mother developed a drinking problem, and as she spent time in and out of rehabilitation, Mark lived with his grandmother in Des Moines. Prior to coming to ISU, he received an associate's degree from Iowa Central Community College. Mark is double-majoring in Management Information Systems (MIS) and Business.

Mark was diagnosed in the 8th grade with a reading learning disorder and ADHD. Prior to that year, he had done fairly academically, but it became increasingly evident that he was an intelligent student who did poorly on standardized exams and was failing English. When he was diagnosed with dyslexia, the psychologist found that he had been compensating

for the dyslexia until diagnosis because he had a genius-level IQ. Mark is aware of his high intelligence, and often uses that to motivate himself to work harder and accomplish more because he acknowledges the ability to do so. Throughout the interviews, Mark reemphasized the impact he perceived of the ADHD on his academic achievement in addition to the learning disability, although I attempted on several occasions to refocus the discussion to the learning disability specifically. He perceived ADHD to be a learning disability until I discussed the subject with him.

Mark's father was highly involved in making sure his accommodations were in place throughout middle and high school, although Mark lived predominantly with his mother and grandmother. Mark's father is a businessman, and Mark consistently speaks of him with pride for his ability to read people, which Mark later admitted to seeing in himself, as well. Mark was also aware of the strengths that he had gained from having dyslexia: the ability to read people, a strong memory, and a strong drive.

Mark graduated from community college with a 4.0 GPA and was a member of the Honor Society, Phi Theta Kappa. He was also part of the All-Iowa Academic team, and was nominated to the All-USA Academic team. He used his strengths in academics to gain leadership roles, and has since used those opportunities to foster his personal business endeavors. Mark has been recruited by some of the top companies in information security, including the U.S. government. He plans to finish his Bachelor's degree as well as a Master's degree before joining the workforce full-time, although he currently runs his own business while he is also a full-time college student.

Summary of Similarities and Differences

Although my participants originated from different cities and states, have different majors, and are seeking different life paths, there are several similarities among them. First, Billy Bob, Mark, and Shortstack were all diagnosed with learning disabilities relatively early in their elementary education, and therefore benefited from supplemental support from a resource room or teacher within the school. Although Patty was not diagnosed with a learning disability until after beginning her college education, her mother was very involved in supporting Patty's academic success from a very early age, similar to that of at least one of the parents of each of the other participants. All of these parents went above and beyond the call of duty with the motivation of helping their students succeed.

Both Mark and Shortstack acknowledged that most of their motivation to succeed came from growing up in a lower socio-economic status in the community, which hindered them from benefiting from costly supplemental help, such as private tutoring, which helps students in academic crisis. Moreover, they both expressed the desire to create a life better than that from which they came, so that their families will have what is needed. For Shortstack especially, the potential to graduate from a four-year institution was not a goal she was raised to expect to meet, unlike Billy Bob and Patty.

Lastly, Billy Bob, Patty, and Mark all emphasized their perception of the significant impact of the presence of ADHD on their academic success, although I attempted to redirect their focus on the learning disability (e.g., dyslexia) only. This subject of misunderstood definitions and classifications of learning disability is addressed in Chapter 6 as a topic for future research.

All participants were on the track to graduate when interviews were completed and data were analyzed and developed into this thesis, although the path has not been easy. All participants have re-taken courses at some point, and are now academically eligible to graduate if they continue to perform as successfully as they are now. In the next chapter are five themes that were developed from the information gathered during the interviews that help answer my initial research questions:

1. What factors outside of the classroom lead to academic achievement or success for SLD?

2. When or how does academic success become salient for SLD?

3. What do SLD know about their disabilities, and how has their level of knowledge impacted them throughout school?

4. How do the stories of the students interviewed compare to the past research concerning factors influencing academic achievement for SLD?

CHAPTER 5. FINDINGS AND INTERPRETATION

Five themes developed from the data collected are addressed in this chapter: the role of family in providing support, self-awareness in relation to the learning disabilities, the sources of motivation for persistence toward graduation, the challenges of life with a learning disability in college, and interactions with unhelpful faculty. These five themes are explained using evidence from the interviews of all four participants to show commonalities among the research participants.

Role of Family in Providing Support

The first theme, the role of family in providing support, was significant for all four participants in this study. For most of the participants, a single member seemed to play the most significant role throughout elementary and secondary school. Moreover, the role of the family member adjusted over time and place.

Extent of involvement of family members

Patty's familial support was limited to that of her mother. As described in Chapter 4, Patty spent most of her childhood with her mother, who was a huge supporter of academic success, so much that throughout school, her learning disability was masked by the overcompensation of support from her mother. In fact, Patty did not realize the full extent of her mother's influence until reflecting on it years later in our interviews:

Like, some of the stuff, I'd need to ask my mom, too, but I did not realize that at first, when I was in elementary school, even through like junior high and high school, she would sit down and like read textbooks with me. Now, I remember that, but like, we would either take turns or she would just read to me. Like, with textbooks and with like books that I'd have to read for like English and stuff like that. And then she'd help me with study guides, she'd help me with papers and stuff like that. But, I never

thought anything of it then. And neither did she. (Patty Interview #1, p. 2) Patty alluded that growing up, she received much attention from her mother, who raised Patty as a single mother during much of Patty's childhood. However, because of this strong teamwork approach toward studying, and Patty's subsequent academic success throughout grade school, Patty was able to fly under the radar while she might otherwise have been seen as someone with a challenge in reading.

Mark had separated parents growing up, much like Patty. His parents divorced early, and he spoke most often of his relationship with his father, although he described growing up and living with his mother and ultimately his grandmother. Although he did not live with his father full-time, his father played the stronger role in ensuring that his academic accommodations were in place throughout secondary school, much in the fashion of Billy Bob's parents' involvement. Mark made it a point to describe his family positively when describing some of their challenges during his childhood: "I hate saying these stories because my family is a very good family, very loving family so I don't want to give the wrong impression" (Mark Interview #1, p. 2).

Mark's father played a dynamic role in his academic success. At first, he challenged Mark to work harder, not understanding that Mark had a learning disability: "They kind of thought that I was not trying so much at first, and they would have me, you know, just sit down and do this stuff. And I was just like, "Ugh!" And I guess the worst were like doing the Iowa Test of Basic Skills and stuff" (Mark Interview #1, p. 5). Later, his family would find that Mark's incredibly high IQ was actually masking the reading learning disability.

There was a discrepancy in how he performed on assignments and on exams. Mark explained that at this time, both of his parents were involved in getting answers:

Well, my parents had noticed a problem and they'd been going into the school and they were like, "What is going on here?" They're like, "We want answers, you know, what is going on?" And finally they got the school to have me to go get tested and everything. (Mark Interview #1, p. 5)

Family was highly salient to Shortstack's motivation and success, but unlike the other participants, her familial support was most evident from her father and aunt, in different respects. For the most part, Shortstack referenced the aid of her father, who had also struggled with a learning disability, as did Shortstack's sister. Because of his own selfawareness, Shortstack's father was able to challenge Shortstack to improve herself during secondary school: "I think my dad caught on to [the learning disability] because he knew what he went through. So he tried to find different ways to teach me things and... I did not realize how important that was until now" (Shortstack Interview #1, p. 3). Shortstack's father played a strong role in her getting supplemental help at home, similar to Patty's mother, but not to the same extent. Her aunt, on the other hand, supported from afar and encouraged Shortstack to call her at any time she needed to talk: "She's always been really supportive, like, if I'm ever really upset with school, I'm getting stressed out, I can always call and talk to her anytime. And she always helps me through it. That's the main person I would call and talk to" (Shortstack Interview #1, p. 18). Shortstack's aunt was a distant supporter who offered a place to come for comfort, in conjunction to Shortstack's father, who offered ideas for her to work through in order to try to overcome the challenges of having a learning disability.

Unlike the other participants, Billy Bob tended to discuss his parents as a unit as opposed to mentioning one individual more often than the other. Billy Bob's parents both received college degrees in education, and therefore had the strongest education background of any of the participants' parents, as well. Therefore, when Billy Bob began having disciplinary problems in the first grade, his parents took an active role together in addressing the issue with the school system. Although Billy Bob personally remembered very little from this time, he was able to recite anecdotes his parents had shared with him:

I don't remember any of it but I guess, like, they would go around and be reading time and then like, either, I don't, either I would not do it or I'd refuse to or I just could not. And then, um, so then I guess it got to the point where [the teacher], when it was reading time, she would just send me out and I'd sit in the hall for the whole time, and then she'd say, come back in. (Billy Bob Interview #1, p. 4)

The above passage described his experiences during first grade in which his teacher would dismiss him from the classroom during reading times, as opposed to encouraging him to participate. A teacher across the hall noticed this behavior, and when Billy Bob was forced to repeat the first grade for academic failure, the school placed him with this second teacher, who encouraged Billy Bob's parents to seek testing for learning disabilities at that time. *Active involvement and support*

The diagnosis of Billy Bob's learning disabilities resulted in Billy Bob's receiving accommodations in the form of supplemental assistance in a resource room throughout school. He remembered times when teachers would try to force him to read in front of the class; at those times he would rebel and challenge them. I asked him about the consequences of challenging teachers:

Well, not too much 'cause after the first time I challenged them they stopped 'cause then the principal would come and talk to them and then my parents would, they would talk to them and I dunno what my parents would say but I know that they would say, "Well, you'll have a letter from our lawyer if that happens 'cause you can't do it by law." (Billy Bob Interview #1, p. 13)

Because they were aware of the laws, Billy Bob's parents were able to take an active role in his education throughout elementary and secondary school years to ensure that he was receiving the fairest and most appropriate treatment.

This active role did not cease after graduation from high school, and this separates Billy Bob's experiences from the other participants, as well. In college, his parents would get involved at times when college instructors were not meeting accommodations:

If I ever had a problem with a teacher or anything, I'd email both [the Disability Resources staff members], and one of them would at least do something or contact the teacher or something. With [the Disability Resources staff members], they give you suggestions to do things, and then if that doesn't work, then you have to get involved. There were several instances where my parents would have to get involved and call them to get things straightened out. (Billy Bob #2, p. 5)

Although in college, parents have a removed role due to the Family Educational Rights and Privacy Act (FERPA), which protects the privacy of student education records (FERPA Web site), Billy Bob still expected his parents to be able to have an active role whenever he had difficulties getting accommodations fulfilled by his faculty, although he would first seek the help of DR. When the staff would not meet his expectations, he would then call on his parents, since in his opinion, his parents were "footing the bill here" (Billy Bob Interview #2,

p. 6). Nevertheless, it appeared that the Disability Resources office insisted that Billy Bob take a personally active role in his own education, and Billy Bob did not agree. For his entire life, his parents had been his advocates, and he had not transitioned into being able to advocate for himself.

According to the Disability Resources Web site, "a collaborative effort between the student, DR Staff, and the faculty should produce a reasonable accommodation for a documented disability" (Disability Resources Student Web site). This statement of collaboration purposefully does not include the role of parents due to regulations under FERPA. Nevertheless, for students like Billy Bob who have parents invested in their well-being past the age of 18, institutions of higher education should be prepared to validate the concerns of parents and find ways to incorporate them in the accommodation process when students give permission to do so.

Unlike Billy Bob, Patty did not realize until just recently the significance of her mother's active role in her academic success. She discussed the first time she realized her mother had helped her so much:

Like I said, I did not even realize that my mom helped me all the time until I had to go and fill out the paperwork [for the disability testing] and be like, "Okay mom, I don't know how to answer this question, what do you think?" I don't really remember and I'm guessing I don't remember everything because there was a lot going on in my house and I just kind of tuned things out. So she kind of helped me with that but I don't know of any specific things besides her having read books to me and I know that we used to just sit up in a room and read books or that kind of stuff. (Patty Interview #1, p. 10)

Because of her mom's substantial time spent assisting her with studying, Patty was unable to recall times when she was significantly failing or when anyone had questioned her abilities. No other participant spoke of such depth of assistance from any resource.

