The lived experiences of college students with a learning disability and/or attention deficit hyperactivity disorder

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The lived experiences of college students with a learning disability and/or attention deficit hyperactivity disorder

by

Sarah Jean Lux

A dissertation submitted to the graduate faculty
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Major: Education (Educational Leadership)

Program of Study Committee:
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Iowa State University
Ames, Iowa
2016

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DEDICATION

This dissertation is dedicated to the students who participated in this study. Special dedication is for Meeka and her twin boys, one of whom watches over her from heaven while the other is with her here on earth. I would also like to dedicate this dissertation to my son, Rowan Daniel, who was born while I was in the process of writing it. His sweet voice was the biggest motivator for me to see it through to the end.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TABLE OF CONTENTS</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>v</td>
</tr>
<tr>
<td>ACKNOWLEDGMENTS</td>
<td>vi</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>viii</td>
</tr>
<tr>
<td>CHAPTER 1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Statement of Problem</td>
<td>5</td>
</tr>
<tr>
<td>Purpose of Study</td>
<td>7</td>
</tr>
<tr>
<td>Theoretical Framework</td>
<td>8</td>
</tr>
<tr>
<td>Significance of Study</td>
<td>10</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>10</td>
</tr>
<tr>
<td>Overview of Study</td>
<td>14</td>
</tr>
<tr>
<td>CHAPTER 2. LITERATURE REVIEW</td>
<td>15</td>
</tr>
<tr>
<td>Disability Policy and Legislation in Higher Education</td>
<td>15</td>
</tr>
<tr>
<td>Disability Policy at the Institutional Level</td>
<td>18</td>
</tr>
<tr>
<td>Disability Conceptual Frameworks</td>
<td>23</td>
</tr>
<tr>
<td>Learning Disabilities and Attention Deficit Hyperactivity Disorder</td>
<td>26</td>
</tr>
<tr>
<td>The Experiences of College Students with LD or ADHD</td>
<td>35</td>
</tr>
<tr>
<td>Summary</td>
<td>43</td>
</tr>
<tr>
<td>CHAPTER 3. METHODOLOGY</td>
<td>44</td>
</tr>
<tr>
<td>Research Framework</td>
<td>45</td>
</tr>
<tr>
<td>Ecology of Human Development</td>
<td>49</td>
</tr>
<tr>
<td>Site Selection</td>
<td>53</td>
</tr>
<tr>
<td>Participant Selection</td>
<td>54</td>
</tr>
<tr>
<td>Data Collection</td>
<td>56</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>61</td>
</tr>
<tr>
<td>Trustworthiness and Criteria for Goodness</td>
<td>67</td>
</tr>
<tr>
<td>Delimitations and Limitations</td>
<td>70</td>
</tr>
<tr>
<td>Summary</td>
<td>72</td>
</tr>
<tr>
<td>CHAPTER 4. THE STUDY PARTICIPANTS</td>
<td>73</td>
</tr>
<tr>
<td>Adam</td>
<td>74</td>
</tr>
<tr>
<td>Anna</td>
<td>76</td>
</tr>
<tr>
<td>Bill</td>
<td>77</td>
</tr>
<tr>
<td>Bri</td>
<td>79</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Demographics of Disabled and Nondisabled College Students ................................................3
Institutional Characteristics for Undergraduate Programs........................................................54
Student Demographics by Institution.......................................................................................55
Research Question Matrix for First Interview .........................................................................59
Research Question Matrix for Second Interview ....................................................................60
Research Question Matrix for Third Interview .......................................................................61
Data Analysis Process Summary .............................................................................................63
Study Participant Summary ....................................................................................................73
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First and foremost, I would like to thank the eight students who participated in this study. Each of them shared their experiences, stories, hopes, fears, and goals. They are incredibly motivated, talented, and insightful adults. I thoroughly enjoyed my time with each of them and wish them the best with their personal, educational, and professional goals.

I would also like to thank the faculty and students with whom I had the pleasure of taking classes for my doctoral coursework. Faculty provided engaging and challenging experiences in which I felt as though we were truly “partners in learning.” As we progressed through the program, my cohort and I experienced many of life’s ups and downs. I am forever grateful to Chris, Wes, Elena, Shanna, Freddy, David, Deb, Michael, Tammy, and Joan for their friendship, support, and unconditional acceptance.

While in the process of completing my doctoral coursework and dissertation, I worked full-time as an assistant director for the Health Care Ethics graduate program at Creighton University. I could not have asked for a more supportive and intellectually engaging atmosphere in which to work while pursuing my degree. My supervisor and colleagues offered an environment that truly encouraged collegiality, scholarship, critical thinking, and social justice. Special thanks to my supervisor Amy Haddad who encouraged a work-life balance and to Helen Chapple who served as an anthropological sounding board as I wrote my dissertation.

While pursuing my doctorate, I experienced several life changes along the way, some of which were quite significant. I would like to thank my family for their unconditional support through everything. I am especially grateful to my partner, Richard, who has
selflessly offered his time, help, and humor when I needed a break or was feeling overwhelmed. I would also like to acknowledge the educational journey of my brother, David. My recollection of his experiences as a child provided additional context for me.

Finally, I would like to thank the members of my dissertation committee whose feedback and perspective helped me to refine my research. My appreciation is extended to Linda Hagedorn, Carol Heaverlo, Robert Reason, and Carl Smith for their time, expertise, and helpful insights. Extra special appreciation is extended to my committee chair, Larry Ebbers, who has been a wonderful mentor throughout my entire journey. I have been extremely fortunate to have Dr. Ebbers as my chair and cannot thank him enough for all that he has done for me, professionally and personally, as a higher education professional and a doctoral student.
ABSTRACT

The body of research concerning college students with disabilities is sparse relative to the percentage of disabled college students who attend college. Further, the majority of existing research fails to capture the student voice and the lived experiences of the students themselves. This dissertation explores the experiences of college students with learning disabilities (LD) or attention deficit hyperactivity disorder (ADHD), examines the experiences that are particularly formative in their development and self-awareness as learners, and considers the role of disability in how the students think of themselves as learners. Using a qualitative, phenomenological research framework, this study uses in-depth individual interviews to collect data from participants at multiple postsecondary institutions in the Midwest. Interviews were recorded, transcribed, and thematically analyzed. Four themes emerged as central to their experiences as college students: a) constructing and reframing knowledge about their disability, b) self-assessment through observation and comparing themselves to others, c) identifying allies and resources, and d) moving toward increased learner autonomy. This study provides numerous opportunities for future research related to the topic and findings. The findings from this study may also provide context and insights for both secondary and postsecondary institutions and parents or families of students with disabilities as well as the students themselves.
CHAPTER 1. INTRODUCTION

There is little doubt that accessible postsecondary education is a benefit to individuals and society, as a whole. For individuals, a college education can mean a greater likelihood of higher earnings, consistent employment, and an overall higher quality of life. Trends in wage earnings and employment over the past several decades indicate a consistent advantage for those with at least a Bachelor’s degree compared to those with only a high school diploma or equivalent. In 1980, adults with a high school education or less “earned 72 percent of what college graduates earned, but in 2007 earned only 43% of that amount” (McMahon, 2009, p. 76). This discrepancy in earnings is not only a longstanding trend, but one that indicates the earnings gap is widening. Further, National Center for Education Statistics (NCES) data show a clear trend that individuals who earn a bachelor’s degree or have at least some college education are less likely to be unemployed. Seventy-three percent of 25-34 year-olds with a baccalaureate degree or higher reported being employed full-time throughout the year, however, only 60 percent of their peers with only a high school diploma or equivalent reported full-time employment (Kena et al., 2014). When it comes to positive life outcomes and the well-being of society, numerous studies suggest that a college education is correlated with “better own-health as measured by health status, greater longevity, better-educated and healthier children, smaller families with less poverty, increased probability of having a college-educated spouse, and greater happiness” (McMahon, 2009, p. 119). Finally, when considering the impact on society, as a whole, a college educated workforce can have a positive impact on the job market, boost overall earnings, address skill deficits in specific labor markets, and provide social benefits as “public goods” (McMahon, 2009).
College enrollment in the United States has increased over the last several decades, a trend that the U.S. Department of Education projects to continue through at least 2023. From 1990 to 2012, colleges and universities have experienced a 48 percent increase in undergraduate enrollment, jumping from an estimated 12 million to a reported 17.7 million (Kena et al., 2014). Similar to the enrollment growth trends of other student populations, postsecondary institutions have also experienced increases in the number of students with disabilities attending college (U.S. Government Accountability Office, 2009). Federal legislation, such as the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, account for part of the increase. Both of these acts addressed accessibility and equity issues for individuals with disabilities and protected them from discrimination. Further, this federal legislation has improved accessibility to education and allowed more diverse learners to be college-ready upon graduating from high school. The increased number of students with disabilities in college can also be attributed to greater awareness and “the increased knowledge students have regarding their rights and options” (Rath & Royer, 2002, p. 356). Finally, postsecondary institutions have continued to widen their marketing efforts in order to align with changing student demographics and attract continued revenue (Rath & Royer, 2002).

For the past decade, however, the percentage of students with disabilities has remained relatively stable at approximately 11 percent of the total undergraduate population (U.S. Department of Education, National Center for Education Statistics, 2013, 2014; U.S. Government Accountability Office, 2009). In 2008-09, 64 percent of students with disabilities had a primary diagnosis that was not readily apparent or observable by others. Such diagnoses are often referred to as “invisible” or “hidden” disabilities and include
learning disabilities (LD), attention deficit hyperactivity disorder (ADHD), and mental illness or psychological conditions. Approximately 18 percent of college students with disabilities report having ADHD, and roughly one-third of college students with disabilities report being LD (Raue & Lewis, 2011).

Table 1

_Demographics of Disabled and Nondisabled College Students_

<table>
<thead>
<tr>
<th></th>
<th>Disabled</th>
<th>Nondisabled</th>
</tr>
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<tbody>
<tr>
<td>Percentage of total undergraduate population in 2011-12</td>
<td>11%</td>
<td>89%</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>44%</td>
<td>43%</td>
</tr>
<tr>
<td>Female</td>
<td>56%</td>
<td>57%</td>
</tr>
<tr>
<td>Race/Ethnicity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Asian</td>
<td>4%</td>
<td>6%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>18%</td>
<td>16%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>15%</td>
<td>16%</td>
</tr>
<tr>
<td>Native Hawaiian or Pacific Islander</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>White</td>
<td>58%</td>
<td>58%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>4%</td>
<td>3%</td>
</tr>
</tbody>
</table>


Overall, students with disabilities are less likely to enroll in postsecondary education following high school compared to their nondisabled peers. However, those with LD or ADHD attend college at approximately the same rate as the general population of a similar age (Newman et al., 2011). In the 2011-12 academic year, Table 1 shows demographics for
college students with disabilities were relatively similar to that of the general undergraduate population.

Although disabled and non-disabled students resemble each other demographically, some notable differences exist, including college choice, attendance status, and living arrangement while in college. The total US undergraduate population is split 60/40 between 4-year and 2-year institutions respectively (Kena et al., 2014). Students with a disability, however, are less likely to attend a four-year college or university than their nondisabled peers. Instead, they opt for a community college or vocational school, likely for more affordable tuition, less selective admissions criteria, smaller class sizes, and a wider range of support services (Weis, Speridakos, & Ludwig, 2013). In fact, longitudinal transition studies find that only 19 percent of individuals with disabilities attended a four-year college or university (Newman et al., 2011). Students with disabilities are also more likely to attend college part-time (67%) than their nondisabled peers (61%), and they are slightly more likely to live off-campus, either on their own or with parents and relatives (82%) than nondisabled students (79%) according to national data (Horn, Berktold, & Bobbit, 1999; U.S. Department of Education, National Center for Education Statistics, 2014).

Finally, degree completion rates are significantly lower for college students with disabilities when compared to their nondisabled peers (Hall & Belch, 2000; Herbert et al., 2014; Newman et al., 2011). Forty-one percent of students with disabilities graduate “from their most recent postsecondary program” (Newman et al., 2011, p. 47), compared to 52 percent of their nondisabled peers. The same study shows that students with disabilities are also slightly more likely to enroll in multiple institutions than their nondisabled peers.
Statement of Problem

As mentioned earlier, colleges and universities have experienced increased enrollment of students with disabilities over the past several decades. While institutions, researchers, and policymakers may view increased enrollment of students with disabilities as an indication that postsecondary education is more accessible than before, challenges in persistence, degree completion, and student development and success still remain. As a demographic that currently makes up approximately 11 percent of the general undergraduate population in this country (U.S. Department of Education, National Center for Education Statistics, 2013, 2014; U.S. Government Accountability Office, 2009), students with disabilities continue to receive relatively little attention in research and practice compared to other underrepresented or underserved student populations (Herbert et al., 2014; Peña, 2014).

The Problem of Research

Within the field of postsecondary education and disability, several explicit problems of research exist. A noticeable absence of scholarly work (Peña, 2014), overall awareness (Myers, Jenkins Lindberg, & Nied, 2013), and theoretical frameworks (Evans, Forney, Guido, Patton, & Renn, 2010) exist for this student population despite their significant presence on college campuses and in academic programs. Since the passage of the Americans with Disabilities Act (ADA) in 1990, topics relating to students with disabilities represented only 1% of all scholarly work from top-tier higher education journals (Peña, 2014). Methodological issues also present challenges for postsecondary education disability research, in that notable variation exists in terminology and definitions when developing research samples and methods (Herbert et al., 2014). These research problems also present as problems of practice if administrators, college personnel, faculty, and other practitioners
cannot synthesize findings and translate them into practice. Finally, when considering the relatively small body of research on the development and success of college students with disabilities, the majority of existing research fails to capture the student voice and the lived experiences of the students themselves.

**The Problem of Practice**

As one of their most fundamental purposes, colleges and universities are meant to generate new knowledge, facilitate the sharing of diverse perspectives, and exist as an inclusive community. To accomplish this, institutions develop policies and programming to ensure, with varying degrees of effort and success, that their campus is one that is welcoming to diverse student populations, backgrounds, interests, and beliefs. Of all minority or underrepresented student populations, few are so laden with legal implications that directly concern multiple aspects of their learning environment and participation in the campus community as those with disabilities. Although the added legislative oversight of the ADA is meant to prevent discrimination and ensure equal access and accommodation, students with disabilities continue to experience education barriers in postsecondary settings (Denhart, 2008).

Scarce higher education literature on students with disabilities does not facilitate a solid theoretical foundation on which college administrators, faculty, and student affairs practitioners can make informed decisions on policy, pedagogy, and programming. While federal regulations such as the Americans with Disabilities Act (1990) require postsecondary institutions to have designated personnel to coordinate accommodations, research is sparse when it comes to ascertaining whether campus disability services and other programming positively impact student outcomes, such as persistence and degree completion (Herbert et
Further, an overall absence of research exists on how to best support students with learning disabilities and the efficacy of accommodations (Denhart, 2008; Weyandt & DuPaul, 2008). The studies that do focus on how to best accommodate students often “do not engage the students’ perspective” (Denhart, 2008, p. 486) and perpetuate a socially constructed value system of competencies. “Even to the present moment it continues to be nonlabeled researchers, policy makers, and practitioners debating the issues and setting agendas regarding services and accommodations for those who are labeled” (Denhart, 2008, p. 483).

The absence of an extensive body of literature regarding college students with disabilities makes it difficult for postsecondary institutions to implement informed policies and practices based on theory and research. By examining the socially constructed phenomena of being disabled, particularly with a non-apparent or invisible disabilities, such as LD or ADHD, this study may provide additional context to the unique challenges for both researchers and practitioners by privileging the student voice. Further, this study responds to the problem of practice that colleges and universities continue to enroll students with LD or ADHD without a generalizable understanding of how they experience and construct meaning from various environmental contexts.

**Purpose of Study**

While an infinite number of external environmental factors and contexts influence the balancing act of successfully navigating college and persisting toward degree completion, the developmental tasks associated with the experience are largely internal. The overall purpose of this qualitative study was to better understand both the external and internal lived experiences of college students who have been identified as having a learning disability (LD) or attention deficit hyperactivity disorder (ADHD). Specifically, this study used
phenomenological inquiry to gain a deeper understanding of how such experiences, as dynamic and reciprocal relationships with various environments, influenced the students’ development and self-awareness as learners. The primary goal of this study was to contribute to a sparse body of literature that addresses the experiences of college students with disabilities by privileging the student voice. The following research questions guided the study:

1. What are the educational experiences of college students with LD or ADHD?
2. What experiences do college students with LD or ADHD identify as formative in their development as learners?
3. What role, if any, does having a disability play in how they think about their own development as learners?

Students with disabilities comprise a demographic that is often overlooked in higher education research and literature (Evans et al., 2010; Herbert et al., 2014; Peña, 2014). Therefore, an overarching goal of this study was to contribute to the student development literature by attempting to gain a deeper understanding of student development within the context of higher education from a vantage point outside of dominant perspectives (Evans et al., 2010).

**Theoretical Framework**

A qualitative approach was most appropriate for this study in order to align the research design with the overall purpose and research questions. Assuming the relativist ontological position that multiple realities exist, qualitative research provides a vehicle with which to understand the sometimes chaotic nature of the human experience by creating space for and acknowledging multiple truths (Creswell, 2013). This study is anchored within a
social constructionism epistemology, because it sought to better understand the lived experiences of college students by exploring how they constructed meaning from experiences in various environmental contexts. Conceptually, constructionism assumes truth in meaning is created, rather than discovered, and that “meanings are constructed by human beings as they engage with the world they are interpreting” (Crotty, 1998, p. 43). More specifically, social constructionism asserts that every aspect of one’s reality is socially constructed by the mere fact that one is part of and interacting with the world. In focusing exclusively on the subjective experiences of its study participants, this study assumed an interpretivist theoretical perspective to inform the methodological approach used. Interpretivism, as a theoretical perspective, is primarily concerned with being authentic in conveying the subjective meaning that the participant has constructed about the phenomena being studied (Creswell, 2013). Identifying a chosen methodology allows the researcher to demonstrate how the research plan or strategy purposefully connects with the methods used to carry out the study (Crotty, 1998). Attempting to capture and convey the essence of being a college student with LD or ADHD, this study used phenomenology as the guiding methodological framework. A researcher who uses a phenomenological approach attempts to uncover and describe “the common meaning” that individuals construct from or assign to an experience with a specific phenomenon (Creswell, 2013). While this section briefly introduced the rationale for the research design used in this study, the third chapter discusses the paradigmatic dimensions used to situate this study in more detail as well as other methodological aspects.

To provide a theoretical foundation in which to understand the interactions between the student and his or her environment, this study used the person-environment approach of
Bronfenbrenner’s (1979, 2005) ecology model of human development. The developmental ecology model, as explained in the third chapter, provided a lens with which to examine student experiences with a holistic approach by placing the student at the center of the experience (Evans et al., 2010).

Significance of Study

The body of research concerning college students with LD or ADHD is sparse when one considers the number of students who have, at one time in their lives, been labeled as having such a diagnosis. They face greater academic challenges, transition issues, and attitudinal barriers that their nondisabled peers often do not. This study may hold value for the various stakeholders, including college administrators, faculty, student affairs personnel, students, and the families of students. Additionally, this study may provide additional insights to postsecondary institutions by giving voice to marginalized students. Such insights may further inform pedagogical and programmatic strategies that can maintain relevancy with students throughout their educational journey. Therefore, based on the previously mentioned problems of practice and research, the primary goal of this study was to contribute to the current body of literature on postsecondary education and disabilities by giving voice to the students who experience the phenomena directly.

Definition of Terms

The overall purpose of this qualitative study was to better understand both the external and internal lived experiences of college students who have been identified as having LD or ADHD. The following section provides brief definitions of terms and explanations of concepts frequently used within this study.
Disability

Access and participation in education, support services, and related programming for students with disabilities have existed within a complex legal context since the enactment of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990. Specific terminology, often defined through legislation and court rulings, exists to guide educators, families, and students. Attending to the legal context when defining disability is appropriate for this study, because it is federal legislation which requires postsecondary institutions “to provide both access and accommodations for students whose disabilities meet the laws’ definitions” (Kaplin & Lee, 2013, p. 1042). A disability is defined as “a physical or mental impairment that substantially limits one or more major life activities of such individual; a record of such an impairment; or being regarded as having such an impairment” (Americans with Disabilities Act, 1990, sec. 12102).

This study was interested in students with LD or ADHD, specifically. Attention deficit hyperactivity disorder (ADHD) is one of several possible disorders that exist within the neurodevelopmental disorder group. Conditions within this group typically have an onset in early childhood and “are characterized by developmental deficits that produce impairments of personal, social, academic, or occupational functioning” (American Psychiatric Association, 2013, p. 31). This study took a broad approach by defining a learning disability (LD) as “a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities” (National Joint Commission on Learning Disabilities, 1990).
**Disability Accommodations**

Per federal legislation, individuals with disabilities are entitled to reasonable accommodations for “otherwise qualified individuals” (Americans with Disabilities Act, 1990). In an educational context, *disability accommodations* refer to removing barriers and making academic modifications that allow an individual to access and fully participate in their education and related programming. The following chapter provides more detail on the various types of accommodations and their purpose.

**Experiences of LD or ADHD College Students**

One of the research questions that helped guide this study broadly examined the educational experiences of the study participants. For this study, *educational experiences* broadly encompassed all experiences, past and present, concerning them as learners. Another research question explored what experiences the participants identified as formative in their development as learners. *Formative experiences* are defined in this study as those which participants have identified as having a profound impact on how they view themselves as learners. The term, *K12 education*, is a commonly used phrase that refers to a student’s elementary and secondary education, which begins with kindergarten and ends with 12th grade. Therefore, the term, K12, encompasses an individual’s entire pre-college education.

**Institutional and Peer Cultures**

Colleges and universities try to create and maintain an environment with conditions that align with their institutional values and mission. A good amount of literature exists on the various components of creating and maintaining an institutional or campus culture. For this study, *institutional culture* or *campus culture* encompasses (a) attributes of the institution and its faculty, staff, and students; (b) the structure and mission of the institution; and (c)
academic policies, programming, and support for students (Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007). While institutional or campus cultures are developed and maintained by the institution itself, peer cultures are collectively created by students at a particular institution or as part of an otherwise defined group (Renn & Arnold, 2003). Using the definition that Renn and Arnold (2003) present in their research, this study defines peer culture as “the forces and processes that shape individual and collective life on campus in terms of identity, group membership, acceptable discourse, and desirable behavior” (p. 262). Findings from this study include several references to and involve institutional, campus, and peer cultures.

**TRIO/Student Support Services (TRIO/SSS)**

The Federal TRIO Programs (TRIO) provide “outreach and student services programs designed to identify and provide services for individuals from disadvantaged backgrounds.” Specifically, they “serve and assist low-income individuals, first generation college students, and individuals with disabilities” to persist toward graduation with programs designed to serve students from middle school to graduate school (U.S. Department of Education, 2013b, para. 1). Student Support Services (SSS) is one of the federally funded TRIO programs. SSS offers comprehensive services to support disadvantaged college students by providing “opportunities for academic development, assist students with basic college requirements, and to motivate students toward the successful completion of their postsecondary education” (U.S. Department of Education, 2013a, para. 1). Several of the students who participated in this study are actively involved in the TRIO/SSS program at their institution.
Overview of Study

The dissertation for this phenomenological study includes six chapters. The first chapter introduces the study with a broad overview. The second chapter provides a descriptive review of the literature related to students with disabilities in higher education as well as a deeper look at theoretical concepts used in this study. The third chapter presents the methodology and research design used for this study by describing the research sites, selection of participants, and the data collection and analysis methods. The fourth chapter introduces the study participants with a general overview of demographics and a vignette of each participant. The fifth chapter presents the study findings, organized by themes which emerged from the data analysis. Finally, the sixth chapter includes a discussion of findings organized by the research questions which guided this study as well as study implications and the researcher’s recommendations for research and practice.
CHAPTER 2. LITERATURE REVIEW

As noted in the first chapter, students with disabilities have entered college in increasing numbers over the last several decades. While not every individual with a disability pursues a college degree, students who identify as having a disability now make up around 11 percent of the total undergraduate population in the U.S. (U.S. Department of Education, National Center for Education Statistics, 2013, 2014; U.S. Government Accountability Office, 2009). The purpose of this chapter is to provide an overview of the current literature surrounding college students with disabilities. Outlining the legislative and policy landscape for this particular student demographic, this chapter briefly provides historical context to postsecondary disability policy as a whole along with institution-level support and services. It also outlines theoretical models for conceptualizing disability as well as the how the study of learning disabilities and attention deficit hyperactivity disorder have evolved in both research and practice, informing education policies today. Additionally, this chapter reviews existing literature on the transition issues and college experiences of students with a learning disability (LD) or attention deficit hyperactivity disorder (ADHD).

Disability Policy and Legislation in Higher Education

Access to education for individuals with disabilities exists within complicated historical and legislative contexts, as it does for other marginalized, minority, and underrepresented populations. Unique to the disabled population, however, is that not one common, visible characteristic, lifestyle, or belief ties them together. The only quantifiable commonality that does exist is a deviation from a socially constructed norm or an observed deficiency in what science or society has deemed an acceptable average. The diversity and fluidity within this socially constructed demographic, the corresponding body of scholarly
work, the overall awareness, and assistive technology related to accessibility have created a legislative and policy landscape that has and continues to evolve.

**Early Legislation to Address Inequalities**

The passage of the Civil Rights Act of 1964, which primarily focused on racial discrimination, addressed fundamental human rights through federal legislation and laid the groundwork for subsequent federal laws and protections for other minority groups, including individuals with disabilities. Following the enactment of such monumental legislation and riding on the heels of the civil rights movement, an unprecedented focus on equality permeated the nation’s education system, from elementary schools to postsecondary institutions (Arendale, 2010; Myers et al., 2013). In the years that followed, the federal government enacted additional legislation focusing on equity, access, and preventing discrimination such as Title IX in 1972, meant to address gender inequities in all facets of education, including everything from faculty and teacher pay to athletic programming and sexual harassment (Myers et al., 2013). However, federal legislation did not specifically address and prohibit discrimination based on disability until Congress passed the Rehabilitation Act of 1973. In that bill, Section 504 prohibits “a college, university, or other postsecondary institution, or a public system of higher education” from discriminating against individuals with disabilities who are “otherwise qualified” (Rehabilitation Act of 1973, 1973). Additionally, it obligated institutions to provide “meaningful access,” or in other words, “modify their programs and services to provide accommodations to students with disabilities” (Simon, 2000, p. 70).
**Americans with Disabilities Act of 1990**

It was the Americans with Disabilities Act of 1990, however, that made the most significant difference. It provided more comprehensive protection against discrimination as well as assurances of equal rights, than any other legislation before it. The Americans with Disabilities Act (ADA) contains five titles that address different areas including equal employment, nondiscrimination assurances relating to public programs and services, reasonable accommodations, accessible telecommunication, and other provisions (Myers et al., 2013). Most relevant to postsecondary institutions, however, are Titles II and III.

Title II of the ADA prohibits “qualified individuals” from discrimination based on his or her disability in that no one shall “be excluded from participation in or be denied the benefits of the services, programs, or activities of a public entity, or be subjected to discrimination by any such entity” (Americans with Disabilities Act, 1990, sec. 12132). Additionally, Title II provides more guidance than previous legislation concerning what constitutes a qualified person with a disability:

The term “qualified individual with a disability” means an individual with a disability who, with or without reasonable modifications to rules, policies, or practices, the removal of architectural, communication, or transportation barriers, or the provision of auxiliary aids and services, meets the essential eligibility requirements for the receipt of services or the participation in programs or activities provided by a public entity. (Americans with Disabilities Act, 1990, sec. 12131)

Expanding the scope to all public entities rather than only those that receive federal funding as outlined in Section 504 of the Rehabilitation Act of 1973, Title III of the ADA prohibits private entities that conduct business with the public, such as private colleges and universities, from discriminating based on disability. Specifically, private entities may not deny or limit participation, provide unequal services, or separate participation in “goods,
services, facilities, privileges, advantages, or accommodations” (Americans with Disabilities Act, 1990, sec. 12182) which are provided to other individuals.

After the ADA was passed in 1990, Congress passed additional protections with the ADA Amendments Act of 2008 (ADAAA), which further clarified and legitimized protections, and ultimately accommodations, to individuals with “hidden” disabilities, such as learning disabilities and ADHD (Simon, 2011). The ADAAA made the legislation more comprehensive and specifically included those who were attempting to make their own accommodations (Kaplin & Lee, 2013; Simon, 2011). Decades of evolving disability legislation and policy at the state and federal level originated from the overarching goals of equity, access, and protection from discrimination in education, employment, and various aspects of daily living. However, individuals with disabilities who choose to enroll in college, whether directly after graduating from high school or several years later, carry personal histories fraught with ambiguity regarding these policies.

**Disability Policy at the Institutional Level**

Because of federal legislation like Section 504 and the ADA, ensuring accessibility and providing services or support to individuals with disabilities are obligations that all colleges and universities, whether public or private, assume when providing postsecondary education. Recognizing the need for additional support services for students who have disabilities, postsecondary institutions often have an individual or an entire department dedicated to assisting students by providing supplemental support and access to accommodations. Such resources help ensure that the institution is in compliance with federal laws. “These schools generally have a structure in place with trained staff, such as a disability services office, to provide and facilitate services for students with disabilities and
coordinate with faculty and other campus offices, such as counseling and academic support centers” (Raue & Lewis, 2011, p. 16). This section outlines the policies, resources, and processes that colleges and universities generally allocate to provide services and support to this specific student demographic.

Disability Services

Although some postsecondary institutions already had offices or personnel dedicated to assist with arranging accommodations for students with disabilities prior to the passage of the ADA in 1990, it was not until this federal legislation was passed that “institutions developed formalized processes for providing accommodations and services to students with disabilities” (Myers et al., 2013, p. 35). All colleges and universities must have designated personnel who coordinate the school’s compliance with federal regulations. Such personnel and formalized processes, however, often vary by institution, depending on the number of students with disabilities the institution serves, the scope of accommodations required, and other institutional variables. Regardless, an institution “must also have grievance procedures that include steps to ensure a student can raise concerns fully and fairly and provide for the prompt and equitable resolution of complaints” (Raue & Lewis, 2011, p. 5).

Self-Identification

If an individual with a disability enrolls in college courses, he or she must voluntarily self-identify with the institution’s designated personnel or office to arrange for appropriate accommodations. Self-identification is necessary so that the student may fully participate in classes and other programming or services providing by the college or university. Even if the student received accommodations or support in his or her secondary education, postsecondary institutions are obligated to provide accommodations “only upon a request by
(or on behalf of) the disabled student” (Kaplin & Lee, 2013, p. 1098). When a student self-identifies as having a disability and requests accommodations or academic adjustments, the college or university “is entitled to inquire into the nature of the disability, to require documentation of the disability, and to reach its own determination as to whether the disorder is a disability that requires accommodation under the ADA or Section 504” (Kaplin & Lee, 2013, p. 1096). Institutions determine accommodations, services, and support based on documented need and on an individual basis (U.S. Government Accountability Office, 2009).

**Disability Documentation**

The nature and scope of what constitutes appropriate documentation of a disability has been and continues to be an ongoing issue of debate (Simon, 2011), however, the ADAAA and subsequent court rulings have prevented institutions from requiring documentation processes that are “overly burdensome and discriminatory” (Simon, 2011, p. 103). Although nearly every postsecondary institution requires some form of verification to document a student’s disability, there is substantial variation in how they verify a disability or what they accept as documentation (Raue & Lewis, 2011), often depending on the type of institution (Weis et al., 2013).

