

**FACTORS THAT MOTIVATE NONTRADITIONAL LEARNERS WITH
DYSLEXIA TO PURSUE SECOND DEGREES**

A Dissertation

Presented in Partial Fulfillment of the Requirement for the

Degree of Doctor of Philosophy

with a

Major in Education

in the

College of Graduate Studies

University of Idaho

by

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December 2014

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AUTHORIZATION TO SUBMIT DISSERTATION

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ABSTRACT

The purpose of this basic interpretive qualitative study was to explore the factors that motivate nontraditional learners with dyslexia to pursue second degrees. The two women and seven men who participated in the study were enrolled in or had completed second degrees in eight fields of study at six nationally accredited institutions in five states. Their experiences were collected through in-depth, semi-structured interviews and coded and categorized for further analysis. The four themes that emerged from the analysis as motivational factors for pursuing second degrees included: *Aspirations*, *Career Objectives*, *Education Objectives*, and *Life Changing Events*.

ACKNOWLEDGMENTS

To My Husband, Wally

Thank you for your support. You never doubted my ability or questioned my priorities. You listened each time I shared yet another exciting literature review finding. Unprompted, you often quietly set about solving technical or software problems to support my writing. As my life partner and best friend on this journey of long days and short nights, you provided me with the courage to continue when the shoreline slipped from sight.

To My Uncle Hail

When I was five, you were intent in teaching me the alphabet and guiding my career choices. Since that time, you have continued to be a positive influence in my life as my cherished uncle and valued friend. Thank you.

To My University of Idaho Support Team

Thank you, Dr. Michael Kroth, for your generosity of time, optimism, and support. Our discussions expanded my critical thinking and added to my skill as a writer. To my committee members, Dr. James Gregson, Dr. Laura Holyoke, and Dr. Matthew Wappett, thank you for serving on my committee and guiding this study in a different direction than initially proposed. The insights I gained exceeded my expectations. I would like to offer special thanks to Cheri Cole who was a life line and guide through the maze of forms, schedules, processes, and changes. Michelle Weitz, thank you for coordinating the meetings for my proposal and defense meetings and for all you do to support students at the Boise campus.

To the Participants in This Study

Thank you for your willingness to share your candid stories of triumphs and challenges. You inspired and prodded me to write when I thought I had no words left to summon to the page.

DEDICATION

This dissertation is dedicated to my brother, Ernie.

While you will always be my baby brother, you have the older soul.

I know that if I were lost, you would find me.

If I broke my leg, you could fix it.

If the sky were falling, you would save us.

You have always been the one who knew how to stay calm and carry on.

I continue to learn from your example.

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CHAPTER ONE

It was a typical day for the rural elementary school first graders. Most of the children sat at their desks preparing to read about Dick and Jane and their little sister, Sally. The rest sat at a large table where they had been instructed to sit quietly and color or draw while the others read aloud with the teacher. The “artists” were the children of migrant Mexican farmworkers with one exception, a blonde-haired boy. Gregarious and thoughtful of others, he grew up to become the star quarterback, captain of the football team, student body president, and the first in his family to attend college. In his adult life, he has had the responsibility to manage, train, and assure the safety and well-being of others in the mining industry. He has an extensive library of outdoor adventure books and magazines, and yet his first grade reading experience carries few fond memories.

Introduction

Over the last several decades, the enrollment of students with disabilities at two- and four-year postsecondary institutions has increased to approximately 11% (National Center for Education Statistics [NCES], 2011). This increased enrollment has been due in part to the Individuals with Disabilities Education Act (IDEA) ensuring services to children and youth with disabilities, and Title I of the Americans with Disabilities Act of 1990 and subsequent Amendments Act of 2008 that provides adult with disabilities legal protection against discrimination and the right to reasonable accommodations. National and state initiatives have also promoted the necessity of a college education as preparation for the current and foreseeable economy.

Dyslexia is the most prevalent learning disability and is estimated by the International Dyslexia Association to comprise “about 85% of all disclosed disabilities” (International Dyslexia Association [IDA], 2012, p. 1). For the academic year of 2008-2009, two- and four-year degree granting institutions reported 86% of reported disabilities were *specific learning disabilities*, the category in which dyslexia is included (NCES, 2011). The number of students with dyslexia is estimated to be higher given those who choose not to

self-identify, who remain undiagnosed, or who are unaware that dyslexia is at the root of their difficulties (Denhart, 2008; Mortimer & Crozier, 2006).

The first grader described in the scenario at the beginning of this chapter represents one child among an estimated 5% to 8% of the school-age population who have dyslexia (Muter & Snowling, 2009). No one outgrows dyslexia. This brain-based type of learning disability impairs a person's ability to read (National Institutes of Health [NIH], 2011), creating academic challenges for students of all ages who experience the condition in contrast to their cohorts without dyslexia (Levelt, 2001; Mather & Wendling, 2012; Shaywitz, 2003; Snowling & Hulme, 2012).

If a child has the good fortune to have a teacher or a parent who recognizes the cause of his or her reading difficulties, efforts can be taken to support and mitigate the educational and emotional issues. Unfortunately, several studies suggest teacher preparation may be inadequate (Carvalhais & Fernandes da Silva, 2010; Mather & Wendling, 2012; Washburn, Joshi, & Binks, 2011). At the postsecondary level, the trend continues as students with dyslexia encounter faculty and administration who also often lack the formal training to effectively instruct, interact, and support learners with disabilities (Hellendoorn & Ruijsenaars, 2000; Katsiyannis, Zhang, Landmark, & Reber, 2009).

In addition to having dyslexia, another characteristic of participants in this study was an age of 25 or older, the demographic associated with that of a nontraditional student (Compton, Cox, & Laannan, 2006, p. 73). In 2009, NCES reported that the enrollment of students age 25 and over in degree-granting postsecondary institutions was growing at a faster pace than the enrollment of traditional students ranging in age from 18 to 24 years old (Chen, 2014). Other nontraditional characteristics cited in the literature review included

delayed enrollment after high school, part-time enrollment, employed while enrolled, responsible for their own finances, may not have a high school credential, or may be a single parent or have dependents other than a spouse.

In the 2013 NCES report, *Conditions of Education*, nontraditional students were noted as comprising nearly 50% of all part-time new or returning undergraduate students. Categorically, the terms *nontraditional learners* and *adult learners* have been interchangeably given their overlapping characteristics; however, Compton et al. (2006) suggested that there are important distinctions when developing strategies and services to support their success. For the purposes of this study, the distinction between the two terms was not pertinent to gathering or analyzing the data.

Background

The undergraduate dropout rate at four-year colleges and universities for students with dyslexia was reported as approximately 57% in comparison to the dropout rate of approximately 34% for their peers without dyslexia (Marklein, 2011; National Center for Special Education Research [NCSE], 2011). Students with dyslexia experience reading difficulties; however, in contradiction to the challenges, they also exhibit strengths in other areas such as abstract reasoning and logic (Du Pré, Gilroy, & Miles, 2008; Shaywitz & Shaywitz, 2005).

As reported by NCES (2002), adult learners were also more likely to leave postsecondary education without a degree. Adults often have roles and responsibilities that take priority over being a student. While the diversity and experience among adult learners can be potential strengths, being an adult learner and having dyslexia can raise the hurdle to earning a degree with implications that can span a lifetime. In spite of the responsibilities of

adulthood and the challenges associated with dyslexia, some succeed in completing their degree programs.

Statement of the Problem

The problem of this study was that no research could be found to explain what motivates nontraditional students with dyslexia to return for second degrees. The literature review did, however, discuss various reasons for why nontraditional and adult students return to school (Mackeracher, 2004; Merriam, Caffarella, & Baumgartner, 2007) and the experiences of students and adults with learning disabilities and dyslexia in particular. These studies provided a valuable background prior to proceeding with this study.

Purpose of this Study

The purpose of this study was to explore the factors that motivate nontraditional students with dyslexia to pursue second degrees and thus address the gap in the literature. Although the dropout rate for undergraduate students with dyslexia has been higher than the dropout rate for their peers without dyslexia, some have earned degrees and later returned for second degrees. A better understanding of the factors that motivate nontraditional learners with dyslexia to return will encourage and inform other learners with dyslexia as well as inform those who support and advocate for their success.

Research Questions

This study explored the experiences of nontraditional learners with dyslexia who were enrolled in or had completed second degrees. Their experiences addressed the following research questions:

1. What are the factors that motivate nontraditional learners with dyslexia to pursue second degrees?

2. In what ways do self-determination theory, transformative learning theory, or other motivational theories explain the motivations of nontraditional learners with dyslexia to pursue second degrees?

Theoretical Framework

This basic, interpretative qualitative study sought to understand the factors that motivate nontraditional students with dyslexia to return to college to pursue second degrees. The framework for examining the motivations and experiences was through the lenses of (a) self-determination theory, and (b) transformative learning theory.

Self-determination theory explains the need humans have for (1) competence, the sense of accomplishment or effectiveness; (2) autonomy, the commitment to willingly engage in an activity; and (3) relatedness, to feel connected with others (Deci & Flaste, 1995; Deci & Ryan, 2000). The theory suggests that motivations range from intrinsic to extrinsic and are influenced by social factors that impact individuals on global, contextual, and situational levels (Deci & Ryan, 2008; Vallerand & Lalande, 2011), thereby offering a suitable lens from which to better understand the complex factors that motivate the participants in this study to return for second degrees.

Mezirow defined transformative learning as “the social process of construing and appropriating a new or revised interpretation of the meaning of one's experience as a guide to action” (Mezirow, 1994a, p. 222-3). With the added life experiences and responsibilities of adulthood, people shift their perspectives and frames of reference to be “more inclusive, discriminating, reflective, open, and emotionally able to change” (Mezirow, 2009, p. 22). Taylor (2008) explained the shift in perspective as occurring when one reflects on experiences that are either “a series of cumulative transformed meaning schemes or as a

result of an acute personal or social crisis, for example, a natural disaster, the death of a significant other, divorce, a debilitating accident, war, job loss or retirement” (p. 6).

In addition to the participants of this study being nontraditional learners with dyslexia, their adulthood suggested the likelihood of life experiences and responsibilities that might have shaped their perspectives and frames of reference. Transformative learning theory provided the means by which to explore whether participants perspectives and frames of reference had been subjected to alternation and subsequently personal transformation.

Significance of the Research

The strength and prosperity of a nation depends upon the literacy of its citizens. Basic literacy is no longer sufficient. The 2006 report released by the Commission on the Future of Higher Education concluded that “America does not have the workforce it needs for the economy it has” (Ebersole, 2010, p. 23). Jobs requiring a postsecondary education have risen from 28% to 59% in the last few decades with the expectation that this trend will continue (Duncan, 2010). Furthermore, unless the U.S. workforce develops to meet the demands for a knowledge-based economy, the economy and per capita income would decrease for the first time in U.S. history (Ebersole, 2010). To address the dilemma, President Obama set a national goal of increasing undergraduate degree completion by 60% by 2025, the level considered necessary to maintain America’s competitive edge (Ebersole, 2010).

The value of a college education has proven beneficial over time for improved employment opportunities, earning potential, and civic engagement (Baum, Ma, & Payea, 2010; Gerber, 2012). The most recent NCES (2014) report entitled *The Condition of Education–2014* continued to make the case for the importance of education citing the

impact of the 2008 to 2010 economic recession. Those who had at least a bachelor's degree experienced less unemployment than those who had less than a bachelor's degree. This pattern continued in 2013. The report further confirmed that higher educational attainment was associated with higher median earnings. The earnings for adults aged 25 to 34 with bachelor's degrees was more than twice as much as those with only high school credentials. "Higher education is now the clearest pathway into the middle class" (<http://www.whitehouse.gov/issues/education/higher-education>, para 1.).

The ability to fill U.S. jobs that require more education is further threatened by the rising cost of a college education. The increased cost of tuition has the potential of making postsecondary education less accessible (Cruz & Haycock, 2012). For adult learners with dyslexia, the tuition for a second undergraduate degree or graduate course has not been the only cost consideration. These learners may be required to re-verify their dyslexia through third-party assessments as proof of eligibility for the accommodations provided for under the Americans with Disabilities Act Amendments Act. Assessments can range in cost from \$500 to \$9,000 (GAO-12-40, p.19) in spite of scientific evidence that dyslexia is a lifetime condition that benefits from accommodations (Duane, 2010; Shaywitz, 2003). Gregg (2007) suggested that the "attainment of positive secondary outcomes for adolescents and adults with LD is dependent on professionals becoming more knowledgeable about the changing demand of education" (p. 219) and applying creative solutions "essential to helping this population gain access to tools and information so that they can add to the world knowledge and economy" (p. 214).

Researcher's Perspective

No one outgrows dyslexia, but many go to college, assume responsible jobs, and have productive lives. Many also wear the wounds of their first exposure to education and carry into adulthood the scars and humiliation of all things read. They bear the hidden challenge of dyslexia.

The years have passed, but my emotions remain barely contained as I recalled my mother's unplanned visit to my brother's classroom as described at the beginning of this chapter. In response to her questions about why my brother wasn't being taught to read, she was informed by the teacher, a veteran of twenty years with status in the community, that my brother was "retarded." Armed with a mother's intuition and knowledge of her son's capabilities, my mother had the good sense to doubt the teacher's assessment. Describing herself as "heartbroken," she nevertheless had the strength to find answers. Our family doctor reassured her that my brother was fine; he just needed time to build his skills. Another teacher at the same grade school contacted my mother and offered a more supportive perspective and helpful suggestions.

My mother died in 2006 so I am no longer able to confirm all the details, but I know how much she valued education. Her own education had been interrupted before she could finish high school due to a family tragedy. She took an interest in our schooling and asked us each day after school to tell her what we had learned. While expenditures beyond the essentials were rare, there was always enough money for books, pencils, crayons, paper, chalk, and a chalkboard to practice printing letters and numbers. Education represented an insurance policy against the hunger and poverty she had lived through as a child and the opportunity to have choices.

I also know how much she despised unfairness. I believe that the day she decided to trust her judgment and disagree with my brother's first grade teacher was the day she took a stand for my brother, the other children at the table with him, and their parents who shared the same aspirations for their children's education. My brother's memory of his first grade teacher has not diminished over the years nor has the appreciation for the teacher who advocated for him and cared about him and his learning.

His advocate suggested he practice phonetics and spend time reading aloud. To accomplish this, I was assigned as his tutor. Each night he was to read to me, and I was to help him with words that proved challenging. "The" repeatedly stumped him. I responded with unhelpful impatience. This recollection serves as a source of shame and opportunity for redemption. My only excuse is that I was eight and hadn't come to recognize that reading was as easy for me as "inventing" was for my brother.

More is known today about dyslexia, albeit not sufficiently well known by everyone who could benefit from knowing. I have taught an undergraduate class at a local university for over nearly ten years; however, nothing in my coursework related to teaching prepared me to recognize learning disabilities. My interest in dyslexia prompted me to join the International Dyslexia Association in 2010 as resource for my own professional development. If I can teach in a way that is well informed, patient, encouraging, and inclusive of all of my students, perhaps I can make amends for the harm I could not prevent as a sister.

I have encouraged the students who have sought my counsel to develop thick skins, to do their best, to use every accommodation and resource available, and to keep their eyes on the prize. There is an element of college that just requires surviving the experience. The

intent of this study was to understand the experiences of college students with dyslexia who have stayed the course through to degree completion and returned for second degrees. Their success can serve as a potential source of strength and encouragement to others who may doubt their own potential.

I entered this study with a bias that learning should be an experience that enlightens rather than embarrasses, encourages rather than humiliates, and prepares all people to achieve their full potential. To bracket any potential bias I may have as a researcher, I briefly shared with participants that the research was of personal and professional interest. To control for bias, I relied on the semi-structured interview questions and related follow-up questions for data collection. In addition, I maintained a journal of my reflections as a means of self-assessment and self-monitoring.

Limitations

Individuals who volunteered and were selected for this study shared experiences that were uniquely their own. The literature review revealed that some students with learning disabilities are reluctant to identify themselves as having a disability, and some struggle academically because they are unaware that they have a disability (Denhart, 2008; Mortimer & Crozier, 2006). How participants in this study may have differed from others who were either reluctant to self-identify or unaware of their dyslexia is unknown. Recruiting through disability service centers also had limitations. One disability service director shared that in her experience students with dyslexia initially registered for accommodations as undergraduates. Once they reached a level of success, the disability service center staff rarely saw them again unless they encountered difficulties with a class or a specific professor. Representatives from several university disability service centers indicated that

disability type was not tracked. The policy to not track was a means of protecting the privacy of the student. As a result, recruiting efforts using a listserv through the disability service centers would have notified all students registered with the centers rather than a targeted recruiting of students with dyslexia.

Finally, the lack of agreement around a common definition of dyslexia complicates how some students identify their condition. Under federal law, dyslexia falls under “specific learning disability,” but is listed under the broader umbrella of “high incidence disabilities” with other disabilities. “Learning disabilities” (LD) is the category under which the majority of students who have dyslexia are classified at colleges and universities. “Developmental reading disorder” is yet another description. How the condition was labeled and then adopted could have been dependent on the diagnostic practitioner’s preference or the state in which the diagnosis occurred.

Delimitations

Two sampling strategies were used to recruit potential participants: criterion and snowball sampling. In addition, recruiting through graduate admissions offices expanded recruitment beyond disability service centers. This proved successful in the recruitment of several students who were notified about the study through professors teaching graduate programs. What remained unknown was whether recruiting through graduate admissions offices was sufficient to encourage potential participants unlikely to self-identify as having dyslexia. When contact was made with a potential participant, each person was provided an overview of the project with assurances of anonymity.

To address the unavoidably broad net cast out to all students registered with a disability service center through listserv notification, the recruiting flyer listed a dyslexia diagnosis as one of the requirements for volunteering for the study.

To address potential confusion about dyslexia as a term, the definitions for dyslexia adopted by the International Dyslexia Association (IDA) and National Institute of Health (NIH) were used to address the questions of interested, potential volunteers.

The scope of the study was limited to participants who met specific criteria that included a dyslexia diagnosis, characteristics of nontraditional learners, and participants in second degree programs provided by nationally accredited institutions. This narrowed the focus and supported the transferability of findings to the greatest extent possible.

Finally, as a means of adhering to and refining the proposed research process, two pilot interviews were conducted to test the interview questions, coordinate audio recording, and practice, assess, and refine the transcription, coding, and data management process.

Key Definitions

To assure a common understanding among all who read this study, terms have been defined. For example, this study involved nontraditional learners who were also adult learners. The characteristics of *nontraditional learners* and *adult learners* overlap; however, in the context of a different study, a distinction between the two terms may have been necessary.

Dyslexia. Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities (IDA, 2012).

Learner. A learner is someone who pursues knowledge, understanding, or a skillset by studying a subject and practicing the application of what has been learned or has been taught. A learner may be engaged in independent learning or within a formal classroom setting. For the purposes of this study, the learner was also a student.

Student. A student attends classes through distance education, at a school, college or university. Not all students are learners nor are all learners students. The participants in this study were all learners who had pursued education by also becoming students at universities.

Nontraditional learner. The *nontraditional* student is defined as a student who does not enter postsecondary education in the same calendar year that he or she finished high school, attends part time for at least part of the academic year, works full time (35 hours or more per week) while enrolled, is financially independent for purposes of determining eligibility for financial aid, may have dependents other than a spouse (usually children, but sometimes others), may be a single parent (either not married, or married but separated with dependents), and may not have a high school diploma (completed high school with a GED or other high school completion certification, or did not finish high school).

CHAPTER TWO: REVIEW OF THE LITERATURE

Introduction

The purpose of a literature review is to develop a full understanding of a topic, to review what has already been researched and applied, and to explore questions that remain unanswered (Bloomberg & Volpe, 2012). The literature reviewed for this study both informed and revealed gaps in the current body of knowledge. A theoretical framework provides the lens from which to explore a phenomenon and address the unanswered questions or gaps in knowledge. Merriam (2009) described a theoretical framework as the foundation for a study. As such, the framework provides the boundaries for a study. In describing how a theoretical framework shaped her study, Fowler stated, “It helped me focus my research, develop my research questions, plan my data collection, and structure my data analysis” (Anfara & Mertz, 2006, p. 50-51).

For this study, self-determination theory and transformative learning theory were chosen as the framework to explore the factors that motivate nontraditional students with dyslexia to pursue second degrees, and thereby contribute to the gap in understanding about nontraditional students with dyslexia. Gerber (2012) noted “an inadequate research base to guide practice for adults with LD [learning disabilities]” and a need “to investigate the variety of experiences and outcomes of adults with LD through its many phases and in its many contexts” (p. 40). Hartley (2011) concluded that more research was needed to understand the relationship between intra- and interpersonal resilience and academic persistence.

Literature Review Strategy

Keyword searches included “academic achievement,” “adult learners,” “degree attainment,” “dyslexia,” “learning disabilities,” “motivation,” “self-determination,” and “transformative learning.” An explored topic often revealed other strands of information to examine. Peer-reviewed journal studies were the primary source for the literature review; however, articles from ERIC, EBSCO, monographs, conferences and conference papers, books, and videos provided valuable insights. The websites for the National Center for Education Statistics (NCES) and the National Center for Special Education Research (NCSER) served as rich depositories of statistical data and information specific to college students and current educational initiatives. Other web resources included the International Dyslexia Association, the Yale Center for Dyslexia and Creativity, the National Association of College Admission Counseling, the National Center for Learning Disabilities, and the Council for Learning Disabilities. Article reference lists provided yet another avenue for potentially relevant articles and the names of authors associated with topics pertinent to this study. Authors’ names that appeared frequently in reference lists were noted and further searches conducted to find additional articles they had authored or coauthored.

Initial search efforts focused on articles published from 2005 forward with the intent that reviews might include the most current research. The search was then expanded to include earlier literature to provide a historical perspective and review how theories may have evolved.

Discussions with several disability service center directors revealed that when students register for services, disability type is not tracked in order to protect the privacy of the student. Understanding the potential for limited tracking served as a reminder to

preclude assumptions when reviewing learning disabilities studies. Because tracking is limited and because dyslexia is the most prevalent learning disability (IDA, 2012), learning disabilities studies were likely, but not assuredly, to include the experiences of students with dyslexia. If an article specifically stated dyslexia as the learning disability, this was noted and compared with other articles in which the learning disabilities were not identified.

Articles were indexed by title, author, and briefly summarized to document the purpose, findings, theories if stated, and research method employed (qualitative, quantitative, or mixed method). Summaries were reviewed for similar and dissimilar findings to determine whether additional exploration was required for clarification. Information often overlapped.

As the content began to overlap, the literature review was determined to have reached a sufficient saturation point. This chapter covers the following topics:

- Traditional Versus Nontraditional Learners;
- Adult Learners;
- Dyslexia;
- Self Determination Theory;
- Transformative Learning Theory;
- Outcomes.

The chapter concludes with a brief summary.

Traditional Versus Nontraditional

The National Center for Education Statistics (NCES, 2002) describes a *traditional* student with the following characteristics:

- Finishes high school and immediately enrolls full time in postsecondary classes;
- Is generally reliant on parents for financial support;
- May work part time.

The *nontraditional* student is defined as a student who meets one or more of the following characteristics:

- Does not enter postsecondary education in the same calendar year that he or she finished high school;
- Attends part time for at least part of the academic year;
- Works full time (35 hours or more per week) while enrolled;
- Is considered financially independent for purposes of determining eligibility for financial aid;
- Has dependents other than a spouse (usually children, but sometimes others);
- Is a single parent (either not married, or married but separated with dependents);
- Does not have a high school diploma (completed high school with a GED or other high school completion certification, or did not finish high school).

NCES (2013) reported that nontraditional students comprised nearly 50% of all part-time new or returning undergraduate students in the U.S. (NCES, 2013). The terms *nontraditional* and *adult student* are often used interchangeably given the overlap and commonality of characteristics such as with age or financial independence. However, Compton, Cox and Laanan (2006) maintained that “not all nontraditional students are adult

students” (p. 73), and *adult students* represent a “distinct group” (p. 74). As an example, *nontraditional* implies students whose needs have been underserved, such as students from lower socioeconomic backgrounds or students who may not have completed high school. Gregg (2007) identified students with learning disabilities as underserved. According to Compton et al. (2006), adult learners “are more likely to be pursuing a program leading to a vocational certificate or degree ... have focused goals for their education, typically to gain or enhance work skills ... consider themselves primarily workers and not students” (Compton et al., 2006, p.74). Further elaboration on adult learners is provided in the following section.

Adult Learners

Supporting the difference between traditional and nontraditional learners, as stated in *Learning in Adulthood* (Merriam, Cafarella, & Baumgartner, 2007, p. 84), Knowles advanced the following six andragogical assumptions about adult learners:

1. As a person matures his or her self-concept moves from that of a dependent personality toward one of a self-directed human being.
2. An adult accumulates a growing reservoir of experience, which is a rich resource for learning.
3. The readiness of an adult to learn is closely related to the developmental tasks of his or her social role.
4. There is a change in time perspective as people mature—from future application of knowledge to immediacy of application. Thus the adult is more problem-centered than subject-centered in learning.
5. The most potent motivations are internal rather than external.

