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Transforming Disability To Advantage: A Phenomenological Study Of Career Success For Dyslexics

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TRANSFORMING DISABILITY TO ADVANTAGE:
A PHENOMENOLOGICAL STUDY OF
CAREER SUCCESS FOR DYSLEXICS

By

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A DISSERTATION

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The College of Graduate and Professional Studies
at the University of New England

Submitted in Partial Fulfillment of Requirements
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Educational Leadership

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ABSTRACT

The purpose of this Interpretative Phenomenological Analysis study was to understand how dyslexics' and non-dyslexics' perceptions about dyslexia impacted the life experiences of dyslexic individuals with successful careers. Six dyslexic participants described meaningful experiences in their lives and career success in individual, semistructured, in-person interviews in the New York tri-state area. The participants shared insights that revealed four themes: (1) Challenging Academic Experiences, (2) Thinking Differently and Creating Success, (3) Championing a Growth Mindset and Positive Thinking, and (4) Leading with Strengths and Talents.

This study explored the transformative shift from narrowly viewing dyslexia as a neurological disorder to a wider lens of potential advantages for adult dyslexics in successful careers.

Eide & Eide (2012) suggested that the same brain differences that create challenges in reading, language, and learning may have also produced strengths in conceptual, visual, and visionary thinking. The participants shared their strengths and talents, challenges and opportunities in their unique career journeys.

Keywords: dyslexia, dyslexics in careers, successful dyslexics

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DEDICATION

To my late parents, Aileen M. Blake and Donald M. Blake, daughter, Emily A. Kubick,

Partner, Ned Liddell and best girlfriend, Marian Caracciolo

Your enduring love, support, and confidence lives with me always.

To Dorothea M. Liddell (Nana)

We continue to heal each other.

And to my brothers, Bruce A. Blake and the late Donald M. Blake, Jr.

Always kept in my heart

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and Dr. Michelle Collay

With much gratitude for your guidance, wisdom,
and encouragement
on this extraordinary journey

To my colleagues in our cohort
Thank you for all your support and friendship

To the participants in this study
Deep appreciation for sharing your experiences and meaningful insights
about your career success with dyslexia

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CHAPTER ONE

INTRODUCTION

An estimated 15–20% of people are dyslexic (Dyslexia Research Institute, 2017).

Although that number in itself may not seem startling, approximately 80–90 percent of students with learning disabilities are also dyslexic. According to the Yale Center for Dyslexia and Creativity (2018), “It differs from other learning disabilities in its specificity and scientific validation. While those with dyslexia are slow readers, they also, paradoxically, are often very fast and creative thinkers with excellent reasoning skills” (p. 1). Furthermore, 40% of individuals with dyslexia can cite a family member (or more) with similar characteristics (*Understood.org*, 2017).

Dyslexia is a neurological learning disorder, usually caused by cerebellar abnormalities in brain development during gestation, “leading to problems in acquisition and automatization of skills” (Nicolson & Fawcett, 2008, p. xvi). Dyslexia causes “impaired functioning of the language-based circuits involving the cerebellum” (p. 141). Brain disruption creates difficulties in coding in tasks requiring language skills: “There is a disruption of left hemisphere posterior neural systems in child and adult dyslexic readers when they perform reading tasks” (Shaywitz, Mody, & Shaywitz, 2006, p. 278). There are different types of dyslexia and related learning issues that affect individuals with dyslexia. Eide and Eide (2012) suggest that the same brain differences that create challenges in literacy, language, and learning may also create strengths in conceptual, visual, and visionary thinking.

Dyslexic individuals can struggle as students. According to Alexander-Passe (2016), “dyslexics commonly experience adversity as children, both educationally in school and socially through exclusion and bullying by peers due to their learning differences” (p. 88). Early

challenges can result in “post-traumatic stress disorders” (p. 91), creating anxiety and low self-esteem. Dyslexic students can often be misunderstood, underdiagnosed, and undermined as students throughout childhood and into adulthood. It can also be argued that dyslexic students can be resilient and transform their life experiences in positive, successful, and meaningful ways. “Post-traumatic growth” (Alexander-Passe, 2016, p. 91) develops when dyslexic individuals are motivated to create positive experiences as a response to earlier traumatic ones. It is important to remember that dyslexia has a neurological basis: One individual’s coping response may be different from another’s. It is also important to recognize that many dyslexics focus on their areas of strength and talent rather than primarily on coping in areas that are challenging to their neurological deficits.

This study explored the transformative shift from narrowly approaching dyslexia as a disorder to a broader frame of possible advantages for adult dyslexics in successful careers. Dyslexics can “craft an environment towards success building on signature strengths” (Nicholson, 2015, as cited by Alexander-Passe, 2016, p. 90). Children with dyslexia carry forward their early academic challenges with learning into their adult careers. Their responses to early life experiences as dyslexic learners shape their personal and professional lives.