In a national survey of postsecondary institutions, 44% of responding institutions indicated that an Individualized Education Program (IEP) was sufficient documentation (Raue & Lewis, 2011). Used in elementary and secondary educational settings, IEPs are highly individualized plans developed by a team made up of the student’s parents or guardians, teachers, and other school personnel to oversee evaluative activities, diagnostic results, and specialized services or supports for the student based on his or her needs (National Joint Committee on Learning Disabilities, 2007). Slightly fewer colleges and
universities (40%) would accept a “504 Plan from a secondary school as sufficient, stand-alone verification” (Raue & Lewis, 2011, p. 3). Students who have a 504 Plan in elementary or secondary school are those individuals who have been identified as having some type of disability, but do not require specialized instruction or services. The majority of institutions (80%), however, “accepted a comprehensive vocational rehabilitation agency evaluation” (Raue & Lewis, 2011, p. 3). Such variations in what is acceptable documentation become an added layer to potentially complicate the process for students who may request accommodations in college.

**Support and Accommodations**

Section 504 and the ADA require postsecondary institutions “to provide reasonable academic accommodations for qualified students with disabilities” (Kaplin & Lee, 2013, p. 1094) if requested by a student for a documented disability. However, providing such accommodations or adjustments does not mean that colleges and universities modify academic criteria or the learning objectives of academic programs of study (Kaplin & Lee, 2013). Specific key phrases, such as “otherwise qualified individuals,” are included in ADA legislation to clarify this point.

The type of assistance or accommodations provided by the postsecondary institution varies and is determined on an individual basis according to the specific needs and limitations of the student. They fall into three general categories (U.S. Government Accountability Office, 2009). *Academic adjustments and auxiliary aids* consist of any modifications to an academic program or course requirements, such as extended time to complete a degree or an exam. *Physical accessibility* covers campus facilities, such as classrooms, dorms, and meeting or event spaces so that students may fully participate in
academics and other programming. The *nonacademic services* category serves as a general catch-all, covering anything from dietary restrictions on a campus meal plan to providing sign language interpreters for a student organization event or meeting.

While the type of accommodations provided can vary widely and are determined based on individual student needs, the most commonly requested accommodation is extra time to finish tests and exams. Data from a National Center for Education Statistics (NCES) survey showed 93 percent of responding institutions indicated that they “provided additional exam time as an accommodation to students with disabilities” (Raue & Lewis, 2011, p. 3). The National Longitudinal Transition Study-2 (NLTS-2) found that 79 percent of students who requested accommodations were allowed to have additional time to complete exams, and 19 percent were allowed to take the exam in a separate setting (Newman et al., 2011). Although tutoring and general assistance with course content are not typically considered accommodations, roughly 44 percent of students “reported receiving some type of help, whether or not the assistance was related to their disability” (Newman et al., 2011, p. xvi). Other accommodations that were commonly provided to students with documented disabilities included note-taking assistance in the classroom, learning and study skills support, alternative format for exams and course materials, and assistive technology (Raue & Lewis, 2011).

The purpose of such accommodations is an attempt to modify either the student’s environment or the students, themselves, in order to increase access and facilitate opportunities for student success (Rath & Royer, 2002). Examples of accommodations or additional supports that affect or modify the environment without compromising academic integrity or learning objectives for the course or program of study can include *assistive*
technology, devices or software applications that reduce “the necessity to use weak academic
skills” (p. 361); program modifications, such as extended time to complete exams; and direct
assistance, such as developmental education classes, supplemental instruction, or tutoring.
Approaches that are directed toward encouraging and facilitating change in the student might
include intrusive advising and counseling that focuses on developing effective academic
skills and study strategies, increasing metacognition, and encouraging self-advocacy (Rath &
Royer, 2002).

**Disability Conceptual Frameworks**

Much like the legislation and policies discussed in the previous section, the notion of
impairment and conceptualization of disability have evolved over time to reflect changing
perspectives as well as economic and sociopolitical forces. Throughout history, such shifts in
perspective can be delineated, to some extent, by several significant models, which include
“the moral model, the medical model, the functional limitations framework, the minority
group paradigm, the social construction model, and the social justice perspective” (Myers et
al., 2013, p. 51), all of which are discussed in the following section.

The moral model assumes that one’s disability is the existential result of an immoral
life or the direct result of sinful activity on the part of the individual or his or her forebears
(Goodley, 2011; Myers et al., 2013). Although some might argue that with advances in
scientific inquiry and medicine, the moral model is not as prevalent today. However,
contemporary examples do still exist, including “the public’s reaction to people with HIV and
AIDS” (Myers et al., 2013, p. 51). The medical model, the dominant perspective in Western
cultures for the past few centuries, views an individual’s disability as a functional impairment
or pathology, focusing on how to cure or treat the condition and the limitations of the
disabled individual (Goodley, 2011; Myers et al., 2013). Similar to the medical model, the functional limitations model views biological and physiological processes and ability as central to the identity of the individual. The model focuses squarely on the disability, itself, and an assumption of powerlessness or an external locus of control in its approaches to living with the disabling condition (Jones, 1996). Models that individualize the disability, such as these, “situate the predicament of disability firmly within the individual” (Goodley, 2011, p. 6). Further, they conceptualize the impairment or disability “on the notion that some bodies/minds are flawed and others are not” (Goodley, 2011, p. 29). When applied to college students, frameworks that individualize the disability focus so much on the limitations of the individual that they never expand beyond rehabilitation interventions and removing physical barriers.

Unlike the previous frameworks, the minority model also takes into account elements and experiences external to the individual and “acknowledges environmental factors and psychological and social consequences of disability” (Myers et al., 2013, p. 52). The minority group framework primarily deals with the experiences of marginalization that a person with a disability is likely to experience as someone who is different from what is considered normal (Jones, 1996). This framework assumes that as part of a minority group, individuals with disabilities will have common experiences or perspectives that they likely share with other minority groups. In a higher education context, the model assumes that existing elements of privilege, discrimination, and oppression result in perceived “otherness” and alienation (Myers et al., 2013; Reid-Cunningham, 2009). While it is not as restrictive as the functional limitations framework, the minority group model does not exactly fit the experiences and perspectives of every college student with a disability (Myers et al., 2013).
The *social construction model* views disability “as a socially constructed phenomenon that incorporates the experience of those living with disabilities in interaction with their environment” (Jones, 1996, p. 348). In doing so, this model takes into account both the individual with the disability and those with whom he or she interacts, whether they are disabled or not. Like the minority group model, the social construction model assumes elements of oppression and privilege, as well as “othering” or marginalizing, those with disabilities. However, the social construction model squarely rests upon the assumption that the whole notion of what it means to be disabled is “less rooted in empirical fact than in a social contract developed primarily by those outside the disability experience” (Jones, 1996, p. 351). In a higher education context, “college climates and structures can marginalize students, creating barriers to their inclusion and success” (Myers et al., 2013, p. 53). In other words, institutional processes, policies, norms, and attitudes constructed by nondisabled peers, faculty, staff, and administrators contribute to the feelings of alienation and otherness that a student with a disability might feel.

Compared to the previously discussed frameworks, the *social justice* model, or disability oppression theory, is the most recent evolution in conceptualizing disability (Myers et al., 2013), and “combines elements of the minority group model and the social construction framework” (Myers et al., 2013, p. 53). In an educational setting, Charlton (1998) describes how power structures intersect with meaning construction as they relate to disability in very common ways:

Students with disabilities, as soon as their disability is recognized by school officials, are placed on a separate track. They are immediately labeled by authorized (credentialed) professionals (who never themselves have experienced these labels) as LD, ED, EMH, and so on. The meaning and definition of the labels differ, but they all signify inferiority on their face. Furthermore, these students are constantly told what
they can (potentially/expect to) do and what they cannot do from the very date of their labeling. This happens as a natural matter of course in the classroom. (p. 32)

While such determinations and labeling most often occur at the elementary or secondary education levels, the meaning construction from such labeling follows the student well beyond high school.

**Learning Disabilities and Attention Deficit Hyperactivity Disorder**

A vast amount of scholarly work, from medical and neurological research perspectives exists for both LD and ADHD (Sparrow & Erhardt, 2014). From this body of literature, researchers have come to understand both LD and ADHD as disabilities in which a combination of neurobiological, genetic, and environmental factors influence how the conditions manifest in individuals (Gregg, 2009; Maher, 2014; Torgesen, 2004). This section begins by briefly describing the developmental nature of and similarities between the two conditions. To understand the evolving nature of science and society’s conceptualization of LD and ADHD, this section then examines the two disabilities separately. Finally, this section discusses the two disabilities as social constructs and the related implications for individuals in an educational context.

**LD and ADHD as Neurodevelopmental Disorders**

LD and ADHD are both classified as neurodevelopmental disorders in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-V)*. They are just two of several possible disorders that exist within the diagnostic category. Conditions within this group typically have an onset in early childhood and “are characterized by developmental deficits that produce impairments of personal, social, academic, or occupational functioning” (American Psychiatric Association, 2013, p. 31). The comorbidity rate of LD and ADHD is relatively high, in fact, some estimate “that as many as one-third of those with LD also have ADHD”
LD and ADHD have several other commonalities. Both have relatively high heritability rates with multiple incidences occurring in one family (American Psychiatric Association, 2013; Cortiella & Horowitz, 2014). Those who are LD or ADHD fall within rather broad, heterogeneous groups that include numerous combinations of how symptoms are presented and to what extent (DuPaul & Stoner, 2014; Orr & Hammig, 2009). Individuals with LD or ADHD experience noticeable deficits in executive brain functioning, a general term for cognitive processes like reasoning, memory, problem solving, and planning (Kane, Walker, & Schmidt, 2011). Despite all of their similarities, LD and ADHD often require different interventions, in that students with ADHD have generally benefited most from a pharmacological treatment approach, while LD students typically respond best to modified instructional approaches (Cortiella & Horowitz, 2014; Doyle, Faraone, DuPre, & Biederman, 2001).

**Learning Disabilities**

Some of the earliest conceptualizations and research into learning disabilities grew from the behavioral sciences. The view of learning disabilities shifted from a medical lens with an emphasis on causes and cure to a focus on understanding and addressing individual differences in learners (Fletcher, Lyon, & Fuchs, 2006). Dr. Samuel A. Kirk, a psychologist and one of the early contributors to learning disorder research and special education policy, first used the term “learning disability” in 1963. A learning disability, as Kirk explained it, was a way to categorize students who had trouble reading or were slower to process information despite having average or above average intelligence (Engel & Munger, 2010; Fletcher et al., 2006; Torgesen, 2004). Kirk’s contributions and conceptualization of learning disabilities, along with the formation of a professional organization dedicated to the field,
became the “catalyst” for “the formal beginnings of the learning disabilities field as a social/political/educational movement” (Torgesen, 2004, p. 15). From these beginnings, two branches emerged within the field; one of research and scientific inquiry into “individual differences in learning and performance” and the other “as an applied field of special education” (Torgesen, 2004, p. 7). Largely in response to the definitions and work put forth by Kirk and others, as well as recognition from the medical community, “the new field was moving toward the formal legislative designation of LD as a specific disability with entitlements for civil rights protections and special services” (Fletcher et al., 2006, p. 16).

From a sociopolitical standpoint, expanded research and advocacy helped to lay the groundwork and inform federal legislation. In the late 1960s, the U.S. Department of Education’s National Advisory Committee on Handicapped Children (NACHC) published a formal definition for specific learning disabilities based on the one Kirk articulated just a few years earlier (Fletcher et al., 2006). In the following years and on the heels of the Rehabilitation Act of 1973, additional legislation such as the Education for All Handicapped Children Act of 1975, later renamed the Individuals with Disabilities Education Act (IDEA) in 1990, led to educational policies that addressed “a need to provide services to youth whose learning characteristics were not being adequately addressed by the educational system” (Fletcher et al., 2006, pp. 10–11). There were practical implications attached to defining what it meant for a person to be diagnosed with a learning disability. Accordingly, the U.S. Office of Education added diagnostic criteria to the definition in the mid-1970s that “led to the development of a formula for calculating a severe discrepancy between intellect and achievement” (Hammill, 1990, p. 77). Not unexpectedly, the discrepancy model of diagnosing learning disabilities was widely criticized by researchers and practitioners, alike.
In the 1980s, the National Joint Committee on Learning Disabilities (NJCLD), a national organization comprised of representatives from a variety of organizations, responded to the need for a more inclusive and comprehensive approach. This group developed a definition that considered the diverse characteristics of various different learning disabilities, the long-term impact, and the potential comorbidity of other disabling conditions (Fletcher et al., 2006). The definition ultimately approved by the NJCLD in 1990, follows:

Learning disabilities is a general term that refers to a heterogeneous group of disorders manifested by significant difficulties in the acquisition and use of listening, speaking, reading, writing, reasoning, or mathematical abilities. These disorders are intrinsic to the individual, presumed to be due to central nervous system dysfunction, and may occur across the life span. Problems in self-regulatory behaviors, social perception, and social interaction may exist with learning disabilities but do not by themselves constitute a learning disability. Although learning disabilities may occur concomitantly with other handicapping conditions (for example, sensory impairment, mental retardation, serious emotional disturbance), or with extrinsic influences (such as cultural differences, insufficient or inappropriate instruction), they are not the result of those conditions or influences (National Joint Commission on Learning Disabilities, 1990).

The NJCLD definition of a learning disability is still used in educational settings more than two decades after its inception and is a widely used operational definition from an applied perspective in education (Fletcher et al., 2006).

The American Psychiatric Association provides a separate, yet similar, definition for clinicians and other healthcare providers. Specific learning disorders, as defined in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (DSM-V), provides a more detailed and comprehensive definition that reflects the expansive scope of human brain functioning and its deficits. It defines specific learning disorders as long-term “difficulties learning and using academic skills” (American Psychiatric Association, 2013, p. 66) that are not responsive to supports or interventions. It goes on to list the various possible diagnostic characteristics related to reading comprehension, phonetics, poor spelling, written
communication, mathematical reasoning, and overall calculation skills, disaggregating the diagnosis as mild, moderate, or severe to categorize severity.

The majority of specific learning disabilities can be attributed to and identified by deficits in reading comprehension, written communication, and math (Cortiella & Horowitz, 2014). *Dyslexia*, a disorder relating to reading comprehension, is one of the most widely known learning disabilities. Someone with dyslexia might find it difficult to recognize phonetic properties of words, sounds, and meanings. *Dyscalculia* is a disorder that affects one’s ability to process math computations, even the most basic such as “measurement, telling time, counting money and estimating number quantities” (Cortiella & Horowitz, 2014, p. 4). The disorder associated with written expression, *dysgraphia*, encompasses deficits relating to “both the physical act of writing and the quality of written expression” (Cortiella & Horowitz, 2014, p. 4).

**Attention Deficit Hyperactivity Disorder (ADHD)**

Physician records from as far back as the eighteenth and nineteenth centuries describe behavior and symptoms indicative of what we now know to be ADHD (Sparrow & Erhardt, 2014; Weyandt & DuPaul, 2013). Clinical descriptions have been quite consistent when including hallmark symptoms of the disorder, including inattentiveness, impulsivity, and hyperactive behavior such as fidgeting and restlessness. Yet, research literature on the disorder has evolved over time, particularly in how clinicians and researchers categorize symptoms and identify causal factors (Sparrow & Erhardt, 2014). While literature and research prior to the 1960s focused primarily on the hyperactive symptoms of the disorder, research since then has pointed to “deficits in sustained attention rather than overactivity” (Sparrow & Erhardt, 2014, p. 2) as the dominant component of ADHD. Current research
points to a combination of genetic and environmental factors as possible causes of ADHD, though, earlier literature framed the disorder as a result of “defective ‘moral control’ and presumed brain damage along with later environmental theories highlighting diet and child-rearing” (Sparrow & Erhardt, 2014, p. 3).

ADHD research has also evolved over the last few decades in how the disorder is assessed and treated in various populations. During the 1950s and 1960s, the focus of most clinical research in the area was directed toward developing and refining drug therapies as treatment for children diagnosed with ADHD. In a review of literature on ADHD in adults, Davidson (2007) reports an overall consensus among researchers and clinicians that current diagnostic procedures can reliably identify the disorder in children, however, that is not entirely the case when evaluating adults for the disorder. To assess ADHD in adults, clinicians will often use “self-reported behavioral checklists” (p. 632).

Additionally, the ways in which the clinical and diagnostic description intersected with sociopolitical perspectives evolved, particularly in terms of K12 education. When federal legislation addressing the needs of students who had learning disabilities was enacted in the mid-1970s, students with ADHD were specifically excluded. In 1980, the third edition of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-III)* included the term Attention Deficit Disorder (ADD) for the first time. It was not until the reauthorization of the Individuals with Disabilities Act (IDEA) in 1997 and the subsequent revisions to the legislation in 1999 that the federal government added ADD/ADHD to the list of eligible conditions covered, granting affected students access to special education services and support (Altshuler & Kopels, 2003). ADHD became “the official acronym to be

The current definition, as described in the *Diagnostic and Statistical Manual of Mental Disorders (DSM-V)*, puts ADHD with specific learning disorders under the much broader umbrella of neurodevelopmental disorders and lists three subtypes: a) *predominantly inattentive*, b) *predominantly hyperactive-impulsive*, and c) *combined*. A total of 18 possible behavioral symptoms are included in the DSM-V definition and are distributed between the two subsets or symptoms types, *hyperactivity-impulsivity* and *inattention* (American Psychiatric Association, 2013; Weyandt & DuPaul, 2013). Hyperactive symptoms can include “excessive fidgeting, tapping, or talkativeness” in children and “extreme restlessness or wearing others out with their activity” in adults (American Psychiatric Association, 2013, p. 61). Impulsive symptoms may involve engaging in potentially high-risk behaviors without forethought, inability or unwillingness to delay gratification, missing important social cues in interpersonal communication, and not giving full consideration to the long-term consequences of one’s actions or decisions (American Psychiatric Association, 2013).

Like other neurodevelopmental disorders, the onset of ADHD symptoms typically occurs in early childhood, “prior to the ages of 8-10 years old” (DuPaul & Stoner, 2014, p. 25). Up until the last 10-15 years, it was widely accepted among researchers that ADHD was mostly a childhood disorder, a condition that most individuals typically outgrow as they reach adulthood (Davidson, 2007). Yet, more recent “longitudinal studies indicate that most children with ADHD continue to display significant symptoms throughout adolescence and into adulthood” (Weyandt & DuPaul, 2013, p. 7). Sparrow and Erhardt (2014) cite the “shift in our understanding of the persistence and seriousness of the disorder” (p. 5) as a key point.
in the evolution of how researchers conceptualize the disorder. Symptoms in adults with ADHD may include a) decreased focus, b) difficulty following through on projects or tasks, c) disorganized, d) challenges with interpersonal relationships, e) trouble regulating emotions, f) inner restlessness, and g) impulsivity (Maher, 2014).

**LD and ADHD as Social Constructs**

Viewing disabilities as social constructs asserts that meaning is applied to individual differences within various social contexts and is connected to the norms, beliefs, and values of a society. This approach widens the analysis to also include both those who are seen as disabled and those who are nondisabled (Jones, 1996). Individual differences that are identified as disabilities, such as LD and ADHD, are “seen as socially created by values restricting how one’s brain is permitted to function” (Denhart, 2008, p. 483). Additionally, what a society views as a learning or cognitive impairment relies heavily on which methods of skill and knowledge acquisition it privileges. In other words, LD and ADHD are disabilities or labels that “have come into existence due to the growing cognitive demands of contemporary societies” (Vehmas, 2012, p. 301). Returning to the disability conceptual frameworks discussed earlier in the chapter, the social construction model views the marginalization of those with disabilities a direct result of institutionalized processes, policies, norms, and attitudes constructed by nondisabled others.

LD and ADHD are both *high-incidence* disabilities (DuPaul & Stoner, 2014; Reid & Knight, 2006). This fact is particularly problematic considering the ongoing issues with consistency and consensus in how to best define, identify, and support individuals who have either or both conditions. Assessing and diagnosing learning disabilities continues to remain elusive, with “no consensus regarding the manner in which to identify” specific learning
disabilities (Weis et al., 2013, p. 2). Fletcher, Lyon, and Fuchs (2006) encapsulate the problematization of learning disabilities in one overarching statement. “No single problem has plagued the study of LDs more than the problem of definition” (p. 25). Singh (2006) asserts that similar issues associated with ADHD.

Perhaps more than any other diagnosis on the medical market today, Attention Deficit/Hyperactivity Disorder (ADHD) problematizes the assumption of an objective measure of ‘normal’ functioning, and points to the distinctly social task of judging normative behaviors, assigning diagnostic labels and deciding on, and responding to, medical treatments. (p. 439)

Further muddying the LD and ADHD labels are contexts of race, ethnicity, socioeconomic status, and gender. These are “are significant factors embedded in the processes through which children’s behavior is perceived, evaluated and treated” (Singh, 2006, p. 447). The LD classification is the most prevalent category used to designate eligibility for special education, yet Black students are overrepresented in both special education and as students with LD (Reid & Knight, 2006). Similarly, minority students are just as likely to be identified as ADHD. However, discrepancies exist in how different populations are treated, in that White children are more likely to receive stimulant medication to treat symptoms (Singh, 2006). Additionally, Singh (2006) noted trends concerning gender in the identification and assessment of ADHD in children, as “boys are 3-4 times more likely to be diagnosed with ADHD than are girls; and women (mothers and teachers) are the primary instigators of ADHD evaluations” (p. 447). Moreover, concerns exist among some researchers and practitioners that the ADHD diagnosis and label is sometimes used “as a means of labeling and controlling children who exhibit difficult behaviors” (Mather, 2012, p. 19).

A significant amount of scholarly work and empirical research exists to support the actuality of LD and ADHD as neurodevelopmental disorders that impact both children and
adults. It is not the intention of this chapter section to call into question the actuality of either, as a condition or disability. Rather, it acknowledges the layered and complicated nature of categorizing someone as disabled, particularly when it is a condition that is otherwise invisible to or hidden from others. The misdiagnosis of learning disabilities and the over diagnosis of ADHD may have long-term consequences for students as the research is lost in translation when applied in the classroom, to educational policies, and at the hands of educators (Mather, 2012; Moore & Slee, 2012).

…more children are at risk of being categorized as having special educational needs and experiencing an attenuated experience of schooling. Where students are seen as the bearers of results, the temptation for classroom teachers to refer children out becomes irresistible. The abundance of experts and special educators convinces teachers that certain children are not theirs to teach. Or if they are to stay in the classroom, their presence is conditional on the provision of a minder or teacher aide who all too often becomes the de facto teacher (Moore & Slee, 2012, p. 229)

Finally, within the context of higher education, college students with LD or ADHD encounter the murky waters of what it means to be labeled as having a mostly invisible or hidden impairment. They and their families feel the direct impact of the complex discussions and evolving legal landscape as colleges and universities continue to address how to best serve this student demographic.

**The Experiences of College Students with LD or ADHD**

It may be a natural inclination for researchers and educators to generalize the characteristics and goals of particular student demographics, but it is important to keep in mind that there is always a certain degree of diversity within any subpopulation. College students with disabilities are no different. Even within the LD and ADHD populations, significant heterogeneity exists not only conceptually, but also in how students perceive their diagnosis, how it affects them academically and socially, and their overall experiences with it in relation to their pursuit of postsecondary education. Similar to his or her nondisabled
peers, though, a student’s personality characteristics and individual differences influence how he or she responds to significant life events and manages challenging situations or circumstances. In other words, these individual characteristics can significantly impact how one responds to his or her disability and his or her overall college experience, as a result (Troiano, 2003). Yet, some commonalities exist and are worth noting in this section, including precollege formative experiences and characteristics, the transition to college, and academic and social experiences in college.

Formative Experiences

Most individuals with LD or ADHD learn of their disability during their formative years (DuPaul & Stoner, 2014; Weis et al., 2013). The support they receive in elementary and secondary school relating to their disability varies greatly, as does the stigmatization that potentially comes with being labeled as a student with LD or ADHD. Those who are identified in elementary or secondary school often experience some degree of stigmatization or alienation from their peers, largely connected to the strategies or accommodations meant to help them (Mather, 2012; Troiano, 2003). Depending on the nature and duration of the stigmatization or support, a student’s precollege educational experiences can either bolster their confidence and self-efficacy or weaken it.

This chapter introduced several theoretical models used to frame the concepts of impairment and disability, specifically discussing LD and ADHD from a social construction framework. Yet, the medical model is still widely used as the dominant perspective to guide educators and parents or families of students with disabilities. Coupled with corresponding federal legislation, the medical model has provided parents and families of students with
disabilities a path to legitimacy and a weapon to use in defense of disability (Ong-Dean, 2005).

In an analysis of literature directed toward parents with disabilities, Ong-Dean (2005) found that discourses in the field often framed their content with the assumption that parents are interested in and able to be change agents and advocates for their children. Additionally, most literature situates “the disability of the child against the background of the middle-class home and the consequent expectations for the child in such a home” (p. 144). Moreover, Ong-Dean’s analysis acknowledges the potential role that parents or guardians play in using the medical model to legitimize a disability label that is embedded in social contexts.

The medical construction of disability is not simply a stigmatizing label that rationalizes social disadvantage. It is something that parents can use to ground the very claim of disability, a claim that might prove better than alternative constructions of the child—as a lazy child, a mediocre student, a troublemaker or a child with a more stigmatizing disability than the one proposed. (2005, p. 157)

These considerations become noteworthy when examining typical educational paths that students choose as they move through high school, develop career or vocational interests, and discuss postsecondary education with parents or guardians and school personnel. Such experiences can be formative as they continue to further define their relationship with learning and their own identity development.

**Transition Experiences**

The transition to college is difficult for most students, yet those with disabilities will often face additional challenges in the transition from the high school setting to a postsecondary institution. One such challenge is the change in accountability for and ownership of the student’s educational success. Since the 1970s, various federal legislation, such as the Individuals with Disabilities Education Act (IDEA), has required that K12 schools provide services to students with disabilities (Kaplin & Lee, 2013). Meant to provide
“specific procedural safeguards and the right to free, appropriate public education in the least restrictive environment” (Simon, 2000, p. 72), the IDEA established mechanisms in K12 educational settings where students with disabilities often had systematic and networked supports throughout most of their classes and other educational programming, including “multidisciplinary teams available for planning and interventions related to their disabilities” (Hadley, 2011, p. 77). Upon entering college, the “burden of success” shifts from K12 teachers, administrators, and other school personnel to “the shoulders of students” (Rath & Royer, 2002, p. 358).

The differences between the secondary and postsecondary environments are especially evident to students who regularly received specialized services or extra support during their K12 education, because once they are in college, the level of networked support that was built specifically for them no longer exists. While federal legislation such as Section 504 of the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 provide college students with disabilities equal access and protection against discrimination, supports are not automatically established for students. Instead, the responsibility rests upon the students to make contact with the appropriate departments at their postsecondary institution to request services, which are usually not as comprehensive as when they were in high school (Hadley, 2011). Unlike a K12 educational setting, the responsibility and choice is left to students to self-identify with, provide documentation of their disability to, and request accommodations from the appropriate office or personnel once they are enrolled in college. High school records and graduation transcripts do not include information regarding whether a student received accommodations or support due to a disability. Additionally, postsecondary institutions typically do not ask that potential students
disclose whether they have a disability or not during the application process so as to avoid potential discrimination allegations (Kaplin & Lee, 2013). In other words, colleges and universities do not seek students with disabilities out to make sure that they receive the academic adjustments or accommodations that they might need to be successful. Therefore, if students do not self-identify and request accommodations, they will likely not receive them.

While it may seem obvious from an outside perspective that it is advantageous for students to self-disclose their disability and request the appropriate academic adjustments, it is not always perceived as an obvious choice by the students. In fact, data from the National Longitudinal Transition Study-2 (NLTS-2) indicates that most do not self-disclose their disability once they are in college (Newman et al., 2011). Nearly two-thirds of those “identified by their secondary schools as having a disability did not consider themselves to have a disability by the time they transitioned to postsecondary school” (p. 31). Of those same students who were identified in high school as being disabled, data suggested that only 28 percent self-identified with the postsecondary institution and, subsequently, initiated the process of notifying the designated office or personnel at their college or university (Newman et al., 2011).

There are several reasons why a college student might choose to not follow through with the disability accommodations process. For some students, it is a purposeful act to not self-identify with the disability services office, for being labeled as LD or ADHD during their K12 education was an identity that they wanted to shed once they entered college (Denhart, 2008; Myers et al., 2013). Self-disclosing their disability and requesting accommodations might “conflict with the student’s desire to have a new beginning, one in which they do not
feel labeled by their peers and faculty” (Myers et al., 2013, p. 39). Further, students are often reluctant to request or use accommodations, as they do not want to be perceived as unmotivated, or seem as though they are taking shortcuts (Denhart, 2008).

Another reason that students do not follow through in requesting accommodations is that it can be perceived as a complex process with multiple steps. Once students self-identify by notifying the designated office or individual at their institution, they find that self-disclosure is only one step in the process of requesting and receiving accommodations. Of those students who were identified in high school as having a disability, only 19 percent completed the formalized accommodation process established by the institution and reported receiving “any accommodations or supports because of their disability from their postsecondary schools” (Newman et al., 2011, p. 32). If less than one-fifth of all postsecondary students with a disability receive accommodations compared to nearly 87 percent of them receiving accommodations and services in high school (Newman et al., 2011), it is not surprising that they would experience additional challenges in transitioning to college.

**Academic and Social Experiences in College**

As noted in the first chapter, relatively little research literature exists on the college experiences that are specific to LD and ADHD students or students with disabilities, in general. Yet, when one explores beyond the general comparisons in student demographics and outcomes, it becomes clear that individuals with disabilities who choose to pursue postsecondary education face additional challenges that their nondisabled peers do not. For LD and ADHD students, academic and attitudinal barriers are very real concerns. The ability to adapt, academically and socially, becomes that much more important to their success.
Learner attributes and habits. Students with disabilities who might have received individualized support in high school now encounter an educational environment that takes a vastly different approach to learning and student support (Hadley, 2011). The transition that students experience upon entering college is informed by both external attributes of their academic preparedness and internal attributes, as learners, including academic motivation, self-regulation, self-efficacy, and metacognition. Some comparison studies suggest that students with LD or ADHD tend to have lower capacity to assess their own ability to perform complex processes or tasks, referred to as academic self-efficacy (Hen & Goroshit, 2012). Self-regulation strategies, such as time and task management, monitoring one’s own learning, and assessing the results in order to refine metacognitive strategies are correlated with positive educational experiences and academic achievement (Pekrun & Stephens, 2010). However, students with LD were more likely to procrastinate than those without a learning disability as well as show “lower levels of metacognitive self-regulation and self-efficacy for self-regulation” (Klassen, Krawchuk, Lynch, & Rajani, 2008, p. 144). In a review of literature on the academic and social experiences of college students with ADHD, Weyandt and DuPaul (2008) found that students with ADHD were “at increased risk for academic problems, lower GPA, as well as compromised academic coping and writing skills” (p. 314).