6. Adults need to know why they need to learn something.

“Adults are motivated by wanting to improve their situations in adult life, whether that situation is work-related, personal, or social/community-related” (Merriam & Bierema, 2013, p. 12). As an example, the doctoral graduates in the 2006 National Science Foundation’s (NSF) report entitled *U.S. doctorates in the 20th century* were on average nearly 34 years old and already engaged in careers. Their quest for doctoral degrees related to the availability of broader career and employment options.

The Shepard and Nelson (2012) phenomenology study sought a better understanding of how adult learners successfully completed graduate studies through the experiences of “employees who study” versus “students who work” (p. 10). Three participants who met the selection criteria were women and working mothers in their forties. Although motivation was not the focus of the study, the interview data revealed that all three participants were motivated by the potential of financial gain and career changes—events that potentially could improve their life situations.

Adults also experience emotions that may range from fear and anxiety to excitement and personal empowerment about entering the academic arena. Merriam and Bierema (2013) noted that when adults go to school, “they *add* the role of student onto their other often full-time roles as caretaker, worker, and citizen” (p. 12). Interviews with nine mature-age learners in the Willans and Seary (2011) study revealed the personal and emotional toll associated with fulfilling multiple roles. One participant stated, “The pressure of time, from working at night, being a wife and mother with household duties, civic responsibilities and children with sporting commitments, was hard” (p. 130). Adding to the stress was the potential lack of support from family and others. One participant shared, “I told my father

what I was doing and why I was doing it, and I thought he understood at the start of it, but I got a phone call from him last week telling me about a job being a priority” (p. 135). Other participants expressed concern about demonstrating the level of skills expected at the postsecondary level.

Dyslexia

Having a learning disability adds further complexity to the myriad of issues adult learners must contend with when entering the academic setting. Dyslexia is the most common learning disability experienced among college and university students with learning disabilities (Shaywitz, 2003).

What Is Dyslexia? For this study, dyslexia definitions from two different sources were reviewed, compared, and concluded to be compatible. The sources were the National Institutes of Health (NIH), an agency of the U.S. government responsible for biomedical and health-related research and the International Dyslexia Association (IDA), a 501(c)(3) nonprofit scientific and educational organization dedicated to the study and treatment of dyslexia and language-based learning differences. Each entity’s definition of dyslexia included a detailed description of its impact. NIH defined dyslexia as follows:

Dyslexia is a brain-based type of learning disability that specifically impairs a person's ability to read. These individuals typically read at levels significantly lower than expected despite having normal intelligence. Although the disorder varies from person to person, common characteristics among people with dyslexia are difficulties with phonological processing (the manipulation of sounds), spelling, and/or rapid visual-verbal responding. In individuals with adult onset of dyslexia, it usually occurs as a result of brain injury or in the context of dementia; this contrasts with

individuals with dyslexia who simply were never identified as children or adolescents. Dyslexia can be inherited in some families, and recent studies have identified a number of genes that may predispose an individual to developing dyslexia (NIH, 2011).

Coinciding with the NIH definition, the IDA Board of Directors adopted the following definition in 2002:

Dyslexia is a specific learning disability that is neurological in origin. It is characterized by difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge (IDA, 2002).

Impact and Contradiction. The challenges associated with dyslexia are well documented (Duane, 2010; Eden & Moats, 2002; Shaywitz & Shaywitz, 2005). Once thought to be associated with low IQ, Ferrer, Shaywitz, Holahan, Marchione, and Shaywitz (2010) were among the first to empirically demonstrate the separation of reading ability from cognitive ability measured as IQ. While dyslexia occurs across a range of IQ results, it remains independent from cognitive ability (Ferrer et al., 2010; Mather & Wendling, 2012).

At the college level, students with dyslexia experience difficulty reading and comprehending the volume of college-level reading required, yet they often exhibit talents in other areas such as abstract reasoning and logic (Du Pré, Gilroy, & Levelt, 2001; Miles,

2008; Mather & Wendling, 2012; Shaywitz, 2003). Exhibiting talents in other areas is the cognitive contradiction that researchers note as a hallmark of dyslexia (Du Pré, Gilroy, & Miles, 2008; Shaywitz & Shaywitz, 2005).

Evidence of Difference. Magnetic resonance imaging and positron emission tomography have enabled the neuroscience community to provide evidence that the dyslexic brain is structured and functions differently than the non-dyslexic brain (Duane, 2010; Shaywitz, 2003; Society of Neuroscience, 2004; Wolf, Samataro, Steinbrink, Martin, & Vasic, 2010). Functional brain images revealed disruptions in the left-hemisphere posterior neural systems while a child or adult was reading (Eden & Moats, 2002). After an effective reading intervention, the neural system changed and showed increased activity in the parietotemporal areas of the brain (Duane, 2010; Shaywitz, Mody & Shaywitz, 2006). The neural images following remediation suggested that the brain may be able to rewire itself and improve reading deficits (Maskel, 2010); however, Shaywitz, et al. (2006) cautioned that intervention will not completely remediate the reading difficulty (Shaywitz, et al., 2006).

Theories of Cause. The three most common theories about what causes dyslexia include the (a) phonological core deficit, (b) cerebellar deficit, and (c) magnocellular deficit. The possibility also exists that more than one deficit may be responsible for the reading challenges.

The phonological core deficit theory has emerged as the most common explanation (Irannejad & Savage, 2011; Mather & Wendling, 2012; Vellutino, Fletcher, Snowling, & Scanlon, 2004) for approximately 70% of dyslexia cases (Maskell, 2010). Phonology is the study of sound patterns in language. These sounds are the code that represents language.

Those who can unlock the code are able to recognize that letters make up sounds that make up the words that represent written language. This theory hypothesizes that an individual's weak coding and decoding ability affects reading fluency, which in turn impacts reading comprehension (Mather & Wendling, 2012; Shaywitz & Shaywitz, 2005; Vellutino et al., 2004). The cause of this weak ability may be related to a difference in the structure and function of neural pathways in the language areas of the brain (Vellutino, et al., 2004).

The cerebellar deficit theory postulates that the underlying causes of dyslexia relate to abnormal cerebellar-vestibular areas of the brain that subsequently impair functions such as processing speed, automatization of articulatory and auditory skills, and balance and motor skills (Leonard, Eckert, Given, Berninger, & Eden, 2006).

Two primary pathways of the visual system are involved in the magnocellular deficit theory and consist of the (a) magnocellular pathway that recognizes fast moving, low contrast information and the (b) parvocellular pathway that responds to slow moving, high contrast information (Stein, 2001). The magnocellular deficit theory attempts to explain dyslexia as a visual impairment that inhibits rapid and automatic recognition of fast-moving, low-contrast information (McLean, Stuart, Coltheart, & Castles, 2011).

Conflict, Controversy, and Progress? After nearly a decade of preparation and input from experts in the fields of neuroscience, biology, genetics, statistics, epidemiology, social and behavioral sciences, nosology, and public health, *The Fifth Edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* was released at the May 2013 annual meeting of the American Psychiatric Association (American Psychiatric Association [APA], 2012). The DSM serves as a common handbook for health care professionals to diagnose, research, and recommend treatment of mental disorders

(American Psychiatric Association [APA], 2012). In the DSM-5, “Specific learning disorder combines the DSM-IV diagnoses of reading disorder, mathematics disorder, disorder of written expression, and learning disorders not otherwise specified” (APA, 2013, p. 2).

Not all input provided prior to the release of DSM-5 concurred with the decision to combine dyslexia with other disorders. Opposing the combination, Snowling and Hulme (2012) made a plea for differentiating dyslexia from reading comprehension in order “to ensure appropriate intervention” (p. 603). The International Dyslexia Association (2012) responded similarly through its Scientific Advisory Board requesting a “reinstatement of the term dyslexia as the appropriate name for phonologically based, developmental reading disabilities that are manifested as unexpected difficulties with word recognition, spelling, language comprehension, and reading fluency; and inclusion of the definition, diagnostic criteria, descriptive information, and affirmation of known treatment protocols” (p. 1).

Colker, Shaywitz, Shaywitz, and Simon (2013), representing the Yale Center for Dyslexia and Creativity, proposed that the American Psychiatric Association reflect revisions in the DSM-5 that divide specific learning disorders into two categories with one specifying dyslexia as a “discrete entity with a neurobiological signature supported by an international community of scientists and another category for less well-defined and less understood learning disorders” (p. 2).

Following similar patterns of disagreement, H.R. 456 and H.R. 623 were presented for consideration to the 2014 House of Representatives. In proposing H.R. 456 in January 2014, Representative Bill Cassidy was calling on schools, state, and local educational agencies to recognize and address the educational implications of dyslexia. The following is the excerpted introduction to H. R. 456:

Whereas great progress has been made in understanding *dyslexia* at a scientific level, including its epidemiology, and cognitive and neurobiological bases ...

In June 2014, Representative Joyce Beatty proposed H.R. 623 as an alternative that begins much like H. R. 456 as stated below:

Whereas great progress has been made in understanding *learning and attention deficient issues* at a scientific level, including their epidemiology, cognitive and neurobiological bases . . .

H.R. 623 replaces the term *dyslexia* with the more general *learning and attention deficient issues*. In responding to inquiries about the two bills, Drs. Sally and Bennett Shaywitz (2014) offered the following analogy:

Dyslexia can be compared to strep throat, whereby the specific symptoms, cause, and treatment have all been scientifically uncovered so that a specific diagnosis can be made, and specific, evidence-based intervention can be given. The term "learning disabilities" is more like the general term "infection," which can have many different causes, along with many different symptoms and differing treatments, depending on the specific infection.

Authors of the recently released *The Dyslexia Debate*, Dr. Julian Elliott, professor of education at Durham University in the U.K. and Dr. Elena Grigorenko, a professor of psychology at Yale in the U.S., presented a contrasting perspective. They proposed that the term dyslexia is too broad to be meaningful, and so misused that it could prevent the help that all readers need who are struggling to learn to read (Morrison, 2014). The U.K. journalist and author Peter Hitchen (2014) followed the release of *The Dyslexia Debate* with a blog entitled "Dyslexia is NOT a disease. It is an excuse for bad teachers."

Students with learning disabilities expressed conflicting views about the term *dyslexia* as well. Griffin and Pollak (2009) interviewed 27 students with learning disabilities, 14 of whom had dyslexia. The students were identified as *neurodiverse*, a term adopted in the U.K. as a concept and as a civil rights movement. Neurodiversity is defined as “atypical neurological developments as normal human differences that should be tolerated and respected in the same way as other human differences” (Griffin & Pollak, 2009, p. 25). Of the 27 students who were interviewed, two views emerged about their *neurodiverse* identity. Those who associated neurodiversity with having strengths and weaknesses expressed greater career ambition and academic self esteem. In contrast, the students who viewed the identity as a deficit associated it as a medical disadvantage that required disability allowances. In response to receiving formal assessments of their learning disability (or neurodiversity), more than half reported a sense of relief while others were concerned about the negative connotation of being “branded with a label that they felt had negative connotations” (Griffin & Pollak, 2009, p. 30). Similarly, some participants in the Mortimer and Crozier (2006) study expressed concern that preconceptions about dyslexia could cause them to “be perceived as lacking in intelligence” and could influence their employment opportunities.

Perception Shift. As the understanding of dyslexia has increased, the perception of dyslexia has begun to shift from a deficit-based disability to a potentially valuable form of diversity (Griffin & Pollak, 2009). Recent articles acknowledged dyslexia’s reading challenges but also hinted at its strengths (Everat, Weeks, & Brooks, 2007; Logan, 2009), and asked for further evidence given the inconsistent results (Brunswick, Martin, & Marzano, 2010). This change in perception from dyslexia as a deficit to dyslexia as a

strength has received momentum as well-known, successful adults with dyslexia have come forward to share their painful memories of classroom experiences and the shame associated with their difficulties in learning to read (Yale Center for Dyslexia and Creativity, 2014).

After struggling as a student for seven years to complete his degree, Jack Horner's senior thesis resulted in an Honorary Doctorate of Science and the prestigious MacArthur Fellowship. *Doctor* Jack Horner earned world acclaim in the field of paleontology for his dinosaur growth research and asked to serve as the technical director for the movie Jurassic Park (IDA conference, 2010; Yale Center for Dyslexia and Creativity, 2012). Other examples of successful adults with dyslexia include authors John Irving and John Grisham, playwright Wendy Wasserstein, renowned cardiothoracic surgeon Dr. Delos Cosgrove (Shaywitz, 2003) and geneticist and Nobel Prize winner Carol Greider (Rodgers, 2011).

Furthermore, a comparative study found a much higher incidence of dyslexia among U.S. and U.K. entrepreneurs than in the general corporate management population and the population at large (Logan, 2009). Well-known dyslexic entrepreneurs include Charles Schwab, founder and former CEO of Charles Schwab Corporation, a discount brokerage firm; Sir Richard Branson, owner of Virgin Atlantic Airlines, one of 400 companies operating under his Virgin Group conglomerate; and Ted Turner, media mogul and founder of CNN, the first cable news network (Rodgers, 2011; Yale Center for Dyslexia and Creativity, 2012).

Dyslexia as Strength. The strength of dyslexia is thought to be the ability to think in multidimensional ways that contribute to creativity as well as the visual and spatial skills used in design, engineering, and physical sciences (Brunswick, et al., 2010; McLean, et al., 2011; Schneps, Brockmole, Sonnert, & Pomplun, 2012). The neural imaging support for this

suggested that the presence of ectopias, small bunches of neurons and axons that have migrated to foreign locations in the cerebral cortex, connect the brain in ways viewed by the neuroscience community as atypical (Sherman, 2010).

Accommodations. In the U.S., dyslexia is the most common disability under the broad legal category of specific learning disability covered under the ADAAA. The ADAAA and Section 504 of the Rehabilitation Act provide the legal support for adults with learning disabilities to access accommodations at colleges and universities. However, a consensus has not developed in how to consistently measure specific learning disabilities, although converging evidence from neuro-imaging research may lead to consistent diagnostic tools in the future (Fletcher, et al., 2002; Shaywitz, 2008). The legal protections afforded by ADAAA assume that the learning disability is due to an unseen internal disorder and excludes conditions such as mental retardation, behavioral disturbances, lack of opportunities to learn, primary sensory deficits, or multilingualism (Taymans, 2009).

The purpose of an accommodation is to bridge the disability and thereby circumvent or partially mitigate its challenges and enable the learner to demonstrate his or her competence. Questions remain about which accommodations are appropriate and/or effective (Gregg & Nelson, 2012; Lai & Berkeley, 2012; Vickers, 2010; Youman & Mather, 2012). The four most frequently accessed categories of accommodations in college settings include (a) presentation, (b) response, (c) scheduling and timing, and 4) setting (Taymans, 2009). Each of these accommodations, its purpose, and examples are listed in Table 2.1.

Table 2.1 Learning Disability Accommodations

Accommodation Category	Purpose	Examples
Presentation	Alternative access to content, most often print material	Screen readers Access assistants Tape recorders Font format (large print)
Response	Alternatives to demonstrate knowledge	Writing directly on a test booklet Oral response Providing scribes Speech-to-text software Word processor Calculator
Scheduling/Timing	Adjustments in time provided to complete an assignment or test	Extended time Unlimited time Frequent breaks Testing over multiple days
Setting	Alternative instructional or testing location	Private room Quiet room Small group settings

Note: Contents of this table were extracted from Learning to Achieve: A Review of the Research Literature on Serving Adults with Learning Disabilities, 2009, pp. 121-122.

Extended Time. The request for extended time (scheduling and timing) to complete a test has been the most studied accommodation with proven effectiveness in preventing errors that result from the pressure to complete a test within timed constraints (Taymans, 2009). Shaywitz (2003) reported that students with dyslexia benefit from extended time as well as a quiet place (setting) free of distractions. The students with learning disabilities in Denhart's study (2008) noted improved grades when faculty permitted extended time. Supporting the Denhart results, a Northwest clinician who works with children and adults with dyslexia shared in an interview that a secondary student with dyslexia was able to achieve a four-grade level improvement in reading comprehension when given extended time (Stephens, 2010). Similarly, in support of extended time, Gregg, Coleman, Davis and

Chalk (2007) investigated the timed writing scores received by 65 students with dyslexia and 65 without dyslexia and found greater variance in the essay quality scores for writers with dyslexia than their peers. This result suggested that time constraints adversely impact the ability of students with dyslexia to demonstrate their writing skill. Bolt, Decker, Lloyd and Morlock (2011) recruited 55 college students with reading and writing disabilities and solicited their experiences with 14 accommodations. The request for extended time was the most requested and perceived to be useful accommodation.

In contrast, Sparks and Lovett (2009) questioned the fairness of extended time for students with learning disabilities given the lack of a standardized assessment and recommended instead that the learning deficits be addressed. The specific learning disabilities were not identified. Another study reviewed research related to the effectiveness of accommodations and concluded that empirical evidence was sparse and inconclusive (Lai & Berkeley, 2012).

Disagreements are likely to continue across a spectrum of dyslexia topics; however, Hoeft and Myers (2014) noted that the interest in dyslexia has created the emerging field of educational neuroscience and has brought together science, educational practice, and theory. In response to *The Dyslexia Debate*, Wolf (2014), a supporter for the continued use of the term *dyslexia*, nevertheless stated, “I believe such differences in perspective are healthy and the basis for the development of knowledge in any field. I applaud these authors’ tremendous efforts to apply their particular perspective across the many areas of dyslexia research” (para. 8), and then further acknowledged that the collective work with dyslexia research involves connecting the divergent knowledge bases to arrive at better assessments

and interventions. To do so would begin to address the issues raised by Sparks and Lovett (2009) and Lai and Berkeley (2012).

Self-determination Theory

According to Ryan and Deci (2000), self-determination theory (SDT) explains the intrinsic need humans have for competence, autonomy, and relatedness. To feel competent is the personal sense of accomplishment or effectiveness. Autonomously engaging in a task or activity is to do so willingly, with interest, and commitment. The need for relatedness is the basic human need to feel connected with others.

Self-determination theory encompasses the study of human motivation and personality and assumes that people are by nature active and willing to engage with their environment, to assimilate new knowledge and skills, and to integrate this knowledge and skills into a psychological structure (Reeve, Ryan, Deci, & Jang, 2008). The integration of knowledge and skills occurs through the internalization of regulated behaviors.

Internalization “is determined by personal history, activity characteristics, and context” (Chemolli & Gagné, 2014, p. 575) and as such, is person-specific. Self-determination theory proposes that the internalization of regulating behaviors occurs along a continuum of relative autonomy for the following internalization types: (a) external, (b) identified—valued for the outcome, and (c) intrinsic. Proponents of SDT, Chemolli & Gagné (2014) proposed that *contiguity* is a more appropriate model than *continuum* of relative autonomy given contradictory evidence now available using statistical analysis. More simply, people may have more than one motive and that “regulations vary in kind rather than degree” (p. 582). Furthermore, *contiguity* supports the multidimensional concept of SDT while *continuum*

implies a concept that is unidimensional. As evidence, the following example illustrates a potential contradiction of the continuum model:

A teacher may work not only to make money but also because she finds her work to be important for students, and she enjoys doing it. We could thus say that the teacher's motivation is external, identified (valued for the outcome), and intrinsic at the same time (Chemolli & Gagné, 2014, p. 577).

Intrinsic Motivations. When the need for competence, autonomy, and relatedness are met, an individual is intrinsically motivated to carry out a task or activity and derives satisfaction for doing something for its own sake. The rewards are psychological, and the more personally meaningful these rewards, the greater the sense of self-determination.

The individual's social and cultural context can influence the extent to which intrinsic needs are met and result in either enhanced psychological well-being and self-motivation, or apathy and alienation. Transition planning has been implemented as one means to help high school students prepare for the independence and self-discipline required at the college level. This external example of an autonomy support that can help strengthen self-determination (Lee, Wehmeyer, Palmer, Williams-Diehm, Davies, & Stock, 2012).

Similar to transition planning for high school students, to help assure the success of mature-age learners, a program in Australia was developed to help "learners acquire a more fully developed understanding of self as learner and also an acceptance of self as intelligent and capable" (Willans & Seary, 2011, p. 123). The program was designed to meet the needs of diverse cultural and social groups who have been "disadvantaged in their access to higher education" (p. 22) and to encourage the adult learners to develop the skills that will support their academic success. Participants in the program were described as "highly

committed and dedicated learners who have a real thirst for knowledge and a determination to succeed” (p. 122), indicating intrinsic motivation. This example of a transition program for adult learners has provided an added measure of support to enhanced psychological well-being and self-motivation.

The need for relatedness leads people to gravitate toward groups that then become part of their identities (Deci, 1995). An inclusive and life-affirming group can have the result of strengthening one’s sense of self-worth and serving as a buttress against life’s challenges. While context can influence the results, social and cultural factors are not the final determinants. Some people in impoverished social and cultural circumstances may have the capability within themselves to develop competence and autonomy in spite of their discouraging environment. For example, a strong autonomy orientation may enable a person to experience social contexts as more autonomy supportive than they are, to influence others to be supportive, or to be less of a hindrance.

Extrinsic Motivations. People also make choices based on extrinsic motivations. Extrinsic motivation drives behavior that is instrumental. In other words, the behavior is instrumental as a means undertaken to achieve an end (Deci, 1995, p. 27). Forms of instrumentality fall along a continuum that includes external regulation, introjection, identification, and integration. The behavior is undertaken based on the expectation of an outcome provided or defined by others (Kinicki & Kreitner, 2009, p. 155). These outcomes may range from rewards to punishments.

Instrumentality. Deci (1995) reported the consistency of studies that implicate extrinsic motivation with feelings of pressure, tension, or anxiety (p. 115). These feelings have the potential to undermine intrinsic motivation and thus commitment; however, some

forms of instrumentality can lead to effective goal setting, necessary structure, and limit setting. For example, safety regulations exemplify limit setting in a manufacturing environment. Employees may respond to a new safety regulation with reluctant compliance or even defiance. Assuming the new regulation is well founded, as it becomes accepted and perceived as beneficial to averting injury to oneself and co-workers, the meaning of the regulation shifts. As the extrinsically motivated behavior becomes internalized, the intrinsic needs of autonomy and relatedness are supported. The behaviors that manifest as a result of this support for autonomy and relatedness appear as the willing commitment to integrate the new safety rule into everyday practice and to also encourage co-workers to adhere to the rules out of concern for their own wellbeing.

In self-determination theory, financial gain represents an extrinsic motivation and yet, the social influence had an impact on the competence, autonomy, and relatedness at the contextual level for the nontraditional learners in the Shepard and Nelson (2012) study. The study examined the differences between employees who studied versus students who worked. The learners were working women and mothers who expressed a motivation to learn for the purpose of potential financial gain and career change.

Lifespan Outcomes. In studies focused on improved lifespan outcomes for people with disabilities, self-determination surfaced as an important consideration. Field, Sarver, and Shaw (2003) provided the following definition for self-determination specific to special education and disability literature:

Self-determination is a combination of skills, knowledge, and beliefs that enable a person to engage in goal-directed, self-regulated, autonomous behavior. An understanding of one's strengths and limitations together with a belief in oneself as

capable and effective are essential to self-determination. When acting on the basis of these skills and attitudes, individuals have greater ability to take control of their lives and assume the roles of successful adults in our society.

Several elements of this definition for self-determination appear in other studies and will be explained in the subsequent sections.

Belief in Oneself. The negative impact of dyslexia on an individual's self-esteem received attention in many studies; however, the majority of students in Ingesson's study (2007) acknowledged that their low academic self-esteem was due to their challenges with reading and writing, but the challenges did not diminish their relationships with peers, their optimism about the future, or their confidence to develop their talents. This optimism and confidence relates to the *belief in oneself as capable and effective*.

Confidence and competence differ as constructs; however, confidence provides the courage to venture into the unknown and persistently apply one's resources and self-knowledge to develop competence. The overlap with Bandura's (1986, 2001, 2006) social cognitive theory's self-efficacy is also apparent in the participants' willingness to act on their beliefs (Ingesson, 2007). The young adults in Ingesson's (2007) study had the advantage of knowing the basis for their reading and writing challenges and had other areas in their lives that enabled them to excel. Some participants were empowered in knowing the source of their challenges (Denhart, 2008; Griffin & Pollak, 2009). Excelling in other areas is a theme Miller (2002) identified as well when exploring the resilience of students with learning disabilities.

Academic Achievement. A study that applied self-determination theory to assess the relationship between academic success and college student motivational orientations found

that going to college to fulfill intrinsic motivation needs for autonomy and competence was positively related to the intent to persist and the GPA achieved (Guiffrida, Lynch, Wall, & Abel, 2013). Relatedness regarding the motivation to give back to one's family also had positive associations with persistence and GPA achievement while motivation to maintain or keep up one's relationships with family and friends from home may have reflected an external orientation and contributed to negative outcomes.