There are creative individuals with high conceptual thinking and other traits, who have career success and are not dyslexic. But there are differences in the brain orientations of dyslexics themselves. Each brain can be considered unique, but there are some common attributes shared by dyslexics. “Dyslexic processing isn’t caused by a single gene, so different individuals with dyslexia will show different patterns of strengths and challenges” (Eide & Eide, 2012, p. xviii). These patterns involve material reasoning, interconnected reasoning, narrative

reasoning, and dynamic reasoning. According to Eide and Eide (2012), individuals with dyslexia often can have the following capabilities:

- Three-dimensional spatial reasoning and mechanical ability.
- The ability to perceive relationships like analogies, metaphors, paradoxes, similarities, differences, implications, gaps, and imbalances.
- The ability to remember important personal experiences and to understand the abstract information in terms of specific examples.
- The ability to perceive and take advantage of subtle patterns in complex and constantly shifting systems or data sets. (p. 5)

The study suggested that 21st-century employers in a “conceptual” (Pink, 2006) economy may benefit from the skills and talents of many dyslexics who can think differently about problems and create innovative solutions.

The emergence of functional magnetic imaging (fMRI) offered a deeper and more detailed understanding of how the brain works in individuals with dyslexia. The fMRI scan measures brain activity from blood flow. “Scientists can infer the location and amount of [brain] activity that is associated with a task, such as reading single words” (International Dyslexia Association, 2018, para. 2). An fMRI of individuals with dyslexia often indicates strengths in the right hemisphere, such as visual, conceptual, and big-picture thinking (Eide & Eide, 2012). The study suggested that fMRI research offered a significant view into the brain activities of individuals with dyslexia.

Unsurprising to dyslexic entrepreneurs, visual, conceptual, and big-picture thinking are common traits underlying career success. “A study of 139 business owners in the U.S. shows that 35% identified themselves as dyslexic. This is strikingly high when compared with a national

incidence rate of 10 percent in the general population” (Logan, 2007 as cited by Leiber, 2011, para. 2). This observation supports other research citing the relevance of thinking differently with the skills and characteristics of successful dyslexic entrepreneurs and leaders. (Alexander-Passe, 2016).

West (2009), as cited in Verhoeven and Boersen (2015), said, “Conceptual thinking is an independent phenomenon among dyslexics. Their success is not the result of compensation strategies due to weakness in processing language. Both phenomena exist simultaneously as successful dyslexics focus on their strengths rather than their weaknesses” (p. 122). Dyslexia can be reframed as a way of thinking differently that offers strengths and talents, rather than deficits. (Reid & Kirk, 2005). “Dyslexia is surrounded by strengths of higher cognitive and linguistic functioning, reasoning, conceptual abilities, and problem solving” (Shaywitz, 2017, para. 4). It was argued in this study that individuals with dyslexia may have viewed their talents and strengths not “in spite of” but perhaps “because” of their dyslexia.

Successful dyslexics reach across many professions. Some well-known dyslexics include Steve Jobs, Richard Branson, Bill Gates, George Washington, Leonardo da Vinci, Albert Einstein, Walt Disney, Thomas Edison, Winston Churchill, John F. Kennedy, Pablo Picasso, Alexander Graham Bell, Thomas Jefferson, Agatha Christie, Lewis Carroll, W. B. Yeats, F. Scott Fitzgerald and Charles Schwab (Psychology Degree, 2017). Anderson Cooper, media journalist, finally decided to reveal his dyslexia as an adult. He credited “reading specialists for the role they played in his career success” (*Understood.org*, 2007, para. 2). Eide and Eide (2012) recommended “the need to change the ways we educate, employ, and teach individuals with dyslexia to think and feel about themselves, their abilities, and their futures” (p. 6). Highlighting well-known successful individuals with dyslexia can educate and inform other dyslexics and

non-dyslexics. Raising the awareness of the talents of individuals with dyslexia to a wider audience will help identify opportunities for both dyslexics and non-dyslexics in the workplace.

Nicholson (2015) argued that individuals with dyslexia offer positive strengths and the skills needed for individuals and organizations in the 21st century. Talents and skills needed from contemporary employers include the ability to think differently and offer innovative solutions and ideas for solving problems. There is a shift in how organizations work, especially in a knowledge economy fueled by accelerating technologies, with more channels for communication competing for audiences and analyzing complex data. Visual thinking, the ability to identify patterns in data, and contributing different perspectives to teams are needed (and valued) by employers. Individuals with dyslexia will need to be aware of their strengths and weaknesses to successfully advocate for themselves in the workplace. Positive and challenging life experiences will have an impact on their career growth as dyslexics.

Statement of the Problem

Dyslexic learners experience difficulties in language coding and processing that affected their abilities to sound out words and to read fluently. Dyslexic learners find reading challenging—to “decode” the written word. Phonological processing helps an individual analyze the sound structures in words. This weakness can manifest itself in difficulty in linear brain operations, language, and reading. There is evidence of strength in the right hemisphere of the brain, highlighting strong visual, big-picture thinking and diverse abilities to solve problems (Eide & Eide, 2012).

The medical and psychological communities define dyslexia as a “specific learning disorder” (American Psychiatric Association, 2016, p. 2) with an impairment in reading, according to criteria defined by the Diagnostic and Statistical Manual (DSM-5). Adults with

dyslexia may (or may not) be aware of their strengths, challenges, or opportunities to self-advocate in the workplace. Dyslexia is often called a “hidden” disability and often the disability is unknown, even by employers (Nicolson, 2015). For example, Vogel and Adelman (2000) as cited in Reid (2016) asked college alumni if they disclosed their dyslexia to employers. They found that “41% of working adults with learning disabilities who graduated 8–15 years before stated that they did not want to reveal their dyslexia to employers” (p. 33). This study considered how self-identification, self-advocacy, talents, and a positive and growth mindset contributed to the career success of individuals with dyslexia.