Attitudinal barriers. While institutions are required by law to provide accommodations to students who have a documented disability, the accommodations do not always address the barriers that students will face, including stigmatization and an overall lack of awareness and knowledge regarding how a specific disability impacts learning and the appropriate use of accommodations (Gregg, 2009; Myers et al., 2013). Attitudinal barriers are, perhaps, some of the biggest challenges that students with disabilities are likely
to encounter in college. Students with hidden or invisible disabilities, such as LD and ADHD, often face a difficult choice of whether to disclose to the college or university that they have a disability at all. If they choose not to disclose and do not request accommodations, they risk not having the educational supports that could help them to be academically successful. Conversely, they could opt to disclose their disability and request accommodations, knowing that there may be faculty, staff, administrators, and students who view them negatively or not as competent as their nondisabled classmates. Even with inclusive institutional policies and practices, longstanding personal attitudes can be difficult to change. “Disability has been a stigmatized identity in the United States largely due to the early moral and medical models that shaped the societal perception of what traditionally is considered ability” (Myers et al., 2013, p. 60).

**Social integration and support.** In a study that examined the role of academic and social integration in the success and persistence of students with LD, DaDeppo (2009) found that while both academic and social aspect were important, social integration was the strongest predictor of academic success and persistence. DeDeppo reasoned that because students with LD are more likely to experience academic challenges than their peers, those who persist beyond their freshman and sophomore years may “compensate by relying more on their social support systems” (p. 128). Further, students who were able to develop or participate in a support network with one another, an “empowerment community,” found that they were better able to develop academic strategies through peer knowledge-sharing (Denhart, 2008; Lombardi, Murray, & Gerdes, 2012).

Compared to their nondisabled peers, college students with ADHD appear to be more susceptible to a wide range of social and emotional challenges which could easily become
barriers to achieving educational goals and positive developmental outcomes. From their review of existing literature on college students with ADHD, Weyandt and DuPaul (2008) also found that those students “appear at risk for difficulties with social relationships and adjustment” (p. 314). Students with ADHD also report mental health issues with greater frequency and higher intensity than their peers (Davidson, 2007; Weyandt et al., 2013). Considering their overall risk for impaired functioning as they move from adolescence into adulthood, social integration and supports play a critical role in facilitating positive developmental outcomes for college students with ADHD.

Summary

This chapter provided an overview of the current literature surrounding college students with disabilities. The overview outlined the legislative and policy landscape for students with disabilities, in general. It provided historical context to postsecondary disability policy as well as institution-level support and services. The chapter also reviewed theoretical models for conceptualizing disability. Specifically concerning LD and ADHD, the chapter described how the literature in research and practice has evolved and informs education policies. Privileging the social constructionist perspective, this chapter further problematized current approaches and perspectives on LD and ADHD. It also looked at existing literature on the transition issues and college experiences of students with LD or ADHD.
CHAPTER 3. METHODOLOGY

The overall purpose of this qualitative study was to better understand both the external and internal lived experiences of college students who identified as having a learning disability (LD) or attention deficit hyperactivity disorder (ADHD). Specifically, this study used phenomenological inquiry to gain a deeper understanding of how such experiences, as dynamic and reciprocal relationships with various environments, influenced the students’ development and self-awareness as learners. This phenomenological study used in-depth interviewing to collect participant data in order to answer the following research questions:

1. What are the educational experiences of college students with LD or ADHD?
2. What experiences do college students with LD or ADHD identify as formative in their development as learners?
3. What role, if any, does having a disability play in how they think about their own development as learners?

This chapter describes the research methodology and design as a whole. Specifically, the chapter connects literature on qualitative inquiry and the research framework with the purpose and design of this study. This chapter also discusses the how the research framework is situated within a constructionist epistemological paradigm and guided by interpretivist philosophical assumptions. It then presents phenomenology as the methodological approach used in this study, connecting back to the goal of examining the lived experiences of others as well as provide an overview of the ecological lens used as the conceptual framework. Additionally, this chapter also provides a detailed review of the data collection methods and data analysis process used for this study. Finally, the chapter explains
strategies used to ensure research trustworthiness and goodness and explains the delimitations and limitations associated with this study.

**Research Framework**

Qualitative research designs provide structure for understanding the chaos of the human experience, creating space for and acknowledging multiple truths. It illuminates layers of the lived experience that are yet to be uncovered. Creswell (2013) defined qualitative research as a way to understand the human experience with the result being a complex, all-encompassing illustration created or interpreted by the researcher. This study attempted to gain a deeper understanding of both the external and internal lived experiences of college students with LD or ADHD. The research questions which guided this study explored how such experiences influenced the students’ development and self-awareness as learners. To align the research design with the purpose of the study and research questions, a qualitative approach was most appropriate. Qualitative research serves as a means by which we seek to understand human behavior and social interaction along with elements of the human experience that are difficult to quantify, replicate, or predict.

**Philosophical and Theoretical Paradigms**

By attempting to better understand human behavior, qualitative researchers inherently add their own experiences, beliefs, and values to the lenses with which they view their research. This highly individualized lens, or set of assumptions and beliefs that an individual or society holds, is called a paradigm, sometimes referred to as a worldview (Jones, Torres, & Arminio, 2006). Because these paradigms or worldviews influence how one approaches research, a researcher’s observations or findings are never objective. Instead, they are “only observations socially situated in the worlds of – and between – the observer and the
observed” (Denzin & Lincoln, 2011, p. 12). The paradigmatic dimensions of the framework used to situate this study by anchoring and guiding the research include ontological, epistemological, and theoretical perspectives, all of which are outlined in this section.

Creswell (2013) describes ontology as the study of our existence or reality. This study intended to shed light on the lived experiences of others, a goal that rested squarely on the relativist ontological assumption that multiple realities exist. In the context of conducting qualitative research, a researcher who uses this ontological perspective presents “multiple forms of evidence in themes using the actual words of different individuals and presenting different perspectives” (p. 20).

How an individual acquires knowledge about the nature of her reality depends on her own epistemological perspective (Jones et al., 2006). The purpose of this study was to better understand the lived experiences of college students by exploring how they constructed meaning from experiences in various environmental contexts. Therefore, this study is anchored within a social constructionism epistemology. Crotty (1998) described constructionism as a perspective that assumes truth in meaning is created, rather than discovered, and that “meanings are constructed by human beings as they engage with the world they are interpreting” (p. 43). More specifically, social constructionism asserts that every aspect of one’s reality is socially constructed by the mere fact that one is part of and interacting with the world.

The ontological and epistemological dimensions of the researcher’s philosophical assumptions are woven into an overall theoretical perspective that serves a “philosophical stance informing the methodology and thus providing a context for the process” (Crotty, 1998, p. 3). In examining how college students with LD or ADHD construct meaning from
their interactions with the world, this study focuses exclusively on the subjective experiences of its study participants. This type of focus in research is best embodied by an interpretivist theoretical perspective. Creswell (2013) explains that research situated in interpretivism is primarily concerned with being authentic in conveying the subjective meaning that the participant has constructed about the phenomena being studied. Additionally, an interpretivist theoretical perspective provided an appropriate context for a phenomenological methodology as well as a backdrop for methods that facilitated opportunities for meaning construction and interpretation, all of which were shaped by the subjective experiences of both participants and researcher.

**Methodological Approach**

Conceptually, the *methodology* of a research study serves as “the strategy, plan of action, process or design lying behind the choice and use of particular methods” (Crotty, 1998, p. 3). Identifying a chosen methodology allows the researcher to demonstrate how the research plan or strategy purposefully connects with the methods used to carry out the study, including data collection, analysis, and the strategies used to preserve the rigor and trustworthiness of the research. It also provides context for the readers to interpret and evaluate the research results for themselves (Jones et al., 2006). To this point, Creswell (2013) suggests that this approach supports *methodological congruence*, the desired outcome of presenting the gestalt of the study “as a cohesive whole rather than as fragmented, isolated parts” (p. 50). This study examined the external and internal lived experiences of college students with LD or ADHD. Further, the aim of this research was to capture an overall sense of how they constructed meaning from their experiences as well as the ways in which those meaningful experiences influenced the students’ development and self-awareness as learners.
Attempting to capture and convey the essence of being a college student with LD or ADHD, this research design used phenomenology as the guiding methodological framework.

As a methodological approach, phenomenology aims to describe “what people experience and how it is that they experience what they experience” (Patton, 2002, p. 107). In doing so, a researcher attempts to uncover and describe “the common meaning” that individuals construct from or assign to an experience with a specific phenomenon (Creswell, 2013). In the most basic terms, a phenomenon can be any kind of experience, a result of one’s own existence in the world. This study attempts to explore and describe the essence of being a college student with LD or ADHD, the phenomenon of interest. The aim of the investigation was to understand the meaning they ascribe to that phenomenon as a lived experience, whether the meaning is specific to an individual or shared by a group.

Like other methodological approaches, phenomenology provides a researcher with a framework for her study, guiding the focus and topic, data collection methods, and how data is analyzed and interpreted. The most appropriate studies for phenomenological research are those with the goal of understanding and giving voice to the individual or individuals who have direct experience with a phenomenon. Researchers attempt to uncover the essence of the phenomenon, describing the commonalities of their experiences (Creswell, 2013). Therefore, data collection methods typically involve individual, in-depth interviews with a several participants by using “an informal, interactive process and utilizes open-ended comments and questions” (Moustakas, 1994, p. 114). Phenomenological methodology assumes an inductive approach to the data analysis process, in that it begins with narrow meaning units assigned to the data, moves to more broader meanings, and brings forward themes found within their collective experiences (Creswell, 2013). Finally, a
phenomenological methodology cannot adequately guide a study unless the role of the researcher is acknowledged through a reflective process of bracketing previously held knowledge and assumptions about the phenomenon being studied. Also referred to as *epoche*, this process requires the researcher to acknowledge and clarify personal biases, values, attitudes, and previous experiences that might influence how she approaches the study (Creswell, 2013). In other words, the researcher “brackets” or places aside her preconceived notions about the subject matter.

**The Role of Researcher**

Jones, Torres, and Arminio (2006) define *researcher positionality* as “the relationship between the researcher and his or her participants and the researcher and his or her topic” (p. 31). As a result, researcher positionality is an important element to examine before collecting and analyzing data. Acknowledging the inevitable presence of the researcher role in this study, a statement of positionality (see Appendix A) outlines what experiences led this researcher to the topic of study, the personal bias owned by the researcher, and the nature of the researcher’s relationships with students who chose to participate in the study.

**Ecology of Human Development**

This study drew upon a conceptual framework that is rooted in developmental psychology as a way to frame the experiences of college students with LD or ADHD as they perceive and construct meaning from their experiences in the world. Urie Bronfenbrenner’s ecology model of human development considers processes, the person, contexts, and time to create the multidimensional aspects of human development through the infinite ways in which individuals interact with their environment (Renn & Arnold, 2003). The following
section briefly explains the four components and relates them to student experiences and within the context of higher education.

**Proximal Processes and Person**

Humans continually interact with the world around them. These interactions, or *proximal processes*, serve as opportunities for human growth and development to occur by engaging the individual in increasingly complex tasks as he or she interacts with other people or objects (Siraj & Mayo, 2014). In an educational setting, a student engages in proximal processes by interacting with the teacher and classmates as well as objects like books, computer programs, and other learning technology. At home, the student interacts with parents and siblings in increasingly complex ways as relationships evolve. Learning to ride a bike or play the piano are examples of proximal processes in which the student interacts with objects. For development to truly take hold as the result of proximal processes, the interactions must require individuals to “think and act *beyond* the comfort of the skills and knowledge they have already mastered” (Siraj & Mayo, 2014, p. 18). Further, the interactions or processes must occur for a sustained amount of time in order for the new knowledge and skills to solidify as part of their development.

Always working in tandem with proximal processes, the *person* or self is conceptualized by individual attributes or person characteristics. Bronfenbrenner categorizes these individual attributes as force, resource, and demand characteristics in later iterations of his ecological theory (Bronfenbrenner & Morris, 2007; Rosa & Tudge, 2013). *Force* characteristics refer to traits that are largely dispositional but can facilitate or inhibit development or growth. Examples of characteristics that are “developmentally generative” and facilitate development include being open to new experiences or having the ability or
willingness to “defer immediate gratification to pursue long-term goals” (Siraj & Mayo, 2014, p. 19). Examples of characteristics that are “developmentally disruptive” and inhibit growth include shyness, personal insecurities, or problems managing emotions. Resource characteristics refer to the internal and external resources that helps one move through life, such as mental ability or intelligence, emotional well-being, supportive family or friends, and sufficient material resources to meet basic needs (Siraj & Mayo, 2014, p. 19). Demand characteristics refer to traits that “invite or discourage reactions from the social environment,” such as an engaging personality or calm demeanor as well as physical traits like “age, gender, and skin color” (Rosa & Tudge, 2013, p. 253). The characteristics can have a profound influence, whether positive or negative, on how an individual develops and what the course of their development entails, in that if “processes are the engines of development, it is the characteristics of person and context that provide the needed fuel and do most of the steering” (Bronfenbrenner & Ceci, 1994, p. 584).

Environmental Contexts

Renn and Reason (2013) describe the context component of Bronfenbrenner’s developmental ecology model as “multiple levels, or systems, in which developmental encounters take place between the individual and his or her environment” (p. 126). In other words, context describes and categorizes the place, in relation to the individual, where a specific interaction occurs, whether for a brief moment or over a long period. Contexts in Bronfenbrenner’s original ecological model include Microsystems, mesosystems, exosystems, and macrosystems (Rosa & Tudge, 2013).

Microsystems are part of the context level that is closest to the individual and are patterns of interactions, whether explicit or implicit, experienced directly by the individual in
a specific setting (Bronfenbrenner, 1979, 2005). Family, social circles, co-workers, and classmates are examples of Microsystems that directly include the individual.

*Mesosystems* refer to the web of “connections across Microsystems—the network of overlapping relationships, messages, objects, and symbols in a person’s everyday world” (Arnold, Lu, & Armstrong, 2012, p. 14). A living-learning community for freshmen, is an example of a mesosystem, as a network of various Microsystems that involve the individual. When individuals are exposed to a new environment or expand their network of Microsystems, their corresponding mesosystem is enhanced by the experience (Bronfenbrenner, 1979, 2005).

*Exosystems* fall just outside the realm of the student’s direct experience, and although they may not have direct contact with the student, they can still “exert an influence on his or her environment through interactions with the Microsystems” (Evans et al., 2010, p. 164). Exosystems, such as institutional planning and administrative decisions at a university, seldom include students, however, they still have a dynamic and reciprocal relationship of influence with one another (Bronfenbrenner, 1979, 2005).

*Macrosystems* are broadly observed patterns of consistency found within the more proximal environmental contexts of a specific culture or subculture (Bronfenbrenner, 1979, 2005). In other words, the macrosystem is the broadest context, “comprising ideology, culture, and major social institutions such as government, religion, and the economy” (Arnold et al., 2012, p. 16).

**Time and the Chronosystem as Added Context**

Bronfenbrenner revised and refined his ecological model several times. Earlier versions of his theory focused heavily on the influence of environmental contexts on human
development (Rosa & Tudge, 2013). Later versions shifted more attention to person characteristics, proximal processes, and the idea of time. As the fourth component of the developmental ecology model, time can have multiple meanings, all of which are equally important. Renn and Reason (2013) categorize them into three groups: (a) the era in which one lives, including generational and historical influences; (b) the sequence of events in one’s life, such as a death of a parent or a disabling accident; and (c) the evolution of contexts or individuals and the associated changes over time, such as occupational burnout or a deteriorating relationship. The chronosystem, a concept added later to Bronfenbrenner’s original model of developmental ecology, seems to straddle between the context and time components in that it “conveys the element of time as manifest in changes in the larger cultural forces of the macrosystem” (Renn & Arnold, 2003, p. 272). The chronosystem is particularly relevant in that it provides an avenue to examine the dynamic interactions of an individual or group of individuals, such as students with disabilities.

**Site Selection**

The research design for this study aimed to recruit participants from multiple postsecondary institutions. College students from two separate institutions volunteered to participate in the study. Private University is a religiously-affiliated, four-year institution with a large central campus that is situated within an urban, downtown business district of a large Midwestern city. Urban Community College is a public, two-year institution with several campuses scattered throughout the same city. As summarized in Table 2, the two institutions possess vastly different institutional characteristics such as undergraduate enrollment, cost, retention rates, and graduation rates. Retention rates in Table 2 are defined as the percentage of full-time students who were retained from their first to second year.
Graduation rates are defined as the percentage of full-time students who completed their bachelor’s degree within six years or their associate’s degree within three years.

Table 2

*Institutional Characteristics for Undergraduate Programs*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Private U</th>
<th>Urban CC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Fall 2012 Undergraduate Enrollment</td>
<td>4,032</td>
<td>17,376</td>
</tr>
<tr>
<td>Tuition and fees for 2013-14</td>
<td>$34,330</td>
<td>$2,610</td>
</tr>
<tr>
<td>Retention rate</td>
<td>90%</td>
<td>50%</td>
</tr>
<tr>
<td>Graduation rate</td>
<td>77%</td>
<td>13%</td>
</tr>
</tbody>
</table>


The goal of seeking out study participants from multiple institutions with differing characteristics was to provide as many diverse voices and experiences as possible with a small sample size. A general comparison of student demographics is provided in Table 3, including gender, enrollment pattern, age, and race or ethnicity of the undergraduate student population.

**Participant Selection**

Prior to any participant recruitment activities for this study, the researcher obtained the appropriate permissions and adhered to all compliance and ethical guidelines outlined by both Iowa State University (Appendix B) as well as the research site institutions. Once approved by each Institutional Review Board, the researcher contacted the disability services office (DSO) at each of the research sites to gain communication access to potential participants who were enrolled at the postsecondary institutions (Appendix C). Working with the DSO personnel at each research site to identify potential participants ensured that any study volunteers would have already self-identified as a student with LD or ADHD, verified
by institution’s disability accommodation process. Additional participant criteria for this study included that participants had to be enrolled as full-time, undergraduate students at either of the two research sites.

Table 3

*Student Demographics by Institution*

<table>
<thead>
<tr>
<th>Variable</th>
<th>Private U</th>
<th>Urban CC</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Undergraduates</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Men</td>
<td>1,634</td>
<td>7,672</td>
</tr>
<tr>
<td>Women</td>
<td>2,398</td>
<td>9,704</td>
</tr>
<tr>
<td><strong>Status</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Full-time</td>
<td>3,813</td>
<td>6,617</td>
</tr>
<tr>
<td>Part-time</td>
<td>219</td>
<td>10,759</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24 and under</td>
<td>92%</td>
<td>54%</td>
</tr>
<tr>
<td>25 and over</td>
<td>8%</td>
<td>46%</td>
</tr>
<tr>
<td><strong>Race/Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>American Indian/Alaska Native</td>
<td>1%</td>
<td>1%</td>
</tr>
<tr>
<td>Asian</td>
<td>9%</td>
<td>3%</td>
</tr>
<tr>
<td>Black or African American</td>
<td>3%</td>
<td>13%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>5%</td>
<td>8%</td>
</tr>
<tr>
<td>Native Hawaiian or Pacific Islander</td>
<td>0%</td>
<td>0%</td>
</tr>
<tr>
<td>White</td>
<td>74%</td>
<td>69%</td>
</tr>
<tr>
<td>Two or more races</td>
<td>3%</td>
<td>1%</td>
</tr>
<tr>
<td>Race/ethnicity unknown</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td>Nonresident alien</td>
<td>2%</td>
<td>1%</td>
</tr>
</tbody>
</table>


To invite eligible students to participate in the study, DSO personnel sent an email message through their college or university email account to students who met the study eligibility criteria. The email invitation included a synopsis of the study as an attachment.
(Appendix D) and invited any students who were interested in participating to contact the researcher directly, using the contact information provided. The researcher used purposive sampling to select 10-12 study participants, however, an actual sample size of eight students participated in all three interviews.

**Data Collection**

The research design for this qualitative study included conversational, unstructured in-depth interviews as the data collection method. The following section provides a detailed explanation of in-depth interviews and the protocol used for this study.

**In-Depth Interviewing**

This study used a model developed by Seidman (2006) for in-depth, phenomenological interviewing. Conducting in-depth interviews with study participants is the primary data collection method for phenomenological research, because the interpretive methodological framework focuses on gaining a deeper understanding about the meaning individuals create from a lived experience (Merriam, 2002). In-depth interviews often include open-ended questions to allow the most authentic participant voice to emerge. The data collected from this type of method provides rich opportunities to look deeper at a particular phenomenon, because it acknowledges the worth and insight gained from the stories of others. (Seidman, 2006).

Staying true to the Seidman (2006) model, this study included three separate rounds of participant interviews. Each round had its own specific purpose within an overall strategy that focused on understanding constructed meaning related to a specific experience or phenomenon. The goal of the first meeting was for the interviewer to establish rapport with the participant while also learning their life history. A participant’s life history can provide
an autobiographical context for the phenomena or experience a study explores. The second meeting focused on their present experiences surrounding the phenomena or topic under investigation. The purpose of the final interview was an opportunity for the participant to reflect on the meaning of the experience or phenomena. Together, data from the three rounds of interviews created an overall picture or the essence of the phenomenon by interweaving retrospective narrative with details of the present moment to provide the opportunity for participants to engage in meaning making (Seidman, 2006).

**Interview Protocol**

When using unstructured interviewing for data collection, Jones, Torres, and Arminio (2006) stress the importance of choosing interview locations carefully, planning how long and how often the participants are interviewed, and other components of the interviewing protocol. All individual interviews in this study were 60-90 minutes long and conducted in a predetermined location on campus, agreed upon by both the researcher and the study participant. Additionally, the researcher ensured that the meeting locations were in a space that was available for at least a two-hour block of time, had the functionality to allow for audio-recorded interviews without interruption, and provided privacy for participants.

The first interview began by engaging the participant in social conversation. A brief overview of the study and its purpose was provided. The researcher asked participants to complete a pre-interview questionnaire (Appendix D) which asked the student to provide some general demographic information. The researcher also reviewed the informed consent information with each of the study participants and asked that they read and sign it if they would like to continue as study participants (Appendix E). The informed consent granted written permission to proceed with the interviews and for the meetings to be audio-recorded.
Additionally, the researcher explained to participants that they had the option to stop the interview or withdraw from the study at any time without penalty.

Together, data from the three interviews created an overall picture or an essence of the phenomenon by interweaving retrospective narrative with details of their current lived experience to provide the opportunity for participants to engage in meaning-making (Seidman, 2006). The flexibility in this interview protocol allowed the researcher to explore and understand, as much as possible, the student’s perspective while maintaining authenticity. Throughout all three series of interviews, the researcher took field notes, as necessary, being particularly mindful of participant affect and body language as well as the participants’ own observations and reactions as the result of sharing their experiences. This section provides a brief summary of the purpose for each interview and a listing of the open-ended questions that guided the conversation.

**First Interview**

Using Seidman’s (2006) approach to the three-interview model in qualitative research, the focus of the first meeting was to gain a better understanding of the participant’s “life history” in order to provide context for the phenomenon of attending college as a student with LD or ADHD. As a semi-structured interview, the researcher used several guiding questions that allowed participants to speak to their own experiences. Questions used in the first interview invited participants to discuss their background or upbringing, educational experiences prior to college, and their understanding of the disability as it has affected them. Table 4 provides a matrix that lists each of the questions used in the first interview and indicates how they corresponded to the research questions for this study.
Table 4

*Research Question Matrix for First Interview*

<table>
<thead>
<tr>
<th>Interview Question List</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.1 Tell me about where you grew up. What is your family like?</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>1.2 Tell me about the schools you attended.</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.3 Other than your classes, what types of activities were you involved in at school and outside of school?</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.4 At what age and under what circumstances did someone first tell you or your family that you might have difficulties with some areas of learning?</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>1.5 Did your parents or family have discussions about your learning difficulties that you remember? If so, tell me about those.</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>1.6 How did your school(s) address the learning difficulties you experienced?</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>1.7 As an adult, what is your understanding of your disability?</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.8 How do you describe your disability to others?</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.9 Prior to attending college, how would you describe your individual learning style?</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>1.10 Did you have particular strategies, technology, or accommodations that were particularly helpful to you?</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* The open-ended questions listed in this table guided this semi-structured interview, however, follow-up questions and conversation varied by participant (Seidman, 2006).

**Second Interview**

During the second interview, participants reconstructed their present experience of being a college student and their perceptions of the college environment in detail. Questions during the second semi-structured interview were based on Bronfenbrenner’s ecology model of human development (1979, 2005). The questions focused on the participants’ interactions within and perceptions of environmental contexts. Table 5 provides a matrix that lists each
of the questions used in the first interview and indicates how they corresponded to the research questions for this study.

Table 5

Research Question Matrix for Second Interview

<table>
<thead>
<tr>
<th>Interview Question List</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1 Who was the most influential in your decision to attend college?</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.2 Have you found a way to connect to [Institution Name]? How did that come about?</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.3 In your time here at [Institution Name], what resources or people have had the greatest impact in providing you with guidance and support?</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.4 What made you self-disclose and/or apply for accommodations?</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>2.5 If you have used any type of accommodations, tell me about those experiences.</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>2.6 What has been the most valuable support or the most helpful? What’s been the least helpful?</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.7 Describe your interactions and the type of support you’ve received, so far, from the Disability Services Office.</td>
<td>●</td>
<td>●</td>
<td></td>
</tr>
<tr>
<td>2.8 How would you describe your interactions with your instructors or faculty at [Institution Name]?</td>
<td>●</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.9 How have you found ways to connect with other [Institution Name] students? What’s been the most difficult aspect of that?</td>
<td>●</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. The open-ended questions listed in this table guided this semi-structured interview, however, follow-up questions and conversation varied by participant (Seidman, 2006).

Third Interview

The purpose of the final interview was primarily one of reflection. The researcher asked study participants to reflect on their decision to attend college, their experiences as an undergraduate, their perceptions regarding the overall experience of being a college student with a disability, and how they feel their perceptions and meaning making have changed over
time. Table 6 provides a matrix that lists each of the questions used in the first interview and indicates how they corresponded to the research questions for this study.

Table 6

*Research Question Matrix for Third Interview*

<table>
<thead>
<tr>
<th>Interview Question List</th>
<th>R1</th>
<th>R2</th>
<th>R3</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1 Since starting college, describe how you have changed as a person. What or who has</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>had the greatest impact on your sense of who you are as a college student?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.2 Looking back, if you had to do it over, would you attend [Institution Name]? Why or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>why not?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.3 What would you tell other students with similar disabilities about the [Institution</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name] campus and community?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.4 How have your approaches in working with faculty changed or evolved since you were</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>freshmen?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.5 Can you tell me a story of a difficult situation with an instructor that you felt</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>you handled particularly well?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.6 What about when you encounter peers who are very different from yourself...whether</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>it’s background, beliefs/values, etc. Can someone tell me a story of a difficult</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>situation with a peer that you felt you handled particularly well?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.7 Before you entered college, try to think back about how you conceptualized what</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>it would take to be successful in college. How has that changed knowing what you know</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>now?</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.8 Give an example, if you can, of one time when you really went against the grain...</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>tried something really difficult or failed at something, but came out a better/wiser</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>person for it.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Note.* The open-ended questions listed in this table guided this semi-structured interview, however, follow-up questions and conversation varied by participant (Seidman, 2006).

**Data Analysis**

To maintain methodological congruence, it was important that the methods used to analyze data from the in-depth interviews with participants aligned with the
phenomenological methodology and research design proposed. This section discusses the
general steps researchers take in analyzing qualitative data as well as the data analysis
approach used in phenomenological research. This study integrated the two approaches, a
process that is outlined in this section, and includes the rationale in addressing each step.

**Data Analysis Process**

To frame the data analysis methods, this study integrated two approaches. The first
approach was a generic framework proposed by Hays and Singh (2012), which incorporated
a data analysis method that is typically used within a counseling and therapeutic context
(McLeod, 2001) with the cyclic process of analysis of Miles and Huberman (1994). This
general approach is “*most directly applicable to analyzing text* derived from certain data
collection methods, such as in the case of interview transcripts” (Hays & Singh, 2012, p.
295). The general steps included reducing data, collecting data, memoing and summarizing,
organizing text, coding, identifying themes and patterns, and creating a codebook. The
second approach aligned with the purpose and methodology of this study. Moustakas (1994)
explained that the phenomenological researcher’s goal during the data analysis phase is “to
determine what an experience means for the persons who have had the experience and are
able to provide a comprehensive description of it” (p. 13). This study used a method of data
analysis that Moustakas (1994) modified for phenomenological research. The process steps
include: (a) a *horizontalization* of every idea or expression related to the experience; (b)
*reducing* data by identifying and eliminating overlapping components; (c) *clustering* and
*thematizing* by grouping and labeling components; (d) *validating* themes by examining them
in relation to the person and experience, as a whole; (e) constructing *textural* and *structural*
descriptions for each participant as it relates to themes; and (f) synthesizing the *textural-
structural descriptions into a composite description that fully conveys the essence of the phenomenon and illustrates the experience in its entirety (Moustakas, 1994).

Table 7

*Data Analysis Process Summary*

<table>
<thead>
<tr>
<th>Analysis Process</th>
<th>Method Used</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Memoing and Summarizing</td>
<td>Developed initial participant narratives for all participants, following each of the participant interviews.</td>
<td>(Miles, Huberman, &amp; Saldaña, 2013)</td>
</tr>
<tr>
<td>Organizing Text</td>
<td>Conducted a <em>global reading</em> of the data with a thorough reading of transcripts while listening to audio recording, editing for accuracy.</td>
<td>(Giorgi, 1997)</td>
</tr>
<tr>
<td></td>
<td>Imported tab-delineated transcripts into Microsoft Excel in preparation for analytical coding.</td>
<td>(Meyer &amp; Avery, 2008)</td>
</tr>
<tr>
<td>Horizontalization and Reducing Data</td>
<td>Reread and compiled transcripts, followed by an initial review of data which used open coding</td>
<td>(Moustakas, 1994)</td>
</tr>
<tr>
<td>Coding</td>
<td>Revisited data and open coding, organizing into meaning units.</td>
<td>(Creswell, 2009; Giorgi, 1997)</td>
</tr>
<tr>
<td>Identifying Themes or Patterns</td>
<td>Clustered concepts and themes by grouping and labeling components.</td>
<td>(Hays &amp; Singh, 2012; Maxwell, 2013)</td>
</tr>
<tr>
<td>Validating Themes</td>
<td>Additional reviews incorporated conceptual frameworks, study purpose, and research questions.</td>
<td>(Hays &amp; Singh, 2012; Moustakas, 1994)</td>
</tr>
<tr>
<td>Constructing Descriptions</td>
<td>Developed textural and structural descriptions of the experience for each participant.</td>
<td>(Moustakas, 1994)</td>
</tr>
<tr>
<td></td>
<td>Wove the textural-structural descriptions together for a composite description.</td>
<td></td>
</tr>
<tr>
<td>Creating a Codebook</td>
<td>Developed codebook that aligns with identified themes and conceptual frameworks.</td>
<td>(Creswell, 2009)</td>
</tr>
</tbody>
</table>
This study integrated the generic framework for analyzing qualitative data and the phenomenological analysis method. The specific process steps that followed the collection of data are summarized in Table 7 with detailed explanation following.

**Memoing and summarizing.** The memos and summaries in this study functioned as more organized and figuratively flushed out versions of “notes to self.” In other words, they tied ideas together as the researcher reviewed the data. As Miles, Huberman, and Saldaña (2013) suggest, the memos and summaries helped illustrate preliminary findings through connections of meanings and themes which emerged, serving a synthesizing tool for the researcher. In this study, they also served as the intermediate step between data analysis and interpretation, in that the researcher reviewed the memos from each of the participant’s interviews in conjunction with summarizing ideas and reflections from the data.