Mark's parents took an active role in seeking action for their son to receive appropriate help in school. Unlike Billy Bob's experience, an outsider was not involved. Mark's parents noticed a discrepancy in his practice and performance and sought answers to explain the difference. Mark also described a time later on, after accommodations had been set, where teachers were not following the appropriate protocols of his individual education plan:

Once, with the 504 plan, [my father] went in there my freshmen year, when they weren't really following anything and stuff, and he went in there and, like I said, he's in business himself, he went in there, and he actually pounded his hands on the table because they were all just arguing and not coming up with anything and he said, here's the deal: "Tomorrow afternoon, my attorney is going to be in contact with you. I hope you have a plan by then." (Mark Interview #1, p. 6)

This example demonstrated the active role Mark's father took in his son's education, as well as the levels that he was willing to go to in order to ensure the appropriate follow-through of his son's education plan throughout school.

Shortstack's father would give her exercises to practice in order to maximize her abilities while spelling: "He would [spend] a lot of time with the spelling, because I'm really bad at that. He would make me write one word three pages long so I would know how to spell and say it out loud. That's the main thing I remember" (Shortstack Interview #1, p. 5). Shortstack's father understood, from his own experiences, that the ability to spell and recall

words would benefit Shortstack in a way that could compensate some for the presence of dyslexia. He had grown up with dyslexia as well and was able to share his own compensatory strategies with Shortstack so that she could be successful in the long run. By challenging her to write words repeatedly, her father took an active role in her academic success by supporting her through strategies that he felt could benefit her progress in elementary school. *Passive involvement and support*

Throughout his interviews, Billy Bob made it clear that his parents "just want to see [him] succeed" (Billy Bob Interview #2, p. 14), and that receiving top academic scores are of lower priority. Moreover, when asked what he thought would have helped him academically succeed more throughout college, he replied, "Maybe being a little closer to home" (Billy Bob Interview #3, p. 5) in order to get away from the distractions of the college atmosphere. His family gives more than support in receiving accommodations; they are a source of relaxation and comfort that he had not found while attending an institution out of his home state. Billy Bob conveyed that his parents offered unconditional emotional support in regard to his academic progress, allowing his parents to support him in a more passive way.

Patty's mother's role in supporting her daughter had not ceased during her time in college, after the diagnosis of a reading learning disability, although it went from active involvement in helping Patty, to emotionally supporting her in a more passive style. She explained her mother's continued role, despite a five-hour drive between them:

She always asks about how my classes are going, how my grades are going, you know, "How's studying been going? Are some classes harder than others?" You know like, is there anything that she can help with as far as proof-reading papers or me emailing them to her or something. I mean, she's obviously willing to help. I just

don't, I feel like since she's five hours away, it's a little harder that way. (Patty Interview #2, p. 3)

Patty is more reserved about using her mother's help now; she attributed it to the distance between them, but Patty has arguably acquired a sense of independence since coming to college. She sought out assistance from her advisor independently, and then sought out diagnostic testing for the learning disability without the physical presence of her mother. Moreover, Patty will be graduating soon and will be running her own elementary classroom where she will be in charge; she will need this newfound independence to lead and educate her students.

I asked Patty how she felt about no one, including her mother, realizing that she had a significant learning disability throughout school. Patty had a difficult time personally understanding how no one noticed, but she made some assumptions:

I don't really understand why. I understand that when I was turning in papers and stuff, my mom would help me write them, or if I had to read a book and then answer study guide questions, my mom used to help me with those, too. So maybe that's why. But I feel like if I had left them blank or wrote the wrong answer, they would have thought that I was making them up because I did not read it. I don't think...I don't know why. But I don't think they realized. I guess with my mom helping me, how would they really know? (Patty Interview #3, p. 1)

In Patty's opinion, had she left answers blank, the teacher would have assumed that she had not studied. She had developed a compensation for comprehension due to the depth of attention her mother gave her; they were able to complete homework assignments to the point where Patty could readily recall the information on exams. She may not have been

receiving accommodations that her mother could support her in, but her mother did actively assist Patty in achieving academically.

However, because college is more academically rigorous, and because her mother was then five hours away, Patty was left to depend on herself as a prime resource, and that was when the learning disability proved to be most challenging and salient in her life. Her mother maintained a role in Patty's academics by emotionally supporting her daughter through the diagnosis and accommodation process.

After the first interview, Mark mentioned his parents rarely unless prompted to do so. However, he did discuss the current role that his father plays in his life as Mark embarks on the daunting task of selecting a job position from companies fighting for him:

I use him for advice, especially when it comes to career advice. He used to work as a headhunter for job placement. His company was a job placement company for students, so he positioned people how to do interviews and the interviewing scheduling, so that some of his own people would get it... he knows a lot about how the company works. So I use him for different types of advice, or sales type thing. (Mark Interview #2, p. 13)

When Mark discussed his father, he did so with a proud tone of voice, so it was fitting to learn that he valued his father's opinion so strongly at this crucial point in his life. Note that the characteristics that Mark saw as significant in his father will be those characteristics that he saw in himself under the theme of Salience of Self-Awareness below. Moreover, this career advice demonstrates the passive role of supporting Mark that his father now takes.

Although Shortstack recognized that her mother called her every day to check in (Shortstack Interview #1, p. 1); for the most part, she did not mention her mother, neither in

positive nor negative light. Shortstack did, however, mention the emotional support provided by her aunt in a passive role:

If I have problems I call my aunt. She lives in Arkansas, and I always call her when I'm either upset or something. She's like, "If you're really upset, I don't care if it's midnight, call me! I might not be awake yet." She gets up at about 5 a.m. (Shortstack Interview #2, p. 15)

Her aunt was also a support during secondary school, which formed the basis of the strong relationship the two had at the time of the interview. Shortstack conveyed that she was able to call her aunt with more personal problems because at the time of the interviews, her mother was under stress with problems that her brother was causing. Therefore, over time, the aunt had stepped into the role of confidante and friend; a role that a mother cannot necessarily fill.

Shortstack's parents, overall, were emotionally supportive of her getting re-tested when she transferred to ISU. Although the diagnostic exam was expensive, resources on campus were able to cover the cost. Moreover, her parents had a vested interest in knowing about the test results: "They were happy. They actually wanted to know what it said!" (Shortstack Interview #1, p. 6). Like the other parents described above, Shortstack's parents were interested in the test results so that they could try to help her in any way possible. She was the first in her family to attend a four-year institution, so there was a certain level of pride involved in their support of her academic success.

This pride and emotional support for her academic success did cause some challenges for Shortstack after she came to ISU:

Well, I'm the first one to graduate from a 2-year college. My sister started going. So when I say I can't come home this weekend, I have to get ready for my test that's next week, they don't realize how much work it is. They're doing better. When I first started, my mom wanted me to take a whole week off for Thanksgiving to go with her to see my grandparents. I told her I could not take that many days off, and she did not understand it. They're doing a lot better, and my dad is doing better because he has employees who are in college! (Shortstack Interview #3, p. 1)

Because her parents were so proud of her, they wanted her to come home for holidays so that she could tell the extended family about her college experiences. She was aware of the passive role of emotional support that her parents gave her in college. However, the learning disability required Shortstack to spend additional time completing assignments and studying, and she felt compelled to work over breaks in the semester. The challenge of time will be discussed further under the theme of Challenges of Life with a Learning Disability. *Summary*

Each of the participants in this study had at least one supportive parent who had a significant role in working through the challenges of having a learning disability. Mark and Patty mentioned only one significant family member, while Shortstack and Billy Bob mentioned two. Moreover, for Mark, Patty, and Shortstack, their family members were more actively involved prior to college, and once these students began to attend college, the support was delivered in a more passive manner. Only Billy Bob's parents maintained an active role in helping him obtain the help needed to succeed, which may account for his seeming to be less independent than the other participants.

Self-awareness

I was excited to learn how introspectively my participants had developed in terms of how they perceived their experiences with having learning disabilities. The passages below describe the self-awareness displayed by each participant throughout the interviews.

Socio-economic status

For Billy Bob, his socio-economic class position was most salient in his selfawareness. Throughout each interview, he personally attributed the bulk of his academic success to his ability to fit in as a "normal" kid. He perceived the majority of students in the resource room to be far removed from his own experiences:

I know it's like when I was in all those rooms and stuff, all those kids, like either their parents don't care or their parents don't support them. You know, maybe they don't have the stuff that I have been given through my parents. Like if it's like money-wise or something. 'cause I mean, some of them obviously don't have too much at all. Especially when you get older and like, some of them may, they don't shower or, you know they don't wear deodorant and stuff like that. But like, I always was one that wanted to fit in with everyone and I always like tried to be that normal kid but really inside I was not but it never affected anything. But it was just like, I had the social skills, I had...I played sports and stuff so it put me with like, ya know, the cool people pretty much. (Billy Bob Interview #1, p. 9)

Because he came from a financially secure home environment, he was able to see the differences between those who have and those have not. Moreover, he admitted knowing that he was not "normal" because of his need to use the resource room; nevertheless, he was aware of those skills that separated him from the other resource students. Billy Bob was a

star athlete, which provided him acceptance by many. Moreover, his self-awareness of social skills enabled him to associate with and ultimately become accepted by the popular students in school. As a result of this social status, he remembers hardly ever being teased for needing to use the resource room for his learning disability, although other students in the room had been teased.

Although the other participants did not express their awareness of personal socioeconomic status with the same earnestness as Billy Bob, there was some mention from both Mark and Shortstack that they were motivated to work hard in order to provide for their families in the future. However, neither Mark nor Shortstack alluded to there being a significant awareness of being different from other students on a socio-economic level. *Perception of academic ability*

Although Billy Bob recognized his strengths as a school athlete, he spoke humbly about both his athletic and academic successes: "I mean it's great and everything, and I worked hard to do it but...I don't really like to be in the limelight" (Billy Bob Interview #3, p. 1). He explained that he had made the Honor Roll throughout high school by simply working hard. When asked whether he perceived himself as smart, he explained, "My circumstances, yeah, I'm smart. But, I know I'm not dumb. But, I know that I do things slow and I learn slow and I, it takes a lot longer than the average student but...yeah, I'm not dumb" (Billy Bob Interview #1, p. 18). In regard to his academic and athletic successes, he explained he sometimes felt that people only recognized him for being a star athlete. In terms of dating, he explained that sometimes girls did not recognize his academic success:

Sometimes girls were just like, "Oh, you're the star, this and that, or…"you're so hot" and then they would know that I go there or I can't do something and then they would

be like, "What's wrong with you" or whatever and it's like, I'm not a piece of meat! (Billy Bob Interview #1, p. 18)

Billy Bob considered those situations to be eye-opening because they showed him that girls might only care about him for what was on the outside, including his presence in the resource room, as opposed to the inside.

In terms of college experiences, Billy Bob explained that he had chosen a major based on his interests and skills:

In class, I'm taking Sports Sociology, and the teacher shows a lot of sports clips of certain professional athletes messing up because of cognitive anxiety, and that's cool. I'll remember...I have a photographic memory when it comes to that stuff and I'm very observant. But it's also sports and I like that a lot and I have no problem doing the stuff. (Billy Bob Interview #2, p. 8)

Mark's self-awareness focused on his genius-level IQ and how that influenced his drive for success. As discussed in Chapter 4, Mark was aware of his natural intelligence and how the learning disability was oftentimes masked by his underlying strengths. He discussed how this affected him at a young age:

I can remember that even way back into, you know 4th grade and then 3rd grade and such. And then they'd be giving out stuff and I could not just do it as fast as other students. And the thing I noticed is that I could never keep up with them. I could never do it as fast. But, 99% of the time, my answers were more accurate than they were, but I could never keep up. I was always the last person done with their test and stuff. (Mark Interview #1, p. 9) Mark was aware, even then, of his abilities in comparison to other students. In some ways, he could be more successful, but he could not be the fastest because of his learning disability.