Correcting myths about dyslexia is a challenge. The Roper Research poll (2010) found that “8 out of 10 people (80%) of Americans erroneously associated learning disabilities with mental retardation” (p. 16) and “79% of parents, 81% of teachers and 58% of administrators associated learning disabilities with mental retardation” (p. 3). The report offered some positive information, citing that Americans and educators agreed that children learn in different ways. The results showed a need to increase awareness of the strengths and talents of dyslexics.

According to McLoughlin and Leather (2009) as cited in Reid (2016), “If dyslexic people are to be fully included in society, the emphasis should be empowerment or enablement rather than a model of disability that perceives the dyslexic as a victim” (p. 314). Individuals with dyslexia should develop a positive and growth mindset, rather than giving up and falling back on “learned helplessness” in a career.

Purpose and Rationale for the Study

The purpose of this study was to learn from the life experiences of individual adult dyslexics with successful careers. Exploring how these successful dyslexics created meaning and sense from their life experiences revealed a deeper and broader understanding of strengths and

talents of dyslexics due to their brain organizations. This study argued that there was a transformative shift from seeing dyslexia with a narrow focus of neurological weakness or disability to a wider lens of strengths, abilities, and gifts in some individuals with dyslexia and career success. Focusing on positive strengths and talents offered more opportunities for career success. (Nicholson, 2015). Dyslexia could be viewed as an “advantage” (Eide & Eide, 2012) and enhanced with adaptive functioning when talents of dyslexics are well matched with career choice. This study explored whether the participants felt that they were successful “not *in spite of* dyslexic processing differences or *because of them*” (p. 4).

The rationale of this study was that people with dyslexia could contribute different and innovative perspectives and talents to solve problems needed in 21st-century professions. Organizations benefit from and value talent diversity from stakeholders. “The latest findings on dyslexia are leading to a new way of looking at the condition; not just as an impediment, but as an advantage, especially in certain artistic and scientific fields” (Paul, 2012, p. 1). Dyslexics in the workplace need to find roles that promote their strengths and delegate some areas of weaknesses, such as linear and sequential tasks, to others with these strengths. Emerging technologies, digital tools, and media available across digital platforms will help the dyslexic become more productive in the workplace. Assistive technology such as text-to-speech, Livescribe Smartpen, Dragon Naturally Speaking (PC), and Dragon Dictate (MAC) are offered across computer and mobile devices (Yale, 2016). Dyslexics offer innovative contributions across many fields due to their brain orientation toward big picture thinking, strong creative talents, visual abilities, and visionary focus as leaders and entrepreneurs. Understanding how dyslexia impacts the life experiences of adult dyslexic individuals with successful careers

contributes to current and emerging knowledge about individuals with other or combined neurological brain orientations.

Central Research Question

This study sought to explore this central question: *How does the perception of dyslexia impact the life experiences of individual dyslexics with successful careers?*

Subquestions

- How does self-advocacy impact the life experiences of dyslexics?
- How does developing a growth mindset and positive thinking impact the life experiences of dyslexics?

Conceptual Framework

The researcher sought to identify a conceptual framework to support the significance of this study's topic. According to Ravitch and Riggan (2012), "By argument, we mean that a conceptual framework is a series of sequenced, logical propositions, the purpose of which was to convince the reader of the study's importance and rigor" (p. 7). This study aimed to learn from the insights of six participants using an Interpretative Phenomenological Analysis methodology. There was an opportunity to reframe dyslexia beyond its status as a neurological, specific learning disorder to a broader (and positive) emphasis on the talents and strengths of many dyslexics.

The researcher was a high-functioning, successful dyslexic. This study "mattered" to the researcher because the insights to be learned from participants who were successful dyslexics could contribute to dyslexics, their families, communities, employers, and current and emerging research. If a dyslexic individual was encouraged to self-identify talents (and weaknesses) due to individual brain orientations, there was the potential to give a voice to dyslexics, empower their

contributions in careers, and bring this often-hidden disability or disorder to light. Dyslexics need to learn to advocate for themselves in their careers. As an example, the researcher experienced early academic difficulties in school. Anxious for new knowledge and passionate about learning, the researcher became determined to discover different ways to learn. A formal neuropsychological evaluation of the researcher in mid-life revealed areas of neurological strengths and weaknesses. There were advantages, including creative talents and big-picture conceptual thinking, within the brain orientations of the researcher. According to Dweck (2016), establishing a “growth” mindset vs. a “fixed” mindset for dyslexics was also critical to success.

The conceptual framework for this study supported the relevant research questions. The data collected through the Interpretative Phenomenological Analysis (IPA) should “provide the researcher with the raw material needed to explore the research questions” (Ravitch & Riggan, 2012, p. 7). Data analysis supported the research questions. Exploring internal, linking, and external success factors offered a conceptual framework that guided and linked areas in the study and helped the researcher decide on the research design and methods. “Topical research describes the *what* of the study, while the theoretical frameworks clarified the *why* and the *how*” (p. 13). This study identified a new model of success to empower dyslexics in careers within the overall conceptual framework, which was discussed in detail in Chapter Two of this dissertation proposal.