**Organizing text.** During and immediately following the collection of data for this study, the researcher conducted a *global reading* of the data in an effort to fully grasp and perceive all the nuances of meaning interwoven into narrative from the participants. Giorgi (1997) suggests that this intermediate step allows the researcher to become familiar with the data, as a whole. For this study, the global reading involved the researcher becoming fully immersed in the data prior to any formal analysis steps by listening to the audio recordings of interviews, following along with the transcript in order to gain this holistic understanding. Additionally, the researcher compiled all tab-delineated transcripts into Microsoft Excel in preparation for coding the data (Meyer & Avery, 2008).

**Horizontalization and reducing data.** One of the initial steps of phenomenological analysis, *horizontalization* assigns equal value to any data that is relevant to the subject matter or phenomenon being studied (Moustakas, 1994). For this study, the researcher used
open coding, which involves “identifying any segment of data that might be useful” (Merriam, 2014, p. 178). It is a strategy that is most often used in grounded theory research (Creswell, 2009). However, the process of open coding provided a structured exercise in horizontalizing the data when reviewing the transcripts, line by line, in Microsoft Excel. Reducing the data, or condensing the data as Miles, Huberman, and Saldaña (2013) describe it, is the process that occurs throughout the analysis phase. It is a process in which that the researcher continually revisits the data by “selecting, focusing, simplifying, abstracting, and/or transforming the data” (Miles et al., 2013, p. 12) to identify and eliminate overlapping components.

**Coding.** After horizontalizing and reducing the data, the next step in the analysis process of this study was to reread the transcripts and opening coding to identify meaning units, a descriptive term used for classifying small amounts of data that, together, form a specific meaning or concept that is congruent or related to the experience or phenomena under study (Giorgi, 1997).

**Identifying themes and patterns.** Having coded ideas and concepts throughout the data, the next step was to cluster concepts and themes by grouping and labeling components. Hays and Singh (2012) describe themes and patterns that emerge from the data as chunks of meaning that often refer to “themes, causes, or explanations; relationships among people; more theoretical constructs” (p. 300). In other words, themes and patterns provide a vehicle for making sense of the vast amount of data collected and the countless meaning units identified from reviewing the data multiple times. As an example, Maxwell (2013) describes categorizing as grouping codes or meaning units based on similarities, whereas identifying
connections, or relationship patterns among codes or meaning units, provides contextual patterns and themes.

**Validating themes.** With an additional review of the data, the researcher further clarified the themes and patterns by revisiting Bronfenbrenner’s ecology model of human development, the conceptual framework chosen for the particular study, as well as the purpose of the study, and more specifically, the research questions (Hays & Singh, 2012). From this step in the analysis process, four themes emerged as study findings, which are discussed in more detail in later chapters.

**Constructing descriptions.** To construct descriptions of each participant’s experience, the researcher “returned to the experience” with particular attention given to the phenomenon being studied (Moustakas, 1994). The textural descriptions included rich text quotes which spoke to the feelings and emotions of the participants. The structural descriptions served as the meaning of those experiences as translated or interpreted by the researcher. The researcher used imaginative variation as a way to weave the two dimensions together to construct a textural-structural description. This integrated description was constructed for each of the four themes from the vantage point and experiences of each participant. Finally, a composite description was developed from this process to convey the essence of the experience as a whole (Giorgi, 1997).

**Creating a codebook.** The final step in the analytic process was to compile the codes by themes or clusters into a codebook (see Appendix G). For phenomenological studies, codebooks primarily assist the researcher with the organization and development of textural-structural descriptions for each participant (Hays & Singh, 2012).
Trustworthiness and Criteria for Goodness

Significant and fundamental differences exist between quantitative and qualitative research inquiry, from the assumptions on how humans construct knowledge to how researchers collect, analyze, and communicate data. Considering these differences, it is reasonable to expect that readers will judge the quality and rigor of the study based on criteria that are consistent with how the study is epistemologically, theoretically, and methodologically situated (Jones et al., 2006). Although, the results and findings of interpretive research are always subjective, the researcher should be able to “offer evidence of how the interpretation was arrived at and that the interpretation is indeed trustworthy” (Jones et al., 2006, p. 129). This section reviews the strategies used in this study to demonstrate trustworthiness and the criteria for goodness in qualitative research.

Internal Validity

The concept of internal validity is sometimes referred to as credibility in qualitative research and addresses issues concerning how credible study findings are in representing reality (Merriam, 2014). Studies will often include strategies into their research design to address potential questions concerning internal validity. The strategies included in this study are explained further below.

- One of the most common strategies is data triangulation, a strategy in which a researcher seeks out ways to compare or cross-check the data she collects by collecting it from multiple sources (Merriam, 2014). The data collection method for this study was to conduct three in-depth interviews with multiple participants. In doing so, data was triangulated by interviewing “people with different
perspectives” and by completing multiple “follow-up interviews with the same people” (Merriam, 2014, p. 216).

- Another strategy, member checking, is especially effective in ensuring that the most authentic participant voice comes through in the study, as it requires the researcher to seek out formative feedback from participants on the preliminary findings from the data analysis (Merriam, 2014). For this study, the researcher provided participants who completed all three interviews with a draft of their transcripts for a preliminary opportunity to clarify or correct.

- Prolonged engagement, a strategy that is often used in phenomenological studies, involves “in-depth interviews, typically multiple interviews of more than an hour each” (Gilgun, 2014, p. 660). Because the researcher is spending extended periods of time with each individual participant on multiple occasions, this strategy provides the researcher with the opportunity to gain “an in-depth understanding of the phenomenon under study and can convey detail about the site and the people that lends credibility to the narrative account” (Creswell, 2009, p. 192). The research design for this study included prolonged engagement through multiple in-depth interviews with each of the study participants.

- Reflexivity, a commonly used approach in interpretive research, allows the researcher an opportunity to disclose “biases, values, and experiences that he or she brings to a qualitative research study” (Creswell, 2013, p. 216). For this study, reflexivity was approached in a couple different ways. First, as mentioned in an earlier section of this chapter, a statement of positionality (see Appendix A) outlined what experiences led this researcher to the topic of study and her
personal bias. Additionally, this study required the researcher to bracket previous knowledge, attitudes, and experiences about the phenomenon of interest, in order to look at it with a fresh perspective (Creswell, 2013).

Reliability

*Reliability* is sometimes referred to as consistency in qualitative research and addresses issues concerning the probability that additional would yield the same findings, generally speaking (Merriam, 2014). Some researchers may perceive this measure of scholarly rigor as incongruent with the philosophical assumptions and perspectives of qualitative research, which acknowledges the sometimes chaotic nature of the human experience and the existence of multiple realities. However, one strategy, which was used in this study, to address potential questions concerning reliability is to maintain an *audit trial*, or “a detailed account of how the study was conducted and how the data were analyzed” (Merriam, 2014, p. 223).

External Validity

Sometimes referred to as transferability in qualitative research, *external validity* addresses issues concerning how generalizable the study findings are and how well to the findings transfer their applicability to other situations (Merriam, 2014). The strategies used in this study to address concerns of external validity are explained further below.

- A common strategy used to address the transferability of study findings in qualitative research is to incorporate *rich, thick descriptions* from in-depth participant interviews into the findings and narrative. Merriam (2014) describes this strategy as a researcher’s use of “a highly descriptive, detailed presentation of the setting and in particular, the findings of a study” (p. 227). The intention of
this strategy is to convey to the reader a sense of “being there” while also providing “the reader with the information necessary to decide whether the findings might be transferable to other settings” (Payne & Williams, 2005, p. 298). In this study, rich thick descriptions and participant quotes were intertwined to capture the essence of being a college student identified as having LD or ADHD.

- **Maximum variation** is a strategy in which the methods portion of the research design includes opportunities to diversify the data collected in order to ensure “the possibility of a greater range of application by readers or consumers of the research” (Merriam, 2014, p. 227). This is a strategy that can be applied by using different sites or by selecting a diverse representation of participants. For this study, a purposeful sampling of participants included college students from two different postsecondary institutions.

**Delimitations and Limitations**

This study contributes qualitative literature and the student perspective to an area of higher education research that is relatively sparse in proportion to its student population. *Delimitations* in research provide explicit parameters to the scope of the inquiry by specifying “what is included and what is excluded from the study” (Denscombe, 2010, p. 108). The overall research design for this study included several. The purpose of the study, the guiding questions, and research framework were all delimiters that were fundamental to the overall study design. The scope of this study was delimited to full-time undergraduate students who had self-identified as having LD or ADHD. The qualitative research design
also delimited the participant pool size to allow for sufficient data collection through multiple in-depth interviews with each individual participant.

There were also several limitations to this study, in both subject matter and methodology. Acknowledging the limitations of a study allows for a more informed interpretation of the overall findings in that it can present “what can, and what cannot, be concluded on the basis of the findings and it also serves as a warning to readers not to draw unwarranted conclusions” (Denscombe, 2010, p. 108). Because the scope of this study was to broadly explore the experiences of college students with LD or ADHD, it did not specifically take into account the student demographics, such as socioeconomic background, the education attainment of their parents or guardians, race or ethnicity, religion, or sexual identity of its participants. Data collection methods in phenomenological studies often include “in-depth and multiple interviews with participants” (Creswell, 2013, p. 81), so studies will typically rely on small sample sizes because of the time-intensive nature of multiple, in-depth interviews. This study was limited to just eight participants who were currently enrolled as full-time students at a two or four-year postsecondary institution.

The goal of phenomenological research is to “reduce individual experiences with a phenomenon to a description of the universal essence” (Creswell, 2013, p. 76). Participants in this study were from two vastly different types of institutions, a private, selective four-year research university and public two-year community college. While using a purposeful sample from these two research sites was an intentional delimitation of this study, further insights may have been gained by also having participants from a public four-year college or university. Additionally, data collection from this study occurred over several months, but the research design did not include the collection of data over multiple years, a method that
might have further corroborated findings or revealed different results, altogether. Finally, information from in-depth interviews is always conveyed through the interpretive lens of the participant. Some study participants may not be able to fully articulate or describe their experiences. The findings from this study are presented with the assumption that participants were genuine in how they conveyed their experiences and truthful with the information that they provided.

**Summary**

The aim of this study was to better understand lived experiences of college students with LD or ADHD. Of specific interest was how such experiences influenced the students’ development and self-awareness as learners. This chapter provided an explanation of the research framework used for this study. It situated this qualitative study within the philosophical and theoretical paradigms that align with the social constructionism epistemological stance and the interpretivist perspective. It also presented phenomenology as the methodological approach used to guide the research methods, as well as an overview of the ecological model of human development used as a conceptual framework. Providing a detailed description of the research methods, this chapter also covered the plan for selecting research sites, selecting study participants, collecting data through in-depth interviewing, and the data analysis process. Finally, this chapter addressed the strategies used to ensure the trustworthiness and goodness of the findings that are discussed in the final two chapters of this dissertation.
CHAPTER 4. THE STUDY PARTICIPANTS

Eight participants shared their experiences as part of this study meant to gain deeper insights into the lived experiences of college students with a learning disability (LD) or attention deficit hyperactivity disorder (ADHD). Interviews with participants occurred over an 8-week period of time. The participants included three males and five females. All were in their early 20s with the exception of one student who was in his late 40s. Three students attended a community college, and the other five students went to a private university. Two of the participants had transferred from a community college to the private university.

Table 8

Study Participant Summary

<table>
<thead>
<tr>
<th>Pseudonym</th>
<th>Year</th>
<th>Race/Ethnicity</th>
<th>Academic Program</th>
<th>Disability</th>
<th>Site</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adam</td>
<td>JR</td>
<td>White</td>
<td>Exercise Science</td>
<td>ADHD</td>
<td>PU</td>
</tr>
<tr>
<td>Anna</td>
<td>FR</td>
<td>White</td>
<td>French</td>
<td>LD</td>
<td>PU</td>
</tr>
<tr>
<td>Bill</td>
<td>SO</td>
<td>Black</td>
<td>Undecided</td>
<td>LD/ADHD</td>
<td>UCC</td>
</tr>
<tr>
<td>Bri</td>
<td>SR</td>
<td>White/Hispanic</td>
<td>EMS</td>
<td>ADHD</td>
<td>PU</td>
</tr>
<tr>
<td>Heather</td>
<td>SR</td>
<td>White</td>
<td>Health Admin</td>
<td>LD</td>
<td>PU</td>
</tr>
<tr>
<td>Margaret</td>
<td>SO</td>
<td>White</td>
<td>Exercise Science</td>
<td>ADHD</td>
<td>PU</td>
</tr>
<tr>
<td>Marvin</td>
<td>SO</td>
<td>White</td>
<td>Medical Coding</td>
<td>LD</td>
<td>UCC</td>
</tr>
<tr>
<td>Meeka</td>
<td>SO</td>
<td>Black</td>
<td>Human Services</td>
<td>LD</td>
<td>UCC</td>
</tr>
</tbody>
</table>

Note. Demographic information is based on responses from the pre-interview questionnaires that participants completed.

Table 8 provides a brief demographic overview of the students who volunteered to participate in this study. Listed alphabetically by the participant’s pseudonym, the table also includes their program of study, whether they were identified as LD or ADHD, and the institution they attended. This chapter introduces the eight college students who participated
in this study. Each vignette is meant to provide a glimpse into the student’s life, including their upbringing, educational journey, how their disability identification came to be, and salient moments in their development as learners.

Adam

“I’ve been working harder than I ever thought I was capable of.”

Adam is a 20-year-old junior at Private University. He transferred to the university after completing his freshman year at a community college near where he grew up. Majoring in Exercise Science, he would eventually like to work as a physical therapist. He is a self-described introvert and has a reserved, yet polite, demeanor. “I’m a shy person at first. I don’t really put myself out there unless I’m comfortable with people.” Adam grew up in a small town in Illinois. “Just a really average city. I guess it’s one of the most average in the country.” His parents, both college graduates, work in marketing and advertising. He has a twin brother and one younger brother. He and his siblings attended a private Catholic school from kindergarten through eighth grade. When Adam was 11 years old, he was diagnosed with ADHD. “I didn’t really know it affected my learning until I got to high school. I just thought it was a behavioral thing in grade school.”

After eighth grade, he attended a private, Catholic college prep high school, where he was a member of the swim team and played golf. He admits, however, that he was not the best student, academically. “I wasn’t a very good student. I got pretty bad grades in high school. My class rank was bad. I just didn’t care. I just didn’t have the drive.” However, he thinks that attending a private college prep high school helped him. “The teachers definitely cared about the students more. I think they got paid a lot less than public school teachers. They wanted to be there, and they really helped me.”
Adam comes from an extended family that always encouraged him to attend college. “[They are] a really supportive family and more from than [sic] just my immediate family, too. My grandparents and aunts and uncles put a lot of pressure on me, but not too much. A healthy amount.” His grandfather, in particular, was influential in Adam’s decision to attend college and is helping pay for his tuition. However, because Adam was not the most motivated high school student, his parents urged him to go to a nearby community college first, even though his twin brother enrolled at a private university in another state directly after high school.

Taking his parents’ advice, Adam enrolled in community college classes and excelled academically. Once he transferred to Private University, however, he had a somewhat difficult transition adjusting to the increased academic rigor and expectations at the university. He also experienced several personal challenges that had a negative impact on his academics. Shortly after he arrived at Private University, he was the victim of a mugging off campus. He also had a girlfriend back home, so the distraction of a long distance relationship influenced how much he involved himself in campus activities and interacted with peers. He felt depressed and generally not well for most of that first semester he was at Private University. His second semester was much better, though, and he continued to work toward getting back on track. Now in his second year at Private University, he feels that he has a better handle on his courses as well as a better understanding of what it takes to be a successful college student.
Anna

“This is something I’m overcoming.”

Anna is a 19-year-old freshman and in her first semester of college at Private University. Majoring in French and minoring in business, Anna has not yet decided on a specific career goal, but she is considering something in international business. She has a soft-spoken and serious demeanor but is polite and eager to talk about her experiences as a college student with a learning disability.

Anna moved with her family from Kentucky to the upper Midwest when she was a child. Both of her parents graduated from college. Her father works in the banking industry, and her mother stayed at home to raise Anna and her siblings. Anna has a twin sister who attends a community college near where they grew up. She also has an older brother, who attends a university in another state. Several years ago, her brother was paralyzed from the waist down as the result of an accident. Anna describes her brother’s accident as a defining event for her whole family, something that had a significant impact on all of them. “Our family grew stronger through a lot of that.”

When Anna was in middle school, her parents noticed that she was falling behind in school, particularly with reading. However, Anna felt that her difficulties with reading began as early as the fourth grade, since that is when she started to dislike reading. “That’s when I stopped reading, because it got really hard to read, and it was frustrating.” A few years later, her parents decided to homeschool Anna for a year so that she could focus on improving her reading skills. “They pulled me out to homeschool me in seventh grade. So, that definitely brought me up a lot more [reading skill level], because we focused a lot on reading, and it was a lot of work.” In eighth grade, Anna returned to a regular school setting, attending a
small parochial high school. She was finally diagnosed with dyslexia in her sophomore year of high school. Anna never used any accommodations or participated in any special instruction programming, even after receiving confirmation of her dyslexia. Yet, Anna earned good grades throughout high school despite her learning challenges and lack of accommodations or special instruction. Beyond her academics, she was also involved in several extracurricular activities as a high school student, including golf, hockey, pep band, and peer ministry.

After graduating from high school, her parents encouraged her to take a year off before enrolling in college to make sure that she was academically prepared for college. She agreed. “I don’t think I was ready to go.” Still, Anna was committed to going to college. “The reason I decided to attend college was because I didn’t really see another path I wanted to take.” So, during that year off, Anna focused on improving her reading skills using an online software program, so that she would feel more equipped to take college-level classes. “We were trying to find something that would help me to get up to that [college reading level] or at least, get close to it.” Now that she is in college, she still uses the software program to maintain her reading skills and incorporates it into her normal study schedule.

**Bill**

“It’s almost like they give you that disability.”

Bill is 20 years old and a full-time student at Urban Community College. He is currently undecided in his program of study but plans to transfer to a nearby public university when he has completed his general requirements at Urban Community College. He is considering something in health sciences or sociology but is leaning towards being a
sociologist. “They [sociologists] look at problems that are going on, seeing what's wrong with it.” One of his college courses introduced him to the field and piqued his interest. Bill is introspective and a deep-thinker, and often viewed his experiences with a wide-angle lens in the interviews.

Bill grew up in the same Midwestern city in which he currently lives and attends college. Although neither of his parents have a four-year college degree, both have successful and stable careers in healthcare and health sciences. His father works at a medical research facility, and his mother is a nurse at a hospital. “They didn’t necessarily go to college, but with the jobs they worked, I guess you would say they got grandfathered in [without a college degree]. I don’t know how they did that; the level of jobs they’re working at.” Bill has one older brother and two younger sisters. He attended public schools from kindergarten through high school.

In early elementary school, he was identified as having a learning disability and ADHD. Throughout grade school, he took medication for his ADHD and was separated from the rest of his class for special instruction in some subjects. When he began middle school, he stopped taking his ADHD medication and used an after school tutoring program instead of getting special instruction during the school day. He soon realized that he was able to excel in school without those supports and quickly disassociated from them. “I’ve never actually felt like I’ve needed it [accommodations or special instruction].”

Taking a pragmatic approach, his parents encouraged him to attend college after high school to increase his employment and earning potential as an adult. “My dad, he was the kind of person, he was always like, ‘You have to get through school so you can get a good job.’ My mom was the same way, too.” Similarly, Bill sees the process of getting a college
degree as a means to an end, even if that means taking some classes that might seem irrelevant to one’s major. “There’s a lot of stuff you don’t necessarily need to know, but you’re required to know it. . . . You have to learn that stuff in order to be able get [the degree].” In addition to being a full-time student, Bill also has two part-time jobs to earn money and pay for college. At one job, he is part of the event security staff at a convention center and the other job is with the catering department of a large hospital. “Luckily I found two jobs that I can choose when I work.”

**Bri**

“*I always had a way around everything.*”

Bri is a 23-year-old junior at Private University and majoring in Emergency Medical Services (EMS). She plans to work as a paramedic after college. She is also a transfer student, having attended community colleges in California and Texas before arriving at Private University. Private University has a very traditional-aged undergraduate population with few transfer students, so Bri sometimes feels like an outlier even though she is only a few years older than the rest of her classmates. In fact, she said that she almost did not volunteer to participate in this study, because she assumed that it was only for traditional-aged students. She is smart with a dry sense of humor and is effusive about her experiences as a student with ADHD, which went undiagnosed until she was an adult.

Bri grew up in California and was the first in her family to attend college. Her father immigrated to the United States from Mexico and has less than a high school education. “My dad didn’t actually graduate from seventh grade. He’s an immigrant from Mexico, so he had to work and fend for his siblings. He’s a very hard worker and held us to that
standard.” Her mother stayed at home to raise Bri and her brother. “My mom is really strict.”

Providing a good education for their children was a priority for her parents. As a result, her parents made many sacrifices to send them to private schools, including an expensive, college-prep high school. “My parents refinanced the house to send us there. It was just an insane amount of money.”

When Bri was about 10 years old, her teacher told her mother at a parent-teacher conference that Bri’s classroom behavior might possibly be attributed to ADHD. Her mom disagreed. “My mom didn’t believe in disabilities.” Instead, her mother viewed it as purely behavioral, in that Bri simply needed to stop talking so much and just behave. Bri remembered getting in trouble at school quite often, even though she was generally a good student, academically. By high school, she was labeled as a troublemaker. “My freshman year, I was marked as that trouble kid.” It was a label that she found frustrating, because it was never her intention to be a troublemaker. “I wasn’t trying to do anything like that. That wasn’t my goal at all. If anything, I was trying to step back to blend a little more, because I didn’t want to be that person.”

After graduating from high school, she enrolled at a local community college while still living at home. A couple of years later, she got married and moved out, relocating to Texas, “I picked up all our stuff, and we moved to Texas together.” Her husband, who was on active military duty, was deployed overseas shortly after that. While her husband was deployed, Bri lived with her aunt and cousins in Texas. Shortly after he returned home a year later, they divorced. Following the divorce, she transferred to Private University. Now,
she lives in an off-campus apartment and attends classes full-time while maintaining a part-time job to support herself.

Heather

“Oh, that’s just my dyslexia.”

Heather is a 22-year-old senior at Private University and is majoring in Health Administration. Friendly and outgoing, Heather is active on campus and belongs to a sorority. She also lives on her own in an apartment off campus. She has had a variety of campus jobs working with the public, including the university’s alumni relations office and the admissions office. After graduating, she hopes to go to graduate school for occupational therapy. She was excited to talk about her experiences as a college student diagnosed with dyslexia and indicated that learning disabilities in education is an interest area of hers.

Heather grew up in a suburb of a large city in the upper Midwest. Both of her parents are college graduates. Her mother was nurse but now works in healthcare administration, and her father works in sales. She has one younger brother who also attends Private University. From kindergarten through high school, she attended public schools, did well academically, and was involved in a variety of extracurricular activities. In grade school, Heather took various dance and acting classes. As a high school student, she was involved in many leadership activities, including National Honor Society, various clubs, and student government.

Heather was not diagnosed with a learning disability until high school, however, her parents had first suspected that she may be dyslexic when she was in elementary school. She says that dyslexia seems to run in her family. “My dad is also dyslexic, but never formally diagnosed. But, it’s very obvious. I think just like him, and we have all the same issues.”
Although she was diagnosed with dyslexia her junior year, Heather opted to finish high school without using accommodations. “I didn’t get any help in high school because it was like, what’s the point? I’ve done it this far.” Although Heather did not formally use academic accommodations in high school, she now uses them regularly as a college student. In fact, ensuring that Heather would be able to use accommodations in college was what motivated her parents to have her formally diagnosed in high school.

**Margaret**

“I think everybody likes to think that they’ve found their place, but I don’t know if I have.”

Margaret is a 19-year-old sophomore at Private University and majoring in Exercise Science. Bubbly and outgoing, she mentions several times throughout the interviews that transitioning to college has not been the easiest for her, particularly when it comes to balancing academics with her social activities. She is still deciding on her career goals but knows that she wants a career in the health sciences. “I think I want to go to med school. . . . I’ve been having a lot of internal struggles this year, but I think that’s what I really want to do.”

Margaret grew up in a small town in the Upper Midwest and is the middle child with an older brother and younger sister. Her parents divorced when she was in elementary school. Shortly after that, she and her siblings moved with their father to another town to be closer to her paternal grandparents. When Margaret was younger, her grandparents helped her father, who worked as a plumber, with childrearing and the challenges of being a single parent of three kids. Margaret and her siblings do not have much contact with their mother. “We don’t really talk to my mom that much. We only really see her on birthdays or holidays, that kind of thing. It’s just a rocky kind of thing. And, my dad, he’s obviously the number
one parent.” She attended public schools until her junior year when she transferred to a smaller private high school. In high school, she had a part-time job and played some extracurricular sports, including hockey and lacrosse.

Margaret is considered a first-generation college student, because although both of her parents had postsecondary training for their professions, neither earned a baccalaureate degree. When it came to deciding which college to attend, Margaret turned to her aunt for guidance. “My aunt really, really helped a lot with the whole process, because she’s gone to college before.” Margaret’s aunt accompanied her on her visits to the university when she was considering which college to attend. She also helped Margaret move into the residence halls her freshman year. “All my family is really supportive, but she [the aunt] played a helping hand in the process of it all.”

Although she was a good student throughout high school, Margaret felt that she really struggled once she was in college. “I just found that it was so hard for me to focus in class. It would take me six hours to do something that would take someone three or two. I just would get so distracted all the time.” In college, she was diagnosed with ADHD during the spring semester of her freshman year after an academic advisor suggested that she get tested at the university counseling center. Now, she uses accommodations in most of her classes and takes medication for the ADHD.

Marvin

“I'm here; I'm trying.”

Marvin is a sophomore at Urban Community College and pursuing an associate’s degree to be a medical transcriptionist. In the interviews for this study, he was congenial and talked slowly, often with a wry grin. At 49, Marvin is the oldest of all the study participants
and has the most life experiences. Although he has taken classes for college credit intermittently since graduating from high school in the mid-1980s, he has not yet completed a degree.

Growing up in a relatively large family, Marvin is the fourth of six children. His mother was a registered nurse and his father was a mail carrier with the United States Postal Service. He attended private, parochial schools for his elementary and secondary education. In addition to a mild physical impairment, Marvin also has learning difficulties, especially with reading. His elementary school assessed his reading when he was in third grade, but since Marvin went through school before the Americans with Disabilities Act (ADA) legislation was passed, support and special instruction were not as widely available and, at best, limited in scope.

Well aware of how he struggled academically in school, Marvin’s parents discouraged him from attending college. They felt that full-time employment after high school was a better option. This was very discouraging for Marvin. At the time, several of his older siblings were attending or had attended college, and he wanted to experience it for himself. In the end, though, Marvin took his parents advice and opted to get a job instead of attending college that fall. Not matriculating right after high school was a decision that he still regrets. “I just let it go, and I still to this day . . . it was 30 years ago, and I still think about it.” A year or two after high school graduation, Marvin did enroll as a part-time student at Urban Community College, taking a class or two at a time while he worked in various jobs. Over the next couple of decades, he would take occasional classes for college credit and change his major or program of study several times.
Much of Marvin’s educational and personal journey as an adult has been one of disappointment. He has always felt that he was underprepared and misdirected when it came to attending college. He also continually found himself in jobs where there was little opportunity for growth, and he struggled to support himself financially. “The most I’ve made is ten dollars an hour.” Then, about seven years ago, Marvin fell and sustained serious injuries at his workplace, a distribution warehouse. “I wasn’t able to go back to work. I was on workman’s comp, and then I broke my ankle. . . . And, then, they let me go, because I didn’t have any other skills.” A couple years after being let go from his job at the distribution warehouse, Marvin returned to Urban Community College for retraining in a field that was less physically taxing. Currently, he is concentrating on finishing his associate’s degree in hopes that it will open some more job opportunities for him.

Meeka

“Making a path out of nothing.”

Meeka is a 22-year-old sophomore at Urban Community College and majoring in Human Services. She plans to transfer to a nearby public university to get her undergraduate degree. Meeka’s career goal is to work in human services or social work, perhaps, in an advocacy role for young mothers. “That’s right up my alley.” As a single mother of a two-year-old son, she feels that she can direct her lived experiences into an empathetic advocacy role for others. “People feel comfortable, they come and talk to me, and I think I give pretty good advice.”

She is the oldest of six children, and her family was split between two households. “I grew up living with my grandma and my little brother, and my mother kept the other four kids, which is three girls and one boy.” Although her grandmother raised her, Meeka still
had regular contact with her mother and the other siblings. “We saw her two or three times out of the week. She’d come visit with the kids, and then she’d go back.” She is the first in her family to attend college. Her father has always been absent from her life, and her mother did not graduate from high school.

Throughout her elementary and secondary education, Meeka attended several different schools. One of her elementary schools had to close down and reopen under a new administration due to poor performance. “The government took it over, so they brought in new teachers, and they redid the building. It’s totally different than it was when I went there.” When Meeka transferred to a different elementary school, the teachers told her mother that she had some learning challenges in math and reading. From that point forward, Meeka had an Individualized Education Plan (IEP) but did not often use accommodations. Once she was in high school, she attended a few different schools, including two alternative high schools. “I had a couple issues my freshman year, and it ended up putting me into alternative school.” She later transferred to another high school and, after that, another alternative high school. Meeka graduated from the alternative high school a year later than the rest of her class.

Meeka did not always think that she would attend college. Rather, she had always thought that she would get a full-time job after high school and live on her own. “I didn’t think about college. . . . Originally, I didn’t have plans. I was already working, so I assumed I would keep working, and I would eventually move out.” It was not until one of her high school teachers handed her a scholarship application that she even considered college as a possibility. “It was like, ‘Here, fill this out.’ I filled it out. I ended up getting a scholarship that gave me the push to go, because I wasn’t going to go.” Looking back, Meeka is happy
with her decision to attend college. “I think everyone should at least attempt it. I think everyone should find different ways to motivate themselves or keep people around you that are looking out for your best interest; that want you to do better.” She feels that enrolling in college has helped her gain confidence in her own learning and abilities. “I would say honestly what’s been the most helpful is me realizing that I can actually achieve something. I don’t have to feel bad about it. I’m just like everyone else.”

Summary

Eight individuals participated in this study by sharing their educational experiences and journeys, as learners, through a series of in-depth interviews. Each of the participants were identified as having LD or ADHD at varying points in their lives. This study examines how their journey and experiences influenced the students’ development and self-awareness as learners. This chapter introduced each of the study participants with a brief vignette, a snapshot that provided a window into their lives, motivations, and identities. The following chapter continues their stories by bringing their experiences to the foreground and organized them into four themes. These themes emerged from an analysis of the qualitative data collected through the series of in-depth interviews with each of them.
CHAPTER 5. STUDY FINDINGS

The purpose of this study was to better understand both the external and internal lived experiences of college students identified as having a learning disability (LD) or attention deficit hyperactivity disorder (ADHD). Specifically, this study uses phenomenological inquiry to gain a deeper understanding of how such experiences, as dynamic and reciprocal relationships with various environments, influenced the students’ development and self-awareness as learners. Along with the overall purpose, the following three questions guided the study, including the research framework, participant selection, data collection methods, and analysis of the data:

1. What are the educational experiences of college students with LD or ADHD?
2. What experiences do college students with LD or ADHD identify as formative in their development as learners?
3. What role, if any, does having a disability play in how they think about their own development as learners?