Persistence, determination, and resilience are often discussed as elements of academic achievement. For example, Denhart (2008) noted that students with learning disabilities in her study were resilient and determined to succeed in meeting their educational goals. Field et al. (2003) noted persistence and resilience. Participants "told of continuing to study, meeting with advisers, going to tutoring, retaking courses when necessary, and even moving home to regroup, rather than abandoning their dreams" (p. 343). The Sarver (2000) study as noted in Field et al. (2003) found a significant relationship between the grade point averages of students with learning disabilities and their levels of self-determination.

Wang, Haertel, and Walberg (1997) defined resilience in the academic context as "the heightened likelihood of educational success despite personal vulnerabilities and adversities brought about by environmental conditions and experiences" (p. 2). The vulnerabilities and adversities of academically resilient students included alienation, chronic poor performance, constant high levels of stress, and the impact of learning disabilities (Martin and Marsh, 2009).

More recently, Hartley (2011) examined the relationships between measures of intrapersonal resilience, interpersonal resilience, and mental health with respect to grade

point average and a sense of belonging within the academic environment. Findings revealed that all of the resilience factors were related to one another. The factors included the intrapersonal components of tenacity, tolerance of stress, negative emotions, positive acceptance of change, control, spirituality, and the interpersonal component of social support. The intrapersonal components of tenacity, stress tolerance, and spirituality accounted for the variance in cumulative grade point averages. While the study added to the evidence that intra- and interpersonal resilience are important to academic persistence, Hartley (2011) concluded more research was needed.

Several researchers have suggested that the limited research may potentially be due to the inherent complexities. For example, Donahue and Pearl (2003) cited the multiple and interactive characteristics of students with learning disabilities and their social/cultural environments. Martin and Marsh (2009) spoke about the broad array of factors that could either predict or be consequences of academic resilience.

Miller's (2002) study attempted to determine the sources of resilience for college students designated as having learning disabilities. Six of ten participants were designated as resilient because they had grades that averaged at least B+ in their majors. The remaining four participants with grade points below B+ were designated as non-resilient. The students identified as resilient were able to describe in specific detail their success experiences and the deliberate steps they took to be successful. They identified strength and described salient turning points that led to their successes. An experience of success subsequently became a resource to draw upon when confronted with a difficulty. Recognizing their strengths and having a success represents the SDT element of competence. All among the resilient group had at least one special friendship that boosted them when they were depressed or frustrated,

thus noting the importance of relatedness. Members of this group also described compensations or additional study efforts they initiated to achieve results.

In contrast, Miller's (2002) students in the non-resilient group could neither identify successful experiences nor persist in the pursuit of success. They were less able to identify their areas of capability, to describe strengths, to reveal any turning points. Comments about friendships also lacked distinctiveness. They were either less able to secure friendships or did not know how to rely on friends for support. While each person was aware of his or her learning disability, no mention was made of specific methods to cope with the challenges the disability presented.

Protective Factors. A learning disability represents a potential risk to educational success (Brendtro, 2012; Martin & Marsh, 2009; Masten, 2001). Protective factors may be either internal or external to the at-risk individual. External examples of protective factors include support and encouragement from others or an inclusive learning environment. This example compares with the self-determination intrinsic factor of relatedness. All but three of the 25 adult participants with dyslexia in the study by Hellendorn and Ruijssenaars (2000) noted that the most powerful form of support came from parents. Internal protective factor examples can be a result of the student understanding his or her disability and the challenges associated with it, initiating strategies to mitigate some of the challenges, and recognizing other strengths that can be leveraged to support success.

Enabling Factors. The theorizing about resilience has prompted an expansion of the risk and protective factors framework to include enabling factors (Bandura, 2006; Martin & Marsh, 2009). Enabling factors include an internal locus of control, learned optimism (Margalit, 2003), and a mindset that academic adversities can be overcome (Yeager &

Dweck, 2012). While these enabling factors are identified as specific and separate examples, identifying which may have primary influence may vary among individuals across varied circumstances. In other words, does a positive mindset lead to an internal locus of control and learned optimism, or is there another order combination of one factor being primary over the others?

Another question arises in whether a factor belongs in the category of protective factors or enabling factors. Planning more time to study a difficult subject may preclude a student from experiencing the risk of failure (Martin & Marsh, 2009). This example of a proactive approach may be linked to a student's understanding of the learning disability and thus be a protective factor and/or also serve as an enabling factor based on a student's belief that the difficult subject can be mastered with additional effort.

Locus of Control. Locus of control is a personality dimension that prompts people to attribute the causes of their behavior to themselves or environmental factors (Kinicki & Fugate, 2012). Students with an external locus of control tend to believe that circumstances are beyond their control. In contrast, students with an internal locus of control believe they are the masters of their own fate.

The young adults with learning disabilities in the Werner and Smith study showed a substantially higher external locus of control than those without a learning disability (Wong, 2003); however, Yeager and Dweck (2012) examined students' implicit theories about the malleability of personal qualities to predict and judge the meaning of events in their world. These implicit theories may explain in part the basis for locus of control. Yeager and Dweck (2012) concluded that students who believe or who are taught that they can develop their

intellectual abilities tend to show higher achievement across school transitions, such as when moving from high school to college or succeeding with a challenging course.

The topics of focus for the Yeager and Dweck (2012) study were the implicit theories about intelligence and personality. They found that students varied in their implicit theories, which fell along a continuum of either a fixed entity perspective at one end to the more malleable incremental perspective at the other end of the continuum. Those with an entity theory of intelligence saw intellectual ability as something that was fixed and unchangeable while those with an incremental theory viewed intellect as an ability that could be developed over time. Implicit theories about personality followed this same pattern with the entity theorist students viewing personality as fixed while the incremental theorists viewing personality as changeable. The entity and incremental perspectives were not always consistent across the two areas of intellect and personality. For example, one could hold an entity theory about intelligence but an incremental theory about personality and vice versa.

Beliefs impact behaviors. The entity theorists perceived the world in terms of threats and defenses, while the incremental theorists viewed that same world as the one that provided an opportunity for learning and growth. These polar opposite mindsets about intellect impacted the effectiveness of goal setting, effort, attributions for setbacks, and choice of strategies.

Entity and incremental theories about personality yielded similar results. Students with an entity theory were more likely to engage in vengeful responses in peer conflicts whereas those who exercised an incremental theory were more likely to address a peer who had bullied them and attempt to find a positive solution that would proactively improve the situation.

The Yeager and Dweck (2012) study suggested that students can be provided with a different lens in which to view their experiences of adversity. This can cause them to alter their behaviors and move from an external to an internal locus of control and subsequently strengthen their resilience.

Orr and Goodman (2010) explored the experiences of 14 college students with self-reported and documented learning disabilities. The study had two goals: (a) to better understand the strengths and weaknesses of students with learning disabilities and (b) to identify and explore common threads of experience among those who persist into and through higher education. The types of learning disabilities were not identified; however, of the 14 students interviewed, two referred to reading and writing challenges in their interviews. Reading and writing difficulties are often characteristics of dyslexia. Themes that emerged from the interviews included (a) the shared emotional impact of their experiences, (b) a pattern of academic difficulties and (c) adversity. Consistent with the need for relatedness in SDT, protective factors associated with resilience, participants in the study also expressed appreciation for the support of relationships, social connections, and identities that were separate from their disabilities.

Self-regulation. When William James wrote about self-regulation in the last century, he was referring to the control of one's thoughts and behaviors that could be honed into either habits or regulated through mental will for the purpose of furthering intellectual development (Fox & Riconscente, 2008). Specific to transformative learning, Cranton (2002) discussed how critical reflection enables the learner to be open to new evidence and alternatives and to replace old beliefs and assumptions that have become "habits of mind" (p. 65). As such, self-regulation is an element of both self-determination and transformation.

Zimmerman (2002) described self-regulated learning as the self-directed process a learner engages in to transform mental abilities into academic skills. The subsequent transition from mental abilities to academic skills occurs when the learner sets goals, adopts strategies to achieve the goals, monitors his or her progress, and if necessary, restructures the physical or social context to be more compatible with goal completion. The hallmarks of academic self-regulation include time management, self-evaluation of the methods selected, and the results achieved (Zimmerman, 2002).

Learning, Compensation, and Study Strategies. As cited in Zimmerman's (2002) description of self-regulated learning, adopting strategies to achieve goals appeared in several learning disability studies. One study involved 53 college students with learning disabilities, the majority of whom had dyslexia. The study examined whether perceived usefulness and actual use of standard self-regulated learning and compensation strategies varied among students with and without learning disabilities, and whether self-regulation provided a differential prediction of academic achievement (Ruban, McCoach, McGuire, Reis, 2003). The results revealed a difference between the two groups of students. The use of self-regulated learning strategies made a larger positive difference in academic achievement for the students with learning disabilities than for the students without learning disabilities (Ruban et al., 2003).

In several other studies, students who persisted recognized their strengths and limitations and identified strategies to compensate or address the limitations (Denhart, 2008; Ingesson, 2007; Kirby, Silvestri, Allingham, Parrila, & LaFave, 2008; Lindstrom, 2007; Reis, et al., 2000; Ruban et al., 2003; Yip, 2012). In addition, the findings from two other

studies revealed that participants autonomously selected strategies that met individual preferences (Kirby et al., 2008; Reis et al., 2000).

Learning and study strategies are the cognitive strategies students apply to their learning contexts, such as those identified in the Learning and Study Strategies Inventory (LASSI) listed in Table 2.2 Learning and Study Strategies Inventory Components and Scales (Weinstein & Palmer, 2002). These include the components of will, self-regulation, and skill (Kirby et al., 2008; Weinstein, Schulte, & Palmer, 2002). Will is exerting the necessary effort to complete assignments. Self-regulation includes focusing attention, maintaining concentration, using time effectively, and using self-testing methods. The skill component relates to how information is acquired and constructed in a manner that can be used to provide proof of knowledge acquisition.

Table 2.2 Learning and Study Strategies Inventory Components and Scales

Component	Scales
Skill	information processing selecting main ideas testing strategies
Will	attitude motivation anxiety
Self-regulation	concentration time management/scheduling self-testing study aids

Note. Adapted from *LASSI (Learning and Study Strategies Inventory) User's Manual*, 2nd Edition by C. E. Weinstein and D. R. Palmer. Copyright 2002 by H&H Publishing Company, Inc.

Kirby et al. (2008) compared the self-reported learning and study strategies specific to reading that were employed by students with and without dyslexia. The results revealed that the two groups of students took significantly different approaches. Some among the students with dyslexia expressed concern about the ability to stay organized and to

effectively take notes. In an effort to compensate for the self-reported challenges, they focused on learning and study strategies related to time management, to the use of study aids, or to activities that ranged from creating notecards, developing mnemonics to help with memorization, outlining the chapter, or using assistive technology such as audiobooks. The combination of approaches contributed to deeper learning; however, the study also suggested that the time intensive efforts taken to enhance their understanding could cause students with dyslexia to forego developing sound test-taking strategies.

In addition to formalized strategies, students with learning disabilities employed compensation strategies to address the disability challenges. Strategies reported by high achieving students with disabilities in the Reis et al. (2000) study included the use of audiobooks to more expediently complete reading assignments by simultaneously engaging their visual and audio skills. If note-taking was difficult, they photocopied a classmate's notes and compared with their own. Another compensation strategy was to take fewer classes or to take classes that played to their strengths thereby avoiding classes where failure was likely. Students credited their success to the compensation strategies learned through programs offered by the university rather than the content-related remediation they had received in elementary and secondary school. Like the students in the Kirby et al. (2008) study, the twelve participants in the Reis et al. (2000) study also had varied approaches for assuring individual success.

All but three of 25 participants with dyslexia in one study described negative strategies that included "avoidance, tricks, camouflage, overcompensation, and repression" (Hellendorn & Ruijsenaars, 2000, p. 233). One participant said, "I camouflage my bad

spelling by writing so small nobody can read it” (p. 233). Another said, “Whenever I have to read aloud, I take care to forget my book” (p. 233).

Self-directed. Pursuing strategies that were unique to individual needs and preferences is consistent with a constructivist philosophy of learning in which learners create their own knowledge (Wertsch, 1998). This is also consistent with self-determination theory and the element of autonomy. Students in all three studies shared a common ability to focus on developing their talents rather than being hindered by their deficits (Kirby et al., 2008; Reis et al., 2000; Wertsch, 1998). Committing extraordinary time and effort to meet their objectives is another characteristic of self-determination (Field et al., 2003; Ryan & Deci, 2000).

To summarize, self-determination theory proposes there are different types of motivation and that these motivations vary in level and quality (Chemolli and Gagné, 2014, p. 575). The studies related to self-determination in this chapter provided evidence of the multidimensional characteristic of self-determination. Learners exercised autonomy, took steps to develop competence or build from areas of competence, and many expressed a value for relatedness in their appreciation of others who provided encouragement, support, and assistance.

Transformative Learning Theory

In 1978, the U.S. Department of Education sponsored Mezirow’s (2009) study “to explain an unprecedented expansion in the number of women returning to higher education” (p. 19). At the conclusion of the study, Mezirow’s (2009) “findings identified ten phases of learning that become clarified in the transformative process (p. 19). The phases are as follows:

1. A disorienting dilemma;
2. Self-examination with feelings of fear, anger, guilt, or shame;
3. Critical assessment of assumptions;
4. Recognition that one's discontent and the process of transformation are shared;
5. Exploration of options for new roles, relationships, and actions;
6. Planning a course of action;
7. Acquiring knowledge and skills for implementing one's plan;
8. Provisional trying of new roles;
9. Building competence and self-confidence in new roles and relationships;
10. A reintegration into one's life on the basis of conditions dictated by one's new perspective.

As a result of these “phases of learning that become clarified,” learners engage in “the social process of construing and appropriating a new or revised interpretation of the meaning of one's experience as a guide to action” (Mezirow, 1994a, p. 222-223). In other words, people shift their frames of reference (taken-for-granted meaning schemes, habits of mind, and mindsets) to become “more inclusive, discriminating, reflective, open and emotionally able to change” (Mezirow, 2009, p. 22). Taylor (2008) proposed that the shift in perspective may also occur when one reflects on experiences that are either “a series of cumulative transformed meaning schemes or as a result of an acute personal or social crisis [disorienting dilemma] (p. 6). Examples of a disorienting dilemma include experiencing a natural disaster, losing a loved one, losing a job, becoming disabled, or losing a job.

Cranton and Kasle (2012) posed that transformative learning theory is “a theory in progress” (p.397) given it has been the subject for further elaboration, the basis for other

theories, and a theory to be critiqued. Howie and Bagnall (2013) suggested that transformative learning theory is not a theory at all but a metaphor lent “to reification and hence uncritical acceptance” (p. 832) as a theory. In response to a critique, Dirkx (2012) acknowledged that “much of what is referred to as transformative learning seems little more than another way to talk about learning and change” and suggested that consciousness development “helps us see how transformative learning might represent a distinct form of adult learning” (p. 400).

Consistent with the view proposed by Dirkx regarding consciousness development, of Mezirow’s ten phases of learning, the phases most closely associated with consciousness development include (a) a disorienting dilemma, (b) self-examination, and (c) a critical assessment of assumptions. These phases support a formation of an integrated and authentic self that is ready to confront “habits of the mind” (Cranton, 2012, p. 65), to question meaning schemes used to interpret for moral, ethical, or philosophical assumptions (Merriam, et al., 2007), and address self-deceptive practices (Dirkx, 2012).

Alternative Concepts of Transformative Learning. Alternative conceptions of transformative learning theory have included “spirituality, positionality, emancipatory learning, and neurobiology” (Taylor, 2008, p. 7). A cultural-spiritual perspective encompasses positionality and focuses on individuals and social structures with the transformational goal of strengthening cross-cultural relationships and developing spiritual awareness. Positionality refers to one’s position with respect to power and privilege based on race, gender, class, sexual orientation or ableness (Taylor, Tisdell, & Hanley, 2000). The social-emancipatory perspective engages critical reflection to help learners rediscover their

power and develop a sense of agency to make the world a more equitable place for everyone (Taylor, 2008).

Just as an increased understanding of dyslexia has occurred through neural imaging technology, the neurobiological perspective of transformative learning is also supported by visual evidence that the brain structure changes during learning. Findings have suggested that “transformative learning (1) requires discomfort prior to discovery, (2) is rooted in students’ experiences, needs, and interests, (3) is strengthened by emotive, sensory, and kinesthetic experiences, (4) appreciates differences in learning between males and females” (Taylor, 2008, p. 8).

Shepard and Nelson (2012) cited continued relevance of the 1981 work by Cross that outlined three deterrents to adult learner participation in continued learning: (a) situational barriers, (b) institutional barriers, and (c) dispositional barriers. Dispositional barriers represent “habits of mind” that can interfere with transformation. An institutional barrier was removed in the Santo (2005) study when the University of South Dakota offered two graduate degree programs through videoconferencing and online discussions using the statewide Digital Distance Network. The purpose was to address the shortage of teachers with advanced degrees in rural South Dakota.

The 25 K-12 teachers and administrators who registered for the classes ranged in age from twenties to fifties. They had not been enrolled in classes for some time and were primarily women. Most of the registrants had limited technology experience; however, they were open to change and had a strong interest in using technology to improve teaching. At the conclusion of the study, Santo (2005) selected four participants to interview who had

completed the degree program. Each reported the experience to have been uniquely transformational. The following statements are a summary of each person's experience:

- Learner 1: The ability to envision a future that would allow the participant to help Lakota children lead a better life;
- Learner 2: The opportunity to assume a new job not previously imagined possible and to continue her education in a doctoral program;
- Learner 3: A changed view of learning, of her role as teacher, and of the technological possibilities for rural educators;
- Learner 4: A deepened awareness about one's abilities and a spiritual sense of one's purpose in life.

Learner 1 envisioned a future that would allow Lakota children to lead a better life. This vision is consistent with the social-emancipatory perspective of transformative learning. Learner 4's spiritual sense of purpose had elements of the cultural-spiritual concept of transformative learning while Learners 3 and 4 spoke to several of Mezirow's phases of learning; namely, assuming new roles, acquiring new knowledge, and building competence.

The Sykes (2014) autoethnography used transformative learning theory as the lens to examine his coming to terms with culture and identity as a nonphenotypical Chickasaw in the role of educator and developer of a tribal learning community. In reflecting on his youth, he said, "I always felt like I was not a *real* Chickasaw Indian" (p. 4). Contributing to his feelings were educational experiences that he described as "miseducative, propagating Native American stereotypes" and "foreign" given his status as a first-generation college student (p. 6). Upon graduating from college, he knew he wanted to give back to his Chickasaw nation, but he questioned whether he had anything to offer. The birth of his

daughter shifted his perspective and evoked feelings that “rekindled the emotions of identity and belonging, revitalizing an interest in connecting with my Chickasaw heritage” (p. 6).

Taking on the role of educator and developer for a tribal learning community, he confronted his sense of alienation, felt the discomfort and self-doubt, and was driven to pursue his goal to be a competent, credible educator. As Sykes (2014) worked through his disorienting dilemma, he assumed new roles as a father, as an educator, and as a valued member of the Chickasaw community. His critical reflections and self-examination enabled him to look at the self- and other-imposed habits of mind described as a “sense of self, interpretation of social systems and issues, morals and religious beliefs, and job-related knowledge” (Cranton, 2002, p. 65). Habits of mind may be altered by a dramatic event, or as in Sykes’ situation, altered incrementally as he began to question previously held assumptions and beliefs about his experiences and his cultural identity.

According to Knowles, the adult learner’s readiness to learn is influenced by the development task required to fulfill a social role. Furthermore, adults have a reservoir of experiences, some of which may need to be called into question. Two significant roles appeared for Sykes: he became a father and he accepted a professional role that had both career and cultural implications. He used his own disorienting experience to connect with students who had similar feelings of cultural disconnect and alienation. Although the study was viewed through transformative learning theory with no reference to self-determination, Sykes’ desire for competence and relatedness coincided with the intrinsic motivations of self-determination theory.

No studies could be found that specifically used transformative learning theory as a theoretical lens to examine the experiences of learners with learning disabilities. However,

many of the experiences shared by learners cited in the dyslexia and self-determination sections of this chapter also resonated with Mezirow's phases of transformative learning. For many, the negative educational experiences during early school years remained salient into adulthood. Paleontologist Dr. Horner said, "...everybody called me dumb, but I knew very early on that I could do things other students couldn't do" (Yale Center for Dyslexia and Creativity, 2012). Like Horner, some who were similarly labeled either allowed the labels to become a part of their habits of mind or rejected them summarily and continued on to pursue their dreams (Denhart, 2008; Griffan & Pollak, 2009). In response to being told she would never graduate, an adult with dyslexia said, "I did not give up. And I managed after all" (Hellendorn & Ruijssenaars, 2000, p. 234).

Outcomes

Whether average or high-achieving, many students with learning disabilities reported adverse emotional reactions to their condition that included anxiety, fear, and perceptions of being less capable of meeting the demands of assignments, especially those requiring reading and writing (Heiman & Precel, 2003; Reis, McGuire, & Neu, 2010). The psychological impact they described can continue into adulthood (McNulty, 2003). In spite of the emotional impact, several studies cited achievements comparable to those without learning disabilities. For example, in an investigation to assess the impact of learning disabilities on the employment outcomes of 500 graduates across three universities, graduates were found to be employed full-time with similar benefits and salaries as other college graduates (Madaus, 2006). Similarly, most of the working adults with dyslexia in another study were performing jobs at the level of their training or higher (Hellendoorn & Ruijssenaars, 2000).

Summary

The rate of enrollment for nontraditional learners has increased; however, they are more likely to leave before completing their degree programs and for reasons as diverse as the learners and the roles that competed with their often secondary status as students. Adding further complication, dyslexia challenges many to keep up with the volume of reading and writing required at the college level. The dropout rate for students with dyslexia is higher than the dropout rate for their peers; however, some have managed their way through internal and external forces to earn undergraduate degrees and return for second degrees. No studies were found that explored the motivations of this group of students to continue their education. This chapter described the approach taken to review the literature and establish the theoretical framework to address this gap in the literature; namely, to explore the factors that motivate nontraditional learners with dyslexia to pursue second degrees. A better understanding of these factors will encourage others students with dyslexia to persist, and inform those who support and advocate for their success.

CHAPTER THREE: METHODOLOGY

Introduction

The purpose of this basic, interpretative qualitative study was to explore the factors that motivate nontraditional learners with dyslexia to pursue second degrees. A better understanding of the factors that motivated the participants in this study to return for second degrees may encourage and inform other learners with dyslexia as well as inform those who support and advocate for their academic success. This chapter describes the methodology used to address the following two research questions:

1. What are the factors that motivate nontraditional learners with dyslexia to pursue second degrees?
2. In what ways do self-determination theory, transformative learning theory, or other motivational theories explain the motivations of nontraditional learners with dyslexia to pursue second degrees?

Components of the methodology to be discussed in detail include the following:

- Rationale for a basic, qualitative research design;
- Setting and sampling strategies;
- Recruiting and selection;
- Data collection;
- Data analysis;
- Validity, reliability, and ethical considerations;
- Limitations of the study.

The chapter concludes with a brief summary.

Rationale for Qualitative Research Design

Offering a generic definition, Denzin and Lincoln (1994) suggested that qualitative research is “multimethod in focus, involving an interpretive, naturalistic approach to its subject matter” (p. 2). The purpose of qualitative research is to add to the body of knowledge of a phenomenon through a systematic investigation that uncovers the meaning of the phenomenon for those involved (Merriam, 2009; Wiersma & Jurs, 2005). Merriam (2009) noted that from her experience not only is a basic, interpretive study the most common across disciplines, the basic, interpretive study is “the most common form of qualitative research found in education” (p. 23).

Because all qualitative research is characteristically interpretative (Denzin & Lincoln, 1994; Merriam, 2009), the researcher “assumes there is no single, observable reality” (Merriam, 2009, p. 8). Denzin and Lincoln (1994) suggested that “objective reality can never be captured” (p. 2). As individuals interpret their experiences and construct their worlds within the context of the phenomenon, multiple realities are constructed (Creswell, 2007; Merriam, 2009). A basic, interpretative study does not predict what may happen but instead develops an in-depth understanding of what life and the world looks and feels like from the perspective of the person living in the setting. The interpretation requires the embedded researcher to gather multiple sources of data through interviews, observations, or documents and then inductively analyze the data for reoccurring patterns, themes, and theories (Creswell, 2007; Merriam, 2007, 2009).

Given the preceding explanation, a basic, interpretive qualitative study was determined to be the appropriate research method to better understand the factors that motivate nontraditional learners with dyslexia to pursue second degrees. Nontraditional

learners vary in age, social roles, and self-perception. Having a learning disability adds to the diversity among some nontraditional learners. This study focused specifically on nontraditional learners with the learning disability of dyslexia, a brain-based disorder that creates common challenges as well as challenges that vary from person to person (NIH, 2011). The commonalities and variations that occur from person to person coincide well with a basic, interpretative qualitative study because there is "...no single, observable reality" (Merriam, 2009, p. 8), but rather "multiple realities" (Creswell, 2007).