Assumptions, Limitations, Scope

As is inherent to all qualitative research this study had given limitations. This study assumed that as more dyslexic learners self-identified as dyslexic, the workforce would be more aware of their talents. This study also assumed that as more dyslexic learners advocated for themselves by expressing their talents and strengths, employers would seek the best fit for these

strengths in 21st-century careers. This study also assumed that life experiences, both positive and negative, would encourage dyslexics to seek support, such as assistive technology and support from colleagues, so they could compensate for limitations and focus on their strengths. The researcher was biased, as a high-functioning dyslexic learner. It was important to be diligent and conscious of this potential bias throughout the study.

Another limitation of this study was that there were six participants, a small qualitative sampling. Furthermore, this study used an Interpretative Phenomenological Analysis (IPA) approach and gained a greater insight into the meaning and sense-making from the life experiences of the participants that shaped their careers, compared to a larger quantitative sampling by survey. The researcher self-identified with the participants as a dyslexic learner. The goal was to help participants feel comfortable in sharing their own experiences. Interpretative Phenomenological Analysis (IPA) also allowed for the researcher to be “engaged in a double hermeneutic because the researcher is trying to make sense of the participant trying to make sense of what is happening to them.” (Smith, Flowers, & Larkin, 2012, p. 3). As a result, there was the possibility of subjectivity and research bias. The researcher consulted with Dr. Monica Creelman, neuropsychologist and affiliate member of this dissertation committee. Dr. Creelman and the researcher consistently discussed the need to reflect on a potential bias throughout the study. It was important not to project the researcher’s self-perceptions of dyslexia on the participants. The researcher was very conscious about not making assumptions about the individual characteristics of dyslexia with the participants: Every individual with dyslexia has a unique brain orientation. The study was also limited by the meaning of career success expressed by each of the six participants and did not assume the meanings of success for other dyslexics.

Significance of the Study

The results from the study identified and developed transformative opportunities for dyslexics based on their positive strengths rather than their weaknesses. Dyslexics who learned how to self-advocate for success would lead by example. The study contributed to increasing awareness, acceptance, inclusion, and respect for people who “thought differently” in the workplace. The study provided employers with a greater understanding of how to attract, nurture, and retain dyslexic talent. According to Nicholson (2015), skills that are needed by a 21st-century knowledge economy include proactivity, innovation, big picture, visuospatial abilities, teamwork, empathy, and communications” (p. 143), which can also describe traits in many dyslexics. A deeper understanding of the life experiences of successful dyslexic learners in the workplace also offered insight into the research of dyslexia and other areas of neurodiversity.

Rationale for the Study

The rationale of this study was the fact that people with dyslexia can contribute different and innovative perspectives and talents to solve problems needed in 21st-century professions. Organizations benefit from and value talent diversity from stakeholders. “The latest findings on dyslexia are leading to a new way of looking at the condition; not just as an impediment, but as an advantage, especially in certain artistic and scientific fields” (Paul, 2012, p. 1). Due to their brain differences, dyslexics offer innovative viewpoints across many fields toward big picture thinking, strong visual talents and abilities, and evidence focused on entrepreneurial leadership skills. Understanding the meaning and sense-making from dyslexics with successful careers may also contribute to current and emerging knowledge about individuals with other or combined neuro-atypical brain differences. Exploring and recognizing the need to advocate on one’s own

behalf and seek guidance to excel in positions aligned with their talents (and individual brain) is described in this literature review.

Talents and skills needed from 21st-century employers include the ability to think differently and offer innovative solutions and ideas. There is a shift in how organizations work, especially in a “conceptual” (Pink 2006) economy, fueled by diversifying technologies and multiplying channels for communication and data. For example, the strengths of visual thinking, the ability to identify patterns in data and thinking differently in teams are needed (and valued) by employers. Organizations may benefit from and value neurodiversity from stakeholders.

According to Paul (2012), “The latest findings on dyslexia are leading to a new way of looking at the condition; not just as an impediment, but as an advantage, especially in certain artistic and scientific fields” (p. 1). Other research suggests that dyslexics offer innovative viewpoints across many fields due to their brain orientations toward big picture thinking, strong visual talents and abilities, and evidence focused on entrepreneurial leadership skills (Eide & Eide, 2012). “Sensemaking, relating, visioning, and inventing” (Biggs, 2007) are leadership skills needed for the 21st century. According to Nicolson (2015), these talents are also closely associated with dyslexics.

Definition of Terms for Dyslexia

A brief definition of *dyslexia* is offered by Shaywitz, Mody, and Shaywitz (2006):

Dyslexia is a disorder within the language system and, more specifically, within a particular subcomponent of that system, phonological processing. Converging evidence from a number of laboratories using functional brain imaging indicates that there is a disruption of left-hemisphere posterior neural systems in child and adult dyslexic readers when they perform reading tasks. (p. 278)

Dyslexic learners demonstrate a weakness in processing information in the left hemisphere of the brain. “Phonological processing problems are found in 80–90% of individuals with dyslexia” (Eide & Eide, 2012, p. 23). Phonological processing helps an individual analyze the sound structures in words. This weakness can manifest itself in difficulty in linear brain operations, language, and reading (Eide & Eide, 2012). There is also evidence for some dyslexics of strength in the right hemisphere of the brain, highlighting strong visual, big picture thinking, and abilities to solve problems (Eide & Eide, 2012).