During the data analysis phase, the researcher interpreted and constructed meaning from the students’ voices by “returning to the experience,” being particularly mindful of the phenomenon being studied (Moustakas, 1994). The aim of this phenomenological study was to capture the essence, the gestalt, of the phenomenon of interest, which was being a college student with LD or ADHD. Focusing specifically on this phenomena and more broadly on the study participants’ lived experiences allowed for imaginative variation as a way to weave the structural and textual dimensions together to convey the essences of the phenomenon (Giorgi, 1997).
From this qualitative, phenomenological study, four themes emerged, each of which share and live within multiple environmental contexts:

- knowledge construction of disability,
- self-assessment through observation and comparison,
- identifying allies and resources, and
- moving toward increased learner autonomy.

This chapter addresses the study findings and is organized by these four overarching themes. Each theme is introduced with a brief description. Then, the theme is illustrated from the vantage point of each participant through a synthesis of textual and structural descriptions. The sections dedicated to each theme conclude by revisiting the ecological model of human development and integrating additional theoretical and scholarly work related to the study findings.

**Knowledge Construction of Disability**

For all of the participants in this study, the knowledge construction of their disability diagnosis played a role in how they framed their own identity as learners. The roots or foundation of this knowledge was almost always constructed by others. For some, explanations from parents or extended family members served as the primary knowledge source. Participants who were identified as LD or ADHD before entering college recounted how their understanding of their own disability diagnosis was shaped by either their parents or the adults who raised them. Such explanations and conversations were largely based on collective family attitudes or beliefs about the diagnosis, or more specifically, the student’s strengths and weaknesses, both as a learner and as a person, in general. Participants who were in college when they were identified as LD or ADHD co-constructed knowledge of
their disability from more detailed information about their diagnosis provided by a college or university staff member.

Knowledge construction of their disability and the meaning-making that resulted from their experiences has evolved over time for all of the participants, and it continues to be fluid, reshaped by the environments in which they interact. For many of the participants, knowledge constructed by others after entering college helped them reframe how they viewed their disability and how it impacted their academics and their life. Disability services staff, faculty, or advisors were typically the source for this additional knowledge which assisted in recasting existing information. The passage of time and the accumulation of new experiences provided some participants with opportunities to restructure or deconstruct their schemas of the diagnosis. Reflecting on their learning and educational experiences led some to question previously constructed knowledge about their diagnosis. Some even questioned its legitimacy and the contexts in which it came about in the first place.

**Adam**

The knowledge of having ADHD is not something that Adam experienced in isolation, even within his family. “My dad and both my brothers have it.” Since family members also had direct experience with ADHD and its effects on different aspects of learning and life, in general, Adam referred to it as just a family idiosyncrasy in which they could all find humor. “We joke about it with my Dad. It’s kind of a joke, because you can tell when he doesn’t take his medicine and when he does. . . . It was never really a serious thing.”

Although his ADHD was treated with levity at home, Adam struggled with reading throughout elementary and middle school. He was diagnosed with ADHD when he was 11
years old, however, he did not really understand how it impacted his learning until he was a high school student.

I didn’t really know it affected my learning until I got to high school. I just thought it was a behavioral thing in grade school, because I was just wild. A lot of people were [wild]. No one really thought anything of it. But when I got to high school and it was more academic oriented, I had to study for certain tests and stuff. Then, it just made sense. People told me, but I also kind of figured it out on my own.

Since he was only in middle school when he was diagnosed, Adam did not make the connection between the potential benefit of medication and academic performance. “I started taking medication at eleven, but I didn’t really notice a difference, because it was spoon fed to me. . . . I didn’t have anything to compare it to.” It was not until his senior year that he realized, reflecting on his own learning style, that taking medication for his ADHD was helpful to him, academically. “I noticed its effects probably senior year. When I would be like, ‘Oh, take this pill, and I can concentrate for my paper or test or whatever.’”

Anna

Diagnosed with dyslexia at 15, Anna was largely unfamiliar with the whole idea of having a learning disability, its implications for her learning, or the academic accommodations that were available to her. “When I first found out I had it, I didn’t really know what was going on. I mean, I’d heard of it before, but I didn’t know really what it was.” Her parents also seemed somewhat uncertain and disagreed on what approach would best help Anna, academically. Her mother attributed the dyslexia to Anna having somehow missed key material in school rather than actual learning differences. “She would just say, ‘No, you don’t have dyslexia. I think it’s just like in school, when you were younger, you skipped over some things.’ I wasn’t taught the proper phonetics or I wasn’t taught something else.”
The nature of the diagnosis continued to remain ambiguous for both Anna and her parents. In fact, she remembers that her parents had disagreements about the legitimacy of her diagnosis. Because they differed on the nature of her learning difficulties, her parents also disagreed on approaches to best help and support her, academically.

I can remember my mom saying, “No, you don’t have it.” And my dad’s like, “She was tested. She does have it. We need to do something.” It wasn’t like she was saying, “You don’t have a problem,” or something, it was, “There’s got to be a way to fix this.”

Anna’s father wanted her to have access to the help that she needed in high school, but her mother refused. “She couldn’t accept that I had it.” Instead, her mother wanted to explore other instructional options in lieu of accommodations. Consequently, Anna did not learn about the various accommodations that were available to her until her senior year. When she did find out about accommodations, it was not from her parents, but from a classmate who was using them. “I think it was halfway through my senior year, and it somehow got mentioned, because one of my friends had the accommodations.”

When Anna learned, as a senior in high school, about the availability of accommodations, it was too late to be of any benefit for her. The realization that she might have missed out on opportunities for extra help led Anna to confirm this with the high school staff. “They were like, ‘Yeah. We knew you were tested in tenth grade. Your parents brought it [the evaluation documentation] in, and we were just waiting for you guys to come in [to request accommodations].’” Anna felt that her parents should have been more upfront with her and allowed her to have input as to whether she should or should not have used accommodations. “The most frustrating thing was my parents both knew that there were accommodations in high school that I could’ve got. I didn’t really need them. It wasn’t that bad, but maybe, here and there, it would’ve been helpful.” Anna wished that she had had the
opportunity to try accommodations in high school to see for herself. “It would’ve been nice. I mean, when reading books or something like that.”

Bill

Bill was identified as LD and ADHD in early elementary school. Perhaps because it was diagnosed so early, Bill was not quite certain how to explain, in specific terms, the nature of his disabilities and how they impact his learning. “My disability has always been reading, writing, and math. More math, but every time math came, instead of actually sitting in the class, right when they would start the lesson, we’d be in a whole separate room.”

While he remembered very few conversations where an adult or parent explained his LD or ADHD to him, he did recall a couple of meetings with his parents and elementary school personnel. “I guess I was a wild kid in class. They said that was part of the reason they took me out of class, too. I guess I was wild or something.” Bill felt that being separated from the rest of his class in elementary school was an important missed opportunity to truly understand his strengths and weaknesses as a learner.

They’d take the group of people who were the disability kids down to a separate room. We’d go and get extra help on math. . . . Only thing I didn’t understand about the whole process is they would take you out of the lesson just right when the lesson would start. Then, you’d go down there to the room and learn specific stuff that I guess you weren’t understanding in class, but you would have no way to even understand that, because you never had a chance to learn it. So, you’re learning specific stuff that you didn’t even really get a chance to learn in class.

Middle school seemed to be a turning point for Bill in how he attached meaning to being labeled as having LD and ADHD. “They [the school] said I had the disability, but as a person, individually, I wasn’t connected with it at all.” For one thing, he opted to stay in the regular classroom and use tutoring after school instead of the separated classroom which was designated for students with disabilities.
What everybody else in the classroom was learning, I was learning the same thing. I did notice that I had trouble with some of the stuff like the math class. I would relate that to the fact that in elementary school, there was stuff that I wasn’t understanding because of the fact that I didn’t learn the same stuff that they [other students] learned in elementary school.

In addition to remaining in the classroom with his peers, Bill also stopped taking his ADHD medication. “I would do one of those things where my mom would give me it, and I would just throw it away.” Lastly, his grades began to improve as he progressed through high school even though he stopped using any special instruction or accommodations, along with the medication. The incongruences between what he had been told about having ADHD and what he was experiencing made him question whether he ever had it at all. “I got in middle school, and I started to realize, if I’m not getting in trouble at all, and I’m not even taking the medicine, I don’t know where that [the ADHD diagnosis] came from.”

Bill has done a great deal of reflecting upon his educational experiences and being labeled as a student with LD and ADHD, particularly at an early age. “I feel like if I wasn’t diagnosed until sophomore year, I feel like I probably never would have been diagnosed at all.” Not knowing the true nature of his learning because of perceived missed opportunities and questionable diagnoses has informed Bill’s thinking about the notion of having a disability. This meaning construction has also provided him with a more global perspective of LD and ADHD, in general, and caused him to question the legitimacy of such diagnoses, especially at such an early age.

To me, it almost seems like at that early age, at first grade, they’ll take a student and they’ll say, “You have math disability or reading disability.” Then throughout that entire process, it’s almost like they give you that disability. By the end of elementary school, you didn’t really have that disability, but from being taken out of the instruction that you needed, by the time you get down to sixth grade, you’re behind. You’re behind on stuff, so now you need to catch up. That’s like a disability.
From Bill’s perspective, both the labeling and the treatment itself have become the disability for him.

**Bri**

Although never actually diagnosed with a learning disability, Bri was told from a young age that she had difficulty with reading. “I remember specifically that my mom said that I wasn’t a good reader. . . . It wasn’t a matter of comprehension. I just couldn’t sit down, focus long enough and comprehend at the same time. It was too much for me.” When Bri was in fifth grade, school staff spoke with her mother about possibly being evaluated for ADHD, but her mom refused. “My mom didn’t believe in any disabilities.” Instead, her mother attributed the challenges that Bri experienced in school to her unwillingness to focus on academics and her propensity for getting into trouble. “After that, it was attributed to my want for attention. I’m the younger child; I’m looking for popularity. And that was how high school was handled.”

She would not realize until years later, when diagnosed at age 22, that ADHD had likely exacerbated her challenges with reading as well as her behavioral problems at school. The diagnosis was an epiphany, of sorts, for her. “It was very eye-opening for me, as an individual.” It helped her understand why she clashed with others in school. “That was not me trying to upset anyone, not trying to be a troublemaker. I just couldn’t help it. I just couldn’t help it.”

Moving forward with the new information about her diagnosis, she began working with the director of the university’s disability services office. In explaining to Bri the impact having ADHD has had on her learning, the director helped Bri reconstruct previous knowledge.
She was like, “Don’t look at it as, you’re getting special attention. You’re not getting anything in addition to anybody else. You’re actually an inch behind, and we’re giving you that inch back. Don’t look at it as us bumping you an inch up. That’s just how it is.” That actually really helped me understand that there’s not necessarily anything wrong with me, but also that you’re falling behind, let’s give you a little boost. We’re not trying to put you ahead of anyone, we’re not trying to give you extra attention, extra anything, in particular.

Heather

When Heather was in elementary school, her parents noticed that she struggled with reading and recognized that she may have some sort of learning disability. For Heather, though, conceptualizing her own learning at that point in time consisted of little more than general strengths and weaknesses. “I guess all I knew was that I was bad at reading, bad at spelling, and I would get numbers confused. I didn’t really understand what was going on in my mind.” Because her father is also dyslexic, her diagnosis at age 16 was no surprise, and it was not associated with any negativity or misperceptions.

“Heather, you’re not dumb, you think differently.” That’s what my mom always said. “You learn differently, you think differently, that’s how everyone is.” So, I think it was just, like, a matter of fact. That’s what you have. You are still going to get those good grades. We’re not letting you off the hook with anything. We’re going to help you out. . . . In a way, it was never a “thing.” It was just a “You have blue eyes, you also have dyslexia.”

Although Heather’s family always discussed her learning differences openly, she knew that not everyone was aware of how dyslexia can affect learning and one’s daily life. She knew that sharing with others that she had dyslexia would likely mean more questions about it, so she said that she was always prepared to explain it and to correct any misconceptions.

People ask me, “What is it, like?” Most of them think I cannot read. I’m like, “No, I’m not illiterate, I can read just fine. It takes me a little bit longer, and sometimes I don’t get the exact same message.” I explain the different-side-of-my-brain thing, and by then, they’re so bored that they don’t really care. But I just say, “Spelling’s hard, reading’s hard. I get numbers mixed up. I can hear numbers just fine and re-
write them, but saying numbers, I can’t do that. So if you do math with me, it’s going to be a pain in the butt, but I will get you the right answer.”

As a senior in college, Heather has had a breadth of experiences of both successes and failures. As a result, Heather has been able to reframe her learner experiences and in doing so, relieve some of the performance pressure that college students often face.

Everyone I’ve found in high school and in college are like, “I need to get my grades up, I need to start working harder,” where I’m like, I always work the same. I always work my best. And yes, my grades might need to come up, but I can’t change. I’m really doing all that I can to keep them. So, I just have to trust that, by the end, I’ve done my best, and I’ll be where I want to be.

Margaret

Margaret was not diagnosed with ADHD until the spring semester of her freshman year in college. Before that, though, much of what she knew about the disorder came from casual conversations with peers. “I don’t know, I just get pretty jazzed about life, and so that’s why people joke, didn’t joke, but they’re like . . . you’re the epitome of an ADHD person.” Even still, Margaret was able to maintain good grades and excel academically in high school without any interventions or extra help.

When she entered college, her experiences as a student and a learner were much different. She felt somewhat like an outlier as she observed peers. “Last year, I just found that it was so hard for me to focus in class. It would take me six hours to do something that would take someone three or two.” Upon her advisor’s recommendation, Margaret went to the university’s counseling office to be evaluated. “I went in there three times, and they did a bunch of weird tests. . . . I wasn’t an extreme case or anything like that.” However, based on the test results, the evaluator confirmed that she had ADHD, which was somewhat surprising to Margaret. “You always feel like you are, but I think everybody says that, ‘Oh, I’m so ADHD!’”
Just diagnosed last year, Margaret is still processing the meaning attached to the various social constructs of having a disability, particularly one that is not outwardly visible. The meaning Margaret constructed from this new self-knowledge hints at the social stigma that is often associated with having a disability. With the exception of her younger sister, Margaret has not shared with her family that she was evaluated for ADHD, taking medication for it, and using academic accommodations. “I actually haven’t told my parents. I told my sister, and I just feel it’s not something that’s a huge impact on my life.” She is also hesitant, at times, to take advantage of the accommodations that are now available to her through the university’s disability services office. “I think the name [disability], more so than anything, definitely has a lot of negative connotations to it, and I was embarrassed to talk about it.” She finds that talking with her professors about accommodations at the beginning of the semester, before they have a chance to get to know her, is also somewhat embarrassing and often worries about what they might think. “I felt uncomfortable. I shouldn’t be embarrassed, but I was. I just don’t want them to think different of me or think I’m a lesser student because of this.” She felt that the stigma associated with having a disability would influence what professors thought about her, as a student and learner, before she had the opportunity to co-construct her identity with them. She also worried that they may view academic accommodations as a way in which she was trying to “game the system” or trying to have an advantage over her peers. “I don’t want them to think that they need to give me special treatment in class, because I would never want that.”

Marvin

Marvin, who is almost 50 years old, was evaluated in the early 1970s for learning challenges and identified as LD in third grade. “I know they were testing me on my reading
ability, where my reading level was, and I think, my math. I don’t know if there’s any paperwork on that. It’s been so long.” Despite having his learning evaluated in the third grade, Marvin said that very little was discussed or explained to him about his impairments or learning challenges.

They didn’t really talk about it with me. Then, when I was in high school, I knew, and I got frustrated. It was difficult for me in grade school, and I was made fun of a lot. I do have a speech impediment, but I’m able to control it, because I did have speech therapy when I was in high school.

Marvin also had some mild physical impairments as a child that manifested mostly as challenges with eye-hand coordination. “When I was in kindergarten, I was going to be held back if I didn’t learn how to skip.” Although his coordination improved as he grew into an adult, he still sometimes has trouble with some tasks. In addition to the learning disability and some mild challenges with eye-hand coordination, he recently began using a cane and has had some additional physical limitations due to a history of work-related injuries.

Meeka

Meeka attended several different public elementary schools, one of which was identified by the U.S. Department of Education to be a low-performing school. Beginning sometime in the fifth grade, shortly after transferring from the low-performing school, the new elementary school began holding individual meetings with Meeka and her mother to discuss her learning.

I remember us meeting a couple times, maybe twice, throughout the year. . . my mom would come because my grandma is disabled. So, if my mom couldn’t come, we would do it over the phone, and I would just sit there with the teacher. Then, it wasn’t interacting. It was just me sitting there listening, and I’m like, “Oh, okay, well they said I need this.”
Even though the teacher and her mother did not engage Meeka in the conversation during those meetings, she found the teacher’s explanation of her learning difficulties to be, more or less, congruent with what she directly experienced.

They would talk about my development. You know how kids; we do testing throughout the year? So, they’d go back and pull those up. They’d be like, “Your daughter needs help in math. She’s a little behind.” I was the one that had to count on my fingers. I had to put down the tally marks, because I am not good at remembering.

They’d be like, “Her reading, she needs to work on it.” It just takes me a little bit longer than everybody else to maybe read a story. But then again, I like to go back over it and make sure I understand. They told her it’s hard for me to get my thoughts on the paper, which is still true. I have kind of a hard time getting what’s up here [points to head] on the paper the way I think of it in my head.

Beyond the individual meetings with her mother and the school, nearly all other conversations and meaningful discussions about her learning challenges stopped. No one explained to her that extra instructional support was available nor how to get it. Instead, she felt largely isolated, observing classmates moving forward, learning the curriculum while she struggled by herself. Throughout middle school and high school, Meeka never knew that the larger purpose for having those evaluations and annual meetings was to develop and regularly review an Individualized Education Plan (IEP) that would outline available supports necessary for her learning.

It was not until she was a college student that she gained a better understanding of what having an IEP meant for her. Her TRIO/SSS advisor walked through the IEP with her one day. “They were just like, ‘Oh, you had an IEP when you were in school.’ And, then, they went into everything. . . . They said, ‘This is what they were saying here, that you need help with this.’” Having a better understanding of what type of information was included in her IEP helped Meeka make better sense of her placement, or misplacement, in alternative schools as a high school student.
I actually felt better, because then it gave me some understanding of what was wrong. It’s like you know you’re not like the other kids. I’m like “They’re bad. They don’t do their work, but they still know what’s going on... I’m sitting here, I’m doing my work, and I’m still lost.”

As a college student, Meeka has chosen not to identify with the socially constructed schemas and negative connotations that often accompany being labeled as having a disability. “Nobody wants to admit something is wrong, even if it’s just something... that’s just a little off. I wouldn’t say I have a disability. I don’t consider myself disabled.” Instead, she referenced an awareness that larger socioeconomic contexts played a role in her diagnosis. “I am educationally challenged, but that’s about it. You wouldn’t know unless I told you. You can’t look at me and see something’s wrong.”

**Theme Summary and Discussion**

The nature and process of how knowledge is constructed as it relates to being identified as LD or ADHD is a central theme with the data. Specifically, this knowledge construction played a role in how study participants framed their own identity as learners.

The process of knowledge and meaning construction typically began within the participants’ family microsystems as parents or extended family members introduced and constructed knowledge about the disability for the participant. In this sense, the roots or foundation of this knowledge was almost always constructed by others and this early impression often carried significant influence over time even if the participant reconstructed or reframed the knowledge years later. As an example, Bri’s mother did not believe that she had ADHD. Rather, her mother assumed Bri’s struggles in school were a byproduct of her want for attention. As a contrast, Heather’s parents, especially her mother, discussed dyslexia openly with her, describing it as more of a difference rather than a deficit in learning.
The participants’ knowledge construction and the meanings they made from their experiences as learners have evolved over time for each of the participants. How they conceptualize the disability and its role in their identities continued to be fluid, reshaped by the environments in which they interact. To examine the move from knowledge constructed by others to reconstructing it for oneself, transformative learning theory provides an additional framework in order to conceptualize the fluidity within this theme. Rooted in a constructivist epistemology, transformative learning theory assumes that an individual’s experiences and interactions with the world inform how knowledge and meaning are constructed. Further, the culmination of one’s past experiences and the meaning constructed from those experiences influences how he or she interprets and constructs meaning from future experiences. “Learning occurs when an alternative perspective calls into question a previously held, perhaps uncritically assimilated perspective (Cranton & Taylor, 2012, p. 8).” In other words, transformative learning theory invokes the individual to remain open to new paradigms “to make them more inclusive, discriminating, open, emotionally capable of change, and reflective” (Mezirow, 2012, p. 76). An individual’s paradigm or worldview is transformed through a process of “critical reflection of assumptions, validating contested beliefs through discourse, taking action on one’s reflective insight, and critically assessing it” (Mezirow, 1997, p. 11).

In this study, there were several examples of how transformative learning theory connected to this particular theme. Meeka was able to reconstruct knowledge of her learning challenges by talking with her TRIO/SSS advisor. From these opportunities to discuss previous knowledge and reconstruct meaning, Meeka was able to understand how larger socioeconomic contexts shaped her K12 experiences as a learner. Similarly, when Bri
discussed her ADHD diagnosis with her college advisor, she was better able to reconstruct knowledge and meaning attached to her K12 experiences of being labeled as a troublemaker. One of the strongest examples, though, was how Bill articulated his critical reflections on previously held knowledge about his learning challenges.

Finally, in a study that examined high achieving adults with learning disabilities, Gerber, Ginsberg, and Reiff (1992) found reframing or “reinterpreting the learning disability experience in a more positive or productive manner” (p. 481) to be a major component in how individuals with LD successfully moved toward their personal and professional goals. Additionally, the authors noted that there were four distinct steps in the process which included a) a recognition or awareness of the disability, b) accepting the disability as part of oneself, c) understanding how the disability impacts their individual strengths and weaknesses, and d) taking action to mitigate any barriers to success (Gerber et al., 1992). Similarly, participants in this study spent a great deal of time reflecting on their experiences as learners, often reframing how they perceived their disability or being labeled as LD or ADHD. In doing so, all of the students who participated in this study seemed to loosely follow the reframing process outlined by Gerber, Ginsberg, and Reiff (1992).

**Self-Assessment through Observation and Comparison**

Nearly all of the participants interviewed for this study discussed, in mostly implicit terms, the continual process of defining oneself as a learner. A cyclical self-assessment of sorts, it seems to be an ongoing evaluative and reflective process, comparing their experiences to that which they observe to be the experiences of others. This process of observing and comparing appeared to begin at the microsystem level within the participants’ own family. Several of the participants described this self-assessment through observation
and comparison as it relates to their siblings. Also at the microsystem level, nearly all participants described ways in which they observed classmates or peers, comparing what they perceived to their own experiences and performance in an evaluative manner. Beyond their network of microsystems, some of the participants also used broader contexts as sources for comparison. The level of academic rigor, as well as campus and peer culture, informed the way that they thought of themselves as learners.

Adam

Growing up, Adam could not help but compare himself to his twin brother, who also had ADHD but was a better student. It was frustrating for Adam, who struggled academically, to see his twin brother get good grades despite having studied very little. “He [Adam’s twin brother] can just not study and get good grades. I would have to really try.” He remembers that his parents would talk with him about it, consoling and encouraging him. “I would break down, and my parents would have that talk with me.” Their conversations also included a reality check too. “[They would say], ‘You have this…’ I don’t want to call it a disability or a problem, but, ‘you have this situation, and you just got to deal with it.'” After graduating from high school, his brother enrolled at a four-year university, but Adam enrolled at a nearby community college as recommended by his parents. His plan was to take care of as many of his general requirements credits as possible before transferring to a four-year institution to finish his undergraduate degree.

As a community college student, Adam excelled academically and thrived. He found that although the academic rigor at the community college seemed to be on par with what was expected of him in high school, he was now one of the high performers, academically,
when compared to his classmates. His academic success was a relatively novel experience for him and gave him confidence.

In high school, I wasn’t one of the smarter kids, but in community college, I definitely felt that I was usually one of the smarter kids in the classroom. That helped me a lot. Just felt like I was on top of my stuff more.

This observation and comparison was not only a confidence builder, but also seemed to be a motivator for him. “I had that internal switch that I started actually applying myself.”

Putting effort toward his coursework and seeing it pay off had a snowball effect for him.

I found that if I’m doing well in other aspects, if I get a good grade on a test, it’s easier to do better on the next test. As opposed to if I get an F, it’s like now I have to dig myself out of this hole. So, yeah, achieving in that kind of stuff makes it easier to continue.

When Adam transferred from the community college to Private University, the transition was challenging for several reasons, including the significant change in academic rigor, expectations from faculty, and the skill sets of his peers.

It was really hard to adapt, going from being extremely successful in community college to being back at the bottom here and trying to figure that all out while everyone else just figured it out since they came last year [as freshmen].

Self-assessing his identity as a learner through observations and comparisons, he felt as though he was behind everyone else, once again, and trying to catch up. Additionally, now that he and his brother both attended four-year institutions, he found himself still comparing his college experiences to the experiences of his brother.

He’s doing really well. He’s got some hard classes too, but, for the most part, he’s got a good GPA and everything. And socially, he’s got a position in his fraternity and everything, so he’s got it all figured out. Last year, that [transferring from a community college to a four-year university] was really difficult for me. . . . I was struggling so much socially, it was hard and everything, so when I saw that [his brother was academically and socially thriving], it was hard. But now it’s just like, it is what it is. I have my friends here, and I’m getting the grades now.
Anna

As a freshman in her first semester of college, Anna was still very much in a state of transition. The self-assessment that resulted from her observations and comparisons of others had as much to do with navigating peer relationships as it did with metacognition. Observing her peers at Private University, Anna assessed the likelihood of potential friendships, comparing their qualities to what she valued in friendships. “When you first come here [to college], you meet all these new people, and you have no idea what they are like.” Although meeting new people and developing friendships may be an expected part of attending college, Anna has found it to be more challenging than adjusting to increased academic rigor and keeping up with her coursework.

Compared to some of the other freshmen that Anna has observed, she felt as though there were noticeable differences in how she approached college, particularly when it came to maturity and self-regulative behaviors. She contrasted her own self-disciplined approach in school with her experiences in working with classmates on a group paper for one of her recent classes.

When I run into immaturity like the last group paper, it was hard to get some of my partners to… They worked, but [to get them to] really work on it. Then, you hear all this gossip. It’s like, “Really? Come on people.”

Perhaps, Anna felt like somewhat of an outlier among other freshmen, because she took a year off between high school and college. In that year off, she might have had some experiences that allowed her to grow and mature in ways that made it seem as though there were vast differences between her and her peers. “It’s like, ‘Okay I know you just came out of high school, and you are getting in the real world.’ It’s like I’ve got to wait for them to mature.” Indeed, Anna seemed to be highly disciplined in her academics with a very structured approach to studying and time management. Having successfully implemented
some effective time management strategies at the beginning of her first semester, she observed some of her peers struggle. She noted that they might have done better, academically, if they had adopted some of her self-discipline in keeping a structured schedule.

I have seen some people here. I have a friend who tried to do the [time management] schedule, but she just couldn’t follow it. But, she is just so miserable [without it]. She is like, “Every night, I just have all this homework.” I’m so thankful. For me, that would be a disaster, because I wouldn’t know what to study first. I wouldn’t know how to get it done.

The realization that she was outperforming her nondisabled peers was significant for Anna and validated her efforts to develop strategies that others did not have.

Bill

The learning difficulties that Bill has encountered throughout his education mostly concern areas in mathematics. He compared his skill level with that of his younger sister who was in high school.

I’m sitting at the table, looking at her learning this stuff and thinking, “How are you that much better than me at the same thing I’m learning? I barely understand it right now, and you completely understand it, and you’re not even in college.”

He has maintained a sense of humor about it, though. “She’ll come, move in, and start doing my homework, which doesn’t make me feel any better.” He laughed, yet he still felt frustrated, overall, with how his elementary school addressed his learning challenges. Bill felt that being assigned to a separate room for special instruction in math when he was in grade school had negative implications for him as he progressed through school. “Things like math, it builds on itself.” He felt that if he would have stayed in the regular classroom with his peers throughout grade school, he might have been in a better place, academically, when he graduated from high school.
I feel I probably would have been much better at math. . . . I feel like I probably would have been much better off right now in college and probably been at [the local public university] from the start [instead of the community college]. I probably would have had a better scholarship or something.

In college, Bill saw his peers at Urban Community College as students, like him, who had other goals. Taking classes at UCC was a stop along the way rather than a worthwhile experience in its own right. “I notice that everybody is like, they have the same attitude. Nobody is really there because they want to be.” Consequently, he has not spent much time at the campus outside of class or to study.

The only time I actually spend extra time on campus would be for homework or being at the tutoring center or like using the resources that come with the school. . . . It’s not like high school where you want to hang out . . . . As far as anything extra [extracurricular activities], I’m out the door the moment I don’t have homework or a test or something.

He planned to transfer to a nearby public university once he finished his general requirement courses. Even though he will be a commuter student and live off campus, he still expected the campus environment and peer culture at the public university to be much different.

Since you do have extra activities . . . it’s like an experience to have. The people that are in there at those things [student activities], they’re there because they’re with their friends and everything, like a football game or something. They do have a little more pride for the school . . . It’s a different experience I’ll get.

**Bri**

Bri recalled how different she and her brother were, growing up, when it came to reading. “He had no problem reading whatsoever, and would sit down and read and read.” She on the other hand, struggled with reading. “I just couldn’t sit down, focus long enough, and comprehend at the same time. It was too much for me.” Observing how the rest of her family enjoyed reading and felt at ease doing so informed the way Bri viewed herself as a learner.
It was such a struggle [for her parents] to get him to stop reading and to get me to read. It was really weird seeing my brother being like that, and me being like this. Both my parents read all the time. I think that was my biggest struggle, was seeing everybody else read and having that, “I don’t want to do that [read], because I know I’m not good at that.”

When Bri enrolled at a community college after high school, she noted a change in how others viewed her in comparison to her peers, referencing variations, by institution, in peer culture and expectations. “I went from high school, where I was mediocre and an athlete, but student athlete, and then go to [community] college and was like, ‘Woohoo! I got this, this is awesome!’” At her community college, Bri found herself excelling in classes, interacting with the faculty, and being a star student. This change was a confidence boost for Bri and how she thought about herself as a learner.

It was nice to finally be that person that I was never in high school. . . . I was always falling behind [in high school], and finally it was like, “Ding! I’m the cool kid.” I’m not popular, but better. The teacher liked me, and the teacher responded to me and my academics. It was amazing.”

She said that her positive experiences as a community college student occurred before she used accommodations and took medication for her ADHD. But even without that, how her instructors and peers related to her and perceived her made a difference. “I wasn’t being treated like a troublemaker. . . . And, if anything, I was ahead of the game. It was kind of nice to have the anxiety levels go away for once.”

When she transferred to Private University, she found the transition into the peer culture somewhat challenging, but for completely different reasons. At 23, Bri was only a few years older than her traditional aged classmates. However, the age difference was a major factor in how she integrated into the institutional and peer cultures at Private University, a campus oriented toward a traditional, residential student population. Since Bri lived on her own and was supporting herself through college, she sometimes had to remind
instructors that although she might look like a traditional college student, she had other nonacademic obligations, such as a job and apartment off-campus.