Setting and Sampling Strategies

Setting. Northwest colleges and universities were selected as a starting geographical point for recruiting participants. To assure participants' degree programs were from nationally accredited universities as stated in the criteria, the online directory of the Northwest Commission on Colleges and Universities (NWCCU) was perused. The Northwest Commission on Colleges and Universities is the regional accreditation authority recognized by the U.S. Department of Education to establish accreditation criteria and evaluate institutional effectiveness for the states of Alaska, Idaho, Montana, Nevada, Oregon, Utah, and Washington.

Colleges and universities from the NWCCU list that offered all three degree programs (baccalaureate, masters and doctorates) were prioritized as locations to contact. A matrix was developed that included the name of the institution, the institution's telephone number, a contact person, the date contacted, and the response if a response was received. Once the institution was determined to be amenable to participant recruitment, the respective Institutional Review Board application was completed and returned to the institution with a summary of the study and a flyer that could be distributed through the disability service

center or the graduate admission office. A copy of the introductory email and recruiting flyer are provided in Appendix A.

In conjunction with recruiting from colleges and universities, professional colleagues were contacted and asked if they knew individuals meeting the criteria who might be willing to volunteer for the study. Potential participants found through these contacts were asked to identify the degree-granting institutions for their respective programs. If the institutions fell outside the NWCCU list, the accreditations were then confirmed from the appropriate accreditation body as part of the screening process. The nine participants selected for the study represented six institutions, not all of which were in the Northwest. The names of the institutions have not been identified to help ensure the anonymity of the participants.

Sampling Strategies. Purposeful sampling narrowed the selection of “individuals and sites for study because they can purposefully inform an understanding of the research problem and central phenomenon in the study” (Creswell, 2007, p. 125). Criterion sampling and snowball sampling strategies were used to “purposefully sample” participants for this study.

“Criterion sampling works well when all individuals studied represent people who have experienced the phenomenon” (Creswell, 2007, p. 128). The following criteria were established as requirements for joining the study to assure potential participants had experienced the “phenomenon” of being nontraditional learners with dyslexia pursuing second degrees:

1. Has a diagnosis of dyslexia;
2. Is at least 24 years old;
3. Attends courses primarily part time;

4. Works full or part time;
5. Is responsible for his or her own finances;
6. Has earned one undergraduate degree from a nationally accredited university and is pursuing or has completed a second undergraduate or graduate degree from a nationally accredited university.

Snowball sampling, also referred to as network or chain sampling, is “perhaps the most common form of purposeful sampling” (Merriam, 1998, p. 63). Creswell (2007) shared the *Typology of Sampling Strategies in Qualitative Inquiry* developed by Miles and Huberman that listed snowball sampling as a strategy that “identifies cases of interest from people who know people who know what cases are information-rich” (p. 127). Snowball sampling was used through a network of professional colleagues to alert potential participants about the study. In addition, participants selected for the study were asked to let similarly qualified others know about the study. Contacts with potential participants identified through snowball sampling occurred either by telephone or email.

Criterion and snowball sampling strategies occurred in the same timeframe with no preference given to participants found using either strategy. Of the nine participants who met the criteria for joining the study, four were located through snowball sampling, and five were recruited from NWCCU accredited colleges or universities.

Participant Selection. Deliberate participant selection that results from purposeful sampling “provides more confidence that the conclusions adequately represent members of the population” (Maxwell, 2005, p. 89). Merriam proposed that the number of participants needed “always depends on the questions being asked, the data being gathered, the analysis in progress, and the resources you have to support the study” (2009, p. 80). Lincoln and

Guba (1985) recommended sampling until information reaches a point of saturation or redundancy.

Data Collection

Data “collection and analysis should be a simultaneous process in qualitative research” (Merriam, 2009, p. 169). During the data collection phase of this study, the analysis that simultaneously occurred included but was not limited to how responses related to the purpose of the study, whether these responses merited further exploration, and how these responses might compare with responses in the interviews to follow.

The Instrument. The primary methods of qualitative research data collection include participation, observation, and in-depth interviewing (Marshall & Rossman, 1995). The instrument chosen for this study was in-depth interviewing. The following three types of in-depth interviews are used in qualitative research: (a) structured, (b) semi-structured, and (c) open. The semi-structured interview format was used in this study to seek information through open-ended questions that were specific to the research yet sufficiently flexible to respond to, to further probe, and to access ideas that emerged during the interview. The support for flexibility is based on the assumption that “respondents define the world in unique ways” (Merriam, 2009, p. 90).

In addition, the semi-structured interview is an appropriate data collection instrument when the researcher knows enough about the study to frame the questions in advance (Morse & Richards, 2002). The semi-structured Interview Script with Questions used in this study is available for review in Appendix B.

Interviewer as Instrument. A naturalistic approach embeds the researcher in the setting as the “primary instrument for data collection and analysis” (Merriam, 2009, p. 15).

Merriam (2009) credited the embedded researcher with the capability to respond and adapt to the spoken word as well as nonverbal cues. Maxwell (2005) advised that as the researcher “you *are* the research instrument...and your eyes and ears are the tools you use to make sense of what is going on” (p. 79).

The concept of the interviewer as the “primary instrument” (Merriam, 2009, p. 15) ran parallel with my 20-plus years of human resource experience interviewing and conducting workshops in behavior-based interviewing and Title VII complaint investigations. For example, the initial interview questions were planned in advance to serve an intended purpose. Active listening ensured that the interviewer heard and understood the participant’s experience and recognized when answers warranted follow-up questions to clarify or to explore other avenues of information. Because we bring our own biases into any interaction, recognizing and setting these aside was important to open and nonjudgmental listening. Accurate documentation supported sound analysis and conclusions. The interviews were conducted with an ethic of care and respect to earn the participants’ trust and to provide the opportunity for a favorable impression of the process.

Piloting the Instrument. Creswell’s (2007) recommendation to pilot the interview questions and procedures was followed to determine the approximate length of time required for an interview, to refine the questions, and to adapt the research procedures. The two pilot interviews resulted in minor revisions to the interview questions and provided an opportunity to practice managing elements of the collection and analysis process before conducting interviews for the study.

Informed Consent. Participants who met the criteria for the study and who expressed a willingness to proceed with an interview were emailed a copy of the Informed

Consent Form (see Appendix C) to review, sign, and return. The Informed Consent Form with the researcher's signature and contact information was provided to each participant well in advance of the interview to provide time for a thorough review.

Upon meeting the participant in person or by telephone, the Informed Consent Form was reviewed, and the participant's willingness to continue was confirmed. Each person was reminded of his or her right to discontinue the interview at any point in the process or to refrain from answering any questions. All participants affirmed their willingness to continue with the interviews. The participant was given a predetermined letter of the alphabet and asked to identify a pseudonym that started that letter. The pseudonym chosen by each individual became the label for all documentation pertaining to his or her data and served to maintain confidentiality.

The Interview. The interviews were conducted in person or by telephone and digitally recorded. Recording "ensures that everything said is preserved for analysis" (Merriam, 2009, p. 109). Hand-written notes were also taken as a backup to the digital recording and included reactions to answers, perceived importance of responses, and served as a means of managing time. The recorded interviews were saved to a password-protected computer and the digital recordings erased. In-person interviews took place in mutually acceptable locations that were free of distractions and suitable for effective digital recording.

A copy of the transcribed interview was emailed to the participant to review and to confirm that the content was an accurate reflection of the interview. Participants were encouraged to correct, clarify, or provide additional comments to the transcript by email. The opportunity to confirm, clarify, and correct the data represented member checks, a "...common strategy for ensuring internal validity" (Merriam, 2009, p. 217).

Field Notes. “Participant observation is primarily the researcher’s take on social action whereas the interview is the participant’s take” (Saldaña, 2011, p. 4). Documented observations are referred to as field notes. Merriam (2009) advised that the more complete the data from the interview and the observations, the more easily the data can be analyzed. Furthermore, field notes represent “preliminary data analysis” (Merriam, 2009, p. 131) and exemplify the earlier noted counsel that design components occur simultaneously, such as data collection and data analysis (Creswell, 2007; Maxwell, 2005; Merriam, 2009).

During and upon conclusion of each interview, descriptive field notes were made that included observations, salient quotes, as well as reflections that could be incorporated to provide a reader with a sense of being present during the interview.

Data Management. A research notebook was developed to store the initial data. As the data was transcribed and amenable to electronic storage, it was transferred to a desktop computer using a designated thumb drive as backup. Based on Creswell’s recommendations (2007), the following steps were taken to manage the data: (a) material was routinely backed up, (b) high-quality tapes were used for audio-recording, (c) filing and storage systems were developed to accommodate “field notes, transcripts, and rough jottings” (p. 142), and (d) the anonymity of participants’ names was protected by each person’s pseudonym.

In conjunction with a system for managing the data, the history of the project was documented in a research journal with a running log of interactions to serve as an audit trail that “describes in detail how data were collected, how categories were derived, and how decisions were made” (Merriam, 2009, p. 223).

Data Analysis

Following Merriam's (2009) recommendation, each interview transcription and associated field notes received coding immediately after the interview as a formal protocol to support accuracy, analysis, and write-up of the findings. Similar to a label on a file folder, the coding represented a shorthand designation of issues pertinent to the study and facilitated ease of retrieval. This initial open coding followed the recommendation of Strauss and Corbin (2007) to read the transcribed interview and conduct a line-by-line analysis to identify ideas, concepts, and issues. Further refinement occurred through axial coding, also referred to as analytical coding, the "coding that comes from interpretation and reflection on meaning" (Richards, 2005, p. 94). Axial coding enabled the data to be rearranged "into categories that facilitate comparison between things in the same category and aid in the development of theoretical concepts" (Maxwell, 2005, p. 96).

As recommended by Merriam (2009), category development adhered to the following criteria (pp. 185-186):

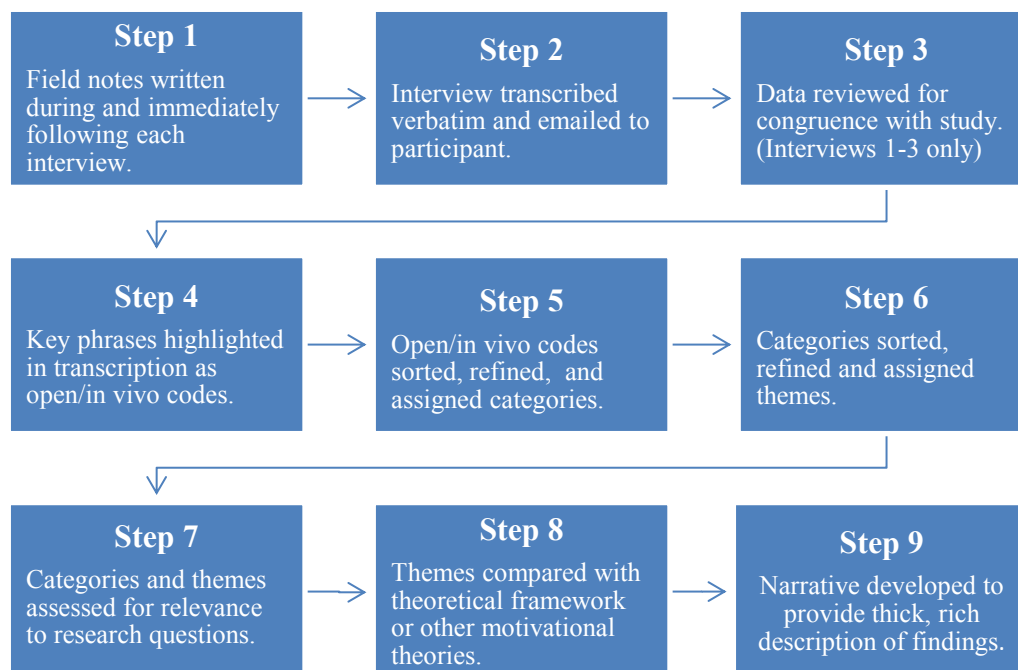
1. Categories are responsive to the purpose of the research;
2. Exhaustive categories assure that all data collected and determined to be relevant and important fit within a category or subcategory;
3. Mutually exclusive categories assure that each unit of data has no overlap into any other category;
4. Categories should be sensitizing thus enabling readers to identify from the category label the type of information that can be found within the category;

5. Conceptually congruent categories place categories at the same level of abstraction similar to an outline in which Roman numerals I, II, and III represent the same level.

As the open coding revealed categories or subcategories of themes, the data was merged as appropriate for further analytical coding. This inductive process continued until saturation occurred and no further categories appeared. Conclusions drawn from the analysis are covered in Chapter Five. The use of a “rich, thick description” supported external validity thus enabling readers to “determine the extent to which their situations match the research context, and hence, whether findings can be transferred” (Merriam, 2009, p. 229).

From the perspective of Bloomberg and Volpe (2012), the qualitative analysis process “is somewhat of a stepwise procedure that involves a blend of approaches” (p. 138) used across qualitative genres. The “somewhat of a stepwise procedure” is indicative of the need to revisit previous steps “in an ongoing effort to narrow and make sense of the data” (p. 138). Similarly, Creswell (2007) described this as a data analysis spiral whereby the researcher moves in circles rather than a fixed linear manner beginning with data management and concluding with a narrative (2007).

Diagram 3.1 Analysis Process illustrates the step-wise process used for this study. The terms “sorted” and “refined” in step 5 required revisiting the open/in vivo codes in step 4 and sometimes within the transcribed interview to confirm an understanding of the context in which the responses were made. Each step of the process has been described in further detail.

Diagram 3.1 Analysis Process

Step 1: Field notes. As advised by Merriam (1998), simultaneous collection and data analysis helped focus the data, prevented repetition, and helped the researcher avoid becoming overwhelmed with the volume of data. Further following Merriam’s counsel, immediately following each interview, general field notes as well as specific notes were written for the following four areas:

- a. potential themes that resonated from the participant’s words and emotive cues;
- b. refinements needed in the interview process, such as revising the planned and potential follow-up questions and better management of time and resources to strengthen the focus and collection of substantive data;
- c. reflections about each participant’s responses and the responses in conjunction with other participants’ responses;
- d. questions that warranted a return to the literature previously reviewed and/or the need to search for additional literature.

The field notes written after each interview developed the foundation for subsequent data collection and analysis and guided the determination of what had "...been learned and what you still need to find out" (Rubin & Rubin, 2005, p. 202). In addition, the notes helped in "preparing and organizing the data...then reducing it into themes through coding and condensing the codes" (Creswell, 2007, p. 148) which proved the most pertinent to completing steps 4 through 7 in the Diagram 3.1.

Step 2: Interview transcribed. Each recorded interview was transcribed verbatim immediately after the interview. This afforded the first opportunity to listen for cues in participants' responses that may have been missed during the interview. In addition, proofreading the transcription prior to sending it to the participant was the *first* read and opportunity to begin highlighting salient responses.

The transcription was sent to the participant as an email attachment. Each participant was thanked for sharing his or her experiences and encouraged to communicate if the transcribed interview contained any discrepancies, areas in need of further clarification, or additional thoughts considered beneficial to the study. Line numbers at the left margin of the transcribed interviews provided participants a convenient way to refer to an area in need of clarification and enabled a line-by-line review for open codes. Each transcription included a cover page labeled with the participant's pseudonym, the date, time, and place of the interview, as well as whether the interview occurred in person or by telephone.

Step 3: Congruence review. "Generating categories of data to collect, or cells in a matrix, can be an important focusing device for the study" (Marshall & Rossman, 1995, p. 111). Adhering to this suggestion, field notes and the transcription of the first interview were scanned for information congruent with the characteristics of self-determination theory and

transformative learning theory, the two theories designated as the framework from which to examine all participants' experiences and motivations. The field notes and transcriptions from the second and third interviews were reviewed in the same manner. The experiences shared in all three interviews affirmed the likelihood of collecting data consistent with the purpose of the study. This matrix was put aside after the first three interviews to assure the analysis process remained open to "unusual or serendipitous" data (Marshall & Rossman, 1995, p. 111) and to "additional codes emerging during the analysis" (Creswell, 2007, p. 152). Neither codes nor categories were preconceived but developed solely from data in the interviews.

Step 4: Open/in vivo codes. In vivo codes are "the exact words used by participants" (Creswell, 2007, p. 153). Transcriptions were re-read and key phrases highlighted as prospective open/in vivo codes. Pertinent field notes were transferred to margins of the transcripts. Margin note examples such as "*self-description matches definition of nontraditional learner*" and "*similar to [participant pseudonym] L's experience*" assisted in later analysis.

Open/in vivo codes with the accompanying transcription line numbers were transferred to colored notecards and labeled with the participant's pseudonym. The notecard color and pseudonym initially provided a method for more linking responses back to a participant's transcript if necessary.

Once all transcripts had been read and codes transferred to notecards, the codes and phrases on the notecards were read and reduced to one word or a simple phrase and listed in an Excel spreadsheet under the heading of the respective participant's pseudonym. Codes within each column were sorted alphabetically. The spreadsheet was printed and posted as a

wall chart. When a question arose about a code, the spreadsheet enabled another means of conveniently searching across columns to identify the participant associated with the code and return to his or her notecard or transcript for clarification or confirmation.

Step 5: Categories. Pseudonym headings were removed from the Excel spreadsheet created in step 4, and all key words or phrases from the open/in vivo codes were merged into one column. This column was sorted alphabetically and duplicated words deleted. Each open/in vivo code was then assigned an axial code/category and resorted.

Step 6: Themes. The resorted categories were reviewed for *mutual exclusivity*, placed in *conceptually congruent* categories, and further sorted and refined. Once no further categories appeared, the results were further reviewed for emergent themes. The resulting categories and themes of this step are listed in alpha order in Table 3.1 Categories and Subsequent Themes.

A clear distinction was possible with some categories and themes; however, in other instances, a review of in vivo codes and transcripts was necessary to confirm the context of the category. Using responses from two participants exemplifies how distinctions were made among the categories and themes of *Aspirations*, *Career Objectives*, and *Education Objectives*.

- From a young age, Andecite knew he wanted to be “an expert in something.” As an adult, he took classes that interested him, and he volunteered his spare time and effort to research projects related to his interests. He said, “It was just a quest for knowledge, wanting to know something that well that I could have a PhD. It wasn’t the paper; it was more just the knowledge.” In Andecite’s “quest for knowledge,” he accumulated 258 credits before completing an undergraduate

degree in geology. Many of the credits beyond those needed for his undergraduate degree contributed to his subsequent degrees.

Within the context provided in his interview, Andecite's "quest for knowledge" related to the category of *intellectual curiosity*. His desire to be "an expert in something" related to the category of *competence*. The competence and intellectual curiosity categories fell under the theme of *Aspirations*. Applying his credits toward a specific degree was associated with the category of *degree focused* under the theme of *Education Objectives*.

- June aspired to teach children with learning disabilities. Early in the interview she said, "When you graduate with your [undergraduate] degree in education—at the time—you had to have a master's within six years." She later shared, "I knew that I wanted to help others who struggled, and I did not want them to go through the struggles that I did."

June's desire "to help others who struggled" fit the category of *help others* associated with the theme of *Aspirations*. Her words and the compassion and emotion expressed in June's voice supported the assigned category as well as *Aspirations*. "You had to have a master's" was categorized as *degree focused* and the theme of *Education Objectives* while her goal to become a teacher was categorized as *employment* with the theme of *Career Objectives*.

Table 3.1 Categories and Subsequent Themes

Categories →	Themes
<ul style="list-style-type: none"> • Advocating for accommodations • Assistive technology 	<ul style="list-style-type: none"> • Extended time • Quiet exam location <p>1. Accommodations</p>
<ul style="list-style-type: none"> • Competence • Desire to contribute • Help others • Intellectual curiosity 	<ul style="list-style-type: none"> • Preferences • Problem solving • Purpose • Role model for others <p>2. Aspirations</p>
<ul style="list-style-type: none"> • Employment • Options 	<ul style="list-style-type: none"> • Promotable • Resume builder <p>3. Career Objectives</p>
<ul style="list-style-type: none"> • Academic • Dyslexia specific • Handwriting • Reading 	<ul style="list-style-type: none"> • Sacrifices • Time conflicts • Writing <p>4. Challenges</p>
<ul style="list-style-type: none"> • Academic probation • Class format • Credit transfer denied • Expulsion 	<ul style="list-style-type: none"> • Helpful • Hindrances • Self-paced <p>5. Educational Experiences</p>
<ul style="list-style-type: none"> • Defense against dyslexia • Degree focused • Employment focused • Life changing events 	<ul style="list-style-type: none"> • Professional requirements • Skill development • Family expectation <p>6. Education Objectives</p>
<ul style="list-style-type: none"> • Faculty • Family • Friends 	<p>7. Supportive Others</p>
<ul style="list-style-type: none"> • Approach to learning 	<p>8. Learning Style</p>
<ul style="list-style-type: none"> • Births • Deaths 	<ul style="list-style-type: none"> • Marriages • Other <p>9. Life Changing Events</p>
<ul style="list-style-type: none"> • Positive • Negative 	<p>10. Psychological States</p>
<ul style="list-style-type: none"> • Proactive and reactive strategies and the use of techniques and tools to support academic performance 	<p>11. Strategies and Tools</p>
<ul style="list-style-type: none"> • Accomplishments • Career success • Recognized abilities and talents 	<p>12. Successes and Strengths</p>

Step 7: Relevance to research questions. Categories and themes were assessed in relationship to the following research questions:

1. What are the factors that motivate nontraditional learners with dyslexia to pursue second degrees?
2. In what ways do self-determination theory, transformational learning theory, or other motivational theories explain the motivations of nontraditional learners with dyslexia to pursue second degrees?

The Merriam-Webster online dictionary definition of *motivate* as a verb is “to give (someone) a reason for doing something.” This definition of motivation was the basis for determining whether the codes and subsequent themes provided a relevant reason for the participant to pursue a second degree. This simple approach also helped preclude premature decisions about the basis for a motivational factor prior to a thorough analysis. The following themes were judged to be relevant motivational factors for participants in this study to pursue second degrees:

1. Aspirations;
2. Career Objectives;
3. Education Objectives;
4. Life Changing Events.

The themes determined to be directly relevant to the first research question were then juxtaposed with the second research question, “In what ways do self-determination theory, transformational learning theory, or other theories explain the motivations of nontraditional learners with dyslexia to pursue second degrees?” The issue to be resolved in examining the themes with the second question was whether the motivating themes of *Aspirations*, *Career*

Objectives, Education Objectives, and Live Changing Events could be explained by self-determination theory, transformative learning theory, or other motivational theories. Yes or no?

Step 8. Theme and Theory Comparison. The emerging themes were considered in relationship to (a) self-determination theory (b) transformative learning, and (c) other motivational theories that may have appeared in the literature review.

Step 9. Develop the narrative. The narrative was composed of rich, descriptive detail and included the words of those who had lived the experience to bring the reader into their worlds. This narrative is provided in Chapter Four.

Limitations

Individuals who volunteered and were selected for this study shared experiences that were uniquely their own. The literature review revealed that some students with learning disabilities are reluctant to identify themselves as having disabilities (Denhart, 2008; Mortimer & Crozier, 2006). It is unknown how the conclusions presented in this study may have differed if participants had included nontraditional learners with dyslexia who have chosen not to self-identify.

The lack of agreement around a common definition of dyslexia had the potential to complicate how some students identified their condition. Under federal law, dyslexia falls under “specific learning disability” but is listed under a broader umbrella of high incidence disabilities with other disabilities. “Learning disabilities” (LD) is the umbrella category under which the majority of students who have dyslexia are classified by their colleges or universities. “Developmental reading disorder” is yet another description. To address this potential disability identity confusion, the definitions for dyslexia used by the International

Dyslexia Association (IDA) and National Institute of Health (NIH) were adopted for this study to address questions that might arise from volunteers or others interested in the study.

Delimitations

The scope of the study was limited to participants who met specific criteria that included a dyslexia diagnostic, nontraditional learner characteristics, and enrollment in degree programs provided by nationally accredited institutions. This had the effect of narrowing the focus and supporting the transferability of findings to the greatest extent possible.

As a means of adhering to and refining the research process, two pilot interviews were conducted to test the interview questions, to coordinate audio recording, and to assess the transcription, coding, and data management process.

Validity, Reliability, and Ethical Considerations

Validity and reliability have often been the standards used to evaluate qualitative research (Bloomberg & Volpe, 2012); however, Merriam (2009) noted the ongoing debate among qualitative researchers about whether the terms *validity* and *reliability* should be replaced with *credibility*, *dependability*, *transferability*, and *confirmability*. Traditional concepts of validity have been concerned with whether a study could be replicated and then generalized to a broader population, while reliability has related to the consistency of a process and interpretation of the data.

Internal Validity. Given the natural setting in which qualitative research occurs, internal validity relies on the logical analysis of the results (Wiersma & Jurs, 2005). The results are valid/credible if the findings accurately reflect the world being described and “ring true to readers, practitioners, and other researchers” (Merriam, 2009, p. 210). Creswell

(2007) recommended that the research look for identification of critical elements and plausible interpretations rather than an ultimate truth to determine validity.