Americans with Disabilities Act: According to the Yale Center for Dyslexia and Creativity

(2018) “The Americans with Disabilities Act, first enacted in 1990 and then updated in 2008, prohibits unjustified discrimination based on disability. It is meant to level the playing field for people with disabilities, including those who are dyslexic,” (para 1).

Americans with Disabilities Act National Network: The Americans with Disabilities Act (ADA)

prohibits employers from discriminating against employees and job candidates who have a physical or mental impairment that substantially limits one of more major life activities. Learning is considered a major life activity and dyslexia is a learning disability. So long as the person with dyslexia is qualified for a position, meaning he or she can perform its essential functions with or without a reasonable accommodation, employers generally should not terminate someone solely because of this learning disability (*adata.org*, 2018, para 2).

Automization deficit: “A cognitive theory of dyslexia based on deficits in automaticity in any skill whether cognitive or motor” (Nicolson & Fawcett, 2008, p. xvi).

Cerebellum: “A region of the brain traditionally thought to play an important role in the integration of sensory perception and motor control, but more recently found to have a significant role in language skills” (Nicolson & Fawcett, 2008, p. xvi).

Cerebellar deficit: “A brain-based explanatory causal theory for dyslexia, based on a cerebellar deficit during gestation leading to problems and automatization of skills” (Nicolson & Fawcett, 2008, p. xvi).

Cormorbidity: “The presence of two or more developmental disabilities in the same individual” (Nicholson & Fawcett, 2008, p. xvi).

Diagnostic and Statistical Manual (DSM-5): Dyslexia is defined as a “specific learning disorder with an impairment in reading” (American Psychiatric Association, 2013, p. 2).

Dyslexia with attentional deficit and hyperactivity disorder (ADHD): The *Diagnostic Statistical Manual (DSM)*, DSM-5 specifies “three subtypes: predominantly inattentive presentation, predominantly hyperactive/impulsive presentation, or combined presentation” (*Add.org*, 2016, para. 2).

Dyspraxia: problems with movement and coordination, language and speech. (*Understood.org*, 2016)

Dysgraphia: Affects a person’s handwriting ability and fine motor skills. A person with this specific learning disability may have problems including illegible handwriting, inconsistent spacing, poor spatial planning on paper, poor spelling, and difficulty composing writing as well as thinking and writing at the same time. (*Idaamerica.org*, 2018, para 1).

Dyscalculia: Dyscalculia is defined as a failure to achieve in mathematics commensurate with chronological age, normal intelligence, and adequate instruction. It is marked by

difficulties with visualization; visual-spatial perception, processing and discrimination; counting; pattern recognition; sequential memory; working memory for numbers; retrieval of learned facts and procedures; directional confusion; quantitative processing speed; kinesthetic sequences; and perception of time (Dsycalculia.org, 2018, para.1).

Data Collection in Interpretative Phenomenological Analysis: “Usually (but not necessarily) in the form of semistructured interviews where an interview schedule is used flexibly and the participant has an important stake in what is covered. Transcripts of interviews are analyzed case by case through a systematic, qualitative analysis. This is then turned into a narrative account where the researcher’s analytic interpretation is presented in detail and is supported with verbatim extracts from participants. (Smith, Flowers, & Larkin, 2009, p. 4).

Double-deficit hypothesis: “A theory of dyslexia based on deficits in phonology and speed” (Nicholson & Fawcett, 2008, p. xvii).

Executive function: “Organization, planning, implementation, and oversight of tasks” (Eide & Eide, 2012, p. 25). “Executive function is the use of self-directed actions (self-regulation) as to choose goals and to select, enact and sustain actions across time toward those goals usually in the context of others” (Barkley, 2012, p. 121). An individual with a decreased level of executive function would experience “impaired self-awareness, self-monitoring, and even an impaired sense of self” (p. 182).

Interpretative Phenomenological Analysis (IPA): “A qualitative research approach committed to the examination of how people make sense of their major life experiences” (Smith, Flowers, & Larkin, 2009, p. 1).

Magnocellular deficit: “A brain-based theory of dyslexia, which argues that the deficit is based on problems in sensory processing, whether auditory, visual or tactile, owing to abnormal functionality of the corresponding magnocellular neural sensory system” (Nicholson & Fawcett, 2008, p. xvii).

Plasticity: “Adaptation of brain structures to better cope with the environment and in response to learning. Specifically when an area of the brain is damaged or nonfunctional, another area may take over some of the function” (Nicholson & Fawcett, 2008, p. xix).

Procedural learning: “Procedural learning is learning how to do something, and learning it to the point where it’s automatic, so you know how to do it without having to think about it. This process of becoming automatic with complex rules and procedures is much more difficult if you’re dyslexic. (Nicholson & Fawcett [2008] as cited in Eide & Eide 2012, p. 26).

Proceduralization: “The learning of a method for performing the skill, followed by the automatization phase in which the skill no longer requires conscious attention” (Nicholson & Fawcett, 2008, p. xix).

Specific procedural learning difficulties (SPLD): “An explanatory theory for dyslexia based on deficits in procedural learning” (Nicholson & Fawcett, 2008, p. xx).

Working memory: “Short to intermediate term memory for active conscious processing” (Eide & Eide, 2012, p. 24).