Patty's self-awareness differed from the other participants in that her awareness took place after being diagnosed in college, whereas the other three participants were diagnosed during elementary school years. As she discussed her experiences from kindergarten through high school, she was able to recall the extensive amount of help she received from her mother. She described what she herself remembered from that time: "But reading, when I was younger, in elementary school, obviously it would take a long time to read stuff but I just thought I was a slow reader. I did not think anything of it" (Patty Interview #1, p. 2). As a young student, Patty did not personally recognize a significant weakness in her reading abilities beyond speed. Therefore, she did not realize that she had areas that needed improvement until after she was tested for a learning disability.

Finding strengths in the presence of learning disabilities

Billy Bob utilized his strong sense of self-awareness in order to maximize his success in college by majoring in something that not only interested him, but also allowed him to make use of his strengths and abilities in the classroom. Moreover, when asked what has helped him be academically successful in college, Billy Bob replied, "I think just having good support and people to go to and knowing my strengths and weaknesses and then whatever I'm good at, that's a bit easier" (Billy Bob Interview #3, p. 4). (It is interesting to note the skills that Billy Bob felt he had; later in this section, Mark will divulge similar feelings in regard to strengths and relate those to his own research into having a learning disability.)

After diagnosis had taken place, Patty's awareness of her strengths and weaknesses dramatically changed. She explained the differences in awareness:

Besides the accommodations, I think just really knowing what my problem was and what I could do to help it besides using accommodations. Like, I know I need to devote more time to reading for classes or something like that. Whereas before, I did not know where I needed to focus my time and my energy and stuff. I think that also helped me, knowing how to improve on my own. (Patty Interview #2, p. 1)

At this point, Patty had evolved from depending as much on her mother, and could now depend on herself and her new-found understanding of her areas of weakness. Moreover, Patty had been given the skills and knowledge to do so from the Disability Resources office through the accommodation process.

Patty explained that it was difficult to discuss having the learning disability with others, even her mother, when she was first diagnosed. However, that has changed over time, as well:

I'm okay with talking about it. At first, it was a little hard, a year ago. But now, knowing that I have it is helping. Sometimes, when people don't really understand, it's hard to think about other ways to describe it. Now, it's never embarrassing to talk about. (Patty Interview #3, p. 1)

Patty had nearly two years post-diagnosis to reflect upon her understanding of having a learning disability. At the time of the interviews, she felt more comfortable discussing it because she herself understood the concept more, unlike when she was first tested, and she did not understand what it meant to have a learning disability. As noted earlier, the longer she

has known about the presence of her disability, the more she has been able to do to help herself.

Because the presence of the learning disability is so salient to Patty's identity in college, it was important to learn how she felt about the period of time when she did not know. She understandably regretted not knowing before college:

I feel like I would have liked to know earlier. Not that I did horrible in high school,

but I feel like I would not be as far behind now...in reading. Or hearing that I read at an 8th grade level and I'm in like, 14th, 15th grade in college. (Patty Interview #3, p. 2) Patty was still coming to terms of the meaning of her disability at the time of the interviews; however, she had made progress in terms of understanding the impact that it had on her, and ways that she could overcome it, which are elaborated on later under the theme of challenges of life with a learning disability.

Patty also discussed how she planned to continue to strengthen herself in the future in terms of maximizing her areas of improvement:

I guess to try to keep doing better in school, as far as understanding. Understanding and being able to retain the information. It's one thing to do well in a class, it's another thing to do well in a class and learn two semesters later when you have another class, they're like, you have to base it off of the other one, and to still be able to remember it. And I have a horrible memory. And I guess just keep working at it to help myself get better or improve as far as reading comprehension and speed. (Patty Interview #3, p.5) Again, Patty focused on her awareness of the affects of her learning disability and what ways she could help herself; she moved to relying less on her mother and more on herself for recognizing areas of improvement, such as reading comprehension and speed.

It became evident by the end of the interviews that Mark's awareness came as a result of past teasing for being slower than others:

I'm pretty open with my learning disabilities and I don't see it as a flaw so much. Maybe back in elementary school the kids might have made fun of it, about going to Chapter 1 and stuff like that. From high school out I don't think it was ever an issue. The other thing is that kids, especially with peers, if kids wanted to try to make fun of me, because they'd try to make fun of me like I was stupid, but the fact is that I was probably smarter than they were and I could just turn it around and show that. (Mark Interview #3, p. 1)

Here, Mark discussed being able to turn around an insult regarding his intelligence because he had the ability to do so. Moreover, Mark demonstrated that he has grown into accepting the learning disability, not as a flaw, but as a part of himself, and that the self-perception of the learning disability has somewhat morphed over time, from something about which he could be teased, into something that is more inconsequential.

For Mark, the times when the learning disability was least salient were in the classroom as a result of his strong professional background in the field of business and from his time at community college:

Over all, I'd say I'm probably a bit better [than most students], but then again, I have quite a bit of a background, you know? I'm studying information systems, I have a degree in computer networking, I worked in the industry, so I have a little bit more of an edge than the other students around here for that. As far as computer networking goes, that I graduated the very top of my class. But that was all just drive. I went into college with the attitude that it was going to be difficult and I was just going to need

to do whatever needed to be done to get it done. (Mark Interview #2, p. 4) In community college, Mark had a smaller classroom environment and a more hands-on experience. He was able to take that experience and use it as a strength at a four-year institution, which in the long run compensated for any shortcomings of the learning disability, and Mark recognized that.

Mark also saw himself as a "pressure" person, in that he thrived in stressful situations:

Actually, my girlfriend says that I'm a pressure person. If you put me on a path that I'm not really interested in, and I'll probably be mediocre. But if you get me in a room that's under pressure, I'll be the one above and beyond everything, I'll just strive in that environment... For instance, in Drum Corps, I was competing at the world championships; we were not allowed to make mistakes. And we actually won that year. (Mark Interview #2, pp. 14-15)

Mark demonstrated with the example of Drum Corps that he is the type of individual who does well under pressure, which is fitting for his career path, which may likely take him to a position with the U.S. Government working with national security systems. He has an ability to do his best work under high-stress circumstances.

Mark was also aware of some of his strengths after taking an IQ exam on the internet once:

I noticed that I took an IQ test once on-line, and it told me my strengths, and it lists spatial geometry, and that was one of the first times I'd ever noticed it. I thought that they were just common-sense questions. I never knew also that people with dyslexia tend to be very good at reading body language and are intuitive. I've known that I've had this ability, and I can typically detect when someone is lying to me. I've called my friends on lies before, and they've wondered how I even knew...They also said on the list that dyslexic people have good memories, and I basically just have to memorize stuff to avoid having to read everything, or pull out key things quickly

without reading stuff and decipher the important facts. (Mark Interview #3, pp. 8-9) Note that earlier Billy Bob described himself as being successful at reading people and having a good memory. Here, Mark explained that he believed his strengths in mathematics were attributed to his strengths in spatial geometry, which he believes are common attributes of a person with dyslexia. Both Patty and Shortstack described their strongest subject as being mathematics, as well, which fits with Mark's finding that spatial geometry is associated with dyslexia. Mark explained the relationship: "When you grow up, you have to basically train your eyes to track the other way, so they're used to having to go in different directions. Even when you have disabilities, the compensations you have to go through can have positive effects, too" (Mark Interview #3, pp. 8-9). Mark perceived his learning disability as a positive attribute because it enabled him to maximize strengths in other areas. He developed strong strengths in reading people and in spatial geometry, traits that the other participants alluded to, as well.

Like Mark and Patty, Shortstack self-identified her area of strength as math, and noted that it was an area in which she might major and pursue a career: "I'm thinking about

going into finance and I chose that because I've always been really good with math and money, always been really good with that. I'm the only one in my family who can manage money." (Shortstack Interview #1, p. 1) Like most people, Shortstack identified an area of strength and decided to capitalize on that strength by majoring in a related field, such as business.

However, that is not to say that the disability did not have an effect on her math skills. She was able to comprehend math concepts quickly, but sometimes the dyslexia would affect the final result of a math problem, as well as comprehension of reading:

I know my comprehension, I mean I tested very well on my test, but I know it's a little bit lower than it should be. I can read something and not understand it. And then...switching numbers and letters around, I know that I do that a lot and I catch myself! That's kind of what I watch for. (Shortstack Interview #2, p. 6)

Shortstack was aware of areas in which her learning disability would affect her academic success. She could finish a math problem, and somewhere switch up a number because of the dyslexia, and end up losing points on the assignment, although it would have nothing to do with her intelligence.

Shortstack was also aware of ways to compensate for situations in which the learning disability would affect her academic success:

That's probably mainly um...like dyslexia, usually people think that you read backwards, you switch around numbers, which is, it's part of it, and I was like, I can read like upside down usually fine. I try not to do it anymore because it's not good for me. And then like in math, when I do homework, I check over it like two or three times. Because I'll have the right answers, I just switched around the numbers. (Shortstack Interview #1, p. 17)

Over time, Shortstack learned where her strengths and weaknesses were. She recognized a strong sense of math, and compensated for the dyslexia by going over her problem-solving several times, sometimes with classmates.

Her strengths and weaknesses were not always evident to Shortstack. Like Patty, she learned a lot about herself after being re-tested in college. The psychologist was able to explain to her areas that she should be aware of, that Shortstack had not considered before. She explained that she felt the diagnostic test was easy at first:

Like, um, saying words and stuff. It was kind of weird because she's like, "We're going to skip the easy ones and start with the harder ones." And then I could not figure out the harder ones. She goes, "Oh, maybe we should go back!" And then I felt kind of stupid after that. (Shortstack Interview #1, p. 8)

Shortstack admitted feeling stupid when she realized that she was unable to complete the easier problems on the diagnostic test, but it showed her in a realistic way where her areas of weakness were in terms of reading and comprehension.

When Shortstack learned of her areas of strengths and weaknesses, she was able to try new strategies to improve her academic success, similar to the experiences of Patty described above:

I'm trying to figure out when I read the textbook how I should summarize that. And the main problem I have is when I'm reading the textbooks, what's important, what's not, and how to figure out what they're trying to tell me out of that paragraph. (Shortstack Interview #2, p. 19) Building upon this skill was important for Shortstack because she honed in on her comprehension abilities, which, noted above, were not as strong as they could be. By knowing that about herself, Shortstack was able to change her studying to a more activelearning process in which she was constantly thinking about what she was doing and how it was helping her: "When I got tested, I realized what I need to focus on and what my actual disability was. I did not know what it was before. I've been working on those and I think that helps a lot, too" (Shortstack Interview #3, p. 4).

Overall, Shortstack recognized, like Patty, that all students learn differently. What worked for some, may not work for her:

With the study skills for the disability, I have to work longer and be very focused. But I think study skills are very important and different for each person, even without a learning disability. I think everyone is different and has to eventually figure out where they are at. It takes a long time. (Shortstack Interview #3, p. 10)

Shortstack advised that students learn about themselves and help themselves using that knowledge, as she had done, much like Patty. Shortstack explained that it could take a long time to realize what one needs; she herself had been in school for almost three years before she finally started to realize what worked for her and what did not when it came to studying. *Summary*

This section explored the depth in which the participants came to understand themselves and their abilities in light of any challenges posed by the presence of a learning disability. Billy Bob was most conscious of his socio-economic status in regard to the learning disability from segregating experiences throughout elementary and secondary school years. Mark and Patty found strength to achieve academically upon realizing that they could,

in fact, succeed, based on test scores for Mark and grade reports for Patty in college. The participants also found personal strength from just understanding the impacts of having a learning disability and how to overcome that, which empowered them to find other strengths within themselves.