There were couple times where our teachers were like, “What do you mean? What were you doing last night that you didn’t have time for that?” I’m like, “Well, excuse me, I work. I know you’re not really used to that. I have a dog at home. She needs attention.”

Being a few years older than her classmates, Bri sometimes felt like an outlier among her younger classmates. “As soon as kids found out I was over 21, they’re like, ‘Can you buy me a beer?’ I’m like, ‘So, you wanted to be my friend, so I can buy you a beer.’ Awesome, I don’t belong here.” Although Bri loved Private University, being slightly older and a transfer student was a difficult transition, yet she eventually was able to work through the transition as she built some friendships over time. “Now that I have friends, I guess it doesn’t bother me nearly as much.”

When came to fitting in, Bri feels that, in some ways, being a non-traditional student at Private University presented more challenges than her ADHD, especially once she began taking medication for it and could use accommodations when she needed to. “[The students at Private University] are phenomenal, but they definitely have their niche in life, where they’re just, they do things a little more traditionally. . . . If they would give me a chance. I’m just like them.”

Heather

In both high school and college, Heather would often compare her own academic performance and learning experiences to that of her peers, particularly when it came to effort versus outcome. She explained that she would often hide her disappointment and look toward her family for support.
I would study with my friends and they would all get A’s, and then I would get the low C on the test. I remember going home just bawling to my mom, like, “Why can’t I get this? I know just as much as them.

Over time, Heather found herself incorporating that disappointment, as well as her learning difficulties, into the personal narrative that she and her peers co-constructed. “They [friends] joke about it, they make fun of it, it’s always fun. And, that has never offended me, them making fun of it.” Still, as she compared her experiences to that of her peers, disappointment and frustration became familiar feelings associated with academics.

It just gets me down when that paper took you a half an hour to write, and it took me four hours, and we either get the same grade or I get less of a grade. That’s not fair to me, and that would just frustrate me. Where I would never be mad at them, I would just always be mad at the situation.

Halfway through her senior year in college, Heather seemed to have plateaued in her self-assessment as a learner. She appeared confident in her own skin and her identity as a college student. Generally, she no longer viewed her dyslexia as a major obstacle. Using her art class as a metaphor, Heather explained her perspective. “When I make a mistake . . . if I’m drawing something, and I make a mistake, I’m going to keep that mistake and incorporate that. I don’t let the mistakes make my work imperfect.”

When Heather would encounter situations in which addressing the impact of her dyslexia was unavoidable, her strategy was to approach it as a matter of managing expectations of those with whom she interacted. “It still comes up when professors tell me to read in front of the class. I’m not going to tell the whole class, ‘Hey, this is going to be a struggle, I’m dyslexic.’” Instead, she would try to talk to the instructors about her dyslexia at the beginning of each semester, but it still would happen occasionally. She felt that if she was able to explain to others that she had dyslexia, she would be better positioned to guide the constructs that others might form of her. “I just don’t want people to ever think I’m
dumb.” Instead, Heather hoped that others would view her dyslexia as merely an individual
difference, a simple matter of varying strengths and weaknesses when compared to her peers.

Yes, I have to work harder. I might get lower grades, but I’m still, I have different
strengths than you do. Mine is not going to be a perfect email every time I send them.
Mine’s not going to be the perfect paper. I will not edit your paper for you. But, I
can run stuff, I’ve always been a leader.

Margaret

During her first year of college, Margaret struggled to find the right balance between
academics and her social involvement on campus. “I knew I was going to have to go to
class, and I knew that I was going to have to study, but I didn’t realize how much you need to
study.” Getting involved on campus, making friends, and participating in social events came
naturally to Margaret, but the increased academic rigor and expectations caught her off-guard
and made her transition to college somewhat challenging. “To be a successful student, I
thought you would just go to class and then maybe hit the library for a few hours at night.”
She felt that she probably initially misjudged what it meant to be a successful college student
at Private University, fitting in as both a successful learner and an active student on campus.

A lot of the people that go here, in general, are very, very smart people, and they
don’t have to try as hard as I do to get good grades. I wanted to be like them. I was
like, “I’m totally like them too.” Not saying that my grades were bad by any means,
but they were definitely not as good as I probably could’ve gotten them. I just
thought that I was smarter than I was.

Now, as a sophomore, she reflected on why the transition to college her freshman
year was so challenging. “I think that being constantly surrounded by people is my main
issue, because in high school, you go home, and you’re home by yourself or with the family,
and it’s a lot harder to be as distracted.” She wished that she had known as a freshman that
she needed to be more mindful of how she prioritized her time. “I think that as my freshman
self, I would’ve wanted to know that [you should] definitely focus more on academics, and
you can have fun, but there’s a balance.” As Margaret observed the new freshmen this year, she noted that they seem to be having a smoother transition than she did when she first started college. “I feel like all the freshmen are a lot wiser than I was.”

Observing herself and others at Private University, Margaret assessed that she probably landed somewhere in the middle when it came to academic performance and involvement on campus.

There’s definitely people out there that are more involved than I am. There’s definitely people out there that are a lot smarter than I am, but I feel like I’m more in the middle mix. I’m involved in a few things, and my grades are decent. They’re not the best; they’re not the worst. They’re good enough to get by.

Reflecting on her experiences since entering college as a freshman, she seemed to have reconciled herself to a learner identity that is balanced and average.

I’m not a 4.0 [GPA] or whatever. That’s not who I am or who I’ll ever be, and I know that. I’m also not the most outgoing or someone who’s going to be involved in every activity that’s out there, but I’d say I’m pretty equally connected in both senses.

Marvin

Although Marvin aspired to attend college after high school, his parents discouraged him from doing so. They persuaded him to get a job instead. “They saw how I struggled and I didn’t like it. Didn’t like grade school and high school because of all the struggles that I’ve had during that time. I still struggle, but I’m seeing this through myself.” Watching each of his siblings pursue a college education made it that much more difficult to accept his parents’ advice.

One brother . . . was finishing up [college] at that time. One sister . . . just graduated from [the local public university] that May. . . . My oldest sister graduated from [Private University] the year before from nursing school, and then, my oldest brother was going to [the local public university] for an engineering degree.

A couple of years after graduating from high school and working full-time, Marvin decided to take classes part-time while he kept full-time employment. He took college classes on a
part-time basis for the next 25 years, changing majors multiple times and never seeming to make much progress toward any kind of degree. With each failed attempt at a particular program of study or goal, Marvin found himself internalizing his failure as he watched the rest of his siblings earn college degrees and advance in their careers. “I kept it bottled up. I would just go on about my business, work. Give in to it [his frustration], and sometimes do some unsavory things.” As a result, he dealt with his own disappointment in ways that were not constructive or healthy. “My family had an intervention. I was going through some problems, and I had difficulty with jobs and struggling with work. . . . With the intervention, they thought I was an alcoholic.” The family intervention and subsequent support seemed to be a turning point for Marvin. It was the motivation to prove to them and himself that he can make things better.

Despite many setbacks in his life, Marvin continues to work toward his goal of getting a college degree and becoming self-sufficient. He tries to remain engaged and active on campus even though opportunities to be involved with activities and programming do not always work with his schedule. At times, he is frustrated by the many ways in which his multiple disabilities seemed to impact his daily life, educational goals, and career options. Additionally, he has found that very few people want to take the time to talk with him about his disabilities or better understand how they impact in his life.

There are some people that do listen, but most of the time, especially old high school classmates or what have you, or other people, they don’t give me the time of day to talk to them. . . . I try to explain things like that, and . . . they’re in too big a hurry, because they don’t want to listen to what I have to say.

He also felt that people often are dismissive of him, due in part to his slower speech and verbal processing.

I talk slower. People don’t want to sit down and. . . . They’re in too big a hurry . . . and sometimes there’s, even with my family, you kind of get discounted. . . . Even
the teacher of this class that I’ve been taking, and I need to talk to her about it, that you got to be more patient with me. I’m here; I’m trying.

**Meeka**

In high school, Meeka felt isolated as she observed classmates moving forward, learning the curriculum while she struggled by herself. “There would be nothing on my paper, but you would think I’m working, but I’m just sitting there.” She rarely asked for help, because she did not want to draw unwanted attention to herself. “You can’t raise your hand and ask for help on a test, because the whole class is taking it. And, you don’t want anybody to know you’re the not smart one.” The perception of her peers and classmates have always been something that Meeka took into account as a learner. “I didn’t want to look stupid in front of my fellow classmates. That was on me, because I could have literally raised my hand and got the help I needed. I chose not to.”

Although Meeka admitted to being stubborn in high school, she said that she still avoids certain classroom situations in college that might make her feel dumb or stupid in front of her peers. However, she has learned a few strategies so that she is still able to get the extra help she needs without drawing attention to herself in class. “I’ll go to the writing center. I might go to the teacher and talk to him during his work [office] hours.” Meeka feels that her hesitancy to speak up in class or ask the instructor a question to clarify something is not unique and that most students likely feel this way.

I think because nobody wants to feel, I am just going to say, stupid. Nobody wants to feel like they are not like everyone else. Nobody wants to feel like they need extra help or extra attention from the teacher.

**Theme Summary and Discussion**

Another theme was the continual process of defining and redefining oneself as a learner, a continuous self-assessment carried out by the observation and comparison of
others. Similar to how participants first constructed knowledge about their disability, the process of observing and comparing appeared to begin with microsystems, either within a participant’s own family or among their classmates. Observing the behavior and outcomes of their peers, and in some cases their siblings, served as a data source from which the participants could compare their own behavior and outcomes in an evaluative manner, making adjustments accordingly.

Several participants expanded the contexts of their self-assessments to include peer culture, described by Renn and Arnold (2003) as a mesosystem self-made by each of the participants through their various microsystems of friends, classmates, and other peer groups. The construction of one’s own peer culture may be mostly the result of each participant’s force, resource, and demand characteristics (Bronfenbrenner & Morris, 2007). For example, Meeka explicitly described building her own peer culture, with her network of “cheerleaders.” Purposefully constructed or not, peer cultures appeared to serve as an influential data source for observation and comparison.

Broader than the peer culture mesosystems, yet continuously intertwined, is the exosystem of institutional policies and academic rigor as well as the overall campus climate. Bri excelled when she attended community college and had meaningful interactions with faculty and peers. As a result, these experiences served as confidence builders for Bri and how she thought of herself as a learner. While attending community college, Adam also shined. He felt as though faculty viewed him as a high-performing student, a relatively novel experience for him that boosted his confidence and increased his academic motivation. For both Bri and Adam, transferring to Private University was a difficult transition, but for different reasons. A few years older than most of her peers, Bri felt somewhat marginalized
on a campus that was very much oriented toward a traditional-aged, residential student population. Adam struggled in his adjustment to the increased academic rigor and expectations at Private University. He felt like an outlier compared to his peers and “back at the bottom.”

The process of self-assessment through observation and comparison affirms an ongoing relationship between a person and influential elements from various environmental contexts. Albert Bandura’s (1991) social cognitive theory of self-regulation is a key theoretical framework to connect with this particular theme and how it is conceptualized in this study’s findings. Bandura described self-regulation as the driving force when persons connect thought to action. In an academic setting, self-regulation encompasses the ways in which students control and are cognizant of their own learning and to what extent (Zimmerman, Bandura, & Martinez-Pons, 1992). Specifically, the self-monitoring and judgmental subcomponents of Bandura’s social cognitive theory help cement its relationship with this particular theme. Self-monitoring provides a continual source of data from which one may gauge how realistic a goal or self-expectations may be. It can also provide an individual with opportunities to facilitate desired change by “paying close attention to one’s thought patterns and actions in different social contexts” (Bandura, 1991, p. 250).

It is important to note that this theme includes only the act of self-assessment through observation and comparison. It does not necessarily include the presumptive next step of determining whether or not to take action, modify one’s approach to learning, or seek out support or resources. The process of social comparison has the potential to promote or hinder the development of help-seeking behaviors (Newman, 2000). It can facilitate the develop of help-seeking behaviors by providing students with “performance feedback, which
is important for developing an accurate sense of when assistance may be necessary” (Newman, 2000, p. 382). On the other hand, social comparison can also inhibit the development of help-seeking behaviors in that asking for help puts a student in a perceived vulnerable position by exposing their needs or deficiencies. As an example, Meeka described how she would avoid certain classroom situations in which she would feel dumb or stupid in front of her peers, such as asking for help. However, over time, she learned strategies that allowed her to get the extra help she needed without drawing attention to herself in class, such as using campus tutoring services or talking with the instructor during office hours. Beyond observing and comparing, the next step of developing help-seeking behaviors, or identifying allies and resources, is action-oriented movement toward increased learner autonomy.

**Identifying Allies and Resources**

All of the students who participated in this study discussed the importance of having allies in learning as well as identifying and using resources in their adjustment to being college students. However, the source, strength, and stability of such relationships and resources varied among them. Participants identified allies in learning as relationships with individuals who provided support to them specifically concerning their learning disability or ADHD or who served as important gatekeepers to successful learning and goal attainment. For some it was a supportive family member to whom they turned for guidance. For others is was a parent who advocated early in their education for the instructional setting that would best fit the student’s learning. All participants identified resources as key in their experiences as college students, whether it was some type of assistive technology that aided their learning or supplemental programming through the college or university. Just as evident, though, was
the awareness of their own deficiencies and underpreparedness when such allies or resources were altogether inadequate or absent.

Adam

After a rough transition to Private University and poor grades his first semester, Adam realized that his learning and study strategies needed some modification. He also realized that he needed to take a more proactive approach and use any support resources available to him. Seeking out campus resources, such as academic accommodations and exploring alternative strategies to address the way his ADHD impacts his academics was a relatively new development for him. He had not found it necessary to do anything like that in high school or at the community college that he attended before transferring to Private University. “I didn’t even sort of need them [accommodations] in community college. I worked probably half as hard in community college as I do here [at Private University].”

Once Adam experienced using testing accommodations for a few semesters, he felt that accommodations such as extra time and a separate room made a significant difference for him.

I didn’t even realize how much harder it is for me, because when people start, especially when people start getting up and leaving, I just get this itch like, “What am I doing wrong? I don’t want to be here anymore.” I just start to spin through it. Contrasting his experiences before testing accommodations with those he has had since he started using them has also provided him with some helpful insights into how he learned and performed best academically.

The extra time allows me to really sit down and think about it. Also, I can talk out loud in these little rooms, which actually really helped. I didn’t even know that until I started taking tests there. . . . It [talking out loud when taking a test] just helps me sort out my thoughts.
Still, Adam had not yet taken full advantage of classroom accommodations and their potential benefits. He used a note taker in some of his classes, especially those which relied on lectures as the primary instruction method. Note takers are typically another student in class who has volunteered to take notes for or share their class notes with the other student. Adam admitted that having a note taker in class had the potential to be both helpful and problematic for him. “It allows me to doze off in class.” He also saw how relying on accommodations in such a way could, ultimately, have negative consequences for him. “I wouldn’t go as far as to say it’s counter-productive, but I mean, sometimes I know someone is taking notes for me, so I don’t really have to [pay attention].” After reflecting on how he has used this accommodation to date, he considered changing his approach in the future.

Maybe next semester, I’ll try to take notes on top of the note-taking, and if that doesn’t work, then I’ll probably stop using them next year. That’s going to have to be a last [resort]. If I really need to make myself do it.

Anna

Anna did not enter college that following fall after graduating from high school. “I don’t think I was ready.” Her parents agreed. “My parents didn’t believe I was ready to go [to college directly after high school] either . . . especially with my dyslexia, we knew I wasn’t ready to go.” During that year off between high school and college, Anna took some French classes while her parents explored programs that could improve her reading skills. “We were trying to find something that would help me to get up to that [college level reading] or at least get close to it.” Looking back, she felt that had she started college directly after graduating from high school, she would have struggled academically. “It would’ve been really hard.”
In order to get her reading skills up to college level, Anna has used a reading software program vigilantly for nearly a year. She explained that the software helps retrain one’s brain.

They [the software developers] believe that the brain can change . . . that after going through some testing to figure out what’s wrong, they can give you these certain activities to do and practices so that your brain will rewire. So you’ll have a really small form of it or you just will no longer have it [the learning disability].

Almost like an athlete training for an event, she dedicated a certain amount of time each day to working through and mastering the software program’s reading activities. Working diligently with the program, she saw significant improvement in her reading over time. “I was tested at a seventh grade reading level last December. Through this program, I was retested this summer, and I was at a junior [reading] level in high school.” Even as a college student, Anna still continued to use the program to improve and maintain her reading skills. “I’m doing the reading thing two hours a day. Sometimes it doesn’t get done, but that’s okay.”

Beyond using the reading software as a resource in her learning, Anna seemed to remain in close contact with her family, viewing them as her primary allies.

My parents, as I grew up, they taught me how to organize myself. They taught me what to do in certain situations, so . . . when I go to my parents now, I’m like, “What do I do in this situation?”

She has not used accommodations in college and has had little contact with the disability services office on campus. As her first semester in college drew to a close, she felt that she had developed a good relationship with some of the faculty in the French department, since that was her major.

I know the head of the French department, because we [Anna and her parents] talked a lot with him before we went [to Private University for a college visit] about what classes I should take, so I know him pretty well. They [department faculty] really
care about you as a person and as a student, and it’s nice to have someone on campus like that.

Bill

Bill is a first-generation college student, which can sometimes mean that parents are less involved, simply because their knowledge about the process of attending college is often limited. However, his mother has been involved in many aspects of his transition to college and a source of support.

Sometimes, I tell you, she [his mother] should have been a counselor, because . . . she learned all the financial aid, and getting all the tuition, and every single type of, I guess, technical part of me having to actually get into college. She knows all the paperwork, what all the certain words mean.

He appreciated the help, because he found some of the processes confusing and wondered how some students who do not have someone to help them with such tasks do it.

I really don’t know how people that don’t actually know somebody that knows this, I don’t really know how they get into college. There’s a lot of stuff you’ve got to do to even get to college. It would be hard just to even figure out what to do.

Bill has also had some instructors who have gone out of their way to help him in their classes. The most challenging courses for Bill have been the math classes, so he was particularly grateful that he had a math teacher who spent time tutoring him, even when he was not taking her class.

I have a math teacher that I’ve had three times [as an instructor]. . . . She’s the best math teacher I’ve had. I actually failed one math class. Then, I retook it with her, and I completely understood it. It just depends on how the teacher teaches.

For him, the detailed and consistent feedback that the math instructor gave to students was the most helpful. When students would fail a test, she gave them detailed feedback on how to do the problems, along with a chance to try it again.

She’ll give you the exact same test pretty much but just different answers. She’ll work out all the problems on the test that you missed the first time. . . . You feel like
you’re doing the work, but if you understood what you got wrong and you actually get all the work and retrace your steps, you’ll get a 100 [percent] on the next test.

Bill felt that her teaching approach was particularly effective for him. “You do learn the process. You completely understand it by the time you’re done.” Thinking about his own learning preferences, Bill explained that he learns best when something is demonstrated for him first.

I just know this just from learning when I go to a new job or something. Once you get that base of how to do it, then you’ll just figure it out by yourself. You can learn from the mistakes you made.

Bri

In reflecting on her pre-college educational experiences, Bri explained that she had access to very few allies or resources to support her learning. Even though she was generally a good student, Bri remembered getting in trouble in school quite often. “I got in trouble for drawing on myself. I got in trouble for not paying attention. I had gotten in trouble for everything.” By high school, she was labeled as a troublemaker even though that was not her intention. Perhaps, because of her tendency to be a somewhat disruptive or unruly student, she would often encounter high school teachers or counselors who were dismissive of her or who would discount her potential. She recalled a meeting with her high school counselor about applying to colleges.

She was like, “You’re not going to make it [to college]. You’re not going to get there. Your grades aren’t there. Your attitude is not up to par. No.” She was the sports advisor specifically. I was varsity all four years, so there was really no reason that she couldn’t have said, “Hey, let’s sit down and try to figure out what we can do to get your grades up.”

She also wished that her ADHD had been diagnosed earlier and felt that her high school should have taken a different, more proactive, approach to help her.

I don’t feel like my high school did anything, or even considered the fact that it may have been a disability like that. I’m sure it would have helped, because it helps me
now at an older age. I can only imagine what it would have done for me at a younger age.

However, once she was in college, she began to identify individuals and resources that seemed to be more engaged and invested in her as a learner. At the community college Bri attended in Texas, she belonged to the TRIO/Student Support Services program. They talked to her about study strategies and arranged for her to have a note-taker in class even though she was not registered with the college’s disability services office. Her advisor recommended Private University based on Bri’s career goals and assisted her in the process of applying and transferring to the university. Once she was at Private University, she initially struggled in her classes, and at one point, one of her professors recommended that she be evaluated for ADHD.

He [the instructor] was like, “I need to fail you, but we need to talk. We need to figure this out, because I want you to come back. I want you to do this, and I want you to be successful.” Which was kind of the opposite approach that everybody else had given me; versus, “You’re failing, you’re not paying attention, you’re not good enough.”

Heather

Throughout elementary and secondary school, Heather benefited from her mother being a proactive and savvy advocate on her behalf. “I did all AP [advanced placement] sciences; AP composition. I did not let my disability hold me back.” However, successfully completing advanced placement courses in high school would have been significantly more challenging for Heather without parental involvement. Her mother continually worked with the teachers at her high school, setting up meetings with them to discuss Heather’s educational trajectory.

My mom would come with me and just say, “Hey, Heather’s bad at reading.” Not ever offending me in any way, but it was a matter-of-fact thing in my family that I was not a reader, I was not good at spelling. I can get A’s completely, but I’m just
going to get them a different way. I was going to get that A, but they [the teachers] needed to understand that.

Heather’s mother also invested quite a bit of time helping her with her studies every evening so that she could continue to take advanced placement classes that prepared her for college-level work.

My mom, in tenth grade, read the whole biology book to me. It was this huge book. I wanted to take AP Bio and she said, “OK, if you’re going to do it, you’re going to need help reading it.” So, she was a trooper and sat down with me every night and would read that to me.

She was also fortunate to have teachers in elementary and secondary school who were flexible in meeting Heather’s individual learning needs. “My teachers have always been awesome and always just been so understanding even though they knew something was different about me. They just didn’t have a formal diagnosis on it.” In her advanced placement composition course, the teacher provided Heather with additional instruction outside of class.

She [the teacher] was really good with working with me and just helping me become a better writer and getting my thoughts out, because that’s always an issue. . . . She helped me with that and knew that the grammar was going to be terrible, but . . . she would check it for me. I would turn in an A paper, an A-quality paper that was the same as everyone else’s.

Heather was fortunate to have her mother’s involvement and advocacy as well as high school teachers who were accommodating to her individual learning needs. As a result, she was very much accustomed to a high level of academic support or additional instruction and sought out similar allies and resources in college. When Heather decided that she would attend Private University, her mother assisted her in connecting with individuals on campus who would, in some ways, act as a surrogate advocate and support person for Heather.

Just before I started [at Private University] . . . I was here with my mom and my dad. We met with [the disability services office staff], and figured out the
accommodations, and honestly, thank goodness for my mom just faxing everything over, because I didn’t have to deal with it.

Connecting with the university’s disability services office has been integral to Heather’s academic success. Specifically, Heather has been able to build a relationship with the department’s director that mirrors the support her mother provided her in high school.

Everything she [the disability services director] provides me she has to through her job. But, then, having that extra physical person there, she’s given me so much mental support, mental stability, being able to just understand my disability. That’s what she’s done the most for me.

Becoming a learning ally to Heather, the department’s director worked with her in ways that were above and beyond her typical job duties. “When I was writing, I used to write a lot of papers for classes, she didn’t just correct them for me. She told me how to make them better for next time and just simple things I can do.”

Margaret

As a first-generation college student, Margaret was glad that she found the TRIO/Student Support Services program when she got to Private University. “Honestly, I was thinking about this the other day. I would have been so lost . . . especially with registration right now.” In building a mentoring relationship with her TRIO advisor, Margaret saw her advisor as a main source of support, certainly an ally in her learning. “If I ever need anything, she’s the first person I’ll call or text. And, she’s always there, always willing to help.” Margaret also credited her TRIO advisor for guiding her through the transition to college. “She’s the one that told me I needed to be tested [for ADHD].”

Newly diagnosed with ADHD and connected with the university’s disability services office, Margaret began to use academic accommodations in most of her classes. She said that she regularly used extra time and a separate room to take tests as well as assistance taking notes in some classes. All of her professors have been flexible and friendly about allowing
the testing accommodations. One instructor, in particular, was very accommodating. “She’s like, ‘Take all the time you need. Don’t worry about the time limit’ . . . she was just very, very nice about it.” Having instructors who have been accessible and understanding has made the transition to using academic accommodations relatively smooth for Margaret.

Marvin

The passage of the Americans with Disabilities Act (ADA) in 1990 came well after Marvin graduated from high school. As a result, he and many others his age did not have the option to access and benefit from academic accommodations in his K12 education. When Martin did encounter individuals who served in an advocacy role or who provided support and mentoring to him, he saw it as an important asset that aided his learning, especially when other support was limited or unavailable. When he was in elementary school, Marvin remembered that some of the nuns who taught at his Catholic grade school, as well as his aunt who lived down the street, provided him with tutoring after school. He also recalled a high school homeroom teacher being the first person to provide coordinated support and advocacy on his behalf.

We had a homeroom teacher . . . and he was my mentor. He worked with me to make sure that all the other teachers would know [about Marvin’s learning challenges]. . . . He was the teacher that made sure that other teachers knew what I needed.

As a college student, Marvin knew well that supportive relationships were key to moving forward toward his degree. One individual who has served as a longstanding ally in Marvin’s learning was his disability services counselor. He has taken college classes intermittently since the late-1980s, so Marvin has developed a strong, supportive relationship with her. “I was one of her first students, so I’ve known her for a long time.” A good match between student and instructor can also make a big difference in a student’s confidence and self-knowledge. A composition instructor, in particular, used some instructional strategies
that played to Marvin’s strengths and got him engaged with his classmates, nearly all of whom were much younger than he was. The instructor asked him to be a small group leader, a request that was a confidence boost.

[My] shaky confidence is just the writing and the comprehending what I’m reading. And, being able to sit down with those students and trying to get out to them what I’m trying to say, and then, just listening to them, like, “Okay.” It just made me feel really good.

Meeka

Growing up, Meeka did not have many adults in her life who advocated for her academic success. “For me, being from my background where nobody’s went [sic] to college, nobody’s graduated from high school. They [family members] really didn’t know.” She recalled that, from a very early age, her mother was always very uninterested and unengaged in Meeka’s education. She only minimally participated when it came to things like parent-teacher conferences for Meeka. “I remember my mom being very passive [at the meetings]. . . . It just felt like, okay, she doesn’t care too much about it [Meeka’s education].” Even when Meeka directly asked for help, her mother, a high school dropout, almost seemed indifferent about her learning. “She’d always be like, ‘You all [Meeka and her siblings] made it farther than me, so you know more than I did.’” Because Meeka lived with and was mostly raised by her grandma, important opportunities to discuss her learning challenges were missed and likely fell through the cracks at home, a result of communication gaps between her mother and grandmother.

She [Meeka’s mother] would be like, “Well, they [teachers] say she’s doing fine but just a little bit behind.” And then, my grandma would be like, “Okay, thank you.” My grandma was the one who was like, “You need to work on your spelling work. You need to do this. Did you do that?” Then, she’d be like, “Why aren’t you getting it? Why aren’t you getting it?”

Parents get mad when they’re sitting, practicing with you for a long time, and you’re still not getting it. I’m like, “I’m trying, I’m trying! Hold on, let me think.” I don’t
think my grandma fully knew what was going on. She was just going by what her daughter told her.

Meeka was never able to rely on her family as a consistent source of emotional support. Her mother almost seemed overtly and purposefully divisive when it came to Meeka’s college education, yet she supported Meeka’s younger sister who was also attending college at a nearby public university. Meeka recalled a situation in which she asks her mother for tax information in order to complete the Free Application for Federal Student Aid (FAFSA).

You have to use your parent’s information for the FAFSA. They [her mother] used it for my sister, but they refused to use it for me. . . . My mom and my sister did her FAFSA and when it came time for me to do my FAFSA, they didn’t want to do it, because my sister thought she would have to split her Pell Grant with me for me to go to school, which wasn’t the case.”

However, once she got to college, she was able to find it through her involvement on campus and in the community. “Honestly, I call them cheerleaders. I found my cheerleaders through the different parenting programs [on campus]. They have different organizations that will help you, that will push you through it [college].” While in college, Meeka has relied on her advisor with the TRIO/Student Support Services program.

Me and my advisor, we have a good bond. She understands I’ve been through a lot and I sometimes you have got to give me a minute to breathe. I might say I’m quitting school but I’m really not. I’m just letting off some steam.

In addition to the emotional and moral encouragement, Meeka has found that her cheerleaders and the programs in which she participates have also provided very practical support so that she could continue with her college education.

They have a little computer lab. They have tutors. They’re there to help you. If you need to set aside time to do your work, you can come in, and they have a daycare. They will watch your child. They’re there to help you. I have mentors . . . I ask them their advice when it comes to classes, when it comes to whatever. Even life stuff.
Then I have some friends that are really good friends. I have a friend that calls me every other day, maybe 3-4 times out of the week. He’s like, “Are you doing your work? You still in college? What’s going on?” . . . . It makes me learn to stay connected to people.

**Theme Summary and Discussion**

Participants acknowledged the importance of seeking out allies in learning, as well as identifying and using resources, in their adjustment to college. Although the quality and quantity of support varied by participant, these helping individuals became partners in a student’s own learning and exerted a positive impact on their educational trajectory. Mesosystems, whether an informal peer culture or more structured like campus support services and programs, were resources that the study participants identified as influential components of their environment.

For some, pre-college microsystems of support had long been established, such as having a parent who acted as advocate or who was actively involved in addressing the participant’s learning needs throughout his or her K12 education. Heather benefited from having a parent proactively involved in her learning as well as teachers willing to accommodate her specific learning needs. Anna benefited from involved parents who were willing to invest time in homeschooling and instructional software so that she would better prepared for college-level work. Participants who had effective microsystems of support prior to entering college often sought out allies or resources that mirrored that support once they were college students. Similarly, in a study that examined the attitudes of college freshmen on seeking help or support for academic concerns, Holt (2014) found that students who reported close, positive relationships with their parents were less likely to associate shame and embarrassment with seeking academic assistance. Further, these students would most often contextualize “academic challenges as opportunities for engagement with others.
which, in turn, predict other effective academic behaviors including better organization, preparation, and classroom engagement” (p. 421). Participants who did not have reliable or consistent microsystems of support before entering college had varied approaches in identifying allies. However, once an ally relationship was established, they viewed those allies as key players in their learning and goal attainment. Over the many years during which Marvin attended community college classes, he had developed a supportive, mentoring relationship with the disability service counselor. For Meeka, her TRIO/SSS advisor served in that supportive, mentor role.

The positive influence of peer culture and structured mesosystems as part of the institutional culture was clearly evident among the participants in this study. In their examination of peer culture in postsecondary education and its influence on individual student outcomes, Renn and Arnold (2003) proposed that the quantity and quality of a student’s mesosystems in college are related to persistence and student success, in that “the more rich and deep the peer mesosystem, the more likely a student is to acquire the knowledge, skills, and confidence to persist in college” (p. 282). Heather clearly benefited from her involvement with the disability services office on campus as well as her involvement in her sorority and other student leadership activities. Similarly, Meeka benefited from her involvement with the TRIO/SSS program and participating in community engagement programming hosted by her community college.