Conclusion

A transformative shift from “disorder” to “advantage” was explored through the life experiences of successful dyslexics in this study. There was a need for much more attention to adults with dyslexia over the long term and through effective followup (Schnieders, Gerber,

Goldberg, & Gomez, 2015). A better scientific understanding of dyslexic brain orientations offered potential insight into strengths and weaknesses. A greater awareness of the advantages of a dyslexic brain orientation could benefit individuals, organizations, communities, employers and researchers. According to Schnieders et al., (2015), “The impact of the economic changes of the past decade will shift success for all young people, and how that affects students with learning differences (LD) both internally and externally has yet to be experienced” (p. 104). There was a need to shift toward self-advocacy in school and the work environment for individuals with dyslexia (Reid & Kirk, 2005). Scientific progress, changing perceptions, self-advocacy, positive and growth mindsets, and a greater awareness of dyslexic talents will contribute to new knowledge on this topic.

Recognizing neurodiversity and the talents of dyslexic learners, increasing inclusion and aligning strengths with successful career outcomes was key. Employers may benefit from a greater understanding of dyslexia and from aligning a good fit with career positions. A deeper understanding of how dyslexia impacts the life experiences of dyslexics in successful careers may benefit other dyslexic learners, their employers, families, organizations, employers, and researchers in the future.

Chapter One introduced the study, the problem statement, the purpose and rationale of the study, the primary research questions, a conceptual framework, a theoretical framework, assumptions, limitations and scope, the significance of the study, definition of key terms for the reader, and a conclusion. Chapter Two explains the review of literature related to the study. This chapter integrates the theoretical concepts into the conceptual framework. The conclusion in Chapter Two will summarize the rationale for how the study addresses the problem statement, questions, and the community.

Chapter Three explores the methodology of an Interpretative Phenomenological Analysis (IPA) approach. The researcher sought to learn from the individual life experiences of the participants to better understand the transformative shift from narrowly viewing dyslexia as a disability to a wider, more holistic view of it as an opportunity and a career advantage. This chapter describes the setting, the relationship with participants, and how the study would be conducted. Chapter Three describes how the data was collected, how the data was analyzed, the rights of participants, and potential limitations of the study.

The findings from the research data are presented in Chapter Four. Results from the data are linked back to the purpose of the study, problem statement and research questions, and include a summary. Chapter Five is the conclusion, including an interpretation of findings, and implications for individuals with dyslexia, communities, and organizations. There is a recommendation for action and further study. Lastly, the conclusion discusses the significance of the study, and a list of the references, followed by the appendices, including data tables, documents for interview protocol, an approved sample consent-for-study form, and letter of approval from the Internal Review Board (IRB).

CHAPTER TWO

LITERATURE REVIEW

The purpose of this Interpretative Phenomenological Analysis was to learn from the life experiences of individual adult dyslexics with successful careers. Exploring how these successful dyslexics created meaning and sense from their life experiences revealed a deeper and broader understanding of strengths and talents of dyslexics due to their brain orientations. This study argued that there was a transformative shift from seeing dyslexia as the limited definition of neurological weakness or disability to a wider embrace of the strengths, abilities, and gifts in dyslexic brain orientations.

This literature review focuses on existing and emerging research that supported the research questions and potential explanations. Appreciative Inquiry developed as a conceptual framework that encouraged individuals to change their thinking from dwelling on old, unsolved problems to a positive mindset of imaging and discovering what *is* possible in their careers. The transformation from “deficit” thinking (what’s wrong) to “positive” thinking was explored during this literature review by the researcher. Theoretical frameworks, such as positive psychology (Lewis, 2016); grit, passion, and perseverance (Duckworth, 2016); and the importance of developing a growth mindset (Dweck, 2016) contributed to the overall conceptual framework, and reinforced the current and emerging research.

There were seven broad initial areas that emerged from the research to show how the unique brain orientations of dyslexics contributed to positive experiences in careers or negative experiences that may have created “learned helplessness” in the workplace.

- Emerging scientific evidence

- Importance of support for dyslexic learners: role of families, friends, and communities
- Academic learning, guidance, and support
- Self-advocacy to create career success
- Psychological experiences, strengths, and perceptions of dyslexic learners
- Self-perceptions of dyslexic learners and perceptions from non-dyslexics
- Importance of seeking job roles well-matched to strengths and skills

New research was added to the literature review throughout the study to reflect new and updated information about dyslexics with career success. This literature review opened with a rationale for the study, followed by the definition and description of dyslexia, discussion of the seven broad areas above, career guidance, and conceptual and theoretical frameworks. The last section summarizes the literature review in conclusion and discusses the need for further study.

Definition and Descriptions of Dyslexia

According to the Yale Center for Dyslexia and Creativity (2018),

Dyslexia is an unexpected difficulty in reading for an individual who has the intelligence to be a much better reader. It is most commonly due to a difficulty in phonological processing (the appreciation of the individual sounds of spoken language), which affects the ability of an individual to speak, read, spell, and, in many cases, learn a second language. Dyslexia affects 20% of the population and presents 80–90 percent of all learning disabilities. But it differs from other learning disabilities in its specificity and scientific validation. While those with dyslexia are slow readers, they also, paradoxically, are often very fast and creative thinkers with excellent reasoning skills. (p. 1)

This suggested that the well-known characteristic of slow reading is associated with a lesser-known characteristic of fast reasoning.