Rigor. Specific to this study, rigor was planned through a systematic, thorough process that included accurate documentation, sound data management, and strategies that promoted validity and reliability. These strategies included (a) member checks, (b) triangulation of data, (c) rich, thick descriptions, (d) researcher reflexivity, and (e) an audit trail.

In support of accurate documentation, each participant's interview was digitally recorded and backed up with hand-written notes, then transcribed. The transcribed interviews were sent to participants for their review and confirmation and/or clarification and comment about the data. Providing each participant the opportunity to assess the accuracy of the transcribed interview served as a member check.

Maxwell (2005) advised that the member check strategy for ensuring internal validity is "the single most important way of ruling out the possibility of misinterpreting the meaning of what participants say and do and the perspective they have on what is going on, as well as being an important way of identifying your own biases and misunderstanding of what you observed" (p. 111).

The triangulation of data occurred through comparing and cross-checking the data collected from (a) the transcribed interviews, (b) member checks with participants, and (c) the thick, rich descriptions of the findings.

Reliability. Reliability, the extent to which there is consistency in findings, was provided through an audit trail that reflected ongoing documentation and demonstration of a consistently methodical and rigorous research. Consistency in findings does not mean that

all participants' experiences will be the same. Similarities and differences were anticipated to occur among participants; however, the reliability of the data was dependent upon the accurate compilation and analysis of the participants' stories that then revealed generalizations that could prove helpful to others. This generalizability created the external validity.

Reflexivity. Maxwell (2005) referred to reflexivity as “the fact that the researcher is part of the social world he or she studies” (p. 82). The willingness of participants to provide the depth and breadth of experiences that would enable a complete and clear interpretation of the phenomenon depended in part on the skill of the interviewer to build a working rapport and to show respect and appreciation for each participant, for his or her time, and for the inconvenience to join the study.

As yet another strategy for promoting validity, reliability, and ethical pursuit of the data, I acknowledged that my entrance into the study was from a position of advocacy by way of exposure to dyslexia through family members and college students. Potential prejudices and assumptions had to be bracketed or set aside (Merriam, 2009) so that participants' experiences could be heard from my frame of reference and yet adhere to Creswell's (2007) recommendation to “keep a focus on learning the meaning that the participants hold about the problem or issue, not the meaning that the researchers bring to the research” (p. 30).

I completed The National Institutes of Health web-based training course entitled “Protecting Human Research Participants” and an Institutional Review Board Application prior to contacting participants and collecting data. The application was approved by the University of Idaho's Office of Research Assurances Institutional Review Board. A copy of

the letter of Exempt Certification for the project, number 13-294, is available in Appendix D.

Conducting an ethical study involves more than receiving approval for the study. Anticipating that some experiences associated with dyslexia could bring up painful memories, interview questions were developed that served the purpose of the study and provided ample latitude for a participant to only discuss what he or she was comfortable discussing. Pseudonyms were chosen by participants to protect their identities. The Informed Consent Form was provided well in advance of an interview for the reading convenience of the participant, and I disclosed my personal and professional interest in the topic as an educator committed to supporting students with dyslexia.

Finally, the discussion posed by Marshall and Rossman (1995) about the regard for reciprocity and ethics resonated as the need to conduct the study in a respectful, sensitive manner that was reciprocal to the trust participants showed in taking the time to share personal, candid, and sometimes painful experiences to further their educations.

Summary

Chapter Three provided the rationale for why this study was appropriate for a basic, interpretative qualitative approach and explained the methodology in sufficient detail to support replication. The framework chosen for this study consisted of self-determination theory and transformative learning theory. Self-determination theory explains the need humans have for competence, autonomy, and relatedness and suggests that motivations range from intrinsic to extrinsic and are influenced by social factors. As defined by Mezirow (1994a), transformative learning is “a social process of construing and appropriating a new or revised interpretation of the meaning of one’s experience as a guide to action” (p. 222-

223). Specific to this study, the pertinent *action* of interest was the motivation to pursue a second degree. The analysis described in this chapter was the basis for the findings in discussed in Chapter Four.

CHAPTER FOUR: FINDINGS

Introduction

The purpose of this basic, interpretive qualitative study was to explore the factors that motivate nontraditional learners with dyslexia to pursue second degrees. I believe that by better understanding this phenomenon, learners with dyslexia will be encouraged to persist with their studies and those who support and advocate for their success will be better informed. The “multiple realities” that emerged from the data analysis as concepts, themes, or theories enabled a holistic account of the multiple perspectives and complexities within the phenomenon (Bloomberg & Volpe, 2012; Creswell, 2007; Merriam, 2009).

Eight to twelve participants were sought for this study. Fourteen people responded within the planned timeframe. Each person was contacted by email or telephone to confirm his or her willingness to participate and to assess whether the potential participant met the selection criteria for the study. Recruiting was discontinued once nine participants had been screened and selected.

This chapter provides an account of the nine participants’ experiences and begins with an introduction by way of their demographics and brief profiles. The demographics and profiles are followed by a section entitled “The Four,” an overview of the four volunteers who did not meet all of the criteria for the study. I found their preliminary information compelling and noteworthy for the context it added to the study. The “Findings” section is made up of four parts: (a) themes that were factors of motivation, (b) themes that supported motivation, (c) themes that deterred motivation, and (d) themes related to activities participants engaged in to support their success as learners. The chapter concludes with a summary of the findings.

Demographics

Neither gender, ethnicity, nor the field of study influenced the recruitment or selection of participants. Of the nine participants who met the criteria to join the study, two were female and seven were male. These participants ranged in age from 28 to 77 and represented eight disciplines. During the interviews, participants shared backgrounds that ranged from blue collar to affluent upper-middle class. All but one of the participants were married.

Table 4.1 Participant Demographics presents the participants in alpha order by their pseudonyms and provides the gender, age, degree, discipline of most recent degree currently being pursued or completed, whether the discipline of the pursued or completed degree is related to the undergraduate degree, and the approximate year of dyslexia diagnosis. The approximate year of dyslexia diagnosis was included to assess whether there might be differences or similarities in participants' experiences based on how the understanding of dyslexia has developed over time. Based on the experiences that were shared, the timing of the diagnosis did not appear to have any bearing on anyone's motivation.

Table 4.1 Participant Demographics

Pseudonym	Gender	Age	Degree(s)	Discipline	Pursued Degree(s) Related to Undergraduate Degree?	Approximate Year of 1st Dyslexia Diagnosis
Andecite	M	30	2 nd Doctorate	Geology	Yes	1989
Chuck	M	45	Master's	Engineering	Yes	1978
Dan	M	54	2 nd Bachelor's	Business	Yes	1968
Evan	M	77	2 Master's Doctorate	Psychology	Yes	1959
Gary	M	42	2 Master's Doctorate	Psychology	Yes	1985
Hemingway	M	50	Master's	English	No	1988
June	F	51	Master's	Education	Yes	1971
Katherine	F	64	2 nd Doctorate	Law	No	1977
Lauren	M	28	Master's	Architecture	Yes	1992

Participant Profiles

In Super's lifespan perspective of career development, people progress through five stages that include: growth, exploration, establishment, maintenance, or disengagement (Kosine & Lewis, 2008). The stages generally, but not necessarily, occur chronologically. During the growth stage, children first begin to think about the future. People in their teens to mid-twenties enter the exploration stage through exposure to various occupations at school, with part-time work, or as volunteers. In the establishment stage, those in their mid-twenties to mid-forties have often chosen a career and may work to enhance their upward mobility. This is followed by the maintenance stage when people in their mid-forties to mid-sixties have either reached a plateau in their careers or are investing effort to stay current or to enrich their careers. During the disengagement stage, thoughts turn to retirement.

The experiences participants provided about their reasons for returning to school reflected Super's career development stages with the exception of the disengagement stage. For example, Lauren, age 28, and Andecite, age 30, were the two youngest participants and had most recently become parents. Both had explored different occupations and majors. Three in established careers, Chuck, Gary, and Hemingway, viewed education as a way to provide options within their current careers or to leverage their experience into other areas of interest. Dan and Katherine were reinventing themselves with new skills. Retirement was possible but of no interest to Dan, Katherine, and Evan. Finally, June, Hemingway, and Katherine had taken advantage of continuing education opportunities that were of a professional or personal interest that may or may not have been degree related. The following profiles are presented in order of age beginning with Lauren, the youngest participant.

Lauren, age 28. Lauren grew up in a small rural community. During summer breaks while in high school, Lauren worked construction jobs and discovered that he enjoyed the hands-on experience of building and remodeling homes. He decided to take an AutoCAD class and found that contrary to his high school English classes, he enjoyed AutoCAD. He continued to work in the construction trade after high school until he took a two-year break from construction to fulfill a mission for his church. Upon returning from his mission, he enrolled in a two-year associate degree program in drafting. He also married.

Observing the recession's impact on the employment opportunities in his community and becoming a parent, Lauren and his wife assumed a circumspect view of their future. The two-year associate's degree in drafting became a four-year construction management degree. A less than satisfactory construction management internship led Lauren to revise his degree

program to the related field of architecture. He transferred to a different university and graduated Magna Cum Laude with an undergraduate degree in architecture. At the time of his telephone interview, he had just enrolled to earn his master's degree in architecture.

Andecite, age 30. When asked as a child what he wanted to be when he grew up, Andecite answered that he wanted to be a PhD. He didn't know exactly what "PhD" meant, but he knew it had something to do with being an expert. "There are a lot of teachers in my family," so going to college was expected; however, another influence was exposure to his mother's professional colleagues—engineers and scientists from around the world who often became family friends. "I got to know them as normal people." His grandfather encouraged him to take advantage of the family social opportunities to engage with these experts and find out as much as he could about their fields of expertise. Much to Andecite's amazement, one of his questioning sessions resulted in a special gift—a flight manual for a space shuttle.

His father's background in fire science introduced him to firefighting and Andecite's first career. He worked as a firefighter in the summer, and attended school and volunteered on research projects that matched his interests in volcanology and geothermal technology during the winters. He avoided student loans by applying the "pay as I go" plan. Firefighting fit well with an undergraduate degree in forestry, but information technology captured his attention followed by an interest in geology. At the time of the telephone interview, Andecite was involved with a research team applying his most recent doctorate in volcano seismology and enrolled in a second doctorate program focused on small-scale cool geothermal technology.

Gary, age 42. At the time of the telephone interview, Gary had just celebrated six months of marriage. He had earned two master's degrees and was pursuing his doctorate in

clinical and community psychology. These educational achievements were in stark contrast to advice given to his mother at a parent-teacher conference that Gary should learn a trade because he was not smart enough to attend college. “Whenever I have an accomplishment, some education thing, my mom will bring that up.”

His empathy for others began early and was applied as a volunteer working in AIDS prevention projects out of high school and during his years as an undergraduate. He described change as a constant in his life. As the AIDS epidemic evolved with the success of new medications, so did Gary’s career. He moved more into public health in general. “I have an outsider perspective from many different parts of my life. I don’t come from a perception that I necessarily know what’s happening with people...I have the experience of knowing what it feels like to be vulnerable.” Gary believed that having lived his life as openly gay from age 18 and being a bi-racial person with dyslexia and ADHD had provided him with a unique and broad perspective. He credited his experiences as crucial to his effectiveness in the health and social work profession.

Gary left an established career and took a significant cut in salary to return to college for his doctorate. “It’s kind of a new investment for me. It’s been really a good choice.” He continued to help others through his involvement with research and training on suicide prevention.

Chuck, age 45. Chuck was first diagnosed with dyslexia in the fourth grade and then twice again during college to access accommodations. Although he struggled with the challenges of dyslexia and dreaded being called on to read aloud, his grades merited a scholarship for tuition and books and earned his membership into the honor society at his college. Television and broadcast journalism appealed to him for what he perceived to be an

emphasis on visual skills, an area in which he believed he could excel. “By the end of five years, I had two certificates of completion, two associate degrees in science, and an associate degree in art.” “I didn’t know what I wanted to do and would have a degree almost finished and then discover something else.”

He transferred from a community college to a four-year university and completed his undergraduate degree in radio, television, and film with an emphasis in multimedia production. His undergraduate degree opened doors to his perceived dream job. The job proved to be less than imagined, however, he discovered that he had an aptitude for repairing computers and transitioned from the television and broadcasting industry to the high tech industry. Married and a parent, he became concerned about the volatility of the tech industry. “You’re always worried about getting laid off from month to month.” Influenced by his wife’s encouragement, her master’s degree, as well as those around him with master’s degrees, he garnered the courage to give education a second chance. At the time of our interview, he had just earned his master’s degree in instructional design and performance technology. “I like this idea of creating instruction because I get to involve my visual media. I get to help people.” He was also considering a doctorate.

Hemingway, age 50. Hemingway liked challenges from an early age. One example occurred at age 15 when he and a friend decided to break the Guinness record for time spent roller skating. Their 12-hour skate didn’t break the record, but it made the local news. An industrious child, he had a paper route at age eight and continued to work odd jobs after school and during the summers thereafter. He found school discouraging. “I couldn’t pronounce my R’s, I had trouble sounding out the words, and I often skipped lines. It probably didn’t help that I went to several different grade schools.” He started high school at

a small, private school; however, this was interrupted when his family moved. “After three more high schools, I stopped attending and finished my senior year with an independent study.”

He enrolled in a forestry academy where he was introduced to firefighting. His athletic ability and work ethic earned him a position on a hotshot fire crew. After the fire season concluded, he enrolled at a community college. Disappointed with his grades, he sought the services of a testing facility and discovered that he had an above average IQ and dyslexia. Two winters as an apprentice wooden boat builder helped build his confidence. “I felt pretty good about myself and the skills I had learned.” With renewed confidence, a better understanding of his learning difficulties, and his wife’s encouragement, he attempted college again. He graduated with an undergraduate degree in wildland fire management and was accepted into a master’s program. At the time of the interview, he had a GPA of 3.7 and had earned 33 credits toward the 48 credits required for a Master of Fine Arts in creative writing.

June, age 51. In recalling her grade school years, she described herself as “one of those kids who sat in the back and did not want to be recognized.” She grew up in a large family, and because her father was in the military, they frequently moved. Her mother recognized that she was struggling with her reading and math and had her tested. “I was in fourth grade...when I was labeled “learning disabled” which led to attending special education classes. In addition to special education, June attended summer school and had speech therapy sessions. “I had to put chains and marbles in my mouth to do motor exercises with my tongue.” As she continued to struggle throughout high school, her mother told her, “Maybe you don’t need to go to college,” but the prospect of being the only one in her large

family who might not go to college spurred her on. College was not easy. “I struggled...I quit.” She got a job at a fast food restaurant and quickly become a manager responsible for training new employees. “I loved doing that, but after six months...I knew I wanted to go back to school.”

When June returned to college, her mother taught her to advocate for herself as she encountered professors who were reticent about allowing accommodations. She also took fewer classes to avoid becoming overwhelmed. As a nontraditional student continuing on to earn her master’s degree, her classes needed to accommodate her work and family schedule. She took one class during the school year and then two classes every summer. She discovered that her master’s degree was still not sufficient to teach reading so she continued with training to be certified in language therapy. She credited several people for being instrumental in her success, including her husband for supporting and recognizing how hard she has worked to successfully pursue her life’s passion “to help others who struggled.”

Dan, age 54. Dan’s upper middle class background afforded him the opportunity to attend private boarding schools with a curriculum developed for students with dyslexia and other learning disabilities. He posed that it was also possible his parents “just wanted me out of the house.” He implied a tendency toward the mischievous as in “Bart Simpson [cartoon character known for his pranks and delinquency] dreamed of being me.” One such example was the curious incident of a professor’s Fiat Spyder being placed on a floating dock and pushed out with the tide. His energy was eventually channeled in a military career. As result of his physical fitness and near perfect ASVAB (Armed Services Vocational Aptitude Battery), he was recruited to join Special Forces, the elite military unit tasked with operations in unconventional warfare, special reconnaissance, and counter-terrorism.

After completing his military commitment, he enrolled in college and earned a degree in mechanical engineering. He had a sufficiently lucrative career as a contract engineer that he retired early and made a living as a day trader. At the time of our in-person interview, he was reinventing himself, managing his post-traumatic stress disorder to the extent possible, and looking forward to a significant but less stressful career applying his second degree, supply chain management. “My number one concern right now is to become a useful member of society.” At the interview, he provided documentation to back his successes and condition. Exhibiting the conflicting characteristics of gregariousness and anxiousness matched a similar contrast in the doubts he expressed about his intellectual ability and yet his 4.0 average.

Katherine, age 64. Her love of learning was cultivated at an early age by parents and a grandmother who read to her every night. Her grandmother’s idea of entertaining her was to memorize poems together, an activity that yielded future benefits. “My ability to memorize has probably gotten me through school.”

Her careers had included veterinary medicine, accounting, and other jobs as well, “things I should have done before I went to school—drove truck, worked in Alaska on a fishing boat, worked in a logging camp. I had adventures.”

She had no interest in retiring. “I can think of nothing worse than retiring to bake chocolate chip cookies for my grandchildren.” She envisioned her future career, learning adventure, and third degree will enable her to “go tilt windmills for people who have no one else to call.” At the time of our telephone interview, she was a full-time law school student and “working during the summer as an intern for a civil rights attorney.” Her decision to attend law school required that she and her husband split their household and only see one

another every three to four weeks. In spite of living apart from her husband “in a crappy student apartment with my bossy 16-year old cat,” Katherine was having a good semester. “I like the classes. I like the instructors. I’ve liked learning this stuff.”

Evan, age 77. Whether or not Evan would attend college was not a topic for debate. He father insisted and supported his son as a traditional student for Evan’s first four years in college as he earned an undergraduate degree in psychology with a minor in sociology. The opportunity to earn his master’s degree in theology at a prestigious Ivy League school was a source of pride for his father but soon became a source of discomfort for Evan. “There was so much wealth there, and here I come from this blue collar family, and while we were not poor, we were clearly blue collar and middle class. I was out of place there.” On the positive side, it was at this university that a professor noticed a discrepancy in Evan’s work and arranged to have a learning specialist meet with him. As a result of the meeting, Evan learned that he had dyslexia. “I can’t tell you how relieved I felt ... I knew there was something wrong, but I thought it was just because I had a low IQ.”

He earned his master’s in theology and was assigned his first church only to soon discover that he was not prepared to meet the counseling needs of his parishioners. This realization led to a third degree, a master’s in psychology and a career transition out of the ministry to what has been his life’s work as a marriage and family counselor. He continued his education and earned a fourth degree, a doctorate in psychology. Married to his life and business partner, Evan is a father, an accomplished musician, and world traveler. In looking back over his life, he concluded, “I could never have imagined that my life would have been this good.”

The Four

Four potential participants did not meet all of the criteria to join the study; however, I concluded that each person's situation was noteworthy. One met all the criteria for inclusion in the study with one exception; she was not enrolled in a second degree program. Her passion for music had been apparent at an early age when she demonstrated the ability to hear a piece of music and then play it by ear. Reading didn't come as easily. Tutors throughout her education helped to varying degrees. Her parents supported her development by sending her to schools and summer camps for learners with dyslexia. Determined to pursue an area that played to her strengths, she chose a prestigious college with international renown for its rigor in preparing people for careers in the music industry. She graduated with a music major applicable to film scoring, video game sound scoring, and other professions in the music industry. At the time of the telephone interview, she had just returned from performing internationally and had several projects in queue. When asked about her intentions to return for her master's degree, she said, "If I went back for another degree, I might do it in music business or film editing, which I enjoy. As for now, I'm focused on my career."

Not everyone with dyslexia has been diagnosed, and the cost can be prohibitive for some. An individual earning her master's degree had been advised by a professor that she might be dyslexic. She did not have a dyslexia diagnosis and volunteered for the study with an expectation that participation in the study might include a diagnosis. When she learned that a diagnosis was not part of the study, the cost and time to qualify for the study dissuaded her interest in continuing as a participant. According to the literature review, assessments can range in cost from \$500 to \$9,000 (GAO-12-40, p. 19), adding to the cost

of an education. The lack of a diagnosis, however, had not prevented this potential volunteer from progressing in her degree program nor had it prevented her from pursuing her personal goals.

Another potential participant had sufficient credits to fulfill the requirements for his undergraduate degree; however, he had chosen to delay graduating to add three minors in related fields of study. Minor in other fields allows a student to explore areas of interest, to earn credits that can apply to a specialized graduate degree, or to add professional credentials to a resume when searching for employment.

Lastly, a fourth person who planned to start law school encountered a barrier when she was denied accommodations to take the Law School Admission Test (LSAT). The litigation was unlikely to be resolved in time for her to participate in the study. She was one among many who have been denied accommodations by the Law School Admission Council (LSAC), the nonprofit, private corporation that administers the LSAT. In May 2014, LSAC settled a class action lawsuit backed by the Justice Department and agreed to “pay \$7.73 million to compensate more than 6,000 individuals...who had requested accommodations such as extra time, which one litigant with dyslexia was allegedly denied despite extensive documentation of the diagnosis and his long history of testing accommodations on AP exams, the SAT and other tests” (Smith, J., WSJ, 5/20/14). As a testing entity, LSAC is subject to Title III of the American Disabilities Act and subsequent amendments (ADAAA) that require reasonable accommodations be permitted to avoid discrimination against people with physical or mental impairments that may limit one or more life activities.

These four individuals did not meet all of the criteria for joining the study, and thus their information was not included in the analysis. However, their experiences, although

only briefly shared, merited mention as additional examples of nontraditional learners with dyslexia who have confronted barriers and yet have remained steadfast in the pursuit of their goals.

Findings

The two research questions to be answered by this study included the following:

1. What are the factors that motivate nontraditional students with dyslexia to pursue second degrees?
2. In what ways do self-determination theory, transformative learning theory, or other motivational theories explain the motivations of nontraditional learners with dyslexia to pursue second degrees?

As detailed in Chapter Three, each of the emerging twelve themes listed in Table 3.1 were first assessed for relevance for pursuing second degrees. If relevant, the second test was to determine whether the theme could be explained by the proposed conceptual framework or other theories.

Themes Relevant as Factors to Motivation

The four themes shown in Table 4.2, *Aspirations*, *Career Objectives*, *Education Objectives*, and *Life Change Events* emerged as directly relevant to the research questions.

Table 4.2 Categories and Themes Relevant to Motivation

Categories	Themes
<ul style="list-style-type: none"> • Competence • Desire to contribute • Help others • Intellectual curiosity 	<ul style="list-style-type: none"> • Preferences • Problem solving • Purpose • Role model for others <p style="text-align: center;">Aspirations</p>
<ul style="list-style-type: none"> • Employment • Options 	<ul style="list-style-type: none"> • Promotable • Resume builder <p style="text-align: center;">Career Objectives</p>
<ul style="list-style-type: none"> • Defense against dyslexia • Degree focused • Employment focused 	<ul style="list-style-type: none"> • Professional requirements • Skill development • Family value/Expectation <p style="text-align: center;">Education Objectives</p>
<ul style="list-style-type: none"> • Birth • Death 	<ul style="list-style-type: none"> • Marriage • Other <p style="text-align: center;">Life Changing Event</p>

At first glance, the four themes appeared to be logical motivations for a majority of students. Participants in this study were homogenous only to the extent that all were nontraditional and all had dyslexia. The resulting themes prompted the recall of a comment made by an individual with dyslexia who assisted as a subject to be interviewed to pilot the interview guide and process. When the purpose of the study was explained, he testily questioned, “Why would my motivations to pursue another degree be any different than anyone else?” Given the four themes that eventually emerged as relevant to motivation, his question had merit. The four themes shown in Table 4.2 appear to be motivations shared by many learners. Each theme will be discussed in further detail in the sections that follow.

Aspirations. Within this theme, participants expressed their desires to be competent, to be able to contribute to society, to help others, to engage in activities and work they preferred, found enjoyable or were interested in, to solve problems, and to serve as role

models to others. These views coincide with elements of self-determination theory that include the human need for (a) competence, (b) autonomy, and (c) relatedness.

Somewhere around eight or nine years old, Andecite aspired “to become an expert in something...I knew you had to get your undergraduate and then your master’s was the next level, and PhD was the top of the pyramid, and then you’ve honed down to the area of your field. I didn’t know the area or field. I just knew I wanted to be someone who knew, who understood something well enough that they could have a PhD. It was just a quest for knowledge, wanting to know something that well that I could have a PhD. It wasn’t the paper; it was more just the knowledge.”

His voice changed in tenor and pace as he talked about geology. “When I’m looking around outside, walking around, flying around, or in a car, I am looking at the topography. I can read what has happened. This mountain range grew up like this, and this river cut through it, or vice versa, and...it’s like reading a story, an amazing story to me. Not a story that has occurred in minutes or hours. We’re talking millions and billions of years, and that’s what has really captured me. I can look out and read a story that’s millions and billions of years old.” His childhood PhD aspiration represents Super’s career development state of growth, the stage in which children begin to think about their future.

Chuck’s friend once said to him, “Why are you always looking for a better way to do something? Why are you always trying to fix something?” For Chuck, there “has always been a pursuit to figure it out,” to make something better and to solve problems. Problem solving also fit with Chuck’s preference for being hands-on and for using his visual skills. “I chose to go into a study that would be using visual skills—watching and critiquing films, making television and film, producing it because I enjoy that. I seem to be good at that.”