On the other hand, challenges and tensions between microsystems are inevitable. Some microsystems may present conflicting messages that are explicit and tangible, such as the tension that Bri experienced in balancing studies and work. Other conflicting messages are implicit and not as easily identified, such as Meeka’s troubled relationship with her
mother who has attempted to undermine Meeka’s education on multiple occasions. How one responds to such tensions largely depends upon the force, resource, and demand characteristics of each participant (Bronfenbrenner & Morris, 2007; Renn & Arnold, 2003).

This theme, the act of identifying allies and resources, affirms the role of adaptive help-seeking behaviors in learning. Adaptive help-seeking behavior involves the awareness that help or support is needed, the understanding of the types of support that is available based on one’s own needs, and the motivation or willingness to request help or support (Newman, 2000). Effectively honing adaptive help-seeking behaviors is a desirable developmental outcome “because of what it represents (i.e., self-regulated learning), what it requires (i.e., cognitive and social skills and affective-motivational resources), and what—if successful—it accomplishes (i.e., a bootstrapping of further learning and development)” (Newman, 2000, p. 389). In other words, it moves the student closer toward increased learner autonomy, which is also the final theme presented in this chapter.

**Moving Toward Increased Learner Autonomy**

Encountering and responding to the expectations of increased autonomy is a recognized developmental task in human development, particularly for adolescents and young adults. One of the themes that emerged from the data was the process of moving toward increased learner autonomy. Participants discussed the varied ways in which they refined their practice of learning, whether through metacognitive reflection or by responding to external expectations to adopt more autonomous learning behaviors.

How participants perceived and responded to this developmental task largely depended upon previous experiences in their pre-college networks of Microsystems, both at home and at school. Those who were accustomed to having advocates in their learning
looked to resources available on campus. Other participants who entered college with a history of having minimal advocates or neutral support systems primarily relied on metacognitive reflection and continued skill building in self-regulated learning strategies. Regardless of their pre-college experiences, all participants encountered relationships with others and themselves that evolved over time, pushing them toward becoming more autonomous learners.

**Adam**

As Adam reflected on his earlier educational experiences, he saw several missed opportunities in which he could have been a more engaged learner. By his own account, he was a mediocre student at best.

I think doing the minimal work, I just skated by. I didn’t care. I just did the homework and opened the book the night before the test. . . . I just went about it the same as everyone else and just got worse grades.

He attributed this, in part, to lack of motivation. “I just didn’t have the drive.” Once he began taking classes at the community college, though, Adam’s academic motivation and performance improved. Yet even though he excelled academically while taking classes at the community college, he felt that he could have invested himself more, particularly when he compared his effort then with his workload now. “I wasn’t getting straight A’s or anything, and I wasn’t putting a ton of work in. Nowhere near what I’m putting in now.”

Having had to adjust to the increased academic rigor at Private University, Adam explained that he is now better able to address how his ADHD impacts his learning.

I can accept it [ADHD] now and have my coping mechanisms. I know how to do ... I don’t know how to say other than I know how to handle [its effects]. I know that I have it. Also, just the way that I stop and think about things before I do them.

He compared his high school self to how he responds to expectations for increased self-regulated learning now.
Before I went home for [Thanksgiving] break last week, I knew I wasn’t going to do any work over break, so I stayed up the night before and did a bunch of work. As opposed to in high school, I never would have even [planned ahead]. I would’ve gotten to the last day of break and been like, “Well, crap.”

Bouncing back after a particularly difficult first year at Private University, Adam has observed a certain resilience in himself. “Especially last year just, when the stuff [obstacles and hardships] keep coming, I was just like, ‘I’m not going to let it win. I’m strong enough to get through it.’”

Reflecting on those experiences, he realized that he is capable of self-discipline and perseverance, after all.

That’s definitely one thing I learned. I mean I never have had to do that before. I never struggled like that in a class before. I never had to do a long distance relationship before. . . . I’ve been working harder than I ever thought I was capable of.

Anna

At the time of the interviews for this study, Anna was only wrapping up her first semester as a college student. As a result, she was still very much in the beginning stages of reflecting on her own transition to college and her identity as a learner and college student. Anna’s parents, particularly her mother, have always been very involved in her academics, as they were in her decision to delay starting college. Anna was grateful for that guidance.

“My mom and dad did really help with the whole college search. They really knew how to dig in deep [to find the right college] . . . which was really helpful.”

Now a freshman in college and living away from home, she has been navigating an evolving relationship with her parents that has included exerting some autonomy.

I feel like my parents still, well, my dad, he’s pretty much letting go. He’s like, “You do your thing when you’re at college.” My mom, I feel like she’s still like, “Let me help you and show you how to do all this.” I’m pulling away going, “No, mom I got to learn to do this by myself.”
In fact, she anticipated some encounters with her parents when she went home for winter break that reflected their evolving relationship dynamics. “I feel like I’m going to be used to living on my own, and my parents are going to be like, ‘This, this, this,’ and I’ll be like, ‘No, no, no.’” Evolving parent-child relationships that involve issues with autonomy are common for college students. Although, for Anna, it was new, and she reflected on the contrast between two contexts. As a college student, she was thrown into an environment that expected independence and self-agency. Yet, she still felt tethered to another context, her family, which has often provided a framework with a deep foundation of paternalistic support. “It’s definitely harder because you live two lives now. One at home and one here [at college].” She now describes her support system based on the issue at hand. “I get more guidance, like from an academic standpoint, from my teachers and my advisor, but if I really need some personal advice I’ll usually call home, because they’ve known me a long time.”

While Anna entered college already possessing a sense of discipline and self-regulation, the amount of time required to study in order to keep up with her classes was more than she had anticipated, which caught her off guard.

I came into it thinking there would be a lot less studying than there needed to be. I remember realizing, “OK, this is not like high school, you’re not going to be having fun all the time.” That was really hard for me to accept. The first week of school, I got homework, and I didn’t think it would take as long. When I sat down, I figured out it was going to take six hours. I’m like, “Oh, shit.”

The responsibility to make sure that she invested the time needed to study and be successful in her courses rested solely on her. She realized that she was ultimately responsible for her own learning and how she used her time to keep up with the demands of being a full-time college student. These were realizations that she had never considered before.

Here’s another thing I learned about myself. If I have all this stuff to do . . . I don’t put it down on a calendar, and with everything to do, I will just stress out. I
remember learning that the first week, and that’s when I told myself, “You need to sit down and make the schedule.”

When Anna began at Private University this fall, she was even surprised by the pedagogical nature of her college classes.

I remember when I got here I was sitting in class going, “I feel it’s high school a little bit.” I’m like, “How the heck are we going to learn all of that?” That’s when I realized this is all me-driven.

Bill

Working two part-time jobs and going to college as a full-time student, Bill has sometimes struggled to find time to do everything. “It’s hard to balance going to school and then going to work at the same time, especially if you have a test. You got to study for it.” Once he started college, he quickly realized that he had to adjust by developing some new strategies to manage his time. “I decided to make a little calendar. Things that I got coming up for the next week and everything.”

Although he had to juggle multiple commitments with work and school, Bill seemed somewhat casual, almost laissez-faire, in his approach to developing specific strategies to address any learning challenges.

I’ve never really had any specific [learning strategies]. It’s just whatever helps me at that time. I’ve never really gotten to the specific study strategies. Whatever helps me, I’ll use that. If I find that it helps a lot, then I’ll just keep using that method until that method doesn’t work anymore.

Additionally, Bill has not put a significant amount of effort into using resources and support meant for students with disabilities. Perhaps this is in part because he now questioned whether he truly had a learning disability or ADHD in the first place.

I’ve never actually used the resources [accommodations] that much. I know here, they got a guy [in the Disability Services Office] . . . and he’s the counselor that I talk to if I have anything with the whole situation [of getting accommodations], but I haven’t talked to him since the day I started school.
Despite his casual approach to developing learning strategies and choosing not to use accommodations, he has used resources which are available to any student on campus. Specifically, Bill liked to use the college’s writing center, which provides students with assistance on papers and other written assignments. He valued the feedback that the writing center staff provided and would use it to improve his work. “[Writing center staff] look at the paper, and they give you new ideas.” Bill also would try to speak with the instructors before or after class if he had questions about the coursework. He would also try to meet with instructors during their regular office hours if he needs extra help. “I think the best resource that I’ve used is just the teacher. . . . The teacher knows you and everything.” Still, the responsibility rests upon the student to seek help. When he entered college, he immediately noted that the expectations instructors had of their students were different than in high school. “They [high school teachers] would really help you and everything, we’d really work together. . . . With [college] instructors, sometimes they don’t really care. You’ve actually got to do the stuff for yourself to get what you need.”

**Bri**

Bri has developed a fairly elaborate organizational system for nearly every aspect of her life, including her schoolwork. A significant part of her organizational system involved technology and various software applications which have allowed her manage her learning and maintain self-regulative behaviors. She relied heavily on her iPad and its various applications to assist her in learning material and being able to easily reference it later when she needed to study for a test or write a paper. She also used her iPad to audio record class lectures while she would take notes, using a software application specifically meant for that
purpose. “I can actually record my professor, and it [the note-taking application] tells me exactly what PowerPoint [slide] I was on at that point in time.”

Although all of Bri’s classes have been face-to-face, her instructors make course materials available online through the university’s learning management system. “The professor uploads our [lecture] PowerPoints, our slides, the study guide, and whatnot.” Some applications on her tablet allowed her to take notes directly on the course material and electronically organize it in a way that made sense to her.

I can color code like I need to instead of sitting down with my 10 pens, like I always have, I just can click the screen and change my markers, and don’t need a highlighter. . . . It [the note-taking application] lets me adjust what it looks like on a piece of paper.

That has probably been my best [technology resource], and you can print it out with all my writing and all my stuff, everything. Just like I would have printed out before, now it has my writing on it and my notes. So much more helpful than any smart pen, or any PowerPoint or handout that a teacher can hand me [in person].

Moreover, she also felt that having her files online and accessible from her tablet allowed her to integrate knowledge from previous classes with what she was currently learning.

I actually upload everything onto my Google drive. Instead of having boxes and boxes of my college classes and my textbooks in a box, I actually have it online, and I can access it. So, my A&P notes from three years ago, now I have them. We went over capnography in class, and we talked about the heart and the respiratory. I was like, “I know that, because I have that right here on my iPad. I can search for it.” Mind blowing. I can upload it in a PDF, so that it doesn’t get destroyed or adjusted. It’s really nice.

The reassurance that the course materials and her notes were saved, organized, and easily accessible alleviated her anxiety and allowed her to focus on what was going on in the classroom. “Now I’m following along [with the class lecture]. I’m paying attention to what you [the professor] are doing. I know what you’re doing. I have your recordings [from the class lecture]. I don’t delete them.”
**Heather**

Heather was very much accustomed to a high level of academic support and additional instruction, both in her K12 education and in college. This support came from her mother’s involvement and advocacy, high school teachers who were accommodating to her individual learning needs, and disability services staff who provided academic support and mentoring. Yet Heather certainly has had to adapt to the demands of her undergraduate program and develop self-regulated learning strategies. “It’s definitely relearning on how to study.” Because of the increased demands and workload in college, she has had to learn how to study smarter. When it came to studying, quality over quantity was the best approach for her.

In high school, I would hand write all my study guides with definitions. That’s not a thing you can do in college. It’s too much. For a while I would try to just look through the PowerPoints, but I don’t retain stuff looking through PowerPoints. So, I came up with the new method, like doing a kind of Cornell notes, two columns, study guides that I type up. I have all my questions or terms in one column, and then all my definitions or things I need to memorize in another.

In having to adapt to the changing demands and expectations to be a more autonomous learner, Heather felt that she had also grown as a person.

I’m a lot more outgoing; I’m not as shy. I think I’m still just as awkward as I was before, but I’m more confident in who I am. I just don’t care, really, what other people [think]. Yes, I want them to like me, because I want to be a nice person, but . . . I speak up for myself a lot more now. . . . I’ve learned how to really speak up for myself and say what I want, and if I have an idea, I’ll tell people about it.

**Margaret**

For Margaret, being in college and learning how to manage her own learning has been a major developmental task for her. “I think that I have probably matured a lot.” Reflecting on her experiences, she realized that her original conceptualization of being a college student
did not align with her experiences as a learner. Study habits that worked well for Margaret in high school no longer seemed adequate.

In high school it’s so much easier. . . . Before the test, you could just cram, use the study guide, and you’d be totally fine. But here, you really need to focus and pay attention in classes, whereas in high school, I didn’t really need to.

High school and living at home provided a more controlled environment, something that helped her balance school and other commitments with social activities. “I was also a lot more structured. I didn’t have as much free time to run around and do whatever I wanted and get distracted by things.”

When she got to college, though, much of that structure was gone. “I came into college wild, doing whatever I want. . . . Just like, ‘Oh, it’s college. Let’s just have fun and meet a lot of people.’” In the two years that she has been at Private University, Margaret has had to learn from mistakes she made in her transition to college. “I had to drop my Chemistry class last year, because I messed around. . . . I just realized that I needed to study more for things and take school more seriously than I was.” She attributed some of her missteps to struggling with finding the right balance between the academic and social aspects of college. “I think that was a main problem of last year; that and I was constantly surrounded by people too. It gets to be too much. It really does.”

Margaret also felt that her relationships with faculty and her approaches in interacting with them have matured since coming to college as a freshman. “I think I’m not as intimidated by them.” She saw herself as more comfortable in approaching them with questions or talking with them about course content. “I think that would be something that I probably would’ve changed my freshman year. Trying to . . . talk to them [instructors] more, because that’s a good thing. And, maybe humanize them a little bit more than I did.”
In the process of taking control of her own learning, Margaret has had to make some significant changes in her approach to school. She explained that her new approach is completely different than what she thought college would require. “I almost feel like it’s a complete 180.” Entering college as a freshman, she prioritized social activities over academics. As part of her new approach, she has tried to make a conscious effort to devote more time to her academics.

I need to focus on studying, actually going to the library, actually studying, and volunteering a lot more than I have. . . . I’m paying a lot more attention to my academics than I am to my social life this semester.

While focusing more on studying than socializing in college may have seemed like an obvious strategy, it was one that Margaret struggled to validate in her mind. It has been particularly difficult for her when it meant that she had to turn down an invitation from a friend. “I’ve realized what’s important. I don’t need to be friends with everybody.” Her college experiences, so far, have caused her to re-evaluate how she allocates her time and effort. “I think I need to focus, not be selfish . . . but definitely not give myself away to everybody, because there’s going to be nothing left for me at the end of the day.”

In reflecting on her learning, Margaret has found that the most effective study strategies are ones that allow her to engage with others about course content. In a way, this approach has provided some middle ground for her by combining studying with socializing. “I’m definitely a group learner.” She explained that group learning has provided her with a sense of camaraderie among her classmates when tackling the task of studying, particularly when it was a challenging course. “I think it’s more comforting when you have someone else there with you, and you can talk through it together, just in case there’s something that you don’t understand.” She realized that not everything can be tackled as a group, though. For
more solitary tasks, she said that it was important for her to maintain a study environment is free from distraction.

For reading things or things I can do by myself, not necessarily studying, but getting things done, [the best environment is] definitely the library. I did not go to the library hardly at all last year, and I think that was a major downfall of mine, because I just didn’t want to go there by myself. This year it’s hard not to go there. . . . It helps me a lot.

She compared this year with last year in how she would normally approach her free time between classes. “I always go [to the library] in between classes, and I seem to get a lot of stuff done in between classes. . . . Last year, I’d have gone and taken a nap, because I’m so close to campus.”

**Marvin**

Over the years, Marvin has often reflected on his educational journey and his goal of earning a college degree. It has been a goal that, despite all of his best efforts, has remained elusive. He described himself as his own biggest motivator and his own worst enemy, simultaneously. Courses with a significant amount of writing have always been intimidating to Marvin. However, he has found that after finding an instructor who matched his learning style, he was able to get through his composition courses. “It wasn’t bad. It was me scared with it and not giving myself the chance, myself a chance with the experience, and doubting myself that I could do it.” Looking back, Marvin wished he had been more intentional in his goals and actions. He said that he would have started at Urban Community College and just concentrated on completing his general education requirements, which would have prepared him to transfer to the nearby public university. He also wished he had worked harder to see a goal through to the end, rather than giving up too easily.

When interviewed for this study, he was nearing the end of his classes and was only a few more credits away from earning his associate’s degree. Looking back, he has come to
understand the value of perseverance, building supportive relationships with others, and using resources that are available to him. He has made it a habit, now, to talk with his instructors at the start of every term to discuss which accommodations will be most helpful to him. He also has made it a priority to talk with and get to know his peers. “You’re building some type of relationship with each person. You run into them [while] out, like at the grocery store. [They] ask you how you’re doing, and [you ask] how they’re doing, and just getting that reconnection.” Marvin’s learning difficulties have affected him in various ways, but writing has been especially challenging for him. “It’s hard for me to write. I can talk about it [an idea], but it’s just hard to write it down and get them [ideas] flowing.” To address his learning challenges, he regularly used academic support resources, such as the tutoring services on campus. “I utilize the Math Center, Writing Centers, and the Learning and Tutoring Center. . . . I know the staff.” He also stated that is has committed to consistently using accommodations whenever appropriate. “The one that I’ve utilized the most would be the extra time with the exams.”

Meeka

Meeka said that, since coming to college, she feels that she has grown, both academically and personally, by reflecting upon her own learning and her relationships with others. She explained that she has used reflection in an intentional way order to improve her learning.

As an adult, I realize I do need a little more time to do my work. I go to school now Monday and Wednesday. So, Tuesday and Thursday, I take to do my work, and I send my son to school. I understand I need to go to the writing center, because I still make little mistakes, punctuation, stuff like that. Sometimes, I need just the overview of what I’ve done to make sure it makes sense.

Rather than getting discouraged, she viewed a failing grade on a test, assignment, or paper as an opportunity to reflect on how she could improve. “When I fail [an assignment] or failed
the class, I would reflect on the work that I did. I would go back through my work.” She has also reflected upon her relationships with others, particularly at school. She felt that this has helped her improve academically too.

I’m nicer, as a person, since I’ve been in college. I’m not really standoff-ish anymore. I’m quiet, but I’m not standoff-ish like I was in high school. I ask for help. It made me more independent and it made me feel like I can accomplish something.

As she has become more aware of her learning preferences and how they are influenced by various instructional styles, she has also become more comfortable in advocating for herself. In talking to one instructor who mostly lectured, she requested notes or an outline ahead of time.

I asked him for notes. I’m like, “Could you just give me a brief overview of what we’re going to talk about ahead of time, so I can go off of that?” Because I cannot write if they’re talking. They [instructors] talk too fast.

Meeka said that the biggest challenge of being a college student was managing multiple, sometimes conflicting, commitments while staying motivated to reach her goals.

You have those days where you’re like, “Oh, there’s a nice night. I want to go do something else.” Motivating myself to do the work. Having a child is not easy, bouncing off the walls. It’s really, for me, motivating myself to get up and go to school.

There are a lot of times, I’m like, “No, this isn’t for me.” But there’s a lot of times I’m excited, too. It’s motivating myself. Motivating myself to do the work, to do the readings, go to TRIO, just doing stuff.”

However, Meeka has found that providing a better life and opportunities for her son are the motivating factors that she has needed to persevere.

I want a better life for my son. I want him to see . . . [that] mommy went to school. [As if speaking to her son], “You can do it too. You don’t have to go to college, but I’d like you to at least attempt it, because I’m setting some money aside for that.”
Theme Summary and Discussion

Greater learner autonomy was the desired outcome of reconstructed knowledge, self-assessment through social comparisons, and successfully identifying support or learning resources. It is for that reason, perhaps, that moving toward increased learner autonomy seemed to be the ultimate task the participants faced. They described the ways in which they refined their practice of learning, whether through metacognitive reflection or by responding to external expectations to adapt more autonomous learning behaviors, such as self-regulation (Bandura, 1991; Zimmerman, 2002).

From an ecological lens, the force, resource, and demand characteristics (Bronfenbrenner & Morris, 2007) of each study participant influenced how this theme, the process of moving toward greater learner autonomy, presented itself within each of the participant’s stories as they talked about and reflected upon their experiences. The characteristics of each participant played particularly pivotal roles in how they cruised, climbed, or stumbled toward increased learner autonomy. Study participants had a wide variety of demand characteristics that could “invite or discourage reactions from the social environment” (Bronfenbrenner & Morris, 2007, p. 796). As an example, Bri archiving lecture PowerPoints on her iPad might invite a positive response from faculty who might view her as a serious and organized student. Conversely, Adam dozing off in class would likely discourage progress toward increased learner autonomy. The variation in how participants respond to environments may also play a role in their progress. Heather relied heavily on the support and mentoring that the disability services director provided her. Other participants chose not to seek out help or accommodations from their institution’s disability services office. How participants chose to engage or not engage in increasingly challenging
activities and how they perceived their level of control influenced their progress toward greater learner autonomy. As an example, Bri and Adam both stated that the academic success they experienced when taking community college classes made them feel more in control of their own learning as well as hone some helpful study strategies.

Self-regulation appeared to be a key component when study participants spoke of their movement toward becoming a more autonomous learner. Zimmerman (2002) described self-regulation as “the self-directive process by which learners transform their mental abilities into academic skills” (p. 65). This transformational process of proactively using one’s own cognitive abilities to hone effective learning strategies consists of several related components, including setting goals and developing strategies to successfully reach them, self-monitoring performance and progress toward goals, directing one’s own time and efforts towards a goal in an effective manner, sufficiently connecting cause and effect in one’s own learning strategies, and being able to make adjustments, as needed (Zimmerman, 2002).

**Summary**

Eight undergraduate college students participated in this study by answering numerous questions over the course of three one-on-one interviews. The questions explored their backgrounds and upbringings, pre-college educational experiences, understanding of their disability, experiences in and perceptions of college, and reflections on their experiences, as a whole. Their answers to these questions, as well as any other related discussion during the interviews, provided the data for this study which sought to gain a deeper understanding of their lived experiences as college students who had been identified as LD or ADHD.
This chapter presented four central themes which emerged from the data analysis of interview transcripts. A section of this chapter was dedicated to each of the following themes:

- Knowledge construction of disability
- Self-assessment through observation and comparison
- Identifying allies and resources
- Moving toward increased learner autonomy

Each of the sections first introduced the theme and was followed by how that theme presented itself in the lives and experiences of each of the participants. Narrative from the researcher’s interpretive philosophical assumptions was interwoven with rich, text quotes from the participants, illustrating their space within that specific theme. Some themes existed in more explicit ways for certain participants, taking up vast amounts of space in the foreground of their minds. For other participants, some themes sat quietly in the background of their mind as they talked, almost as if their stories and words were fumbling hands that were searching for an object in the dark.

Thinking about one’s own identity as a learner appeared to be a common thread that ran through each of these separate, yet related themes. Participants discussed the ways in which others talked about and described their disability and the role it played in how they ultimately would define it for themselves or reject it altogether. They described their awareness of others’ behaviors and abilities, often using such observations as a self-check, drawing comparisons to inform their self-concepts as learners and to assimilate with the peer culture or the institutional culture. Many participants described how others helped them
progress toward their goals, while others described absent or unsupportive individuals. Finally, they described their transitions, evolving relationships with themselves and others.

Previous chapters of this dissertation introduced the focus of the study, offered a descriptive review of literature, explained the methodology used for the qualitative research, introduced the study participants, and finally, summarized the findings as the result of a thorough analysis of the data collected. The final chapter includes a general discussion about the results from this study as well as implications for research and practice.
CHAPTER 6. DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

For this study, eight undergraduate students participated in a series of in-depth, one-on-one interviews, answering questions about their overall educational journey and their experiences as college students. The overall purpose of this qualitative study was to better understand both the external and internal lived experiences of college students identified as having a learning disability (LD) or attention deficit hyperactivity disorder (ADHD). Specifically, this study used phenomenological inquiry to gain a deeper understanding of how such experiences, as dynamic and reciprocal relationships with various environments, influenced the students’ development and self-awareness as learners. This chapter discusses study findings as they relate to the research questions that guided the study. Additionally, this chapter provides implications for research by presenting opportunities for future research related to the topics and findings of this study. It also explores the implications for practice with recommendations for practitioners.

The Educational Experiences of College Students with LD or ADHD

The first research question broadly asks about the educational experiences of college students diagnosed with LD or ADHD. Although Chapter 5 discusses these findings in more depth and organizes them into themes, this section briefly summarizes the participants’ educational experiences and highlights how the ecological model intertwines with social cognitive theory of self-regulation. Most of the participants talk at length about the various Microsystems and mesosystems that have swirled about them throughout their educational journey, including the input and involvement of family; observations of and comparisons to, and conversations with their peers; the support of and interactions with instructors; and the availability and relevance of support services and programming. As a result, social cognitive
processes of *self-monitoring* (Bandura, 1991) and *social comparison* (Newman, 2000), as well as the development of and refining one’s own help-seeking behaviors emerged as themes in this study’s findings to further support the role of mastering self-regulative learning and behavior in becoming a more autonomous learner.

The exosystem and macrosystem contexts, which do not directly involve the participants, also impact their educational experiences. Participants also discuss the influence of exosystems such as the overall quality, policies, and practices at their elementary and secondary institutions; the climate at the postsecondary institution they attend; and the varied feelings of marginalization as students who do not have a well-defined cohort. Finally, participants also talk about macrosystem contexts but in more indirect ways. Some of them describe experiences in their educational journey that reflect the ways in which evolving legislation for students with disabilities and the advancement of assistive and educational technology help or hurt them. In discussing their experiences, backgrounds, and relationships with others, the participants also reveal how family socioeconomic status and parental educational attainment influence their educational trajectory and goals. Finally, many reference the social construction and stigma that often accompany being labeled as having a disability.

The influence of the chronosystem on the participants’ experiences present interesting results. On a sociohistorical level, the passage of ADA legislation and access to accommodations simply is not part of the experience for the one participant who is several years older than the others. Participants reference other sociohistorical elements, advancements in treatment or support, as influential. Examples include medication for ADHD and evolving assistive technology like iPads, audiobooks, and improved text or
screen readers. On an individual level, the influence of chronosystem elements is significant. The participant’s age at which the disability is identified influence the meaning they construct related to the disability and themselves, as learners. Other familial or educational transitions during their upbringing also seem to influential to varying degrees.

**Formative Experiences in Their Development as Learners**

The second research question asks about the experiences that college students with LD or ADHD identify as formative in their own development as learners. The study participants openly share how influential people in their lives shape the way they view themselves as learners and how their past learning environments guided their educational trajectory. All of the participants discuss the role of family and how parental guidance and support facilitate their growth as learners, and conversely, how the familial roles impact such growth if there is an absence of support. Participants also talk about the various ways in which their learner identity is impacted by their educational environment. Participants primarily focus on the quality and nature of their K12 education and the academic rigor and peer culture of their postsecondary institution.

**Family and Parental Involvement**

Several participants benefit from having parents who are supportive and advocate, on their behalf, to ensure that their specific learning needs are met. Most notable is Heather’s mother who reads textbooks to her in high school so that she can participate successfully in advanced placement classes to prepare her for college-level work. “She [Heather’s mother] was a trooper and sat down with me every night and would read that [biology textbook] to me.” Other participants have positive parental involvement, but their approaches vary. Although Anna’s mother does not believe that Anna’s reading difficulties are a disability, she
does see them as malleable and helps Anna by providing her with special instruction and homeschooling as well as to use tools to improve her reading skills. “That [being homeschooled for seventh grade] definitely brought me up [improved Anna’s reading level] a lot more, because we focused a lot on reading, and it was a lot of work.” Bill’s mother directs her support through getting him enrolled in college, assisting with the paperwork and process. “She just likes to do the financial aid and fill out all the papers and everything, so I just let her pretty much handle that. I guess it’s fun to her or something.”

Some of participants discuss how their parents are generally neutral or, for some, absent. Adam describes his parents and family as supportive, yet he feels as though they were not as involved as they could have been in his K12 education. He never used any accommodations or extra help in high school. He is not sure that his parents knew about their availability or how using accommodations could have helped him. “I don’t think they were as aware of it as they could have been.” In fact, Adam is uncertain as to if his teachers even knew that he could have accommodations due to his ADHD. “I don’t think the teachers even knew about it. I think they just thought I was kind of obnoxious sometimes.” While Bri’s mother instills the value of being organized and structured, she does not investigate the possibility that Bri may have ADHD. “I think that it would have been a lot easier if my mom . . . didn’t think it was a weakness type disorder.” Her mother refuses to consider it as a possibility and attributes her struggles in school to her troublesome behaviors and want for attention. Margaret is the only participant that had not shared with her family that she was diagnosed with ADHD. “I actually haven’t told my parents. I told my sister, and I just feel it’s not something that’s a huge impact on my life.” So, while her family is generally supportive, there is no advocacy, certainly, and support was limited in nature.
Finally, a couple of the participants have parents who did not advocate for their learning and were generally unsupportive. Marvin, being much older than the other participants and too early to benefit from the ADA, was disadvantaged compared to the other participants. His existence in time and place works against him. It is unlikely that his parents had enough knowledge on how best to help him. They discouraged him from pursuing college after high school, hurtful baggage that he has carried for many years. Meeka was never able to rely on her family as a consistent source of emotional support. While she was mostly raised by her grandmother, Meeka’s complicated and troubled relationship with her mother really interfered with Meeka’s academic success. Her mother rarely shared information from the IEP meetings about her learning challenges with Meeka’s grandmother. Additionally, her mother is straightforward in communicating to Meeka that she was either not invested in her learning or was simply overwhelmed. “She’d [Meeka’s mother] always be like, ‘You all made it farther than me, so you know more than I did.’”

One additional observation about Meeka’s formative experiences is that of all the participants, she is the only one who is also a parent. Shortly after starting college, Meeka becomes pregnant and gives birth to twin boys, one of whom died soon after birth. Being a single parent and coping with the loss is incredibly difficult for her.

Going through that and still deciding to stay in school I think was best. If I would have stayed at home [and not continued with college classes], I probably, I wouldn’t say I wouldn’t be here, but I wouldn’t be the person I am today.

Now, she feels that her motivation to finish her degree lies within being a single parent and wanting a better life for her two-year-old son.

My baby has helped me so much. . . . [He] is my motivation for everything. I’m like, “Alright, [son’s name], we need to get you a better house. Mommy needs to get a reliable car. Mommy wants a degree, so you can see mommy with a degree . . . so I can help you go through school.”
Educational Environment

A few of the participants had access to teachers in their K12 experience that went above and beyond to assist them. Heather had supportive teachers throughout her K12 education. In elementary school, for example, her teacher told her in advance, which paragraphs she was assigned to read out loud with the class. Knowing this in advance allowed Heather to practice the assigned paragraph or passage ahead of time.

Fourth grade, I remember my teacher would always tell me what paragraph I would read out loud beforehand. When we would read a chapter out loud, she would come to me and say, “You’re going to read this one,” so I would spend the whole time we were reading just re-reading that paragraph, because reading out loud is my biggest fear in the world, still is, I hate it.

Just as she did in elementary school, Heather had teachers in high school who worked with her outside the regular instruction time so that she was able to successfully progress through classes that would prepare her for college level work. As an example, the teacher from her advanced placement composition course proofread and reviewed her written work before she submitted it for a grade. “She [the high school composition teacher] helped me with that [written work] and knew that the grammar was going to be terrible, but . . . she would check it for me.”