Emerging Scientific Evidence

The emerging scientific evidence from advanced neurological imaging, such as functional fMRIs, offered significant insight into the strengths and weaknesses of individual brain orientations. These images offer a better understanding to guide, support, and empower dyslexic learners. Shaywitz et al., (2003), as cited in Hudson, High, and Otaiba (2015), explained the role of emerging brain research to better understand how dyslexics learn:

The brain of a person with dyslexia has a different distribution of metabolic activation than the brain of a person without reading problems when accomplishing the same language task. There is a failure of the left hemisphere rear brain systems to function properly during reading. Furthermore, many people with dyslexia often show greater activation in the lower frontal areas of the brain. This leads to the conclusion that neural systems in frontal regions may compensate for the disruption in the posterior area.

(para. 48)

The scientific description of how an fMRI scan measured brain activity was defined below, according to the International Dyslexia Association (2018),

Functional MRI (fMRI) is based on the physiological principle that activity in the brain (where neurons are firing) is associated with an increase of blood flow to that specific part of the brain. fMRIs are used to widely study the brain's role in reading and its components, phonology, orthography, and semantics. Studies from different countries have converged in findings of altered left-hemisphere areas. Results of these studies confirm the universality of dyslexia across different world languages. (para. 2–6)

Such research may have been helpful in “developing successful reading interventions” (para.1) and offered information that may relate brain orientations of dyslexic learners to potential career roles. The differences in brain structure in dyslexic learners affected language and reading processing. Research indicated that strengths in conceptual, visual, and big picture thinking on the right side of the brain were developed due to the arrangement of broadly spaced minicolumns of cells in the cortex in the brain in some dyslexics. According to Casanova (2012) as cited in Eide and Eide (2012):

Individuals with widely spaced minicolumns (functional units from cells in the cortex of the brain) sent out larger axons that formed physically longer-distance connections. Individuals with broadly spaced minicolumns tended to form more connections between minicolumns in distant parts of the brain. Longer connections are generally weaker at fine-detail processing but excel at recognizing large features or concepts, that is, big picture tasks. Circuits formed from long connections are also useful for tasks that require problem solving, especially in new or changing circumstances. Broader connections favor the formation of broadly integrated circuits, which in turn create high-level cognitive skills. Joining distant areas of the brain together is just what individuals with dyslexia do best. (pp. 39–41)

Individuals with dyslexia are challenged by reading tasks. Research analysis comparing reading levels with IQ levels suggests that while dyslexics may read at a lower speed due to slow processing, the IQ scores of dyslexic and non-dyslexic learners can be similar. According to Ferrer et al., (2010) as cited by Yale (2011), “fMRI scans show that dyslexic individuals are neurobiologically wired to read slowly” (p. 2). The results of this study demonstrated that the

intellectual abilities of dyslexics were comparable to non-dyslexics, despite the lower level reading scores of dyslexics due to information processing.

Gerber (2012) summarized his own research and provides related research from experts in the field of adult education with students with learning differences. The author critiqued evidence-based research to date:

What the research literature has told us so far on adults with learning differences (LD) is that one size does not fit all. Research tells us that the best practices should incorporate flexibility in approach, and understanding of the complexities of adulthood, and an appreciation of what is unique when working with adults with LD. (p. 44)

This study learned from the lived experiences of six dyslexic participants with successful careers. Their voices revealed individual stories of challenges and success reflective of their unique, complex and flexible approaches to earning their success.

This study argued that there was a need to revise an understanding of dyslexia as an opportunity or as an “advantage” rather than only a neurological deficit. According to the American Psychiatric Association (2018), dyslexia was defined as a “specific learning disorder” based on specific criteria listed in the *Diagnostic and Statistical Manual of Mental Disorders*, 5th edition (DSM-5). Eide and Eide (2012) suggested using the term “learning advantage” to describe the talents and skills of an individual with dyslexia in career roles with “goodness of fit.” Paul (2012) commented, “The latest findings on dyslexia are leading to a new way of looking at the condition; not just as an impediment, but as an advantage, especially in certain artistic and scientific fields” (p. 1).

According to the Yale Center for Dyslexia and Creativity (2018), there is evidence that the whole-brain, data driven approach in an fMRI “can deepen our understanding of the neural

basis of dyslexia and highlight the importance of synchrony between diverse brain regions for successful reading” (para. 1). According to Shaywitz, Moday, and Shaywitz (2006) research suggested that brain imaging capabilities (such as the fMRI) provided scientific evidence that contributed to a positive and dynamic understanding of the strengths and weaknesses of dyslexic learners, “an exciting example of translational science being used for the public good” (p. 278). The study argued that scientific evidence such as the fMRI imaging clarified what parts of the brain were activated when an individual with dyslexia was reading. “So while the dyslexics may read more slowly, they have strengths in higher order thinking and reasoning skills” (Shaywitz, 2006, p. 3). The greater the understanding of emerging scientific evidence, the greater potential for improved reading interventions to benefit dyslexic learners.

Importance of Support for Dyslexic Learners:

Role of Families, Friends and Communities

Supportive roles impacted a dyslexic learner’s confidence and achievement. Kiziewicz (2012) cited the importance of support: “What is clear is that when this creative thinking ability is nurtured, whether in education or in the workplace, dyslexic people succeed, but when it is not, dyslexic people fail” (p. 203). Nalavany & Carawan (2011) challenged the “lack of research and empirical inquiry in the life experiences and socio-emotional adjustment of adults with dyslexia” (p. 58). There was a focus on studying how family support can help a dyslexic learner develop high self-esteem to navigate from childhood into adulthood.