Referring to his master's degree in instructional and performance technology, Chuck said, "these are the people who design anything from a lesson plan to how to integrate the technology that I love into the class...I can kinda return what was given to me in some way, even though I may not know the student directly."

With his dyslexia undiagnosed until age 26, Hemingway recognized that he needed to address the gaps in his earlier education if he was to write about the places he has been and the people he has had the opportunity to meet and work with during his career and travel adventures. "I want to improve my writing ability to share stories people will be interested in reading." He described himself as "turning into a writing geek." He blames his newly found obsession with sentence structure and rules of speech related to the engineering genes in his family. His choice of stories to write are mostly work related or about his winter adventures.

Specific to autonomy, writing is "a solo endeavor" he can do his way. He viewed himself as an introvert who was "better able to communicate on paper than in person." Part of his incentive to write is about chronicling what may be ordinary to firefighters but extraordinary to people "stuck in desk jobs." "I get to work in wilderness areas that very few people will see in a lifetime. I have the camaraderie of great co-workers, and I never know what adventure the next fire call will bring. Some say we're 'living the dream.' I want to write about it in a way that honors the land and the people."

June shared, "Because I was always in special ed, I've always wanted to work with kids who struggle...the fact that I am dyslexic...I knew I wanted to help others who struggled." After teaching at the K-1, K-8, and high school levels, she discovered, "I love working with at-risk populations." However, what she preferred and had been acknowledged

as skillful in doing was not the only area that could serve her purpose “to help others.” Recognized for her competence, skill, and ability to relate to students most in need of a teacher’s support, she was told, “You need to go out of this classroom, and you need to share your knowledge.” Positioned to be a statewide force for change, June was applying her education, training, and passion to train teachers to teach K-3 reading.

Katherine expressed a lifelong interest in learning for learning’s sake. She described learning as fun, even when challenging. As an example of the extent with which she exercised her love of learning, she shared that once while working at a university, she had the opportunity to attend classes for a reduced rate. “If you had a declared major, you could get priority registration so I changed my major annually because classes were \$20 a semester and five bucks a credit hour so I thought I’d spread it out...I’ve always kind of taken classes. I like learning school stuff. I like school so I’ve been in school off and on for a long time.”

Dan’s aspiration was expressed when he said, “My number one concern right now is to become a useful member of society. If I wanted to, I could go to the social security office, raise my hand and say [I’m] 100% disabled, and they’d take a look at my medical records, and they’d go, ‘Damn straight.’ (laugh) I want to do something in society.”

Lauren developed an affinity for construction in high school, further affirmed by his project placing in a statewide Skills USA competition. “I really enjoy doing stuff with my hands and anything related to construction and architecture.” He knew he wanted to attend college and take “some sort of architecture and drafting” courses. Once enrolled, the classes he enjoyed the most were the architectural classes. “Even though I wasn’t the greatest at the time, I really enjoyed doing those better than all of my other courses.”

Specific to the relatedness component of self-determination theory, several participants discussed the importance of serving as role models to family members, especially given the potential that dyslexia may be inherited. This was important for June given her daughter also has dyslexia. Similarly, both Andecite and his wife have dyslexia and are cognizant that their daughter may have inherited dyslexia. They are watching her carefully but are also optimistic that she will “grow up with parents who are well educated...and see that getting a degree is not an unattainable dream. We’re nontraditional. She’s going to see that there is not a strict path you have to follow. She’s going to see that you don’t have to be in school every semester for nine years. You can do it differently. There are options, and it is possible to do.”

Chuck said, “My dad’s family has dyslexia. My dad has had to hide it his whole life...I don’t have to hide behind my dyslexia. My dad has a master’s degree as well, but I can say to my brother who has dyslexia, ‘you have (if there is such a thing) less dyslexia than I do, and I have a master’s degree. Now what’s your excuse?’” Applying what he has recently learned, Chuck hopes to “have more insight into what my issue is, but also if I learn it, maybe I’ll have an answer for my cousins, ‘No, you go to school, and you do this and you do that. There are people and places and departments who can help you.’”

Career Objectives. Chuck’s motivations to pursue a master’s degree related to meeting a career objective that could offer employment that wasn’t subject to the swings he had observed while working in the high tech industry. “You are always worried about getting laid off from month to month.” He also “realized that I if I were going to repair computers for the rest of my life, I’m probably good, but it’s a little monotonous.” In thinking about what area to pursue for a master’s degree, he discovered a degree that offered

career possibilities in corporations and colleges. “Anywhere you go, the degree was exportable. I wasn’t necessarily locking myself into one place.”

As the Center for Disease Control funding was reduced for AIDS prevention in his state, Gary recognized that “the work I was doing wasn’t going to be possible to continue doing so I was looking at either switching to another area of work or taking the opportunity—it was almost a forced opportunity—to rethink what I was doing with my life.” He considered retooling with a master’s degree and discovered that he could earn two master’s degrees with just an overlap of one semester. “It’s just more options. You have more choice of what you do in your job and how you do that job.” The doctoral program expanded his options further with the culmination of becoming a licensed clinical psychologist and the ability “to do direct service and research and run programs, so it’s a very flexible degree. I thought I’m going to take the opportunity to do that and switch gears, and I was kind of getting burned out on that public health approach.”

Katherine had already had careers in veterinary medicine, accounting, and as an intern had embarked on yet another career in law. Her career objective was to “tilt windmills,” to be the Don Quixote for those who weren’t able to do so for themselves by applying her law degree in an advocacy role. One of Knowles’s assumptions about adult learners is their accumulation of “a growing reservoir of experience which is a rich resource for learning” (Merriam, et al., 2007, p. 84). Consistent with this assumption, Katherine optimistically stated, “I have so much work experience that they’re going to hire me.”

Similar to Katherine’s reflection, Evan said, “By the time I got there [graduate school], I had so much clinical experience...a two-year internship...a master’s degree, I had practiced as a licensed family and marriage counselor, I had more knowledge than my

professors about clinical work, and they recognized that in me, and they weren't threatened by me." His professors made use of his experience by asking him to assist in teaching a course.

Although having a college education has been the path to prosperity, or at least an escape from poverty, the recent recession and ongoing uncertainty in the labor market has had many people thinking about the health of the economy and its potential impact on their employment opportunities. For example, even though Katherine had made several career changes, liked a challenge, and loved learning, she also voiced a practical perspective about having a career. "I like paychecks and health insurance and stuff like that."

In referring to the requirement that she earn her master's degree, June said, "Part of it was economics. I had to get a job." The *job* was a career related to her aspirations. Lauren enjoyed the design side of building and chose architecture as a profession but remained keenly aware of the recession's impact on the small rural community where "there wasn't much for work" and even less employment during the recession. He expressed the importance of employment and the ability to support his family several times during the one-hour interview. He anticipated that his master's degree in architecture could provide "greater motivation for people to want to hire me" and "a better chance of finding a good job where I could support my wife and my kids."

Education Objectives. Gary viewed his degrees as "strategic in that it makes you look better on paper." He added, "I had this thing about having a learning disability...I have this sensitivity about wanting to prove myself, and educationally that's how I've done it. I'll end up with three masters and a PhD." Gary acknowledged that his continued pursuit of

education was “an irrational fear now—but if you have that fear, that’s somewhat motivating for me—I want to be bullet proof even though no one is shooting anymore.”

Several participants discussed the impact of family expectations about attending college. Chuck and his wife “decided that we needed as a family, for both of us, we needed our education to move us forward.” Moreover, “my wife already had a master’s degree and was very expressive about being the first in her family to get a doctorate.” She also told him, “People with dyslexia get doctorates in everything all of the time.” Lauren and his wife also discussed the future benefits of Lauren continuing his education beyond an associate’s degree. He subsequently changed majors and decided to continue his education beyond an undergraduate degree.

June said, “All of the family, all my brothers and sisters had all gone to school. This big family had all gone to college. I didn’t want to be the one who didn’t [go to college]... we all strive—and that was important to my mom and dad. They said we would all go to college. ‘You will have a degree.’ And that was important for them.” In addition, there was “the competition to show my brothers and sisters that I can do this.”

In Andecite’s family, his grandfather and his mother “both had master’s and both he and my mom were teachers. There are a lot of teachers in my family. Education is a big thing.” His wife influenced his decision to conclude his undergraduate degree and to continue his education in a graduate program. “She has a master’s degree, and she’s going to be starting a second master’s degree and wants to move on to her PhD in nursing.” Thinking through his options, he concluded, “I can move on. I want to be able move on.”

Evan’s father had been a good provider with only a high school education. “We never lacked for anything” and his mother was “brilliant,” “a talented artist,” and “well

read.” Although neither of his parents had attended college, Evan “didn’t have any choice—I was going to go to college. It was real clear. ‘You’re going to college.’”

The family expectation to attend college is an example of an external pressure. Deci (1995) suggested that external pressures have a tendency to undermine intrinsic motivation, and yet as extrinsically motivated behavior becomes internalized, the need for autonomy and relatedness are supported. Evan’s parents insisted he attend college; however, as a theologian, “What got me into psychology...all those people in my congregation coming to me for counseling. I didn’t have enough experience.” The extrinsic had become an intrinsic need to serve his parishioners, and thus relatedness, and his desire for greater competence led him to pursue a master’s degree in psychology followed by a PhD in psychology.

For Lauren, “When I first started school, my idea was just to get a simple degree and get out in the workforce.” “We [Lauren and his wife] were concerned about me just getting an associate’s degree in drafting and being able to find a job.” Lauren and his wife made the decision to extend his education. He changed majors, transferred to another school, and incurred additional expense when the university he transferred to would not accept all of his previously earned credits. Lauren and his wife viewed his long-term plan to meet his education objectives to be “probably the best option we had.” To “actually become a licensed architect,” he knew he had to earn a master’s degree in architecture.

In the state where June resides, teaching special education required a master’s degree in special education. “I had to get a master’s because that was part of being a teacher.”

Andecite noted, “I’m the first of three generations to have a PhD,” thus achieving an objective that he had proclaimed at “eight or nine” to the delight of his grandfather and the laughter of his cousins.

Gary recognized that his pursuit of his education objectives was in reaction to his early experiences. “It’s a little bit embarrassing because I know part of it is just because I want to prove I’m not, in the vernacular in Texas where I grew up, ‘retarded.’ That’s the word they used so I was in special ed courses with kids who actually had developmental delays, and I knew that wasn’t where I should be...a lot of my training has been to support that I was not like them.” In addition, the death of a friend was a reminder that “if you want to get stuff done, the stuff you want to do, your time is limited.”

As Gary was looking forward, Hemingway’s sense of time and view of his degree was to look back and “redeem the lost years” and “gaps” in his education. Like June and Gary, he too had experienced special education and perceived it as “a place where they sent you so you wouldn’t take too much of the teacher’s time and slow other people down.” Given his skills when he started his college education, he recognized the need to continue building his writing skills, but more importantly, he enjoyed the access to learning content and the experience with other writers that the master’s program provided. “The one class I really liked required reading a series of short stories. You learned a lot about elements in a story such as plot, tension, conflict—what makes for a good story. We would then write our own stories and workshop those in class to get feedback from one another.”

Life Changing Events. Mezirow (2009) proposed that “learning in adulthood... enables us to recognize, reassess, and modify the structures of assumptions and expectations that frame our tacit points of view and influence our thinking, beliefs and attitudes and actions” (p.18). This basis for transformative learning can be triggered by life-changing events that can be traumatic or joyful. Several participants shared experiences that fell within the theme of life-changing events.

Snorkeling off the coast of Thailand in 2004, Andecite noticed a change in the water. “I had just taken a class called natural hazards, and you go through volcanoes, earthquakes, tsunami, so I knew all the signs of a tsunami. I had just gotten back on the boat and saw the water begin to wash away, and the ocean turned to white water and moved away from the islands we were near. I went to the captain and said, ‘I think there is a tsunami coming.’ I began arguing with him, ‘There hasn’t been a tsunami in years,’ he said, ‘there was no problem.’ Once we got back onto the mainland, I got chased by another set of waves, but it was different. Another wave hit, and during that time, I learned there was a huge difference in thinking it and knowing it. When that wave came, I knew I was going to die. I knew there was no hope; it was going to be there in minutes. The wave moved within a 100 yards of where I was standing and then receded. It took me months, maybe years after that to comprehend what had happened.”

Andecite stayed for two more months to assist with the rescue and recovery work followed by similar work after Hurricane Katrina. The experience pushed him further into geology. Andecite’s experience exemplified Mezirow’s disorienting dilemma, a life crisis or event that has the effect of causing one to shift his or her thinking or actions that may not otherwise have happened prior to the dilemma. The impact of Andecite’s experience provided clarity about his future education. “I was already leaning toward geology and that pushed me more into geology just because I wanted to know more.”

Dan’s speech was halting as he produced documentation about the incident that he believed to be the initial source of his post-traumatic stress disorder. “In my military career. Watched a guy die. He. First time I ever saw a parachute open. The guy pulled. Had a perfectly good chute. Cut away his main chute. Pulled his reserve. His reserve didn’t open.

He went splat.” Dan was the next to jump. Other events followed that left Dan unable to trust others.

After leaving the military, he worked, earned a degree in mechanical engineering, and had a successful career as an engineer. He also shared that he “used to have a severe drinking problem. I wasn’t an alcoholic. I can say that now because I was just able to quit without any help. But if someone at the time had called me an alcoholic, he’d have been hard pressed to find someone who didn’t agree with it. A fifth of Jack every night was no problem.” His “psychological abilities and health dramatically took a steep decline” and he went from being just a little bit rough around the edges to being diagnosed as in a major depression anxiety state. He sought help.

A disorienting dilemma can occur suddenly as in an epiphany or over time. Dan had experienced a series of events over time that caused him to rethink his future, to get the help he needed, and to consider his options. “I knew I was going to go back to school...I knew I couldn’t be an engineer any more...started talking to my friends about something I could do...supply chain management came up,” a field related to his engineering degree. Through self-examination and reflection, he realized he no longer had to be the super action Special Forces figure and hard driving engineer he once was, but he knew he could use his intellect, prior military and career experience, and a second degree to assume another career.

Katherine’s interests had been primarily in science. When she attempted to transition back into a medical field, “they told me that 55 was too old to change careers.” Experiencing discrimination that she perceived as unfairly denying employment she was otherwise qualified to do represented a disorienting dilemma in the form of a life crisis. She acknowledged that she was “still kind of grieving.” At the time of the event, “it ripped me

off, and I hired an attorney.” She had “taken such good notes because I’m kind of OCD,” that her attorney told her she should go to law school.

Feeling “pissed off” and “really frustrated,” she sent an email to a university about applying for law school the following year. She received a response to her email that same day informing her she had two days to make the deadline for taking the LSAT exam. She “did well enough,” completed her application, was accepted, and began law school. Describing her first semester at law school as “fun,” she also revealed she was “still pissed off that my dream [to return to a medical career] hadn’t worked out...that’s all right. I’ll get even...I’m going to go tilt windmills for people who have no one else to call.”

Marriage and parenthood can represent important and joyful life changes for many people. Prior to completing his undergraduate degree, Andecite married. As he and his wife envisioned their future together and discussed their respective education goals, “I was considering the master’s program and talked to my wife about my research, and she said, ‘You should see if you can just go to a PhD program. My advisor said, ‘It would be a good idea to get credits for the grants you’re bringing in. As an undergraduate, the grants don’t get any credits but as a master’s or PhD student you do [get credits], so that’s how you transition over.’ With a little help from my wife and my advisor, I’m entered the PhD program.”

The birth of their daughter represented another major life transition and further solidified a change in his pattern from taking classes because the topics interested him to culminating his credits into degrees. He summed up his feelings, “Now we have [daughter’s name]. It’s so great. Having a daughter who is going to grow up with a father who has a PhD and a mother who will have one here in a couple of years also, we’re not stereotypical PhDs

that dress in suits and go into an office. We're outdoorsy people, [wife's name] is hands-on in a hospital, and in geology, I work hands-on. It'll be really nice for her [their daughter]. It has added to my motivation. She is going to grow up with parents who are well educated."

Chuck's disorienting dilemma had been building over time. He was skilled at his job but didn't find it interesting. It was "a little monotonous." He met the woman who would become his wife. She "already had a master's degree" and was "very smart." Their marriage represented a transition. When she was offered a job in another city, he was able to negotiate a job transfer to the same city, and thus in addition to getting married, he was also transitioning to a new location and to a new work environment.

Once they had established themselves at their new location, Chuck's wife told him about a job opportunity that had the potential to provide more stable employment. The opportunity was also in a field he enjoyed. He applied and was hired. Then "we got pregnant and had our daughter." Chuck's disorienting dilemma consisted of several incremental changes over time and caused Chuck to think, "What can I do? Everyone around me seems to be working on their master's or their doctorate." My wife was beginning to seriously look into it so we began to think about it, maybe unspoken at first but began to come into this understanding that we'll do it one at a time. 'You don't have your master's, so you'll get your master's, then I'll go get my doctorate,' so then I had to decide, 'Okay, I'm going to get a master's... my wife and I decided that we needed as a family, for both of us, we needed our education to move us forward.'" Chuck had just completed his master's degree prior to our interview and was looking into a PhD program.

Gary had married just a few months prior to the interview. His marriage carried additional personal and political significance as a same sex marriage. Although the federal

government and a growing number of states have recognized same sex marriages, not all states have concurred. “I’ve been married to my husband six months now. We were married in November...so that’s been part of my life. Actually my life—during the time I’ve been alive—it’s been very changing so that’s been really exciting to be a part of.” States banning same sex marriages have been challenged in state or federal courts. Gary expressed his optimism about the future outcome of these challenges. “Things are changing very quickly.”

On a more somber note, Gary shared another change that influenced his decision to continue his education. Loss represents a disorienting dilemma that can have the power to shift one’s thinking. “A really close friend of mine died, so that gave me an idea...if I need to do something, I need to do it quickly because life is short.”

Summary. Several participants described the relevant themes in ways that intertwined. For example, Evan had parishioners who often sought his advice on family and marriage issues. Recognizing that his theology degree and his experience were insufficient, Evan knew he needed to know more to be a competent counselor. “What got me into psychology was...all those people in my congregation coming to me for counseling.” He also discovered a preference for what would become his life’s work. “In the process of having my congregation coming to me for counseling, I decided I’d rather be a counselor than a minister so I resigned from the church. He received his license and began his practice in marriage and family counseling. In addition to clients from his former congregation, “the other churches in town knew that I was a minister so they thought I was safe to send people to...I wouldn’t take their faith away.”

After joining an organization that addressed AIDS-related issues, Gary wanted to have more autonomy as well as to continue developing his effectiveness. “I got a job within

the AIDS organization...I realized I needed a larger skillset, and I saw that in my field of work that the higher your education is, the more control you have over what you do.” The greatest influence to pursue a second degree was motivated by his desire to do more. “Growing up when I did and being out early in life, I felt like I had a responsibility to contribute to HIV prevention. It was calling my people...my generation...never knew a time without HIV...we saw so many people die...and the people who would have been our mentors died from the disease, so we...really needed to roll up our sleeves and get to work.” He also recognized that people “were more likely to listen to you if you had the education.” He aspired to make a difference. “It was calling my people.” He chose a career field focused on AIDS prevention and came to realize that his continued education was a means to have his voice heard.

Lauren concluded that if he were to stop his education after completing the drafting courses he enjoyed, he could be limiting his options. Architecture was the profession he knew he would enjoy. What Lauren enjoyed and preferred to do related to his career objective, which could only be met by achieving his education objective, a master’s degree in architecture.

Counterbalancing Influences

Participants shared experiences that either strengthened or deterred their motivation to pursue second degrees. Given the trajectory toward earning second or additional degrees, the supporting influences may have been stronger than the deterrents for participants in this study. The supportive themes of *Positive Education Experiences*, *Supportive Others*, *Positive Psychological States*, and *Successes and Strengths* listed in Table 4.3 will be discussed first.

Table 4.3 Categories and Themes that Supported Motivation

Categories →	Themes
<ul style="list-style-type: none"> • Class format • Helpful • Self-paced 	Positive Education Experiences
<ul style="list-style-type: none"> • Faculty • Family • Friends 	Supportive Others
<ul style="list-style-type: none"> • Positive 	Psychological States
<ul style="list-style-type: none"> • Accomplishments • Career success • Recognized abilities and talents 	Successes and Strengths

Influences that Supported Motivation

The influences that supported participants' motivations to pursue second degrees included positive educational experiences, people who supported and encouraged their success, the ability to maintain or regain positive psychological states, and foundations of prior successes and knowledge of their strengths.

Positive education experiences. Chuck talked about a community college professor who took the time to learn more about dyslexia in order to assist him. He encouraged him by saying, "This [dyslexia] can't stop you." Another professor "was a very friendly guy, didn't intimidate me...he was an English teacher, and I think because he reached out, I had a little more comfortable experience working with him...I would normally stay away from English...all these classes that he would teach—'Oh, Mr. _____ is teaching that class. It'll be fun.'" Having a positive experience with his master's degree program had prompted Chuck to consider continuing his education to earn a doctorate. He also said he was "not afraid of school, "not afraid of the degree," and no longer fearful about the judging of

uninformed professors because he had gained the confidence to “inform them about what dyslexia is.”

One of Evan’s professors noted the incongruence between Evan’s writing and his other abilities and referred Evan to a specialist who diagnosed his dyslexia. “They really gave a damn about me.” Later as a doctoral student who was already fully engaged in a profession, he was asked by the faculty to lecture on an aspect of marriage counseling. He found this to be affirming. “They saw my talent...they treated me like a peer...they really accepted me...my doctorate experience was my best academic experience.”

June recounted an ah-ha moment with a favorite instructor. “Oh my gosh! What she taught me there! All of a sudden I knew what sentence diagramming was and why a sentence is the way it is. She made me realize what I missed all along. I still struggled to read, but I understood about writing with sentences, writing a paragraph.”

Still haunted by his earlier educational experiences, Hemingway said he was “encouraged to have several professors who were really positive and worked with me by giving me the reading assignments well in advance so I had ample time to prepare. They also allowed me to finish the semester online to accommodate the mandatory training I had attended for my job in another state. I felt like they cared about me as a student and wanted to see me do well in the class.”

Lauren’s college experience was much better than his high school experience where remediation had consisted of adding more English to his course load. At his college, Lauren was encouraged to use “accommodations to help with my existing English classes...and other courses...that would require writing or reading.”

Positive psychological states. The following 24 descriptors were used by participants in this study when talking about experiences that supported their progress:

- | | | |
|----------------|-----------------|---------------------|
| 1. Accepted | 9. Fit in | 17. Mentally back |
| 2. Cared about | 10. Friendly | 18. Not afraid |
| 3. Comfortable | 11. Fulfilled | 19. Not intimidated |
| 4. Confident | 12. Fun | 20. Patient |
| 5. Connected | 13. Gave a damn | 21. Relieved |
| 6. Encouraged | 14. Healthy | 22. Said I could |
| 7. Enjoyed | 15. Helped | 23. Spark |
| 8. Excited | 16. Lucky | 24. Transcendent |

In addition to experiences that contributed to positive psychological states in the previous sections, June recalled, “In eighth grade, I got a new special ed teacher...who gave me the *spark*, who helped me realize I could continue with school and graduate.” The *spark* was ignited by showing June what she *could do* rather than what her learning disability prevented her from doing.

Andecite shared that his best writing occurred when he had the time to get *mentally back*, “usually midmorning, where my brain is working the best, and then I’ll reread the paper and be able to fix all of the dyslexia, because even writing sentences, I’ll switch words around, things like that.”

Chuck took a job that allowed him to volunteer with several faith-based, nonprofit television stations and to apply his skills and creativity. The appreciation he received brought him back to a place that he found to be “healthy” and allowed him to move forward.

Evan said, “I think the only time I was academically *comfortable* was at [name of university].” The comfort was due to the recognition he received from his professors for his experience and expertise.

Successes and Strengths. All participants had successes and strengths that served to bolster their confidence and self-efficacy beliefs. These provided sources of protection from doubts, discouraging events, and other difficulties. Gary had the insight at a young age to reject a label he knew didn't describe him and the courage to live his life authentically. He cited his own sense of "vulnerability" for giving him empathy for others. He credited his success at problem-solving with his ability "to see patterns and solutions pretty quickly, especially from a community level...I can see a picture in my head and...see a way out, a solution, or a way to approach it...It's a more creative space than seeing what's actually there."

Evan, for example, earned good grades with his memory retention and intuitive abilities. "I had 98% retention. I could remember something really well," and "I passed a lot of tests intuitively."

Andecite's grant proposal resulted in significant funding for his university and enabled him to bypass the writing class he had avoided. When asked about his avoidance of the required writing class given his successful grant writing, he described how his mother had developed his grant writing skills. "When I was young, if I wanted any [additional] money in my allowance, I had to write a proposal telling what I was going to do to earn the increase."