The quality and nature of their K12 education was important for some of the study participants to discuss, especially if they felt it was detrimental to their development. Most notable in this regard were the experiences and stories described by Meeka and Bill. Meeka attended several different public elementary schools, one of which was identified by the U.S. Department of Education to be a low-performing school.

[The school] wasn’t doing that well when I got there, before the government took over. It was one of the schools that wasn’t doing that well. My teacher actually told my grandmother she needed to switch us, because we weren’t learning. So, my brother, my sister, and I all went to the same school, and we didn’t learn anything. It
was up until fifth grade, when I switched from there and went to [a different elementary school].”

Bill found his educational experiences, particularly in elementary school, to be frustrating when it came to the school’s approach in how it addressed his learning challenges. “As I got toward the end of high school, my junior and senior year and especially now, I look back on it and think that process [of receiving special instruction separate from the regular classroom] was no help at all.” From his perspective, those missed opportunities for building social skills had a negative impact on his social development and his ability to fit in with his peers.

Conversely, some of the other participants described their K12 experience as giving them a good education, even though they did not use accommodations or felt they put their best effort into excelling academically. Adam attended parochial schools throughout his K12 education and felt that it was a supportive environment even though he did not always apply himself. “The teachers definitely cared about the students. . . . They wanted to be there, and they really helped me.” Also having attended private schools for her entire K12 education, Bri feels that the academic rigor of her private college prep high school prepared her for the academic rigor of college classes. Yet, the aspects of high school that left a lasting impression on her related to the unhelpful ways in which the school addressed her behavior, which were likely symptoms of her undiagnosed ADHD. “It got really frustrating to me that I was getting put down for the things that I was doing. . . . I was automatically, my freshman year, marked as that trouble kid.”

When it came to college, the academic rigor at the institution and peer culture were particularly formative for some of the students. Bri and Adam transferred from community colleges to Private University. Both of them talked about the differences in culture and the ways in which it affected how they thought of themselves as learners. Attending community
college gave both of them a taste of success, something that remained elusive to them, as high school students. Success at the community college allowed Bri to shed an unwanted reputation that she acquired during high school. “I wasn’t being treated like a troublemaker. . . . And, if anything, I was ahead of the game.” Similarly, Adam was motivated by the success he experienced at the community college he attended. “I had that internal switch that I started actually applying myself.”

Meeka, who did not have many positive K12 experiences, found the environment at college to be much more advantageous for her personal development, confidence, and self-concept as a learner. In particular, she seems to have found her place within a supportive community through her participation in the TRIO/Student Support Services program. She frequently does volunteer work for the program and is involved with many of their student events.

They [TRIO/SSS] had this single parents conference recently. I was here the day before. I had to help them set up the room. I was here and had to come early that day. I’m the one greeting the students, telling them where to go, signing people in, hanging up the signs.

**The Role of Disability**

The third research question examines the possible role that being LD or ADHD plays in how they think about their own development. There is not a clear consensus among the participants as to whether being identified as LD or ADHD helps or hurts their development as learners, but the contrast in their experiences and perceptions is notable. Additionally, participants discuss how the age at which they were identified influenced their approach to learning and their self-concept, as learners.
A Helpful or Hurtful Label

Some participants are very clear in stating that the label hindered them as learners. When Bill was in elementary school, he was separated from the rest of his class during certain parts for special instruction. He now feels that it was more hurtful than helpful in his development as a learner. “One thing I noticed about the process is always it actually would make me fall behind on the lesson in the class.” When Bill discussed the learning opportunities he missed by leaving the classroom and his peers, his description echoes learning principles of Gestalt psychology. Perceiving the whole is essential to learning parts, and therefore, the learning process must integrate both (Seel, 2012).

I don’t even know what they taught in the class. There’s a whole, but you wouldn’t learn everything as a whole. Then, I’d be learning just one plus two [in his separate instruction], and they [his peers in the classroom] are learning one plus two, and they’re learning all this [additional content]. I’d come back to class, knowing what one plus two is real good, but that’s all I would know in the class. When it came to group work, I don’t know the rest of the stuff. It almost slowed me down from the learning process, I guess.

Bill, who was identified as LD and ADHD in early elementary school, sees the label as mostly hurtful, not only to his learning, but to his overall development.

That process [of being separated from the regular class for special instruction], it didn’t only take you out of class during your learning time, but it also isolated you from the kids. I noticed throughout elementary school, I didn’t really know anybody, have any friends or anything, because I was always down at the resource room during recess. I didn’t really know anybody. I was one of those shy kids, because I was always in a [resource] room, by myself, with two other people.

Several of the study participants explained how important it was to them that others did not perceive their use of accommodations as a “crutch.” Heather felt as though that was why her parents delayed having her officially diagnosed with dyslexia until high school even though they suspected that she had it in when she was in elementary school. “She [Heather’s mom] never wanted me to use it as a crutch.” Diagnosed with ADHD comparatively late as a
college sophomore, Margaret worried about how her instructors will perceive her when she approaches them about using accommodations. “I don’t want them [the instructors] to think that they need to give me special treatment in class, because I would never want that.”

Adam, on the other hand, was candid about his use of note-takers in class, relying on them as he dozes off in class. “I don’t want to [use them as a crutch], but sometimes, I do.”

Other participants, however, describe their relief when they were finally diagnosed and wish they knew sooner or had access to accommodations earlier. For Bri, who often found herself getting in trouble throughout her K12 education, a tangible explanation for why she struggled with behavioral issues in school was a welcome perspective. “It was a relief for me.” She feels that if she had been diagnosed earlier, things would have been different for her.

Similarly, Anna wished that someone had, at least, talked to her about the availability of accommodations in high school, especially since she was diagnosed when she was a freshman. “I didn’t find out until my senior year that I could’ve gotten accommodations, and I was not really happy [that no one told her].” She is uncertain as to whether she would have used them, but she wishes that she would have had the information to make that choice. “It would’ve been nice. I mean, when reading books or something like that.”

**Identified Early or Late**

Whether participants perceive the disability identification as helpful or hurtful seems to be largely dependent upon the age at which they were first identified as having LD or ADHD. Of the eight participants, four were identified as being LD or ADHD in elementary
school. Two were identified as LD in high school, and two were assessed and identified as ADHD in college. Further, how each of the participants were invited to be involved in the process and how the information was presented to them influenced how they perceived their own development as learners.

Adam and Bill, both of whom were identified as having ADHD in elementary school, attributed it to being a “wild” kid, a characteristic they viewed as somewhat normal for a grade school student. As a child, Adam perceived his ADHD as a mostly behavioral concern rather than something that impacted his learning. His perception, at the time, was that he was just being a kid, having fun like the rest of his peers. “I was just wild. A lot of people were. No one really thought anything of it.” Bill cited that rambunctious quality as one of the reasons he was initially taken out of the regular classroom. “I guess I was a wild kid in class. They said that was part of the reason they took me out of class, too. I guess I was wild or something.”

Many of the participants who were identified at an early age feel as though they were not brought into the conversation as an active voice. Meeka remembers that for many of her Individualized Education Program (IEP) meetings, her mother would participate by phone instead of being physically present at the meeting. “It wasn’t interacting. It was just me sitting there listening.” Bill remembers attending his IEP meetings, yet even as a middle school student, he did not fully understand most of the conversation. “I don’t really remember what they were really about. I guess they have something to do with talking to the parent and seeing where I’m at, I guess.”

Heather and Anna were both aware of their dyslexia for several years prior to receiving a formal assessment in high school. Once they were assessed and the dyslexia was
confirmed, no one discussed the option of having access to accommodations or special instruction. Recalling the lack of discussion, they both describe their mixed feelings about it. Although Heather is glad and proud of the fact that she made it through high school without using any accommodations, she wonders how she might be a different learner now if she used them prior to college. “Maybe I would’ve been lazier when I was younger, because I pushed myself hard in elementary school. I thought grades were so important at that time. And, looking back, the dumb grades we got, that doesn’t even matter, so…” Anna remembers feeling frustrated that she did not learn about accommodations until her senior year of high school and wishes she could have at least had the opportunity to decide for herself. “I didn’t really need them. It wasn’t that bad, but maybe, here and there, it would’ve been helpful.”

Participants who were not identified until much later seem to have a different perspective, one that is more accepting, and in some cases, grateful for finally having an explanation for their struggles. Bri, diagnosed with ADHD as a college student, feels as though the diagnosis finally provides answers for her. “It was very eye-opening for me, as an individual.” Margaret, who was also diagnosed with ADHD in college, now feels that she is better able to talk with various people about the ways in which ADHD impacts her life. Her TRIO/SSS advisor who approached her about getting evaluated for ADHD, introduced her to the staff at the university’s disability services office. She also spoke with her younger sister, who is a high school student and has ADHD too. “The pills [for ADHD] make her [Margaret’s sister] feel really different, and so she was very wary of me going on them. She’s like, ‘You’ll feel completely different if you do it.’ So, I’ve taken that into account.”
Some participants felt strongly about the implications of being identified early or late. It impacted how they perceive themselves now, and they wished things had been different. As an example, Bill felt that being categorized as LD and ADHD hurt his overall development, but he also noted that his educational trajectory would likely be different.

I feel like I probably would have been much better off right now in college and probably been at [the local public university] from the start [instead of the community college]. I probably would have had a better scholarship or something.

Bri, on the other hand, wished that she had been diagnosed earlier.

It would have been easier . . . if my teachers would have recognized the fact that my talking is not just because I feel like ignoring them. I just can’t sit down and focus. It would have been easier. I don’t think I would have struggled [in high school] nearly as much.

**Implications and Recommendations**

The findings from this study move researchers and practitioners toward a deeper understanding of how the experiences of college students with LD or ADHD contribute to the students’ development and self-awareness as learners. The four themes, which emerged from a thorough analysis of the qualitative data collected, provide a foundation for further research and help inform policies and practice for both secondary and postsecondary education. This section discusses potential implications and opportunities for future research, implications for practice, and recommendations for practitioners.

**Implications for Research**

As discussed in Chapter 1, significant research challenges exist as the result of noted gaps in literature on postsecondary students with disabilities. This dissertation addresses only a small portion of that gap, yet the study findings may be of use to researchers by contributing to what is already known about the experiences of college students with LD or ADHD. The study may also shed new light on how students with LD or ADHD experience
and make meaning from their environment as it relates to the students’ development and self-awareness as learners. While this study contributes to student development literature that is specific to students with disabilities, researchers may want to consider pursuing related topics and areas in future studies.

This study broadly explores the experiences of college students with LD or ADHD, so there are opportunities for further research related to the delimitations of the current study. The scope of this research does not specifically take into account demographic variables within the participant sample. Future research could further explore the impact of specific demographic variables, such as race or ethnicity, socioeconomic background, and education attainment levels of parents or guardians, on the experiences of college students with LD or ADHD. Since this qualitative study includes only a small participant sample, future research could expand the sample size or include participants from different types of postsecondary institutions. Additionally, even though LD and ADHD fall within the same diagnostic group of neurodevelopmental disorders, future research could examine each of these conditions separately for a deeper analysis.

Concerning the overall findings from this study, several opportunities for further research exist in method and scope. The findings from this study are presented with the assumption that participants are genuine in how they convey their experiences and truthful with the information that they provide. Future research could expand on the current findings by widening the data collection to include interviews with faculty, staff, peers, or family members of the participants involved. Future studies could also employ different data collection methods, such as written narratives or focus groups to further triangulate qualitative data and results. Additionally, data collection from this study occurred over
several months. A longitudinal research design that collects data over multiple years of a participant’s undergraduate education might corroborate findings. Finally, each of the four themes presented in this paper could be independently explored in more depth.

Implications for Practice

The purpose of this study was to better understand the internal and external lived experiences of college students with LD or ADHD. The findings of this study illustrate the internal journeys that are informed by the interactions students have with their environment as well as the meaning that they assign to those interactions. The findings from this study may provide context for practitioners, particularly postsecondary administrators, faculty, disability service providers, K12 administration and personnel, and parents or families of students with disabilities as well as the students themselves. The following recommendations are related to the findings discussed earlier in this chapter.

Postsecondary administrators, educators, and staff. Participants benefit from having the opportunity to speak with others when constructing meaning related to their disability or learning challenges. This is particularly true for individuals who are able to reframe or reconstruct pre-college knowledge about their disability. Disability services staff are uniquely positioned to facilitate critical discussions with incoming students who self-identify as having a disability. Reframing is a strategy in strengths-based counseling that allows the individual to take a fresh look at previous experiences with the overall goal of increasing their awareness “of what modifications they must make to improve their lives and to describe what strengths or resources they have to make those changes” (Smith, 2006, pp. 45–46).
Study participants also describe the ongoing self-assessment carried out by observation and comparison of others, particularly their peers. This serves as a way to compare what they observe to their own experiences and performance in an evaluative manner. Postsecondary institutions may want to consider ways to capitalize on this finding by integrating it into a peer mentoring or coaching program to assist LD or ADHD students in honing executive functioning skills. In a study that examined the impact of this type of peer coaching program at a two-year institution, the LD or ADHD students found the coaching to be “highly effective in helping them enhance their capacity to achieve goals and reduce the daily anxiety associated with the pursuit of academic success in a rigorous postsecondary setting” (Parker & Boutelle, 2009, p. 213).

The participants in this study view their own movement toward increased learner autonomy to be an important goal in their own development as learners. Through metacognitive reflection, they work toward refining their practice of learning through increased self-regulation. Faculty, advisors, disability services staff, and various student affairs personnel may want to consider ways in which they can provide students with increased opportunities to reflect on their own learning, study strategies, and self-regulated behavior. Explicit opportunities could be demonstrated through program or learning outcomes, co-curricular programming, or academic policies.

**K12 administrators and personnel.** The transition challenges that most students face upon entering college are often amplified for students with disabilities. Findings from this study highlight the important role that K12 educators can play in creating opportunities to hone skills needed for a smoother transition to college. The participants in this study value opportunities which allow them to communicate with others when constructing meaning
related to their disability or learning challenges. They cite these opportunities as helpful in their overall self-awareness as learners. K12 administrators and educators may want to consider ways to increase the opportunities for conversations where the student plays an active, age-appropriate role in reflecting upon and constructing meaning concerning their disability and how it impacts their learning. A deeper understanding of their disability and how it relates to their learning positions high school graduates to “be better able to explain their needs for specific learning and testing modifications” once they are in college (Janiga & Costenbader, 2002, p. 468).

**Parents and families.** The nature and process of how knowledge was constructed as it relates to being labeled as LD or ADHD plays a central role in how study participants frame their own identity as learners. Because this knowledge construction typically begins within the participants’ family microsystem, parents or extended family members may want to be more purposeful in how knowledge is constructed concerning the disability or learning challenges. Returning to the conceptual framework used for this study, the ecological lens acknowledges the complexity in how the context of family interacts with external systems (Bronfenbrenner, 1986). An infinite number of intrafamilial dynamics, as well as broader contexts like socioeconomic status, parental education level, and cultural background, may factor into how complicated or effective this recommended strategy is for individual families.

Identifying allies and resources is part of the overall concept of developing adaptive help-seeking behaviors, a key to self-regulated learning. Parents and families can play an important role in providing an environment that is welcoming to seeking help or support, when needed. Creating an accepting environment that encourages help-seeking behaviors, validates the fact “that difficulty and failure may require assistance” and that seeking help or
using available resources and support is a responsible and acceptable way to address challenging situations (Newman, 2000, p. 364).

Self-regulated learning plays an important role in this study’s theme of moving toward increased learner autonomy. Therefore, parents and families of students with LD or ADHD may want to consider opportunities to draw attention to self-regulated behaviors that students already demonstrate at home and “offering encouragement to adopt self-regulatory practices (i.e., social persuasion), and by helping students anticipate and manage physiological and affective reactions to anxiety-producing learning situations” (Klassen, 2010, p. 28).

Summary

The overall purpose of this qualitative, phenomenological study was to better understand both the external and internal lived experiences of college students identified as having LD or ADHD. This dissertation presented the study in six chapters. The first chapter introduced the study with a broad overview. The second chapter presented a descriptive review of literature related to students with disabilities in higher education as well as a deeper look at theoretical concepts used to frame this study. The third chapter presented the methodology and research design used for this study by describing the research sites, selection of participants, and the data collection and analysis methods. The fourth chapter introduced the study participants with a general overview of demographics and a vignette of each. The fifth chapter presented the study findings, organized by themes which emerged from the data analysis. Finally, the sixth chapter discussed the findings in relation to the research questions which guided this study as well as the implications and recommendations for research and practice.
REFERENCES


APPENDIX A. RESEARCHER POSITIONALITY STATEMENT

My educational and professional journey, as it relates to this study, is one that seems to come full circle in many ways. I grew up in a family that included both parents. My mother, who has a high school education, stayed at home to raise three kids and then worked as a receptionist in a doctor’s office when we were older. My father graduated from college with a bachelor’s degree in business and owned a small lumber and construction supply business for many years. As the oldest of three children, I have a younger sister who earned a bachelor’s degree and a younger brother who completed some college credit toward an associate’s degree in automotive technology from a local community college. As an elementary student, my brother was diagnosed with a learning disability. While he demonstrated well above average intelligence in diagnostic testing, he encountered significant difficulty with reading and writing. In contrast, my sister and I were both above average students and did not encounter any learning difficulties.

Being a good student in elementary and secondary school, does not automatically mean success in college, though. Upon graduating from high school with good grades and ACT scores, I chose to attend a private, research university. As a freshman, however, I was more interested in the social aspects of college, and as a result, was only marginally successful in my classes. In the spring semester of my freshman year, the university placed me on academic probation. For my sophomore year, I transferred to a public university in the same city, which is where I completed my undergraduate and graduate degrees. However, my lack of focus and motivation made college challenging, particularly as an undergraduate. I changed my major four times before settling on a Bachelor of Science in General Studies so that I could “just get done.” It took me six years to get the degree. After
receiving my undergraduate degree, however, I felt more focused and motivated in my career goals and immediately enrolled in a graduate program at the same state university. I graduated with my master’s degree two years later.

During my final year as an undergraduate, I also worked full-time as a caseload assistant in a state vocational rehabilitation agency. This provided me with valuable experience in disability access and transition planning. Halfway through my graduate program, I began my first professional job in higher education, working at a local community college as the Coordinator of Disability Services. Since then, I have worked exclusively in higher education, primarily in student affairs and academic support, for the last 15 years.

With this professional background, I bring my own set of assumptions, perspectives, and experiences to this study. For 10 of those 15 years, I worked in the community college environment, managing support programs for disadvantaged students, including students with disabilities. For a portion of this time, I also led a department that provided campus-wide student services for all students, such as tutoring, counseling, and new student orientation. In my current position, I have a much different role, in that I work with faculty and online students in a graduate program at a private, research university.

Phenomenological researchers, according to Giorgi (Giorgi, 1997), must take on a discovery-oriented approach, in that he or she must set aside, or bracket, all previously held assumptions about a particular topic or the phenomena they are studying. The first assumption that I needed to attend to in this process was that higher education, in general, creates an uninviting environment for students with disabilities. Additionally, I also assumed that students with invisible or hidden disabilities, such as LD or ADHD, encounter varying degrees of skepticism when requesting accommodations. While some of my previous
professional experience substantiates these assumptions, I could not generalize it to the lived experience of the students who participated in my study. Existing literature suggests that students with LD or ADHD face challenges that their nondisabled peers do not, however, I acknowledged that my assumptions related to these student populations are overgeneralizations. In other words, I had to bracket my assumptions that being in college is “tough” for students with disabilities, since those assumptions were mostly associated with my own personal experiences of having a younger brother who was diagnosed as LD and my professional experiences in postsecondary student affairs, working with students who have disabilities.
APPENDIX B. IRB APPROVAL

IOWA STATE UNIVERSITY
OF SCIENCE AND TECHNOLOGY

Date: 10/17/2014
To: Sarah Lux
4220 S 38 St
Omaha, NE 68107

From: Office for Responsible Research

Title: Experiences of College Students with Learning Disabilities

IRB ID: 14-468

Approval Date: 10/15/2014
Date for Continuing Review: 10/6/2016
Submission Type: New
Review Type: Full Committee

The project referenced above has received approval from the Institutional Review Board (IRB) at Iowa State University according to the dates shown above. Please refer to the IRB ID number shown above in all correspondence regarding this study.

To ensure compliance with federal regulations (45 CFR 46 & 21 CFR 56), please be sure to:

- Use only the approved study materials in your research, including the recruitment materials and informed consent documents that have the IRB approval stamp.
- Retain signed informed consent documents for 3 years after the close of the study, when documented consent is required.
- Obtain IRB approval prior to implementing any changes to the study by submitting a Modification Form for Non-Exempt Research or Amendment for Personnel Changes form, as necessary.
- Immediately inform the IRB of (1) all serious and/or unexpected adverse experiences involving risks to subjects or others; and (2) any other unanticipated problems involving risks to subjects or others.
- Stop all research activity if IRB approval lapses, unless continuation is necessary to prevent harm to research participants. Research activity can resume once IRB approval is reestablished.
- Complete a new continuing review form at least three to four weeks prior to the date for continuing review as noted above to provide sufficient time for the IRB to review and approve continuation of the study. We will send a courtesy reminder as this date approaches.

Please be aware that IRB approval means that you have met the requirements of federal regulations and ISU policies governing human subjects research. Approval from other entities may also be needed. For example, access to data from private records (e.g., student, medical, or employment records, etc.) that are protected by FERPA, HIPAA, or other confidentiality policies requires permission from the holders of those records. Similarly, for research conducted in institutions other than ISU (e.g., schools, other colleges or universities, medical facilities, companies, etc.), investigators must obtain permission from the institution(s) as required by their policies. IRB approval in no way implies or guarantees that permission from these other entities will be granted.

Upon completion of the project, please submit a Project Closure Form to the Office for Responsible Research, 1138 Pearson Hall, to officially close the project.

Please don't hesitate to contact us if you have questions or concerns at 515-294-4586 or IRB@iastate.edu.
APPENDIX C. LETTER TO DSO REPRESENTATIVE

Date

Administrator Name  
Disability Services Personnel Title  
Name of Institution  
Address  
City, State, Zip

Dear [INSTITUTIONAL DISABILITY SERVICES REPRESENTATIVE],

I am a doctoral student with Iowa State University and am writing you to request your assistance in distributing information about a study that I am conducting for my dissertation. The purpose of the study is to better understand how college students with learning disabilities perceive and construct meaning from various environmental contexts as it relates to their college experience. My research plan includes conducting individual interviews with 8-10 students from various institutions about their perceptions and experiences, as an undergraduate, in specific settings, such as their interactions with family, peer groups, classmates, student services, faculty, and the campus community, in general. Information gathered in interviews with students will only be used for the purposes of my research. Maintaining confidentiality and protecting the identity of your institution as well as the students who volunteer to participate is of the utmost importance to me. While I will take careful steps to protect the identity of your institution as well as the students, a small possibility exists that someone may be able to infer identities in the final written report.

Please find the attached participant letter, which includes a summary of the proposed study that provides further information, as well as the participant recruitment flyer. I appreciate your willingness to circulate both the participant letter and the recruitment flyer as email attachments to the students registered with your office that have self-identified as having a learning disability. Interested students are encouraged to contact me directly. Finally, please do not hesitate to contact me if you have questions or concerns.

Sincerely,

[Signature]

Sarah Lux  
slux@iastate.edu  
402-981-3422
You are invited to participate in a study specifically for college students who have been diagnosed with a learning disability.

Purpose of Study
The purpose of this study is to better understand the perceptions and experiences of students, like you, who have been diagnosed with a learning disability.
- I hope to gain new insights into how you and other students perceive your college experience, so far, and the campus community, in general.
- I also hope to hear about your perceptions and experiences, as a college student, in more specific settings, such as your interactions with family, peer groups, classmates, faculty, and staff.

You are being asked to take part in this study because you are currently enrolled in college and have self-identified with the Disability Services Office as having a learning disability. You should not participate if you are under the age of 19.

What will I be asked to do?
You will be asked to voluntarily take part in three separate one-on-one interviews with me that will last approximately 60 minutes each. These are informal interviews and scheduled at a time and place that is convenient for you.
- First Interview: Participants are asked to complete a brief questionnaire for demographic data. Then, we discuss your background, educational experiences prior to college, and your understanding of the learning disability and how it impacts you.
- Second Interview: We talk about your present experiences of being a college student.
- Third Interview: You will be asked to reflect on your decision to attend college and the overall experience, including how you feel such perceptions have changed over time.

All study participants will receive a total of $30 worth of gift cards to their campus bookstore (a $10 gift card for each interview).

Who do I contact if I would like to participate or have questions?

Sarah Lux
slux@iastate.edu | 402-981-3422
sarahlux@creighton.edu | 402-280-2639

Hi! I'm a doctoral student at Iowa State University and conducting this study as part of my dissertation. I also work at Creighton's Center for Health Policy & Ethics.
APPENDIX E. PRE-INTERVIEW QUESTIONNAIRE

Pre-Interview Questionnaire

Pseudonym: ________________________________________________

College / University: ________________________________________

Program of Study / Major: ____________________________________

1. What year are you currently in?
   a. Freshman
   b. Sophomore
   c. Junior
   d. Senior

2. How many credits have you earned so far?
   a. 0-15 credits
   b. 16-30 credits
   c. 31-45 credits
   d. 46-60 credits
   e. 61 or more credits

3. What is your current GPA?
   a. 3.5 or above
   b. 3.00 - 3.49
   c. 2.5 - 2.99
   d. 2.00 - 2.49
   e. below a 2.0

4. If you attend a four-year institution, did you transfer from a community college? If so, where?

   _______________________________________________________

5. If you attend a community college, do you plan to transfer to a four-year university? If so, where?

   _______________________________________________________

6. Do you attend full-time or part-time?

   _______________________________________________________

7. Gender: Female Male Rather not respond

8. Date of birth: __________________________________________
9. Race/ethnicity:
   a. American Indian/Alaska Native
   b. Asian
   c. Black or African American
   d. Hispanic
   e. Native Hawaiian/Pacific Islander
   f. White
   g. Two or more races
   h. Prefer not to respond/unknown

10. Education level of parents (or persons who raised you):

   **Mother:**  
   a. Less than high school  
   b. High school or equivalent  
   c. Some college  
   d. Associate’s degree  
   e. Bachelor’s degree  
   f. Master’s degree or higher  

   **Father:**  
   a. Less than high school  
   b. High school or equivalent  
   c. Some college  
   d. Associate’s degree  
   e. Bachelor’s degree  
   f. Master’s degree or higher

---

**Disability-Related Questions (Optional)**

1. Briefly describe your learning disability.

   __________________________________________________________________________

2. At what age were you diagnosed?

   __________________________________________________________________________

3. Please list or describe the accommodations you used in high school.

   __________________________________________________________________________

4. Please list or describe the accommodations you use in college.

   __________________________________________________________________________
This form describes a research project and has information to help you decide whether or not you wish to participate. Research studies include only people who choose to take part, so your participation is completely voluntary. Please discuss any questions you have about the study or about this form with the project staff before deciding to participate.

**Who is conducting this study?** Sarah Lux, a doctoral student at Iowa State University, is conducting this study. She also works at Creighton University as the Assistant Director of Graduate Programs at the Center for Health Policy and Ethics.

**Why am I invited to participate in this study?** You are being asked to take part in this study because you are currently enrolled in college as a full-time undergraduate student who has self-identified as having a learning disability. You should **not** participate if you are younger than 19.

**What is the purpose of this study?** The purpose of this study is to better understand the perceptions and experiences of students, like you, who have been diagnosed with a learning disability. We hope to gain new insights into how you and other students perceive your college experience, so far, and the campus community, in general. We also hope to hear about your perceptions and experiences, as a college student, in more specific settings, such as your interactions with family, peer groups, classmates, faculty, and staff.

**What will I be asked to do?** If you agree to participate, you will be asked to voluntarily take part in three separate one-on-one interviews that will last approximately 60 minutes each. Please note that all interviews will be audiostaped so that I may transcribe the data Afterwards.

- **First Interview:** At the beginning of the first meeting, you will be asked to complete a brief questionnaire for demographic data. Then, we will discuss your background, educational experiences prior to college, and your understanding of the learning disability and how it impacts you.
- **Second Interview:** We talk about your present experiences of being a college student.
- **Third Interview:** You will be asked to reflect on your decision to attend college and the overall experience, including how you feel such perceptions have changed over time.

**What are the possible risks or discomforts and benefits of my participation?** The foreseeable risks or discomforts related to your participation in this research are minimal. You may benefit from taking part in this study by having the opportunity to reflect on your transition to college and potentially gain insights into yourself and others that could facilitate positive personal growth. We hope that this study will benefit society and contribute to existing higher education research by creating space for student voices and learning from your unique college experience.
How will the information I provide be used? The information you provide will be used as part of the data collection procedures for this study. These interviews serve as the primary source of participant data to be collected for this study.

How will you ensure the confidentiality of the data or to protect my privacy? To ensure confidentiality to the extent permitted by law, the following measures will be taken:

- Participants will choose a pseudonym to use instead of their actual name to decrease the likelihood that identifiable information would be associated with interview data.
- I will store the audio recordings and transcripts from the interviews in a locked file and/or on my personal desktop computer that is password-protected.
- The results of this research project may be made public and information quoted in reports, published documents, and meetings. However, every effort will be made during the multiple reviews to omit or change personally identifiable information.

As the primary researcher, I will make every effort to prevent anyone other than my faculty advisor, Dr. Larry Ebbers, from knowing that you provided this information, or what that information is. Although we will make every effort to protect your confidentiality, a small possibility exists that data could be compromised or someone could somehow be able to infer identities in the final written report.

Will I incur any costs from participating or will I be compensated? You will not have any costs from participating in this study. If you choose to participate and complete all three interviews, you will receive a total of three $10 gift cards to the bookstore at your institution, one at the beginning of each interview.

What are my rights as a human research participant? Participating in this study is completely voluntary. You may choose not to take part in the study or stop participating at any time, for any reason, without penalty or negative consequences. You can skip any questions that you do not wish to answer.

Following each interview, you will receive a copy of the transcript from our meeting. After reviewing the transcript, you will have an opportunity to change or delete any responses, as well as add ideas, if you so choose. Additionally, you will have a chance to review the entire manuscript of the completed report before it is formally submitted to my dissertation committee. The final review allows you to view and make edits to and provide input on the data, your responses, and study findings, in its totality.
If you have any questions about the rights of research subjects or research-related injury, please contact the Iowa State University Office for Responsible Research at (515) 294-4566 or JRB@iastate.edu.

Whom can I call if I have questions about the study? You are encouraged to ask questions at any time during this study. For further information, please contact:

Sarah Lux, Doctoral Student/Researcher
sux@iastate.edu
(402) 981-3422

Dr. Larry Ebbers, ISU Faculty Advisor
lebbers@iastate.edu
(515) 294-8067

Consent and Authorization Provisions
Your signature, prior to participating in the interviews, indicates that you voluntarily authorize or agree to the following:

• participate in all three interviews and this study,
• the general purpose of the study has been explained to you,
• that you have been given the time to read this document, and
• that your questions have been satisfactorily answered.

You will receive a copy of the written informed consent prior to your participation in the study.

Participant’s Name (printed)

___________________________________________  ____________________________
Participant’s Signature                       Date
## APPENDIX G. CODEBOOK

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<thead>
<tr>
<th>Coding Level</th>
<th>Description</th>
<th>Code</th>
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