Sources of Motivation for Persistence toward Graduation

The participants in this study had differing sources of motivation, but they are connected by an underlying theme of strong drive and perseverance, which has been impacted by their personal experiences of challenge associated with the presence of a learning disability. Experiences of each participant are described below.

Maintaining academic successes

Participation in athletics throughout his life had a salient role in Billy Bob's drive to succeed academically. In high school, Billy Bob's achievement of Academic Honor Roll began with his need to qualify to play for his high school hockey team. When I asked him if he had ever worried about qualifying, he replied simply, no, but he recognized that he did work hard throughout high school: "I did not really care but it was like, I always just figured if I got all my stuff and did everything I had to do, and you know, put maybe an ounce of effort into it, you could see what happens" (Billy Bob Interview #1, p. 18).

For Billy Bob, academics were a way to participate in sports, which he considered to be an important outlet from the challenges of college: "It's my scapegoat. Everyday, that's what I look forward to. It's a two-hour break from doing any work" (Billy Bob Interview #3, p. 7). With this drive toward athletics, it makes sense why Billy Bob considered taking a leave of absence from college to focus on his professional athletic career. Patty discussed her motivation for success mostly in terms of reflecting upon how she had succeeded academically, especially in the semester prior to the interviews: "When I first got to college, I was not doing well. And then slowly I've been getting better, I guess, like, progressing," (Patty Interview #2, p. 1). She recognized that for some students, and even one of her friends, sometimes the hardest part of feeling motivated is to not see improvement. As she began to improve academically, she was able to trust new ideas from the Disability Resources staff. She explained what she would advise another student with learning disabilities to do in college:

Get tested and try all of the options that are offered, like Disability Resources. At first, I was like, "A reader? Really? That's not going to work." I felt like I was going to more like hear what the other person is thinking. Like, "If I don't get what this is saying, can you re-word it?" But then as soon as I tried it out, it helped. At first, I was not so sure about that. Try to keep an open mind and try everything that they tell you is available. (Patty Interview #3, p. 4)

Patty did, in fact, try the advice she provided for other students, and it was successful for her personally. Her success explains why she is so apt to suggest others try the same; it worked for her, so it can work for others. She was very encouraging in her suggestions to try many options; Patty recognized that people learn differently, and that some ideas may not work for everyone.

Part of her motivation also stemmed from not wanting to lose the academic success that she had achieved in the past semester:

I help [myself] knowing that I'm doing better, especially doing similarly last semester- that also made me want to not go from being on the Dean's list last

semester to then being back down. So I know that I still need to work as hard but yet, now I guess it's that I can do it. My mom is always there to support me. (Patty Interview #3, p. 7)

Note that here, again, Patty mentioned her mother as an afterthought. The support from her mother is constant and it fuels her motivation to succeed because she knows her mother is behind her. Moreover, now that Patty had reached one of the highest levels of academic achievement, she had a taste of it, and she had tangible evidence to prove to herself that beyond successful methods, there was an outcome to prove the long-term affects of the changes she had made to her studying habits. She understood how for others, that may still be difficult:

I guess that's true, because I know you have people tell you, "you can do it, just keep working, it will get better." But that doesn't actually mean that you can- they have to

say that. Especially last semester, just try to keep trying. (Patty Interview #3, p. 8) Patty empathized with those still struggling because she remembered the time before she began seeing results. Her advice to other students was to not give up, and to keep an open mind until something clicked.

Mark also suggested that part of his motivation stemmed from having met his academic standards at one point, and the drive to maintain these standards, similar to Patty's experience with the Dean's List:

When I started out, I started pulling a 4.0. There was another student in the class; he was actually a non-traditional student that I knew. He had a little competitive thing where he would ask me what my grade was on different exams and stuff so we ended up having this little competition. (Mark Interview #2, p. 4)

The competition with the other student motivated Mark to perform at his best; it was not to make the other student look bad. He utilized the presence of another strong student to challenge himself, and the results were top academic achievement throughout his Associate's degree.

Mark also explained how he channeled the challenge of a class into positively motivating energy: "My comp-science exams stress me out because I know how difficult they are, but I use that as positive energy to work harder and get ready for them and get focused. I just try to figure out how to pull things out" (Mark Interview #2, p. 14). Mark provided a strong example of how he continued to maintain a positive perspective on his ability to be academically successful in spite of potential challenges. This positive attitude helped him achieve regardless of the challenges posed by the learning disabilities, as described in the next theme, below.

Demonstrating academic success to others

There was a sense of competitiveness in Billy Bob's attitude toward succeeding in life, and when asked about it, he related his competitive attitude to sports and how it affected his motivation to succeed in college: "[It's] just knowing that in hockey, you always want to compete and win. So I just have that competitiveness and drive to succeed. I guess it rubs off" (Billy Bob Interview #3, p. 6).

This competitive nature appears to be related to his need to prove people wrong. Throughout his interviews, Billy Bob referenced feelings of not sensing support from teachers and instructors. He explained that he works hard to show others and himself: "I guess I've always liked to prove everyone wrong...But for my self-reassurance, and selfesteem, yeah, I can do it, I'm almost done" (Billy Bob Interview #2, p. 5). Billy Bob only had a few semesters left before graduation, so the end was in sight. He wanted to graduate in order to prove that a student with a learning disability, even one as bad as he felt his was, can graduate from an institution like ISU.

Shortstack was the first in her family to graduate from a two-year institution and begin attending a four-year institution. Much of her motivation to be academically successful came in her senior year of high school, when she was able to be part of a college prep course: "My senior year, I realized that I wanted to do something and that year my counselor said that they were having a class, only like 15 or 20 students could go into it, and he got to choose the students" (Shortstack Interview #1, p. 12). This prep course enabled Shortstack to see, for the first time in her life, that a student with a learning disability could, in fact, go on to college and be successful.

Now, while in college, Shortstack was able to reflect on where she was in high school, and how her school did not support her in the way she had been supported in college in terms of support and resources:

I think about where I started. From like, high school to here. And then I call my aunt!...In high school, like I said [earlier], they kind of just pushed me aside. And my aunt kind of brought this up to my attention. Like the math, it wasn't even algebra that they were teaching me senior year. (Shortstack Interview #2, p. 12)

Again, Shortstack referenced her aunt, who was a support and could help Shortstack reflect on her experiences in school. Shortstack recognized that her school did not give her positive attention; she felt they assumed that she was not capable of performing higher-level math, and so they passed her through to graduation without skills beyond algebra.

Shortstack also recognized that this put her at a disadvantage once she came to school, but she did not let that affect her efforts:

I'm not giving up! My goal is to graduate and everyone's like, "How long are you gonna be there, two years?" I'm like, "Oh, 3 or 4 years..." "That long, and you transferred in?" I was like, "Yeah, so?" As long as I finish, that's all I want. (Shortstack Interview #2, p. 13)

Shortstack was proud to be the first in her family to attend a four-year institution of higher education and to achieve academic success for her family, despite the challenges she faced due to her perceived under-preparedness.

Working toward success in the future

Mark expressed that his lower socio-economic status throughout childhood ultimately played a large role in his wanting to be academically and professionally successful:

I guess it's looking back at my background. I don't want to have to worry about, I don't want my family to have to worry about finances or where they're going to be living or how they're going to be living. I don't want them to have to worry about the power being out if they're going to stay living in the same house. I want to continue to work so my family won't have to do that. I want to be very good at it. And I have a drive just to help people in general so that's why I kind of like the government thing. It'd be helping protect the U.S. For me, my family, my future family, that's number one for me. I want to make sure they're taken care of. And I can do that! (Mark Interview #2, p. 3) Mark's intentions are altruistic; he worked hard with the motivation to help those around him, including his future family and his country. His goals involve providing for his family, as opposed to proving that he can do something. He already knows he can be successful.

Part of Mark's plan to prepare for the future involved setting the stage to be in a position to be successful after his graduation:

If I did not have the drive to go on it probably would not happen. Just trying to use the resources available, trying to not just work in my academics, but use the people around who can help with that. Then I also get involved with different organizations, and it's my involvement that's led me to get some of the awards that I have, which has then helped get scholarships and having that on my resume has also helped them in terms of getting more job opportunities. Plus, in getting involved in organizations, I have that much more source of network. The people I know can help me, too. It's about creating my opportunity, instead of just waiting for an opportunity to come around, and then going after it. (Mark Interview #3, p. 3)

This paragraph is one of the strongest representations of the type of person Mark is. He created goals, then created a plan to meet and surpass those goals. He focused on the long term and fed his motivation with positive thoughts in order to keep on the track for success. Note that in the organizations Mark listed, he held leadership positions and received various rewards over time. He was a dynamically successful individual.

During the interviews, Shortstack's sense of motivation matched Mark's in several ways. She had faced challenges transferring to a four-year institution, like Mark had. Moreover, both came from lower socio-economic backgrounds, and were highly motivated to be successful in order to provide for future family:

I look at it and I know I want to do this. I don't care how long it takes. I want to show myself that I can do it. It may take me 10 years or whatever total, but that kind of gives me motivation. And also, going in and seeing what I need to work on, and that's why I'm here. And then I look at my family, and most of my family has dead-end jobs. I don't want that. I had that in high school; I was a senior at high school working two jobs and then I woke up one day and said, "I don't want to do this for the rest of my life!" So I think about what I want for my children some day. I want to make sure I can afford it. (Shortstack Interview #3, p. 4)

Shortstack wanted to be able to provide for her family, whatever the cost. She recalled that she was unable to participate in some of the more expensive learning centers because her family could not afford it. When she mentioned that she wanted to be able to afford things for her children, she was alluding to the idea that they, too, may have special needs that would require additional funding. She wanted to help her family in whatever ways possible to be as successful as she was becoming in college.

Summary

The participants in this study were highly motivated to succeed academically, but this motivation came from different areas. Patty and Mark achieved high honors academically in college, and sought to maintain that, whereas Billy Bob attempted to maintain academic success to be able to qualify to complete athletically. Billy Bob was also motivated to succeed to demonstrate his ability to do so to others who had doubt, similar to Shortstack, who was motivated to succeed in order to be a representative of success to her family members. Shortstack and Mark were both motivated to succeed academically to be prepared to provide for their future families.

Challenges of Life with a Learning Disability in College

The participants in the study were aware of the challenges they had overcome as a result of attending college with a learning disability. For all participants, time was the major issue; there was never enough time to finish readings or to learn the information well enough. However, for each participant, additional challenges arose as well.

Running out of time

Because college is typically more challenging and time-demanding than high school, it is typically more salient as a challenge for students, as the participants described. Billy Bob reflected on his thoughts as a young student in elementary school:

I would say then just like, oh man, I wish I could...you know, as I got older it did not matter, but when I was younger and stuff...yeah I was always like, "Oh man, I wish I could, you know, read that quick or read that or do stuff or..." My mom always wanted us to like, read books and stuff but we'd go to library and get a crap load of books and I'd just look at the pictures because I could not read it. And I was always just was like, "I wish I could read it." (Billy Bob Interview #1, p. 14)

During this time, comparison of himself with others occurred frequently, which explained the growth of his competitive nature and increased motivation to prove others wrong, as described above. Billy Bob recognized that the reading speed caused him to be significantly different from others, and it was a characteristic that he could not easily change about himself as he might be able to do with being more social or working harder at sports. At a young age, he found himself taking too much time to read, thus causing himself to stand out from others.