Chuck's academic performance merited a scholarship and membership on the honor society. Lauren won an award for his construction entry in a Skills USA competition. Athleticism served as a source of strength and confidence for Dan, Hemingway, and June. Dan was an accomplished tri-athlete prior to his joining Special Forces. In a career of more than 25 years, Hemingway had continued to meet the annual skill and physical endurance

qualification to continue as one of only 400 smokejumpers nationwide to provide aerial fire suppression response. June was an accomplished swimmer, a healthy activity that she continued to enjoy as an adult. She was also recognized at a young age for her ability to train others, a skill that she applied with students and other teachers.

Supportive others. Almost every participant spoke of people who had encouraged, supported, prodded, and served as role models for pursuing their goals. The people included spouses, parents, friends, and teachers. Viewed through the lens of self-determination theory, relatedness was apparent in the experiences that described significant others, such as Katherine's description of her grandmother who believed in women's liberation long before it had a name, a mindset that contributed to reading Katherine the classics and making a game of memorizing poems like *The Reading Jail*. Katherine credited her ability to remember information to the memorization games she had played with her grandmother.

Katherine's uncle served as another role model for his service to others and for the integrity of work. "He was a physician who sold his practice when he developed cancer at the tender age of 84, and ...retired to run a methadone clinic at a women's prison...take ER calls on the weekend so the younger doctors could spend time with their families...and serve with doctors without borders four to six times a year."

Evan spoke of his mother's influence. "She was very, very Catholic, and she was very involved in my life—more so than my father was—and she really believed in right and wrong, and she really taught me right from wrong. I think that had something to do with my interest in religion and my feeling that there was something more transcendent to life than what all of my peers were doing."

June described her mother as her “saving grace,” and “coach” who taught her how to advocate for herself. She talked about a special teacher who told her, “You could do this,” and helped her with life skills such as writing a check, preparing a resume, and making eye contact during conversations. She had a best friend in high school who “was valedictorian, class president...loud...and she liked me for some reason...I learned it was okay to be different.”

Hemingway recalled how his mother had him read his favorite story about Buffalo Bill to her every night for weeks to practice his reading. He remained in awe at her patience and ability to repeatedly listen to the same story night after night. He talked about the master boat builder he apprenticed under who “served as a role model for living a life of integrity and community service.” He credited his wife for his progress. “If it hadn’t been for my wife’s encouragement, I don’t think I would have a college degree.”

Andecite’s grandfather encouraged him to ask questions of the scientists and engineers who often visited Andecite’s parents’ home. In addition, “When my mother found out that I had dyslexia, she learned all she could about dyslexia, ways to cope with it. I never thought of dyslexia as something that makes it so you can’t do things. I just think that you have to do it differently.” His wife and his advisor had encouraged him to conclude his undergraduate degree and apply his accumulated credits to enter the PhD program.

Several of Chuck’s professors “took the time to really see me...to know me.” He recalled with great fondness the neighbor who was also the school librarian. She asked him to assist her in the library. As a result, he learned that the library was a treasure trove of resources that could enable him to learn in his own way. Similar to Hemingway and Andecite, Chuck said, “My wife is one of my champions. She would say with a couple of

nudges, some gently, some not” that Chuck found the master’s program that was right for him and his family. Moreover, “my wife already had a master’s degree and was very expressive about being the first in her family to get a doctorate.” She also told him, “People with dyslexia get doctorates in everything all of the time.”

Lauren looked at how hard his father worked. “He [Lauren’s father] wanted to go to school...with us kids graduating, he decided to go back...and got his bachelor’s degree.” His father reminded him of how important it was to get an education.

Influences that Deterred Motivation

Influences that represented potential deterrents to motivation for the participants in this study included *Challenges*, *Negative Education Experiences*, and *Negative Psychological States* as listed in Table 4.4.

Table 4.4 Categories and Themes that Deterred Motivation

Categories	Themes
<ul style="list-style-type: none"> • Academic • Dyslexia specific • Handwriting • Reading 	<ul style="list-style-type: none"> • Sacrifices • Time conflicts • Writing <p>Challenges</p>
<ul style="list-style-type: none"> • Academic probation • Class format • Credit transfer denied • Expulsion 	<ul style="list-style-type: none"> • Hindrances <p>Negative Education Experiences</p>
<ul style="list-style-type: none"> • Negative 	<p>Psychological States</p>

Challenges. All of the participants talked about their challenges with reading and the impact that the inability to read well had on their academic performance. In spite of the reading challenges, two said they enjoyed reading for pleasure. Several discussed challenges with writing; however, in response to the challenges, one avoided classes that required

writing while another pursued a degree that required extensive writing. Many of the challenges described by the participants were commonly associated with dyslexia. Chuck, Dan, and Hemingway expressed concerns about being asked to read aloud in front of others without time to rehearse or memorize and about being called on to answer questions in class. June and Hemingway said they got “tongue tied” when called on in class. Writing challenges included not having a strong grasp of grammar rules, making spelling errors, and not having sufficient time to review and correct errors.

Gary shared, “Spelling is still horrible for me or in writing on poster boards, doing those sorts of things in public.” In preparing for an important interview, he said, “I was terrified just knowing that I was already mentally tired, and I needed to focus and write something coherently and spell it correctly and make it look—I have serial killer handwriting—it’ll look horrible...I’m already wiped out, so at that point, I thought, ‘Oh, this is going to be bad because they’re going to see exactly what I wanted to hide.’” His dyslexia was further confounded by ADHD (attention deficit hyperactive disorder) which “combines with it [dyslexia] in a really sadistic way to help me feel okay with not doing those things, with avoiding them, and finding ways to get out of them.” “Those things” and “them” refer to double-checking his work.

Spelling had remained a challenge for Evan throughout his career. “I still can’t spell. I don’t understand phonetics, and I get the letters all backwards. I’ve written a book. It’s won seven awards...I have trouble looking it [a word] up in the dictionary, because if you can’t spell a word, you can’t look it up, so how do you find it in the dictionary?”

As expressed by other participants, successfully completing a degree program doesn’t lessen the challenges of having dyslexia on the job. June warned, “Once you’re in a

career track though, it doesn't get easier. Your difficulties continue. You just have to figure out ways so it doesn't hinder your job—like spelling and grammatical syntax. I have to reread what I write. I read slowly so it takes me twice as long to create an email.”

Negative education experiences. Unprompted, participants willingly shared negative educational experiences that spanned from grade school through college and included workplaces. Several participants had been labeled retarded. Several had been held back a year in grade school, and several recalled special education classes that were anything but special. In some situations, policies and procedures proved to be hindrances or sources of discouragement.

Gary vividly remembered the teacher who told his mother that he wasn't smart enough to go to college. His special education classes included “kids who actually had developmental delays, and I knew that wasn't where I should be.” June recalled that her special ed classes were “in the basement like a dungeon, and you would walk down there, you would always feel degraded and you're quiet. You never tell anyone.”

In describing his grade school experience, Dan said, “I was moved into the mentally retarded class because I wasn't reading with all the other first graders. A guy came in. He gave us a test to take a basketball, run down, bounce the basketball to the end of the court and back, and took about four of us out of the class, and said, ‘Okay—these people aren't mentally retarded. There is something else going on. Give them more tests.’ My parents sent me to private schools.”

When Dan performed well on a test, he was accused of either faking his dyslexia or being cured of it in spite of having a dyslexia diagnosis. He acted out. His behavior resulted in expulsion from several high schools until his parents found a school for dyslexic students.

College presented other hurdles for June. She was placed on academic probation, dropped out, worked for a while, but returned determined to use the accommodations she was entitled to under ADA. “I would tell my professors that I had a learning disability, and they would tell me to just suck it up. ‘You either make it or you fail,’ but they weren’t going to change anything. So I struggled my first two years at the university.”

Chuck’s community college experience had been more dyslexia friendly, but when he transferred to a four-year university that was well regarded for its disability service center, he found “instructors there were so harsh. I’m sure they would say, ‘We’re difficult because if you can get through it, you can get through anything.’ I don’t know that I subscribe to that philosophy.”

Lauren was required to take an additional high school English class to remediate his dyslexia. In hindsight, he questioned why adding more to a workload that was already overwhelming was viewed as superior to giving him the additional time he needed. “The school, the school district, or whoever made the decision, they felt that more English was going to help me be a better student.”

To verify his legitimate access to accommodations, Chuck was required to have his dyslexia reassessed twice as an adult. Hemingway’s dyslexia diagnosis from another state was not accepted by his current university. “I had to find a local testing facility and pay for the same assessments I had already taken.” He recalled the cost being around \$600. Reflecting on his high school experience, Hemingway said, “High school wasn’t enjoyable.” When asked to explain more, he said, “It was uncomfortable to be called on and not be able to answer the questions. It was like my brain was a pinball machine.” He said he felt like a “reject” and “vulnerable.” He recalled an incident in which the school bully had picked up

on his feelings and tried to taunt him to fight. In response, he took a gun to school the next day. “I just wanted him to know he couldn’t fuck with me.” He stopped going to school to avoid trouble and finished through an independent study. Presenting the documentation for his dyslexia at college resulted in mixed reactions from professors. “I had some professors who I really appreciated, but others made me feel like having me as a student was going to mean extra work for them. I also worried that they would think I would use the extra time to cheat or that I needed the extra time because I’m a slacker.”

June described herself as “one of those kids who sat in the back and did not want to be recognized. I wouldn’t raise my hand. I would just sit quietly and try to observe.” Her description of herself was much like Hemingway’s behavior in class. He added, “I had questions I didn’t want to ask in class. I thought if I just listened a little longer, I’d be okay, but I just got further behind, lost, and overwhelmed.

College policy proved discouraging to Lauren. To achieve his education objective, Lauren transferred to a college that had a good reputation for the degree program he wanted to pursue. Given the location, he was also able to avoid paying out-of-state tuition. Unfortunately, some credits from his previous university weren’t accepted, adding to the time and cost of his education.

As an adult returning to college, Dan concluded that his “expectations were way too high” and then described a scenario in which a professor asked the students to work in groups so he could “complete work for a contract I’m doing on the outside.” Providing another example, he said “I’ve had teachers walk into a class and have no idea what they were going to teach that day...if I’m paying. They need to teach.”

Negative psychological states. The 58 negative descriptors listed below significantly exceeded the 24 descriptors listed in the Positive Psychological States section on page 110.

- | | | |
|----------------------|-----------------------|-----------------------|
| 1. afraid | 21. humiliated | 41. quiet |
| 2. anxiety | 22. inadequate | 42. retarded |
| 3. bored | 23. inferior | 43. scary |
| 4. bullied | 24. intimidation | 44. self- |
| 5. burned out | 25. judging | condemnation |
| 6. called stupid | 26. labeled | 45. shame |
| 7. cancer to cut out | 27. lost | 46. stressful |
| 8. confusion | 28. mean | 47. struggled |
| 9. degrading | 29. mentally hard | 48. suffering |
| 10. depression | 30. no emotional | 49. taunted |
| 11. derogatory | strength | 50. teased |
| 12. discouraging | 31. not fun | 51. terrified of test |
| 13. dumb | 32. not normal | 52. tired |
| 14. embarrassed | 33. not rewarding | 53. tired mentally |
| 15. fear | 34. not smart | 54. trepidation |
| 16. felt like an | 35. not supportive | 55. uncomfortable |
| imposter | 36. not understanding | 56. vulnerable |
| 17. frightening | 37. out-of-place | 57. withdraw |
| 18. frustrated | 38. overwhelmed | 58. worried |
| 19. hard work | 39. pain | |
| 20. hide | 40. paranoid | |

While many of the descriptors pertained to participants' experiences as students, adverse experiences were not limited to the education environment. Chuck described a work experience in which his manager's reaction to a spelling error on a post-it note made him feel as though he was a "cancer to be cut out." His dyslexia was source of shame, a feeling shared by Gary and Hemingway as well. Dyslexia was something to hide from others as a means of self-protection and to feel less vulnerable.

While seeking help for PTSD, Dan described a group therapy session in which he "was teased, bullied, and publicly humiliated by the psychologist and by the group leader for

being dyslexic, repeatedly asked to read, repeatedly told I wasn't dyslexic. He had me stand up in front of the class, in front of the group, and read." Dan quit the group.

Evan said, "I felt deeply inadequate. And I saw all of the other students as smarter than I was. I didn't feel smart at all, and in fact I felt very dumb. I felt like I was faking it, that I was a total fake, that I was fooling everybody...that I was fooling my professors." These negative psychological feelings contrasted with academic accomplishments that included a scholarship to a prestige college and social status given his popularity with classmates.

Test anxiety was a reoccurring theme. Chuck purposely looked for a degree program that would enable him to gain acceptance with his GPA rather than have to take the GRE. "I don't want to take the GRE...deathly afraid of the test." June said, "I continue to think about my doctorate. I have so many research projects I could think of doing...the struggle is...taking the GRE. It scares the heck out of me." For tests in general, Gary shared, "I can get by with listening to lectures because I retain really well, but not reading the material so much, so when they test on the material, then I'm shit out of luck."

Other Themes

Not all themes that emerged from the analysis pertained to motivations for pursuing an additional degree or to the counterbalancing influences that supported or deterred those motivations. These themes, *Accommodations*, *Learning Styles*, and *Strategies and Tools* are listed in Table 4.5 Themes Unrelated to Motivations or Counterbalancing Influences.

Table 4.5 Themes Unrelated to Motivations or Counterbalancing Influences

Categories	Themes
<ul style="list-style-type: none"> • Advocating for accommodations • Assistive technology 	<ul style="list-style-type: none"> • Extended time • Quiet exam location Accommodations
<ul style="list-style-type: none"> • Approach to learning 	Learning Style
<ul style="list-style-type: none"> • Proactive and reactive strategies and the use of techniques and tools to support academic performance 	Strategies and Tools

Accommodations. A few participants in the study took advantage of accommodations provided under ADA. For example, Hemingway and Lauren reported using the technology available through their universities' disability services centers to convert their textbooks to audio files to help them keep up with their reading assignments. Andecite and Dan accessed other forms of technology to assist with their writing or note taking in class. June insisted on being able to record the lectures. Several found the extended time and a quiet place to take exams helpful. The use of accommodations, however, was irrelevant to their reasons for pursuing the degrees.

Learning style. Learning style is an individual's preferred way of learning. The 2004 study by Coffield, Moseley, Eccelstone, and Hall reported more than 70 models of learning styles. Given the abundance of models, Mortimer (2005) advised caution in drawing conclusions about dyslexia and learning style. In support of Mortimer's advice, the few participants in this study who discussed learning styles used descriptors associated with the VAK model (visual, auditory, and kinesthetic); however, the learning styles varied among participants. For instance, Gary described "thinking in pictures and patterns," and Chuck pursued a degree that would "make use of his visual skills" indicating possible preferences for a visual learning style. Lauren described himself as a "hands-on" learner

implying a kinesthetic approach to learning, and Katherine said, “If I hear something, I remember it,” specific to an auditory learning style. Gary, Andecite and Evan also referred to their retention or memorization capabilities.

Strategies and tools. Each person in the study discussed strategies and tools they had used as students to help with their success.

Evan said, “I had little tricks that I learned to survive academically.” One of the “tricks” to compensate for his slow reading was to read book reviews rather than the assigned books and then listen intently to class lectures. He memorized the reviews so he could participate in class discussions. Both Evan and Gary “warmed up” and “cannibalized” previously written papers to make up for the lack of time to “write a paper from scratch.”

Andecite and Katherine recognized their dyslexia was most problematic when they were tired. Andecite’s remedy was to write in the morning when he was at his best mentally. Katherine described a unique system she had developed in grade school. “If I’m very tired, I put an arrow left to right so I read in the correct direction. If I’m very tired, I spend too much time scanning to see which way makes sense...when I’m rested, it’s not a problem.”

June used color coding, highlighted material, and when possible, chose small classes with discussion groups rather than classes held in large lecture halls. She also limited the number of classes she took to avoid becoming overwhelmed.

Limiting the number of classes proved helpful to Andecite as well. “One semester a year was what I was doing for a long time, usually fall and then I’d take the spring off to go traveling” to prevent “getting burned out.” Prior to taking tests that included essays, Andecite practiced brain exercises to build his confidence and ensure “I don’t get things written all dyslexia.”

To build his technical skills, Hemingway practiced writing drills and exercises. As a proactive measure, he requested the syllabus and assignments well in advance of the first class in an attempt to stay ahead of deadlines. He also attempted to “assess during the first few weeks of school which classmates might make good study partners.”

Hemingway and Lauren also reported using audio tools. Lauren said, “It helps me get through the reading assignments faster.” Dan used technology to assist with his writing, and Dan and June both used tutors as needed. Hemingway and Gary found the Erlen glasses with colored lenses had helped make reading less fatiguing.

Gary said, “I’ve really focused on those areas that I’m really good at and have limited my exposure to areas that I’m not so good at.” Dan limited his exposure as well by using an avoidance tactic with reading and writing assignments. “I don’t read the textbooks, only the parts that I have to. I have them on PDF, do a search for a key term or phrase, then read just that little bit.” To address the fear of being called on in class, he confessed to “being obnoxious” by asking a lot of questions during the first week of school to discourage professors from calling on him.

Some participants were shifting their perspectives about dyslexia from deficit-based to strength-based. Chuck had discovered several websites “that don’t categorize dyslexia as a disability but rather...a special ability...I’m not quite up to that point...I still have to struggle to live in the general world.” Gary somewhat tenuously said, “I guess I view dyslexia as probably a gift. It gives you a different way of thinking...a different way of experiencing the world that to me is a very positive thing and that thinking in unorthodox ways can be very useful. I guess I feel like I need to carry the standard for that.”

None of the participants expressed a connection between their use of any of the strategies or tools discussed and their motivations to earn second degrees.

Summary

In summary, the purpose of this chapter was to present the findings that emerged from the in-depth analysis of the interviews with the nine participants. To the extent possible, participants' own words were used to provide the readers of this study with a clear, rich, and thick description of participants' experiences and what motivated them to pursue second degrees. Their motivations were practical and driven by their aspirations. Their career and education objectives related to their aspirations. Several shared life-changing events that influenced their decisions to continue their education. No one indicated that his or her chosen career field was selected primarily for the prospect of external rewards, and instead the data revealed numerous examples of motivations related to the intrinsic need for autonomy, competence, and relatedness. Their motivations, however, were subjected to external influences that had the potential to either support and or deter their motivations for continuing their education.

CHAPTER FIVE: CONCLUSIONS

The purpose of this study was to explore the factors that motivate nontraditional learners with dyslexia to pursue second degrees. By better understanding the phenomenon through the experiences of the people with dyslexia who agreed to be interviewed for this study, others with dyslexia may be encouraged to persist with their studies. Moreover, those who support and advocate for their success have the potential of being better informed about the challenges nontraditional learners with dyslexia experience along the route to degree achievement and about the importance of their support and encouragement.

Although the enrollment for nontraditional learners has increased, nontraditional learners are less likely to complete their degree programs (NCES, 2011). Enrollment has also increased for students with learning disabilities, of which dyslexia is the most prevalent. Like nontraditional learners, students with dyslexia are also at risk of not completing their degrees (NCSE, 2011). Thus, being a nontraditional adult learner *and* having dyslexia exacerbate the likelihood of an incomplete degree program, although not for lack of intellect or ability, as the nine participants in this study demonstrated. To the contrary, the nine participants in this study had earned undergraduate degrees and had returned for additional degrees. Of the nine, five had returned for second degrees, two were earning their third degrees, one was earning his fourth degree, and one had completed four degrees.

This final chapter includes my conclusions about the motivational factors and describes how the findings relate to the initially proposed framework of self-determination theory and transformative learning theory, and other motivational theories that may have emerged. I offer several suggestions for future research and conclude the chapter with my final thoughts from the perspective of an adult learner, a professor with a majority of

nontraditional students in my classroom, and as the sister of the first grader introduced at the beginning of Chapter One.

Motivations to Pursue Second Degrees

A basic interpretive study does not predict but rather develops an understanding of what the world looks and feels like from the perspective of an individual. Following Merriam's (2009) counsel that there would be "no single, observable reality" (p. 8), I approached each interview open to whatever I might discover.

The first research question to answer was "What are the factors that motivate nontraditional learners with dyslexia to pursue second degrees?" The factors that emerged from the data analysis included aspirations, career objectives, education objectives, and life-changing events. Given some of the experiences shared across these four factors of motivation, the factors may apply to a variety of learners with and without dyslexia, traditional and nontraditional learners, and others. Examples of experiences for each of the motivation factors are provided in the following sections.

Aspirations. Aspirations consisted of participants' motivations to be competent, to be able to contribute to society, to help others, to engage in activities and work that was interesting, preferred, or purposeful, to solve problems, and to serve as role models for others.

Quaglia and Cobb (1996) proposed that aspirations consist of *inspiration* and *ambition*. "Inspiration reflects that an activity is exciting and enjoyable" (p. 130) and engaged in "for its intrinsic value" (p. 130). Ambition is the willingness to set a goal that has future value and to carry out the necessary activities for goal achievement that brings aspirations to fruition. Participants specified aspirations and the steps they had taken to

transition from the conceptual realm of thoughts and dreams to actions that moved them toward their goals. Dan, for example, was adamant about contributing to society with his knowledge and skills. His actions prior to enrolling consisted of discussing his options with former colleagues and friends, assessing what degrees might complement his engineering degree, and investigating competencies in demand by employers.

Career Objectives. The object of an aspiration often pertained to employment within a preferred vocation or professional career. By meeting their career objectives, some participants envisioned greater autonomy with which to apply their knowledge and skills across a range of options within their chosen fields. For example, Chuck recognized the transferability of his degree across several industries. Lauren added that his career preference could eventually provide financial security for his family.

Education Objectives. In most instances, career objectives could only be achieved by completing education objectives. Degree attainment related to acquiring the knowledge necessary to secure a role, to assume greater responsibility, or to develop competencies for competency sake or as proof of capability. For some participants, earning the targeted degree was required for professional certification or licensing. June knew she had to earn a master's degree to teach. Lauren had to have a master's degree in architecture to become a licensed architect.

Family expectations about degree attainment were either assumed and unquestioned or explicitly expressed. For example, for participants whose parents had college degrees, degree attainment was implicitly assumed. In contrast, Evan's college education was a topic of family discussions, expected, not optional, and a source of pride for his parents who had not had the opportunity to attend college.

Whether degree attainment was encouraged by others or set as a personal objective, pursuing a second degree was viewed as a means to future opportunities and an improved quality of life.

Life Changing Events. Several participants shared salient, milestone events that drove their education decisions. Experiences included an incident of job discrimination, the loss of a close friend, surviving a tsunami, and a series of experiences that culminated with health issues. Some events were associated with celebration; namely, marriage and parenthood, but with the events, participants also changed their perspectives and re-examined their priorities.

The second research question was “In what ways do self-determination theory, transformative learning theory, or other motivational theories explain the motivations of nontraditional learners with dyslexia to pursue second degrees?” The following section discusses how the motivational factors related to the theoretical framework of self-determination theory and transformative learning theory.

Relationship of Motivational Factors to Theoretical Framework

Self-determination theory. According to self-determination theory, motivations range from intrinsic to extrinsic and are influenced by social factors that impact individuals on a global, contextual, and situational levels (Deci & Ryan, 2008). The strongest self-determination motivations are the intrinsic needs for autonomy, competence, and relatedness. However, some extrinsic motivations may also support the intrinsic need for relatedness. Such was the case for the adult learners in the Shepard and Nelson (2012) study who were motivated by the potential for financial gain and career changes that could improve their life situations. The Shepard and Nelson (2012) findings were consistent with

the findings in this study as well. For example, Evan's additional education broadened his career options. He applied for a position that provided a higher salary, but more importantly, the job provided an opportunity to relocate to another state that offered an improved quality of life. "We were raising two small children" and "living right between two ghettos." The smog was another issue. "There were days we couldn't see the house on the other side of the street. He looked at his children and concluded, "I have to get out of here."

The intrinsic need for autonomy appeared in participants' expressed desires to control their timelines, to engage in preferred activities of personal as well as professional importance, and to assume roles of greater decision-making. The need for autonomy and competence often overlapped for several who recognized their skill gaps and were intent on addressing deficits from earlier education experiences. Hemingway's example was notable for his persistence to attend college. "There were things I was interested in learning, and I thought that once I was in college, I would have more control of my time to learn and make up for what I missed in high school." Several expressed recognition that their skillsets needed further development, such as when Evan acknowledged that he needed additional training to more effectively address his parishioners' requests for family and marriage counseling.

Several had applied their acquired skills in the context of relatedness, such as Katherine whose intent was to be the voice for others who are unable to speak for themselves. Her advocacy role was underway as an intern with a law firm specializing in civil rights cases. Evan was provided counseling, Gary was involved in suicide prevention, and June was training teachers to teach struggling readers.

The need for relatedness also appeared as a desire to serve as a role model of others. Andecite wanted his daughter “to grow up with parents who are well educated” and to know that dyslexia could not preclude her from achieving her goals. Chuck viewed earning his master’s degree as a positive example for other members of his family with dyslexia and as encouragement for them to continue their education.