Unlike Billy Bob, Patty did not stand out from others due to her poor reading speed. Instead, Patty described that during secondary school, her mother would step in and support her during times when assignments became too time-intensive:

So I'd just re-read and re-read it. So then I think, I probably asked her or she probably offered 'cause she realized I was struggling but, I dunno. It just ended up taking way too much time so she kinda, I guess helped more. And then papers and stuff, she would always help with, too. (Patty Interview #1, p. 3)

The challenge of the learning disability for Patty was slow reading speed and comprehension. Patty's mother, by offering assistance, helped Patty to compensate in the face of this challenge. Although Patty was unclear who first initiated this cooperative study situation, herself or her mother, what is clear is that it became a natural relationship between the two until Patty transitioned to college.

Shortstack, like the other participants, had challenges with being able to feel as though she had enough time to complete assignments and to study. She explained that although she feels like an average student, she works differently:

I think I am about the same, as with classes and stuff. I think I'm a little bit slow, like, usually people take four to five classes, and I'm only taking three. And then, that's still a lot of work. I think I'm doing as much work as they're doing when they're taking their four classes! (Shortstack Interview #2, p. 5)

Shortstack sometimes found it difficult to explain this concept of taking additional time to her friends, especially when she was taking fewer classes. Moreover, Shortstack had experienced the pain of working hard and spending the extra time and not seeing the work pay off: It's a lot more work than a normal college student, well, I don't know but...a different college student. And...it's just, you get really frustrated. Especially like if you worked really, really hard, and you did really bad on a test...and when that happens to me, I just feel like crap! So it's like, I spent all those hours, and I just didn't get it, or what did I do wrong? (Shortstack Interview #2, p. 12)

Nevertheless, Shortstack explained that even in the face of disappointment, she remembered where she came from and where she wanted to go, drawing on her positive attitude and using her motivation to help her continue to try new things and work hard.

Time was an issue for Mark, especially in taking exams:

When I started Iowa Central, I did not [use accommodations for exams] at all; I just talked to my instructors as I needed. But when I got here, it was after the first test that I failed that I realized, hey, I just did not have time to finish it, so I went and got [help from] Disability Resources. (Mark Interview #3, p. 2)

The additional time on exams allowed him to perform up to par with other students in his class, just as it helped the other participants who struggled with needing additional time to read and comprehend written information.

Fitting in with a learning disability

For Billy Bob, as discussed above, fitting in with the popular crowd from elementary through high school was a major priority. He found that the learning disability hindered that because of the stigma of attending the supplemental resource room: "I definitely needed to go there, but it sucked at first knowing I had to go there" (Billy Bob Interview #1, p. 9). As discussed above, Billy Bob had his own perception of what it meant to be a student in the resource room, and although he acknowledged he needed to be there, being normal was an

image he tried to project. He went on to explain how he appeared to live a normal life in high school:

I had girlfriends that were good looking, the good looking girls in school and stuff. So it was like I lived a normal life, but there was a time out of high school, like 30-40 minutes where I had to go there and just be that kid. But then after that, I was a normal kid that just lived with it. (Billy Bob Interview #1, p. 9)

The resource room continued to be a stigma that kept Billy Bob from feeling like a totally normal student. However, perception of fitting in changed in college because "when I came to college, you could not tell which kids had a learning disability. High school weans [the stereotypical resource room kids] out" (Interview #3, p. 11). As a senior in college, Billy Bob did not feel as though students could tell he had a learning disability because everyone looked the same and therefore appeared to be on a more equal ground.

For Shortstack, part of the challenge of having a learning disability was helping others understand. However, she later admitted in the final interview that sometimes the only people who can truly understand are people with similar experiences: "I think any kind of disability will help other people understand. I think that's the main thing-either people who have struggled through it or people who have kids or families who have had that disability" (Shortstack Interview #3, p. 2). She could see how people with disabilities or similar experiences could empathize; those students who took five classes could never understand what it felt like to take three classes and always be working harder than most to succeed.

Mark's need to fit in came in the form of securing his place in the competitive job market, and preferred to highlight his intelligence and his abilities as opposed to his areas of challenge in his job interviews. The job interviewing process took place during the interview series and therefore influenced Mark's perception of how the learning disability could negatively affect his getting a job offer:

Yep, if you can prove it, it's illegal. But there's a million ways that they don't have to. And I'm not even saying that they would sit down and say or even think out loud, well this person's dyslexic, I'm going to rule him out. I don't think it's so much that. But you know, they might think to themselves, dyslexia might cause a little bit of slowness on certain types of things whereas these other people might not be affected. And yeah I can't consider that because legally I can't, but even if they're not consciously thinking about, that's still rolling around in their subconscious. So they're narrowing it down, but they still don't really know which way to go. But they say, "I just have a good feeling about this person," and that might be because in the back of their minds, I might not be that person simply because of the potential weakness. When I go out, I want to go out strong. (Mark Interview #2, p. 10)

Mark recognized that employers cannot legally discriminate against him if he were to disclose his learning disability in an interview or on a resume, but he still perceived that it could cause a negative connotation against his candidacy for a position. Moreover, he had had a similar experience happen to him before in which he felt stigmatized for having a learning disability:

Oh, I'm open with them once I start working. Once I'm in it, and they can see me work. My problem is that when you go into a job interview, they're looking for ways to rule you out, and I don't want to give them anything that could do that. But once I'm in the job, they can see how I work and once they see that, they won't use the preconceptions, even if they knew ahead of time and I still got the job. I actually had

this happen when I worked at a health care company in Fort Dodge where my mom worked. They knew ahead of time that I had a learning disability, and I started and they came in making ridiculous rules, trying to overcompensate for things. Instead of trying to write out stuff, we had to label glasses and stuff, so instead of me writing them out, they had me cut them out of something! Anyways, it was on the preconception that I have a learning disability and we're going to have problems in these areas. Well, if I start working, they can see how I work, and they won't have any preconceptions about what my work will be and they won't misjudge how I can do the job. (Mark Interview #3, p. 3)

In the scenario, Mark self-disclosed the disability before he began the job, and he had to work against the stigma to prove himself. In his professional career search, Mark has prepared himself against such stigmatization by serving in leadership roles of organizations and having a range of other professional experiences, as described in the discussion of Mark's motivation, above. Again, Mark worked to promote himself as a strong candidate for the long run, so that he can be successful in many ways down the road.

Along with this concept of fitting in with others was the idea of feeling comfortable with oneself. Patty insightfully described her perspective of the time it takes to get comfortable with the learning disability: "It takes more time, more time as in physically studying, but yet more time mentally preparing yourself to deal with it and see how to go about dealing with it" (Patty Interview #3, p. 17). Patty had a positive outlook on living with the challenges of having a learning disability; it took her more time, but she had hope that changes would continue to take place. In time, Patty could most likely reach a point where

she is comfortable asking an unfamiliar reader for assistance, although she may not currently be in a position to do so.

The process of getting the help needed

Patty was able to illustrate the difficulty in comprehension and how it first played a role in her getting tested for a learning disability:

I knew that I was having troubles with reading and even in college I would read stuff and not understand it and then go to talk to the teacher about it and they'd ask me a question and I'm like, "Well I read, I just don't know!" (Patty Interview #1, p. 5) The difficulty in comprehension and the inability of Patty's' instructors to aid her learning prompted Patty to then visit the academic advisor who would ultimately encourage her to get tested for a possible learning disability. In this situation, the challenge of the disability proved to be beneficial because it actually helped Patty get on the track to getting the help necessary to be academically successful in college.

Once Patty began receiving accommodations, the learning disability posed a new challenge; Patty had to self-identify her disability in a number of ways, and sometimes that meant working with a reader for exams. She described times when she would get nervous during exams because of a discomfort with the reader: "I think it's more about being comfortable with the person, so I can be like, 'Hold on, what is this saying? This question sounds ridiculous to me…' you know?" (Patty Interview #2, p. 13). The learning disability was still new to Patty's identity, and although over time she had grown more comfortable with talking about it, she had not yet become confident asking instructors for help.

Mark's challenges with the learning disabilities differ from the other participants in that he was diagnosed with a genius level IQ with significant differences in his ability in reading speed. In terms of the genius level IQ, the learning disability was initially a challenge because it went undetected until about 3rd or 4th grade for Mark:

I had a larger IQ so, um, so I kind of masked the fact that I had a learning disability because a lot of times I could do well. Like, I could go into an exam where, um, most students would spend, you know most of the exam going back over and over and over, and I would do it once and get it right and uh, so, I mean there was things like that that made it hard for them to see it. But uh, they said based on the fact, despite, uh, how I scored on some of these other tests, the difference between my, uh, my speed level and such, showed a sign of dyslexia. And showed also reading disabilities. (Mark Interview #1, p. 4)

As discussed above, the genius level IQ made it possible for Mark to compensate for the learning disabilities, which therefore went undetected and un-accommodated for a long period of time during secondary school.

The genius level IQ also made it difficult for Mark to get adequate supplemental help out of the resource room, which was called Chapter 1 in his school district: "I was in Chapter 1 up until uh, up until 5th grade and I remember going in one day, and they said, 'You know, they're like, you know everything we have to teach you. You know everything. We can't teach you anymore!"" (Mark Interview #1, p. 9). Although Mark still required accommodations for his dyslexia, the teachers in that room found it difficult to challenge his learning because his natural intelligence made it possible for him to grasp concepts quickly. It was unclear if the teachers in this room were experienced in helping a student with learning disabilities in Mark's unique position of having a genius level IQ. Lastly, one of the challenges for Shortstack was finding ways to enjoy reading when it had been difficult for so long. She tried to explain it to a friend:

We came up with the learning disorder and how I hate reading- 'cause she's a big reader and she asked me why I don't like to read and I was like, "because I don't understand a lot of the stuff I read." And I was like, "I have to read it over and over and it just...it frustrates me so I just put it away. And I don't want to do it." (Shortstack #1, p. 15)

In some ways, Billy Bob had a similar experience, and he used hockey as an outlet for getting away from the stresses of studying and reading. Shortstack, however, did not have such a release. She did, however, have the strong determination to continue to work through the challenges of the learning disability in order to be successful in the long run. She recognized that her disability was her own worst enemy, and she was willing to face it in order to meet her personal goals.

Summary

One of the biggest challenges of having a learning disability for all of the participants was the significant added time that was needed to complete reading assignments both in and outside the classroom. Another challenge that the participants faced was trying to fit in with others and to have others understand the learning disability, such as in the classroom for Billy Bob and Shortstack, or in employment for Mark. Moreover, Patty had to learn how to accept herself. Another challenge that the participants faced was finding what was necessary to obtain the help needed to succeed academically, but as I discussed above in a previous theme, understanding oneself and needs motivated some participants to academically achieve in the future. Interactions with Unhelpful Faculty

When I began this study, I was under the impression that my students would have had some kind of significant interaction with instructors, either positive or negative, based on the findings from my pilot study. Moreover, I included questions about interactions with faculty in my interview protocol (see Appendix E). My anticipation of these findings was further supported by the findings that SLD who adjusted well to college had faculty members as support systems (Hauser, 1994; Smith & Nelson, 1993). However, my participants seemed to rely heaviest upon themselves and the DR office resources. In fact, the participants found that, sometimes, it was not that professors were not necessarily extremely positive or negative influences, but rather just unhelpful and unknowledgeable of how to help SLD.

Billy Bob explained this lack of understanding, and I asked him how he approached faculty like this:

I say, do you understand this? Do you know that you have to do this? And then like today, I had my teacher fill it out, and she's from England, and it's about her second semester here, and I was like, have you ever seen one of these or filled one of these out? And she's like no. What do I do? And I said, well you sign it and go over it and then get back to me if you have any questions. And then she's like okay. But I have a feeling she won't get back to me so I'll have to confront her on it. (Billy Bob Interview #2, p. 3)

In his example he mentions that she is an international faculty member, and we discussed his understanding of how ADA laws are unique to the United States. Nevertheless, this is an example of a participant perceiving that a faculty member does not understand how to help him succeed academically by implementing his accommodations. Mark experienced a situation in which he perceived that his instructor did not believe in giving students accommodations, although in the end, he acknowledged that she complied: "I had one [instructor] and she followed [the accommodation form], but it was as though it was because she was obligated, you could tell. It was like, you could tell that she didn't necessarily believe in it" (Mark Interview #2, p. 8). Mark did not feel that she was a helpful instructor because she made him feel as though she did not support helping him in his academic success by signing the accommodation forms.