Participants were in various stages of life. Their career objectives were influenced by how well established they were in their chosen career fields. For example, Lauren’s preparation for a career in architecture was based on interest and his prior successful experience remodeling and building homes. The classes he had enjoyed most related to construction and architecture. His sense of competence in construction appeared to have provided him with the self-efficacy to proceed with a degree in architecture. He also viewed an architectural career as a means of providing for his family, thus meeting the need for relatedness.

Andecite had volunteered and served as a research assistant on projects he found personally meaningful. These projects also coincided with his degree field. Gary’s early volunteer experience guided his career and degree choices. Several participants with significant work experience and skills were preparing for new careers, such as Dan and Katherine. Gary was broadening his career opportunities within the same field by adding competencies, while Chuck and Lauren placed importance of building financial security for their families.

Engaged in established careers, Hemingway, June, and Evan continued to take advantage of learning opportunities to enhance their skills or for the love of learning, thus meeting the intrinsic need for competence and sense of accomplishment while also in

relationship with others. All participants expressed motivations that represented the intrinsic need for relatedness.

To achieve their career objectives and to achieve the level of autonomy desired required demonstration of competency. Several participants with career success as evidenced by tenure on the job or by the level of job responsibility expressed surprise at their success and either negated or modestly acknowledged their accomplishments.

The self-determination intrinsic components of autonomy, competence, and relatedness appeared again in experiences related to education objectives with an emphasis on the sense of accomplishment realized at the successful conclusion of a degree program or acknowledgement of the skill level achieved. Other expressed motivations related to developing knowledge and skills more readily acquired through college coursework. Dan, who had retired from a lucrative career as an engineer, was adding a second undergraduate degree that he viewed as closely related and complementary to his engineering degree. His due diligence prior to enrolling had revealed that his second degree was also practical and in demand by prospective employers across several industries.

The need for relatedness was shared as participants talked about their parents' and spouses' views about the perceived future value of an education. For some participants, the educational achievements of family members had influenced their decisions to attain similar or greater educational achievements. Andecite said, "I'm the first for three generations to have a PhD...my mom was the second in three in her family to have a master's. Most have bachelor's." While this could be regarded as an extrinsic motivator, the extent to which attending college is a taken-for-granted assumption and cultural norm within a family suggests an intrinsic need for relatedness.

The intrinsic motivation for relatedness includes belonging to an inclusive and affirming group. For most participants in this study, the inclusive and affirming groups extended beyond family. Nearly all participants discussed their appreciation for the acceptance and encouragement from not only family but also from friends, faculty, classmates, and co-workers.

Specific to academic settings, greater social integration has been associated with the likelihood of continued enrollment. For nontraditional learners, the social integration is not about living on campus or joining fraternities or sororities. The affiliations proposed as important to nontraditional learners were the relationships developed with tutors, mentors, advisors, and faculty members who supported their academic success and helped them withstand challenges to their achievements (Compton, et al. (2006).

Guiffrida, et al. (2013) used self-determination theory to examine the relationship between academic success and college student motivational orientations. Findings suggested that going to college to fulfill the intrinsic motivational needs for autonomy and competence is positively related to the intent to persist and the GPA achieved. Autonomy and competence also supported the persistence of the participants in this study. Several viewed educational achievement as proof of competence. Furthermore, participants engaged in self-direction and self-regulation to progress and juggle their roles and responsibilities as students, spouses, parents, and working professionals. Several noted strategies they applied to “survive academically” and to manage their learning situations. When setbacks occurred, retreat was sometimes helpful to reflect and to consider alternate approaches that would enable their success.

Transformative learning theory. Transformative learning theory “concerns how adults make sense of their life experience” (Merriam, 2007, p. 132). This sense-making provides a frame of reference made up of taken-for-granted assumptions and expectations that develop within the context of one’s biographical, historical, and cultural experiences derived from such things as family background and upbringing, religion, social norms, as well as personal preferences.

A frame of reference has two components: (a) habits of mind, the set of assumptions that are used as a filter to make sense of an experience, and (b) point of view, the set of specific expectations, beliefs, feelings, attitudes, and judgments that determine “what we see and how we see it—cause-effect relationships, scenarios of sequences of events, what others will be like, and our idealized self-image” (Mezirow, 2000, p. 18).

The beliefs, values, and judgments that stem from our meaning-making schemes are closely associated with our self-identity. “Who we are and what we value are closely associated” (p. 18). When values are questioned, the individual may feel attacked, and in response, learning may be limited to only the ideas that are consistent with the narrow or factually flawed frame of reference. “A more dependable frame of reference is one that is more inclusive, differentiating, permeable (open to other viewpoints), critically reflective of assumptions, emotionally capable of change, and integrative of experience” (Mezirow, 2000, p. 19). In the more “dependable frame of reference,” learning is expansive rather than limited and occurs “by elaborating existing frames of reference, by learning new frames of reference, by transforming points of view, or by transforming habits of mind” (p.19).

Mezirow (2000) proposed that “transformations often follow some variation of the following phases (p. 22):

1. A disorienting dilemma;
2. Self-examination with feelings of fear, anger, guilt, or shame;
3. Critical assessment of assumptions;
4. Recognition that one’s discontent and the process of transformation are shared;
5. Exploration of options for new roles, relationships, and actions;
6. Planning a course of action;
7. Acquiring knowledge and skills for implementing one’s plan;
8. Provisional trying of new roles;
9. Building competence and self-confidence in new roles and relationships;
10. A reintegration into one’s life on the basis of conditions dictated by one’s new perspective.

The transformation may be sudden or incremental through “a series of cumulative transformed meaning schemes” (Taylor, 2008, p. 6). Four participants in this study shared experiences representative of disorienting dilemmas that had the effect of transforming their frames of reference.

Andecite’s disorienting dilemma occurred in 2004 while vacationing in Thailand. He had just taken a class in natural hazards and recognized what he thought were signs of a tsunami. He lacked the certainty and perhaps the professional credibility to convince the boat captain of the impending danger triggered by the 9.0 magnitude earthquake in the Indian Ocean. He narrowly escaped becoming a fatality. He remained in Thailand and used skills learned as a firefighter to assist in the rescue and recovery effort. Profoundly affected,

the experience was the tipping point for confirming his field of study. “There is a huge difference in thinking it and knowing it...that pushed me more into geology...I wanted to know more.”

Several years later, Andecite met and married someone who shared his interest in the environment and outdoor activities and his commitment to helping others. With the birth of his daughter, his new roles as husband and father prompted further reflection on the meaning of his education and the work he aspired to do. The tsunami experience pushed him to commit to a field of study. In addition, the roles of husband and father caused him to rethink his pattern of taking classes to assuage his intellectual curiosity and resulted in actions that enabled him to complete his undergraduate degree and to enroll in a PhD program associated with his interests and career prospects.

Gary said, “My friend dying was a motivator because it really reinforced that if you want to get stuff done, the stuff you want to do...do it quickly because life is short.” Gary “wanted to have a PhD and have that sense of accomplishment, that achievement.” He also became aware that AIDS prevention funding from the CDC was changing, and the likelihood existed that he might not be able to continue doing the work he had been doing. The loss of his friend coupled with the potential loss of his employment caused him “to rethink what I was doing with my life.” He enrolled in a PhD program that would enable him to become a licensed clinical psychologist with the ability to “do direct service and research and run programs.”

Katherine’s interest in learning and need for a challenge had provided work experiences that ranged from veterinary medicine to accounting. When she decided to return to the medical field, “they told me that 55 was too old to change careers.” This called into

question a frame of reference that included a strong matriarchal family who valued education and her history of career successes in unrelated fields. In response and in part due to assisting with her own lawsuit, she enrolled in law school. At the time of our interview, she was already trying on her new role by serving as an intern for a civil rights attorney.

Dan's experience of a disorienting dilemma occurred incrementally. After joining the military, his athleticism and intellect resulted in his recruitment into Special Forces. At the conclusion of his military career, he earned a degree in mechanical engineering and soon was involved in a fast track engineering career. "I never once had an interview that I didn't get the job." He was sufficiently successful as an engineer that he retired in his forties and assumed another career. "I was a day trader for several years, and I'd work between 100 to 120 hours a week, and I'd go weeks without talking to another human being...I didn't say I was happy."

Aware of his declining mental state, Dan eventually sought help and was diagnosed with post-traumatic stress disorder. In addition to managing his mental health, Dan was coming to terms with a new identity. "We [Special Forces] were told that we were the only people in the world who had higher egos than navy fighter pilots...if you could have seen me then...you'd know that I'm a fraction of what I was. I use to walk into a room and own it." His decision to pursue a second degree was partially due to the need to re-create himself and accept an identity commensurate with a less intense career, and yet also contributory.

The experiences representative of a disorienting dilemma led Andecite, Gary, Katherine, and Dan to pursue second degrees as a course of action. Similarly, the participants in the Santo (2005) study reported that the opportunity to continue their

education had been transformative allowing a vision for a different future, the possibility of assuming a new job, and a deepening awareness about one's abilities and purpose in life.

Other Motivational Theories

Self-determination theory was the focal motivational theory for this study. However, two other motivational theories, aspiration theory and self-efficacy theory, provide complementary perspectives about the participants' experiences.

Aspiration theory. Quaglia and Cobb (1996) proposed aspiration theory as an integration of achievement motivation and social comparison theory. From their perspective, aspiration consisted of inspiration, what an individual wants to do plus ambition, the willful engagement in actions that will bring the aspiration to fruition.

As an example, given her difficulties as a child learning to read, June was inspired to help children who experienced the same difficulties. Her actions included earning a degree that would enable her to teach and further supplement her course work when she recognized it as insufficient to achieve her inspiration. The factors that motivated June, her aspirations, her career objectives, and her education objectives can be explained with the self-determination intrinsic components of autonomy, competence and relatedness.

Self-efficacy theory. "The likelihood that people will act on outcomes they expect prospective performances to produce depends on their beliefs about whether or not they can produce those performances (Bandura, 2001, p. 10). Lauren found his high school English classes and his school's remediation efforts frustrating. In sharp contrast, he enjoyed and was competent with construction activities. This likely bolstered his self-efficacy to pursue architecture, a field that played to his intrinsic motivations for autonomy and competence. Furthermore, given participants' triumphs over discouraging and sometimes disparaging

encounters in their learning environments, self-efficacy beliefs based on other strengths and successes offer plausible support for the persistence associated with self-determination theory.

Suggestions for Future Research

Four motivational factors, aspirations, career objectives, education objectives, and life changing events prompted the participants in this study to pursue second degrees. These factors appear to be motivations that many learners share. Although each person was interviewed with the same interview questions, some questions may have resonated differently among the participants. Not all participants discussed the factor of a life changing event; however, responses across the three factors of aspirations, career objectives, and education objectives often overlapped and appeared to be threads from the same cloth. A study that differentiates the relationship among factors shared by all participants could conceivably parse out which factor has the greatest impact on motivation or whether the factors are specific to the individual.

This study focused on nontraditional learners with dyslexia pursuing second degrees. A comparative study could assess how factors that motivate nontraditional students with dyslexia in undergraduate programs compare with the factors that emerged in this study. Additionally, a comparative study could potentially reveal how and whether motivations change over time as learners transition from high school to undergraduate and on to other degrees.

The individual with dyslexia who agreed to assist with piloting the interview guide had been adamant in his question, “Why would my motivations to pursue another degree be any different than anyone else?” His view that there was no difference seems accurate, given

the results of this study. An expanded study contrasting nontraditional learners with and without dyslexia could confirm whether the four motivation factors that emerged in this study (aspirations, career objectives, education objectives and life-changing) are common motivations.

Finally, many in the teaching profession have been encouraged to adopt inclusive teaching methods that support learning outcomes for all students. Similar to students who have learning style preferences, methods in the classroom may reflect the delivery preferences of the instructor. A survey of postsecondary students and faculty could potentially identify the extent to which inclusive teaching methods have been implemented.

Self-Reflections and Standard of Care

The purpose of this study was to explore the factors that motivate nontraditional learners to pursue second degrees. Four factors emerged; however, the education experiences with the potential to support or deter participants' motivations impacted me the most. In a former role, I often advised managers that if they knew or should have known about the existence of harassment or discrimination, they had an obligation to take action as a legal standard of care.

The education experiences participants shared in this study prompted reflection about what I know or should know to assure I am providing the standard of care and support that students deserve and my institution should expect from me. If the following questions can contribute to improvements in other learning environments, the result may be that another student will persist with his or her education objectives instead of dropping out. I offer readers the following questions as the starting point for their own reflections:

1. How can I be more like the instructor who served as the “spark” for June by focusing on her strengths and not her disability?
2. How can my regard for the student as a person and his or her life situation and learning outcomes be demonstrated so that decades later I will be recalled as the professor Evan remembered as someone “who really gave a damn”?
3. How can I better connect with students to earn Chuck’s description as “someone who really saw me”?
4. What elements of best classroom practices could I adopt or better implement to facilitate improved learning outcomes?
5. Have I developed a welcoming climate that is conducive to learning and inclusive to students from diverse backgrounds, cultures, and range of abilities?
6. How can I improve my planning and organization skills to benefit my students and provide more time for relationship development?
7. Dan’s consumer-oriented view, “I’m paying...I expect them to teach” struck me as a reasonable expectation. Am I well prepared when I enter the classroom so that students perceive a return on their investment of time and tuition?
8. Do I hinder or support degree attainment? Both June and Chuck recalled professors who they perceived as viewing their learning difficulties as theirs alone to deal with and overcome.
9. Do I understand how laws and institutional policies are to be applied and why? Denied the accommodations that she was entitled to under ADAAA, June had to insist on rights afforded to her by federal law. Similarly, Hemingway’s request for a quiet place to take his exams was met with nonverbal expressions that

discouraged his further requests. Chuck chose a university well regarded for its disability service center only to encounter a disconnect between the espoused values of the center and enacted values of some instructors.

10. Do I question practices that may no longer be relevant? For example, student athletes and members of student organizations receive excused absences to attend university-sanctioned events. The equivalent provision for nontraditional learners should be for *life-sanctioned* events such as when a parent-student has to stay home to care for a sick child or because an employee-student is unexpectedly called in to cover a co-worker's shift.

Education budgets have been the subject of constant debate. A realistic student-to-teacher ratio could enable the affirming affiliations that support academic persistence; however, simple, friendly exchanges can have an exponential, positive influence on learning outcomes as the participants in this study discussed, and have little to do with budgets.

Degree attainment has a long history of proven benefits for the individual and society (Baum, Ma, & Payea, 2010; Gerber, 2012). If misguided or misinformed practices are allowed to raise barriers that affect access to education and/or degree completion, then universities and those of us within those institutions have failed in the mission to develop a literate and educated citizenry essential to the development of a healthy, prosperous, and peaceful nation.

Final Thoughts

This study provided the opportunity for personal and professional development. My brother, the first grader at the beginning of Chapter 1, often spoke to me from the literature. He was present in each interview. He is every student with dyslexia in a class I've taught.

His face is every eager and sometimes uncertain face I greet the first week of school. He reminds me that I still have much to learn.

The French philosopher Jacques Maritain said, “A man of courage flees forward, in the midst of new things” (thinkexist.com). The two women and seven men who willingly shared their stories were all people who have chosen to flee forward. The majority expressed views that conveyed the importance of relatedness through their appreciation of those who had supported and encouraged them. Relatedness also was the source of their desires to help others, to serve as role models to others, to represent others, or to be good providers for their families, and to contributors to their communities.

At the inception of this study, concern was expressed that discussions about dyslexia could evoke unpleasant memories, discourage an open discussion, and result in distress and discomfort for the participants. This proved true to the extent that participants shared numerous recollections of unpleasant experiences. What proved to be false was the concern about their willingness to share these experiences. To the contrary, many disclosed experiences with such depth and breadth of emotion that my composure and objectivity as a researcher was sometimes threatened.

As I returned to the analysis and transcripts to prepare this dissertation, I often relived my initial reactions to their stories. Their examples of persistence and resolve to not be deterred by the naysayers, bullies, and the uninformed served as a source of inspiration and compelled me to write one more paragraph and then one more page.

In M. C. Escher's 1955 lithograph entitled *Liberation*, dark, obscure triangular shapes appear at the bottom. As the eye moves upward, the shapes are transformed into birds that take flight. Using education as a metaphor for liberation, the participant profiles began with the youngest about to embark on a career and concluded with the oldest well established in his career. All the participants were in different stages of metamorphosis along the education continuum. Their resolve, their strength of character, and their resilience against the odds fueled the completion of this dissertation. It was my great honor to have been entrusted to share their stories.



Illustration 3.1. M.C. Escher's Liberation.
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APPENDICES

Appendix A: Introductory Email and Recruiting Flyer

Appendix B: Interview Script with Questions

Appendix C: Informed Consent Form

Appendix D: Letter of Exempt Certification

Appendix A: Introductory Email and Recruiting Flyer

Subject: Request for Participant Recruiting

I am a doctoral student at the University of Idaho and would like to recruit participants from your university for my study.

The University of Idaho Institutional Review Board has certified my dissertation study entitled "Factors that Motivate Nontraditional Learners with Dyslexia to Pursue Graduate Degrees" as exempt under category 2. Attached for your review and consideration are my university's Letter of Exemption Certification, the application certified, and appendix C which includes the Informed Consent Form, interview questions, and a recruiting flyer for your review and consideration.

If additional documents are required from your institution, please advise. If approved, I would like to make the study known through your graduate admissions office and disability service center.

Respectfully,

Students Needed for Dyslexia-Related Study



Students with dyslexia are being recruited to participate in a dyslexia-related research project.

The purpose of this study is to explore the factors that motivate nontraditional students with dyslexia to return to college to pursue a second degree.

Participant Selection Criteria

A participant will be a potential candidate for the study if he or she...

1. has a diagnosis of dyslexia;
2. is at least 24 years old;
3. attends graduate courses on a primarily part-time basis;
4. works full or part-time;
5. is responsible for his or her own finances;
6. has already earned one undergraduate degree from a nationally accredited university and is now pursuing or has completed a second undergraduate or graduate level course.

Time Commitment: 45- to 60-minute interview conducted in person or by telephone and scheduled at the participant's convenience.

If you are interested in volunteering for the study, or have questions regarding the study, please email your contact information to js4od@msn.com or call (208) 890-4442. The University of Idaho Institutional Review Board has certified this project as Exempt.

Appendix B: Interview Script with Questions

Interview Overview, Demographics, and Questions

Numerous studies have been conducted to understand what motivates various nontraditional learners to pursue a second undergraduate degree. No studies could be found that specifically address the motivations of nontraditional learners with dyslexia to pursue an additional undergraduate or graduate degree. This basic, interpretive qualitative study will address the gap in the literature about this specific segment of the graduate population. A basic qualitative study seeks to understand a situation from the perspective of those who have experienced the situation. To summarize, this study has two purposes: 1) to explore the factors that motivate nontraditional learners with dyslexia to pursue an additional degree; and 2) to identify how motivational frameworks explain these learners' motivations.

You are one of up to eight to twelve people who will be part of this study. Thank you for your willingness to participate. I have an interview guide I will use to document your experience as well as a digital recorder as backup to assure my notes are accurate. Before we delve into the questions, I would like to confirm the demographic information we discussed by phone:

You have had a dyslexia diagnosis. _____

The approximate date of your dyslexia diagnosis was _____

Your age is _____

You are pursuing a second degree in _____

The institution granting your degree _____

Your current career/employment is _____

Your major responsibilities include _____

Interview Questions

1. Tell me about yourself.
2. What prompted you to enroll for an additional undergraduate degree?
3. In our prescreening interview, you indicated you are pursuing or have earned a degree in _____. Tell me about your program and how you came to select this particular degree.
4. Some students are ready for a change of pace after completing their undergraduate degree. What was the timeframe between completion of your undergraduate degree and enrollment in your current program?
5. How was the choice of your second degree influenced by your initial undergraduate degree?
6. What had the greatest influence on your decision to enroll in your degree program?
7. How has/did your motivation change or evolve from the time you first thought about returning to college to enrollment/completion?
8. A nontraditional student is someone who has delayed attending college, is an adult over the age of 24, attends course part time, works full or part time, is financially responsible, and may have dependents. Dyslexia is another characteristic of being a nontraditional student. How have any of these characteristics influenced your motivation to pursue your graduate degree?
9. What, if any, other factors have affected your motivation? What changes have you experienced since beginning your educational journey? What else could you share with me that could be beneficial to this study?

Appendix C: Informed Consent Form

Informed Consent Form

Title of study: Factors that Motivate Nontraditional Learners with Dyslexia to Pursue a Second Degree

Researcher: Jan Stephens

Institution: University of Idaho

The University of Idaho Institutional Review Board has certified this project as Exempt.

Purpose of this research study:

The purpose of this basic, interpretative qualitative study is to explore the factors that motivate nontraditional learners with dyslexia to pursue a second degree.

Procedure:

Confidentiality: To protect your identity, you will be assigned a pseudonym and all references to you and the information you provide will appear under that pseudonym. Only the researcher has access to your identity and responses. The data you provide, however, may be seen by the ethical review committee and published in a journal and elsewhere without giving your name or disclosing your identity.

Interview: The approximately one-hour interview will be scheduled at a time that is mutually convenient for you and the researcher. The interview questions will be related to your experience and decisions to pursue a second degree. Your answers will be captured with hand-written notes and digitally recorded. A transcript will be provided to you to assure accuracy of the data. The researcher will follow-up with a telephone call or email to confirm your receipt of the transcript and accuracy of the data.

Right of refusal to participate and/or withdrawal: You are free to participate in this study or withdrawal at any time and for any reason. You are encouraged to let the researcher know if you are uncomfortable answering a question or if your experiences don't coincide with a question. If the interview appears to be creating a stressful situation for you, the researcher will stop the interview.

Possible risks or benefits:

There is no risk involved in this study with the possible exception of your time. There is no direct benefit to you; however, the results of this study may yield information that could benefit others who have dyslexia and those who support their success.

Contact:

If you have questions or concerns before or after the study, please do not hesitate to contact the researcher or faculty sponsor.

Researcher

Jan Stephens
Student, University of Idaho
Department of Leadership & Counseling
Boise, Idaho 83706
Telephone: (208)890-4442

Faculty Sponsor

Dr. Michael Kroth
University of Idaho
Department of Leadership & Counseling
Boise, ID 83702
Telephone: (208)364-4024

Authorization:

I have read and understand this consent form, and I volunteer to participate in this research study. I understand that I can choose not to answer any of the questions asked or opt out of the study simply by stating "I no longer wish to participate" at any time without penalty, loss of benefits, or any impact to relationships. I will receive a copy of this form so that I can refer to it during the interview.

Participant's Name: _____

Date: _____
Month/day/year

I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily. A signed copy of this Informed Consent Form has been provided to the participant.

Researcher's Name: _____

Date: _____
Month/day/year

Appendix D: Letter of Exempt Certification

	University of Idaho Office of Research Assurances (ORA) Institutional Review Board (IRB) 875 Perimeter Drive, MS 3010 Moscow ID 83844-3010 Phone: 208-885-6162 Fax: 208-885-5752 irb@uidaho.edu
December 12, 2013	
To:	Michael Kroth
Cc:	Janet A. Stephens
From:	IRB, University of Idaho Institutional Review Board
Subject:	Exempt Certification for IRB project number 13-294
Determination:	December 12, 2013 Certified as Exempt under category 2 at 45 CFR 46.101(b)(2) IRB project number 13-294: Factors that Motivate Nontraditional Learners with Dyslexia to Pursue Graduate Degrees

This study may be conducted according to the protocol described in the Application without further review by the IRB. As specific instruments are developed, each should be forwarded to the ORA, in order to allow the IRB to maintain current records. Every effort should be made to ensure that the project is conducted in a manner consistent with the three fundamental principles identified in the Belmont Report: respect for persons; beneficence; and justice.

It is important to note that certification of exemption is NOT approval by the IRB. Do not include the statement that the UI IRB has reviewed and approved the study for human subject participation. Remove all statements of IRB Approval and IRB contact information from study materials that will be disseminated to participants. Instead please indicate, "The University of Idaho Institutional Review Board has Certified this project as Exempt."

Certification of exemption is not to be construed as authorization to recruit participants or conduct research in schools or other institutions, including on Native Reserved lands or within Native Institutions, which have their own policies that require approvals before Human Subjects Research Projects can begin. This authorization must be obtained from the appropriate Tribal Government (or equivalent) and/or Institutional Administration. This may include independent review by a tribal or institutional IRB or equivalent. It is the investigator's responsibility to obtain all such necessary approvals and provide copies of these approvals to ORA, in order to allow the IRB to maintain current records.

This certification is valid only for the study protocol as it was submitted to the ORA. Studies certified as Exempt are not subject to continuing review (this Certification does not expire). If any changes are made to the study protocol, you must submit the changes to the ORA for determination that the study remains Exempt before implementing the changes. The IRB Modification Request Form is available online at: <http://www.uidaho.edu/ora/committees/irb/irbforms>

University of Idaho Institutional Review Board: IRB00000843, FWA00005639