Patty also had an encounter with an instructor who she found unhelpful in the accommodation process:

[I had one instructor who] kinda, didn't yell at me, but was...I dunno, [in] not the nicest tone, and basically told me, "I cannot sign this for you in class," like no one else is in the class. The next group was not coming in yet. And he was just like, "Um, you're going to need to make an appointment with me." And I was like, "Okay, well you know, can I stop by later today or tomorrow? When will you be there?" He's like, "No, you need to email me in advance and make an appointment." And I was just like, "Whoa!" And then, he asked my name and everything, so I told him, then when I did get to his office, he was just like, "Yeah, I'm not allowed to [sign the accommodation form]." But yet, first when I got to his office, he was like, "Who are you and why are you here?" And I'm thinking, "Why do I need to schedule and make an appointment with you, if you're not even gonna know that I'm coming?" He had no idea! He was like, "Oh! Did you make an appointment?" "Yes, can you not just look at your computer?" And then from there, I kind of just, depended on how they

are, [determined how I would approach different instructors.] (Patty Interview #2, p. 10)

Patty described an instructor who she perceived to be unhelpful in that not only did he ultimately not understand that he could sign her form, he made the process of helping her more lengthy than she had experienced with other instructors, and did so in a manner that she found offensive when he seemed to forget her scheduled appointment.

Last is Shortstack's experience with a faculty member who was not initially helpful in her process of receiving accommodations in a class:

He just, I don't think he understood [the accommodation process]. I was working with Disability Resources because he didn't understand why they couldn't come over to his office and [proctor my exam during his open time]. He had a student who did better without [having accommodations during exams]...so he thought I would do better without [leaving the classroom for a quiet, low distraction room, as well]. And he kept on calling them "those people." And then he got really mad at me because I went back and talked to the Disability Resources staff and they sat down and talked to me and he got really mad, like, "Why did you go to 'those people'?" He just wanted me to have a friend come over and read the test [in his office] and I wanted to make sure that was okay because it was my first semester [getting accommodations at ISU]...I had one friend who was [a business major as well] and he said he would [proctor my exam for me], but he said it would be really hard [for him to proctor honestly] since he'd already taken the class! (Shortstack Interview #2, p. 8)

Shortstack perceived that this instructor was not helpful in her academic success because he not only seemed to not understand the accommodation form and process, but he also offended her by yelling at her at one point.

The above experiences were negative for the participants and represent instances of unhelpful faculty who the participants perceived to lack knowledge of the accommodation process and did not demonstrate openness to assist the participants in their academic success. Although the participants felt that for the most part, they had compliant and openly helpful faculty members, it is important to note that there exist faculty members such as these, and it is important to consider these negative experiences when universities develop methods of educating their faculty members on how to best serve all students in the classroom.

Summary of Thematic Development

To summarize the findings and data analysis, five themes were developed in order to identify commonalities within the lives of the participants, as well as to help answer my four original research questions, responses to which are summarized in the final chapter. The five themes included the role of family in providing support, self-awareness in relation to the learning disabilities, the sources of motivation for persistence toward graduation, the challenges of life with a learning disability in college, and interactions with unhelpful faculty. The themes were developed based on content from interviews focusing on students' experiences from kindergarten through college. Because the study was limited to participants who were juniors and seniors in college, the majority of the responses participants gave were related to experiences in college, which impacted the implications for future studies and practices, addressed in the next chapter.

Although no two participants led identical lives, there were some similarities within the themes that connected student experiences. For all the participants, parent involvement played a crucial role in the students receiving aid throughout secondary school as well as in college. Some parents played more aggressive roles when school districts did not comply, as was the situation with Mark and Billy Bob. Other parents were strong supporters who provided direct assistance to help students, as with Patty's mother and Shortstack's father. Personal background, in relation to socio-economic status, also had an impact on participant experiences in getting aid in school for the learning disability. For Shortstack and Mark, growing up in a lower socio-economic status motivated them to work hard in order to provide more for their children than their parents had not been able to provide them. For Billy Bob, growing up in a higher socio-economic status allowed him to beat a negative stereotype of students who used the resource room at his school, providing him with a reasonably stigma-free childhood amongst peers, although this was arguably aided by his athletic prowess.

It was important for the participants to learn what their challenges were in regard to the learning disability, such as needing additional time and learning strategies, so that the participants could in turn utilize this knowledge as strength to overcome the challenges. All the participants also encountered a negative experience with a faculty member during college who they felt did not understand their needs or the process under which a faculty member should use to provide accommodations. Understanding the information demonstrated by the thematic development contributed to the suggestions listed in the final chapter for future studies and practices.

CHAPTER 6. DISCUSSION, IMPLICATIONS, RECOMMENDATIONS, AND PERSONAL REFLECTIONS

Discussion

This study on college SLD focused on the aspects of student lives that aid in their academic success and persistence toward graduation. The students described in the study had documented learning disabilities that significantly impaired their ability to either read quickly, comprehend clearly, or a combination of the two. Needless to say, the learning disability impacted student life both in and outside the classroom, encompassing all aspects of academic performance: studying, learning, memorizing, note-taking, test-taking, etc. *Research Questions Revisited*

Having discussed the background and rationale for this study, the related literature, the methods used, descriptions of the participants, and the data analysis, I now discuss the conclusions, revisiting both the original research questions and the presuppositions identified at the beginning of this study. The original research questions for this research project are reiterated below:

1. What factors outside of the classroom lead to academic achievement or success for SLD?

2. When or how does academic success become salient for SLD?

3. What do SLD know about their disabilities, and how has their level of knowledge impacted them throughout school?

4. How do the stories of the students interviewed compare to the past research concerning factors influencing academic achievement for SLD?

It was important to me to learn as much about the experiences of my participants as possible in order to help explain some of the answers to the original research questions. I had students describe not only their experiences in college, but also their experiences from elementary school through high school. I asked participants not only about their families, but also their friends, teachers, and mentors.

The first research question addressed factors outside the classroom that led to success, and three of the four themes developed from the data analysis directly respond to this question: *the role of family in providing support, self-awareness in relation to the learning disabilities, the sources of motivation for persistence toward graduation*. Strong support from parents and extended family members helped my participants receive the help and guidance they needed from early ages. The process of how their learning disabilities affected them in turn helped the participants reflect upon how they themselves worked best. Above all, the drive to succeed ultimately led each of my students down a path of strong willingness to persevere through difficult academic times, which all four of my participants expressed experiencing. The answer for academic success was not learning to take notes a certain way or how to memorize quick facts for a quiz; it was learning who they were and recognizing the resources available to help them along the way.

Recall that within my literature review of relevant research, I described articles associated with *support systems*. It was a topic commonly found in past research and is supported by the findings of this current study. I noted that Siegel (1999) described a relationship between academic success and self-esteem: "People with learning disabilities often experience difficulties with self-esteem and self-concept, and, as they proceed in school, experience more and more failure" (p. 171). My students represent the inverse of the outcome that Siegel (1999) described for adjustment of SLD to college: they were welladjusted; Mark, Billy Bob, and Patty all held some type of student leadership role on campus

as described in the participant biographies. All the participants had found a niche on campus in which they were able to develop academic success when away from their parents, who had supported them directly prior to college. Their strong self-concepts are explained by their knowledge of the challenges associated with the learning disabilities and how they can be empowered to overcome those challenges. This idea of support systems was also described by Heiman and Kariv (2004), who explored the transition from high school to college for SLD. They found that the students had much more support from friends in college, as opposed to parents during secondary schooling, and that they used more learning strategies, such as marking up reading material, than secondary school children. Similarly, my participants became involved with social peer groups and resources on campus that helped them become successful, although their parents remained support systems off campus.

My second question pondered when SLD become aware of their academic success. My theme of *self-awareness in relation to the learning disabilities* spoke to this idea. My participants first struggled, then sought out resources for help, and slowly learned from that gained knowledge. The process of understanding themselves took time, but with guidance, they learned how to help themselves. Recall the section in my literature about *self-reliance*. Beale (2005) explained that students have a responsibility to understand the laws regarding LD, what services are available at the school, what services they actually need to be able to be effective self-advocates in the accommodation process. Although my students spoke little of laws, they all understood the services available; one of the prerequisites to participate in the study was to be a SLD currently receiving accommodations from the DR office at ISU. They self-disclosed to receive the accommodations, taking the initiative to seek out help. Brinckerhoff, McGuire, and Shaw (2002) added that in order to achieve academically,

students must possess self-determination. This speaks to my theme of *the sources of motivation for persistence toward graduation*. Each of my students found a reason to continue through personal struggles, employing the self-determination that Brinckerhoff, et al. described.

The third research question asked what my participants knew about their own disabilities. Not one participant could give me a textbook definition of their type of learning disability, but I was not looking for that. Each did, however, explain to me how the learning disability challenged and affected them in and out of the classroom setting. These responses were most heavily conveyed through my theme of *the challenges of life with a learning disability in college*, in which my participants described the extra time needed to complete assignments as a common experience. In my literature review, I noted that Barga (1996) described that SLD adopted techniques for managing a disability in college: coping or passing. I would describe the coping mechanism of my participants as discovering what each individual needed to succeed, and then seeking out the resources available. Moreover, the findings by Trainin and Swanson (2005) showed that SLD benefit more from high strategy use during studying, and that those students who were strategic about their learning had as high a grade point average in college as those students without a learning disability. The participants in the current study first learned how their learning disabilities affected them, and then developed academic success strategies to overcome these effects in the college setting.

My final research question considered how the experiences of my participants compared to those described in that literature findings I described above. One of the differences between the literature and the experiences of my participants involves the concept of *support systems*, which I mentioned above. Some of the literature reviewed showed that these support systems involved faculty, mentors, advisors, or tutors (Smith & Nelson, 1993; Hauser, 1994). However, when I asked my participants about interactions with their instructors (see Appendix E), none discussed personally significant interactions with instructors that were positive. As I discussed in the final theme, instead of describing a significantly positive instructor or faculty member, each participant instead expressed a significantly negative experience with a faculty member who the participant found to be unknowledgeable of how to help the student succeed, as well as lacking the inclination to help the student succeed academically.

From the interviews, I gathered that my participants seemed to rely heaviest upon themselves and the DR office resources, and some of the participants noted the benefits of Vocational Rehabilitation in supplement to DR. This finding suggests implications for future research as it is important to explore if this discrepancy is limited to my participants only.

My literature review also contained a qualified section about *ADHD and learning disabilities*. It was not the intent of this study to explore the comorbid relationship between ADHD and learning disabilities (The Encyclopedia of Learning Disabilities, 2002). However, as I explained in the participant biographies in Chapter 4, Mark, Billy Bob, and Patty continuously disclosed their perceptions of ADHD on their academic progress and how it affected their ability to be academically successful. There are implications for future research to explore how students perceive ADHD affecting their academic success, and how it compares to the affect of the additional presence of a learning disability, as well as to why and when students with ADHD begin to perceive that ADHD is categorized as a learning disability, when, according to the DSMIV (2000), it is not a learning disability.

Presuppositions Revisited

I made several presuppositions before starting the data collection for my thesis, based on my own professional experiences in the DR office at ISU. My first presupposition was that student affairs professionals, both in disability resources and around campus, can play a significant role in the college experience of SLD. I had gathered research that had supported the idea of members of the university community positively impacting the college experiences of SLD (Hauser, 1994; Smith & Nelson, 1993). Each of my participants recognized that the DR staff played a large role in their academic success by providing the resources and knowledge needed to transition to college work. Patty specifically related the story of her first hearing of the possibility of having a learning disability from her academic advisor; he was the first person in Patty's educational experience to recognize her flailing efforts to succeed, and to suggest that there might be another reason for her continued failure until that point. The actions of this academic advisor are in line with the research by Smith and Nelson (1993) that found 30% of the participants in their study reported that faculty were supportive or made attempts to work closely with them in the classroom, and noted that this was important for their academic success. At ISU, many times faculty members serve as academic advisors as part of their contribution to the university, so it is important that faculty and staff are both aware of their potential impact on SLD, even though on the whole, the participants did not discuss at length the positive interactions had with faculty members.

My second presupposition of SLD in college was that their experiences from elementary and secondary school years can impact the academic success or failure of a college SLD. The participants in this study all recognized that they were successful academically because they had the determination to find ways to be so; they were

intrinsically motivated. From my limited sample of four participants, it was not evident whether time of diagnosis, pre-college admittance versus post-college admittance, had a significant effect on ability to succeed. Further research is needed to expand this knowledge.

My third and final presupposition expressed that parents' income and involvement will impact self-advocacy and resources available to SLD. My theme of *the role of family in providing support* defends the supposition that parental involvement will help students succeed academically through school; the parents of my participants found ways to support their students from early ages based on the needs of the individual student. Moreover, the motivation of Mark and Shortstack to become more successful than their parents economically supported the idea that parental income will influence resources available to students. Shortstack specifically noted that she was not able to attend special programs for reading outside of the school district because her parents could not afford it. However, the experiences of my students do not clearly show whether parental income played a direct role in academic success and further research is needed to explore this possibility.

Implications for Practice

The participants' positive experiences with the Disability Resources office and the Vocational Rehabilitation office on campus demonstrated that continued funding and staff support are needed to improve these offices across the country so that adequate services are available not only to those students with diagnosed disabilities who are looking at colleges, but also for currently enrolled students who feel they may have an undiagnosed disability. Staff in these offices should understand the needs of college SLD and be willing to adapt current practices to meet those needs within reason.

Faculty, staff, and students alike may learn from this study several important points of information. First, although a student may be diagnosed with a learning disability, individual differences must be considered. As discussed in Chapter 1, a learning disability could impact reading, math skills, written skills, comprehension, or learning, or a combination of the above. Moreover, students are not legally required to self-disclose the learning disability, nor its impact on student life, to anyone outside the designated Student Disability Resource center on a college campus.

Second, the salience of the learning disability will change from student to student. This may be impacted by the amount of time a student has been diagnosed, as well as the resources available that have educated the student on areas of strength and weakness, and skills to maximize or improve those areas, respectively. Salience of the presence of the learning disability may also affect a student's motivation to seek out help; the participants in this study sought out help for areas of improvement of which they were aware, but such selfadvocating may not transfer to all SLD. It is also important to recognize that the students in the study were juniors and seniors with experiences to reflect upon. Students who were freshmen or sophomores in college would most likely not have had the time to develop such reflections on personal experiences for the purposes of this study.

Future practices should also involve training on how to address the possibility of a learning disability with a student who is not currently receiving accommodations. Such training can benefit instructors who can address the issue in an unobtrusive way that keeps the student from feeling offended or stupid. Training can also benefit academic and student affairs staff who work with students who are having academic difficulty in classes and may show signs of learning disabilities. This was the case with Patty, whose academic advisor

helped her find the Disability Resource office, which later diagnosed her with a learning disability in reading. Appropriate training can help lead students to the appropriate services on campus or in the community so that they can continue to be successful at college as soon as academic challenges arise. Moreover, training will help prevent faculty and staff from inappropriately self-diagnosing students with disabilities; this training is not meant to create educated diagnosticians, but instead empathetic helpers on campus who can suggest appropriate resources for students on an individual basis.

In addition to this training, improved means of communicating the accommodation process to both new and returning faculty is needed so that all are educated on how to best serve students. My fifth theme of *interactions with unhelpful faculty* expressed examples of interactions with instructors who either did not understand the accommodation process or did not help the participants feel as though they were being sincerely assisted. It may be helpful to not only explain the process of completing accommodation forms, but also to explain the rationale as to why accommodations may be in place and how accommodations serve SLD in ways that do not compromise the integrity of the course.

Because family played such dominant roles in the development of the participants throughout elementary and secondary school, it is also important to recognize that it is likely that parents will seek access to information on how to help their students with learning disabilities succeed in college. Mark and Shortstack both discussed the involvement of a parent or other family member in helping maintain accommodations throughout elementary and secondary education years, but explained that such support adjusted into emotional support when they entered college. In Patty's case, her mother was also very actively involved throughout elementary and secondary education years, but in college provided more

emotional support when Patty was finally diagnosed in her sophomore year. Billy Boy was the only participant whose parents maintained an active role in ensuring that he was receiving his accommodations; the other participants had grown more independent by college. Parents need to be educated on the differences between high school and college, especially in terms of academic accommodations. Then, if students do alert parents of academic difficulty, parents would be aware of possible resources on campus to then suggest to the student in order to promote the self-advocacy that Patty, Shortstack, and Mark had developed.

Recommendations for Future Research

The findings from this study suggest implications for future research. Throughout the discussion above, I noted several areas needing additional research in the future. However, there are several additional points of interest that I would like to cover. First, research including a sample larger than four students is needed in order to better understand the different issues that SLD face at college. This study was limited to four participants and much larger samples from multiple kinds of institutions of higher education may provide significantly different results. This study is simply meant to guide those who may potentially interact with college students with disabilities so that they may understand the experiences of students and thus serve as better sources of support on campus. Also, research to understand issues SLD face other than in the classroom is important in order to understand how learning disabilities impact daily life activities.

As a result of the participants' expectations of the roles of instructors, research is needed in order to explore what instructors understand to be their roles in the lives of SLD. Moreover, it is necessary to determine what training, if any, instructors have had and to then evaluate how this training has impacted their perceptions of their roles.

There are differing definitions concerning what constitutes a learning disability. Throughout this study, I noticed that some participants identified ADHD as a learning disorder. However, as noted in Chapter 2, the *Diagnostic and Statistical Manual of Mental Disabilities* (2000) categorized ADHD as a behavioral disorder. Future research is needed to determine whether to consider ADHD a learning disability and whether to include students with ADHD in a study of SLD. This research suggests that the participants perceive that the presence of ADHD often impacted their ability to learn and to be academically successful.

Additional research is needed to understand not only how many SLD across the country are currently enrolled at colleges, but also whether they were diagnosed with learning disabilities after coming to college or during kindergarten through high school. This study included three participants who were diagnosed in secondary school (Billy Bob, Shortstack, and Mark), and one diagnosed after being enrolled in college for several semesters (Patty). Additional research could determine the percentages of students diagnosed before and after enrolling in college, as well as the different needs of each group. For example, Billy Bob, Shortstack, and Mark all participated in a supplemental resource room for much of their time from kindergarten to high school. However, Patty was diagnosed in her sophomore year of college. She was much more comfortable than the other participants in trying as many options for academic assistance as possible, having gone so long without any accommodations from the elementary and secondary school systems. It would be beneficial for student disability resource practitioners to have more current research on the different needs of those students diagnosed with a learning disability before college and those diagnosed after enrolling in college.

Personal Reflection

This thesis started out as an unrefined research proposal outline for Research and Evaluation 550. The purpose was originally geared toward improving my own knowledge and understanding of the students that I was working with in my assistantship: SLD. At the time, my knowledge was limited to two undergraduate psychology courses: one on the psychology of reading, and another on "abnormal" psychology. Prior to taking the assistantship in the Disability Resources office at ISU, my practical experience of SLD was limited to that of my mentor work as a resident assistant during my undergraduate career, and based solely on what my students chose to self-disclose, which admittedly, was very little. All of this led to my motivation to learn more about the students with whom I was working as soon as possible during my first semester of graduate work.

My knowledge and empathy toward students with learning disabilities has increased exponentially throughout my work on this study. The strikingly different personalities of my participants helped me develop my interviewing skills by showing me how to match my questioning and listening to the individual needs of each participant. Moreover, my participants were excited to tell me much more than the limited scope of my interview guideline, and their enthusiasm encouraged me to continue, even during fleeting moments of self-doubt.

One of these moments came in January after several weeks of break from classes on campus. My students were busy beginning a new semester, and I was pressed to learn patience to work within the boundaries of others' schedules as my own time on campus dwindled. I had to learn trust that my participants were as excited to assist me as I had believed in the beginning, and I learned confidence in actively pursuing communication in

order to ensure that the next interview did, in fact, occur. These skills of patience and communication will without a doubt assist me as I embark on a full-time, professional career in student development services within residential life, where I must be patient in waiting for a student to be ready to come to me for support, and able to communicate effectively when the time comes.

I underwent a significant amount of development and maturation throughout this process. My skills as a researcher have continued to improve, and I have been able to see the fruits of this through the completion of projects for different courses for the masters program since the start of my data collection. My maturity as a practitioner has also developed as I have learned to be more attentive to the students with whom I work by being respectful of their readiness to share with me, as well as by my own pacing of questioning and listening during meetings.

Most importantly, the completion of this project has contributed to my confidence as a member of the professional field of student affairs. My young age has been a factor that I have allowed to play a role in my self-confidence in working with students and members of my peer group in the professional field. Completing this thesis has allowed me to see myself not as someone younger, but as someone with a different range of skills and abilities that should be capitalized on, as opposed to doubted because of having several years less professional experience. I see that there is no one perfect path of doing things professionally; I have created my own path that involves a love of exploration of both my self and others.

Overall, I found this experience to be both challenging and rewarding. I maximized my already strong organizational skills by maintaining a persistent path for the completion of this thesis, and I overcame my own self-doubts by never quitting, although the thought of

doing so seemed tempting for some time. As my work on this project drew to a close, I became aware of the significance of a master's student completing a thesis in two years. Given the chance to re-do my decision to complete a thesis, I would do it again and encourage others to find the personal strength to try such a challenge. I can think of nothing more rewarding and fulfilling than the writing of the final chapters of this great adventure, and I hope that others in my position consider themselves up for such a challenge as well.

APPENDIX A: SMITH and NELSON (1993) STUDENT INTERVIEW

- 1. What is your class standing (e.g., freshman, sophomore, junior, senior, graduate)?
- 2. What is your current GPA?
- 3. What is your disability?
- 4. How long have you attended the University?
- 5. What does it mean to be academically successful?
- 6. Why do you think some college students with disabilities are more successful than others?
- 7. Who would you talk to if you were having difficulty with your work or other academic matters (or who would you advise someone with disabilities to talk to)?
- 8. What are the obstacles students with disabilities face in trying to succeed in colleges and universities?
- 9. Who are some figures who have had influence on your success as a student?
- 10. Compare your experience in high school with your experience at the University.
- 11. Have you ever thought about leaving the University? If so, why?

APPENDIX B: INTERVIEW QUESTIONS FOR PILOT STUDY

- Can you start off by telling me your name, classification year at ISU, and how many semesters you have attended ISU?
- 2) What made you decide to come to ISU?
- 3) What is your major, and why did you choose it?
- 4) How would you describe the grades you receive in classes?
- 5) How are these grades similar or different to the grades you got in high school?
- 6) Can you tell me about what you know about your learning disability?
- 7) When were you first diagnosed with the learning disability?
- 8) When did you or your family first notice that there were signs of a learning disability, prior to diagnoses?
- 9) How did you feel when you were first went for testing for a learning disability?
- 10) What are some of the things you remember thinking about at that time?
- 11) Who did you tell, and how did you tell them, after you were diagnosed?
- 12) Have you ever been teased for having a learning disability? If so, by who?
- 13) How do you think your academic success has changed since being diagnosed?
- 14) Do you always come to Disability Resources for accommodation forms?
- 15) Which classroom accommodations do you receive for each of your classes?
- 16) What made you first start using accommodation forms?
- 17) For which classes have you had instructors sign accommodation forms?
- 18) When have you ever not used accommodation forms for your classes?
- 19) What makes you not use accommodation forms in classes?
- 20) How do you approach your professors when you want your forms signed?

- 21) When do you usually take the forms to your professors?
- 22) Can you describe some of the various reactions that you have gotten regarding accommodation forms?
- 23) How do you feel when you talk to professors?
- 24) How do instructors make you feel when you go talk to them about accommodation forms?
- 25) When, if ever, have you disclosed your learning disability to an instructor?
- 26) Can you describe any times when instructors have forgotten to give you accommodations?
- 27) How did you feel about this?
- 28) What did you do in response?
- 29) How do you feel during exams?
- 30) How do instructors treat you during exams?
- 31) Can you describe a time when you have felt stigmatized for having a learning disability?
- 32) How would you describe the life of a college student who has a learning disability?
- 33) If you could change anything about that, besides your learning disability, what would you change?
- 34) Where do you go for help or for support?
- 35) What advice would you give to another student with a learning disability who is going through college classes?

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APPENDIX C: EMAIL TO POTENTIAL PARTICIPANTS

Dear Disability Resource Students,

My name is Bridgit Breslow, and I am a graduate student in the Education Leadership and Policy Studies Master's degree program. I am completing a research thesis on the experiences of SLD in college. I am asking for SLD to consider volunteering to be part of this research thesis.

You will be meeting with me on multiple occasions should you volunteer:

- 1) to go over the consent form and the explicit details of the study
- 2) to have three personal, reflection interviews to investigate the experiences that you, as a student with a learning disability, have faced in the past. These memories might be hard to think or talk about, but if you feel comfortable in sharing, I highly urge you to volunteer
- 3) to have a closing meeting going over the thoughts and descriptions I encountered from the interview with you as developed in data analysis after the completion of three interviews

If you are interested in being a volunteer, please email me as soon as possible at <u>bridgitb@iastate.edu</u>. Thank you for helping out a graduate student!

Bridgit Breslow

APPENDIX D: INFORMED CONSENT DOCUMENT

INFORMED CONSENT DOCUMENT

Exploration of Experiences Influencing the Academic Achievement of University SLD in Persistence to Graduation: Investigator: Bridgit Breslow, B.A.

This is a research study. Please take your time in deciding if you would like to participate. Please feel free to ask questions at any time.

INTRODUCTION

The purpose of this study is to explore and learn about the interactive relationships that a student with a learning disability has with past and current instructors at the post-secondary (college) level. In addition, the study will investigate what other factors had added to the academic achievement or failure of SLD in college. The study will give the researcher, as well as faculty and staff at Iowa State University, a better understanding of the thoughts, feelings, and experiences that a student with a learning disability faces, and how that impacts how well he or she does in the classroom.

The purpose of the thesis is to give Iowa State University's faculty, staff, and SLD a better understanding of how students are currently interacting with their instructors, and how those interactions can be positive or negative for the student. It is meant to not only benefit the learning of the Iowa State University faculty and staff, but especially the SLD.

You are being invited to participate in this study because by responding to the email sent to the Disability Resources student list serve, you are self-disclosing that you are a current student in the Disability Resources office, who has a documented learning disability, and is currently receiving academic accommodations this semester. The Disability Resources office only serves those students who have provided appropriate documentation of a disability. The researcher has not and will not read or disclose any information in the file. Although you have responded to the list serve email, the researcher has not and will not disclose your identity to other staff members in the Disability Resources office, nor will your legal name be used or disclosed to anyone at any time for the purposes of this class study.

DESCRIPTION OF PROCEDURES

If you agree to participate in this study, your participation will last for approximately four hours, which will be spaced out over the course of several weeks, during several interviews, at the discretion of the participant. However, all interviews should be completed by August 1,

2007, for the purposes of the class project. In other words, if you would prefer, for example, to do the interviews within two weeks, the researcher is more than willing to accommodate the needs of the participant. The researcher acknowledges that you are a student, and she is willing to meet during mutually convenient times and in mutually convenient location.

You will be asked to take this consent form home to determine if you feel comfortable continuing with this study. Of course, you are allowed to leave the study at any time for any reason. If you decide to participate, you and the researcher will determine a meeting date for the next interview, which will last approximately one and one-half hours.

During this interview, the researcher will be asking many personal questions regarding your past experiences with having a learning disability. You may have to reflect upon past memories, and it is reasonable to expect that these reflections of past experiences could bring up past emotions of embarrassment, pain, or insecurity. The researcher is hoping to gain a thoughtful understanding about how a student with learning disability feels, and the obstacles a student faces throughout his or her life. The researcher is hoping that you will be able to provide honest and open responses, and to allow her to learn about your experiences. This interview will be taped recorded.

At the end of this interview, you and the researcher will determine two class settings that the researcher can observe from your schedule, and you both will determine when the researcher will attend each of them. For this part of the study, you need only attend the classes that you both agree on, and try to participate as you normally would: if that means going and listening, that is completely acceptable. The researcher will take notes during the lecture that will describe her observations on the tone and attitude of the professor, the class lecture, and the participation of the students. This will serve to illustrate an average class day that a student with learning disabilities faces at Iowa State University. You will need to sit in close proximity to the researcher so that she is able to observe you adequately, but may do so in a manner that maintains your anonymity of relation to the researcher.

At the end of these two observations, you and the researcher will plan another date, most likely a week or so later, in which the researcher and you will come together and meet again, for approximately one hour. During this session, the researcher will describe to you themes or trends that she noticed throughout both the long interview, and in regard to the tone of the two classes. You will then explain to the researcher whether or not her reactions are accurate, and why or why not they are accurate. Your opinion is very important to the researcher for the purposes of this study.

As noted above, the interview will be tape recorded. You may skip any question during the interview that you do not with to answer or that makes you feel uncomfortable. The tapes will be completely erased no later than August 1, 2007.

RISKS

While participating in this study you may experience the following risks: uncomfortable, upsetting, or embarrassing memories, feelings, or thoughts. If at any time you feel unable to continue the interview, the researcher can help you contact Counseling Services at Iowa State University in order to help work through these emotions.

BENEFITS

If you decide to participate in this study there may be no immediate benefit to you. However, being able to reflect upon past memories might promote retrospective thinking, in which you may realize coping strategies that you have learned for various situations. It is hoped that the information gained in this study will benefit society by providing other SLD at Iowa State University some personalized coping strategies on how to deal with various life experiences related to the learning disability. The study may also be used in the future on how to train instructors to approach and treat students with hidden disabilities in the classroom.

COSTS AND COMPENSATION

You will not have any costs from participating in this study. You not be compensated for participating in this study.

PARTICIPANT RIGHTS

Your participation in this study is completely voluntary and you may refuse to participate or leave the study at any time. If you decide to not participate in the study or leave the study early, it will not result in any penalty or loss of benefits to which you are otherwise entitled. If you feel that reflecting upon past personal experiences related to the learning disability will be traumatizing for you, the researcher encourages you to avoid participating in the study, and to consider Counseling Services for coping strategies.

CONFIDENTIALITY

Records identifying participants will be kept confidential to the extent permitted by applicable laws and regulations and will not be made publicly available. However, federal government regulatory agencies and the Institutional Review Board (a committee that reviews and approves human subject research studies) may inspect and/or copy your records for quality assurance and data analysis. These records may contain private information.

To ensure confidentiality to the extent permitted by law, the following measures will be taken: you will choose your own pseudonym, which will be used throughout the transcription

of the interview, and for the purposes of any class papers or presentations. Only the researcher will have access to the study records, which will be kept locked in a filing cabinet in her home, or under password-protection on her computer. Nothing will be posted on the Internet. All tapes and other study tools that contain your original identity will be destroyed no later than June 1st, 2006. If the results are published, your identity will remain confidential.

QUESTIONS OR PROBLEMS

You are encouraged to ask questions at any time during this study.

- For further information about the <u>study</u> contact Bridgit Breslow at 817-774-6662. The supervising faculty on this class project is Nancy Evans, who can be reached at 515-294-7113.
- If you have any questions about the rights of research subjects or research-related injury, please contact Ginny Austin Eason, IRB Administrator, (515) 294-4566, austingr@iastate.edu, or Diane Ament, Director, Office of Research Assurances (515) 294-3115, dament@iastate.edu.

SUBJECT SIGNATURE

Your signature indicates that you voluntarily agree to participate in this study, that the study has been explained to you, that you have been given the time to read the document and that your questions have been satisfactorily answered. You will receive a copy of the signed and dated written informed consent prior to your participation in the study.

Subject's Name (printed)

(Subject's Signature)

(Date)

INVESTIGATOR STATEMENT

I certify that the participant has been given adequate time to read and learn about the study and all of their questions have been answered. It is my opinion that the participant understands the purpose, risks, benefits and the procedures that will be followed in this study and has voluntarily agreed to participate.

(Signature of Person Obtaining Informed Consent) (Date)

APPENDIX E: INTERVIEW QUESTIONS

Interview #1

- 1) Can you start off by selecting a pseudonym for yourself and telling me your classification year at ISU, and how many semesters you have attended ISU?
- 2) What made you decide to come to ISU?
- 3) What is your major, and why did you choose it?
- 4) Can you tell me about your parents and your history with them?
- 5) Can you explain what your family dynamics are like?
- 6) When were you first diagnosed with the learning disability?
- 7) When did you or your family first notice that there were signs of a learning disability, prior to diagnosis?
- 8) What motivated you to get tested?
- 9) What was your family's reaction during this time to the test results?
- 10) What did they do in response to the results?
- 11) How did you feel when you first went for testing for a learning disability?
- 12) What are some of the things you remember thinking about at that time?
- 13) How were you treated by teachers?
- 14) How were you treated by your peers?
- 15) Who did you tell, and how did you tell them, after you were diagnosed?
- 16) How have others reacted to your having a learning disability? Please identify any persons you refer to.
- 17) How do you think your academic success has changed since being diagnosed?

Interview #2

- 18) How would you describe the grades you receive in classes? 19) How are these grades similar or different to the grades you got in high school? 20) How do you think your academic success has changed since being diagnosed? 21) What, if anything, has been influential to your academic achievement in college? 22) How do you feel you compare with the "average" college student? 23) Can you tell me about what you know about your learning disability? 24) Do you always come to Disability Resources for accommodation forms? Why or why not? 25) What made you first start using accommodation forms? 26) Can you describe some of the various reactions that you have gotten regarding accommodation forms from instructors and/or classmates? 27) How do you feel when you talk to professors in general? 28) When, if ever, have you disclosed your learning disability to an instructor? 29) How would you describe the life of a college student who has a learning disability? 30) Where do you go for help or for support? 31) How do you feel during exams? 32) How do instructors treat you during exams?
- 33) What are some academic achievements that you have made since coming to college? Interview #3
- 34) How would you describe the life of a college student who has a learning disability?
- 35) If you could change anything about that, besides your learning disability, what would you change?

- 36) Has there ever been a time when you have felt stigmatized for having a learning disability?
- 37) What was it like?
- 38) What advice would you give to another student with a learning disability who is going through college classes?
- 39) Describe your impression of what has helped or hindered you in college.
- 40) What are your long-term goals for success and how do you plan to get there?
- 41) What would improve your college experience as a student with a learning disability?
- 42) Overall, how do you feel about the accommodation process?

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