Academic Learning, Guidance, and Support

Increasing awareness of dyslexic learners in school can identify reading difficulties early on and provide support for these students, both academically and emotionally. “The majority of dyslexic students in the U.S. are not getting the help they need” (Wolf, 2014, as cited by

Raymond and Raymond, 2014). “It’s a form of brain organization that they have that leads them to be, often times, our artists, our architects, our pattern recognizers in radiology and astronomy. But they often think outside the box of our conventional left hemisphere thinking” (para. 10). Individuals with dyslexia need to use the strengths and talents of their “unconventional” ways of thinking differently to successfully navigate through their lives and careers. It was suggested that offering different teaching styles may help a dyslexic learner. Curriculum models (including group projects, additional or alternative academic assessments) and academic guidance were important factors in helping a dyslexic student identify successful career goals.

Sumner (2012) analyzed a model that provided dyslexic students with guidance and support to create successful career outcomes. Support for dyslexic learners included the following: “specialist tutors, dyslexic tutorials, a learning profile, diversity of support from other advisors, learning advanced IT skills, dealing with procrastination (and perfectionism), planning, crossing boundaries, self-esteem and motivation and work/career placement” (p. 101). Dyslexic learners may benefit from changes in teaching styles and curriculum that encourage more interactive learning that may result in positive learning and career outcomes.

Educational leaders could strategically create more integrated incubator-based and project-based learning for students offering different “thinking” perspectives for collective successful results. Redford (2015) studied how real world learning helped dyslexic students integrate information and enhance understanding of curriculum:

Project-based learning is based on the idea that school assignments should involve authentic learning experiences and activities that reflect the work that people must do in the everyday world. It emphasizes a number of skills that educators have generally agreed are essential for a twenty-first century education. (para. 1)

Redford (2015) also stated many dyslexics demonstrated “qualities that include collaboration, creativity, communication, and critical thinking. Project based learning often involved groups of students working together to achieve a common goal. This was ideal for a dyslexic” (para. 4). Research suggested that experiential learning (including project based learning) contributed to the success of adults with dyslexia (Schnieders et al., 2015, p. 21). This study argued that choosing career environments well aligned with the skills and talents of dyslexics was critical to achieving and maintaining success.

Positive Experiences, Strengths, and Perceptions of Dyslexic Learners

Lockiewicz, Bogdanowicz, and Bogdanowicz (2014) compared the psychological resources of adults with and without developmental dyslexia. They pointed out “Succeeding in different fields by highly functioning adult dyslexics may depend on personality and motivational factors, rather than cognitive factors” (p. 543). The psychological resources included visual-spatial abilities, creativity, and motivation. Kiziewicz (2012) described common attributes of a dyslexic thinker that included a tendency to “question and challenge conventions and assumptions and make inventive connections and associate things that are not usually related” (p. 198). Thinking differently, finding passion in work, creatively solving problems, persevering through challenges, and using innovative approaches were successful factors. “Envisioning what might be” (p. 199) was another example of a strength in visual/spatial abilities and creativity.

This study explored these critical traits and characteristics in the six participants and their relationship to their success. Kiziewicz further described that dyslexics tended to “reflect critically on ideas, actions, and outcomes and persist in the face of resistance” (p. 201). Duckworth (2016) cited grit as an inspirational psychological trait associated with achievement.

“In assessing grit along with other virtues, I found three reliable clusters. I referred to them as the intrapersonal, interpersonal, and intellectual dimensions of character. You could also call them the strengths of will, heart, and mind” (p. 273). The study argued that individuals with dyslexia need to adopt a positive and growth mindset, continue to learn and demonstrate “grit, passion, and perseverance” (Duckworth, 2016) to succeed. Chapter Four highlights the voices of the participants as they adopted such qualities to succeed.

Dyslexics (and non-dyslexics) who can solve problems by thinking differently positively contributed to the workplace. Research indicated that creative dyslexics (and creative non-dyslexics) integrated design thinking into career opportunities (Mootee, 2013). Design thinking allowed stakeholders (everyone who has a stake in organizations) to approach challenges and opportunities as innovative designers and offered different perspectives to imagine what is possible. Biggs (2007) and Saunders (2007) as cited in Kiziewicz (2012) suggested that creativity is about imagining new applications to current ideas, as well as creating brand new ideas. Visual-spatial skills can be strong, leading to excellent abilities in various career fields. Pink (2006) as cited in Nicolson (2015) suggested that the 21st century will need right-brain thinking:

- Not just function but also *design*.
- Not just argument but also *story*.
- Not just focus but also *symphony*.
- Not just logic, but also *empathy*.
- Not just seriousness but also *play*.
- Not just accumulation but also *meaning*. (p. 134)

This study argued that unconventional thinking (thinking differently) contributed to the career success of the participants.

Hoi (2013) offered various ways dyslexic learners may use the right side of their brain to compensate for weaknesses in processing from the left side of the brain. The author studies examples of several dyslexic learners who develop skills and cognitive exercises to improve the organization of ideas and reading comprehension. The research showed a potential to strengthen “big picture” thinking often connected to the right side of the brain. Hoi (2013) also cited cultural, technical, and economic changes in our environment that may need right-sided thinking to solve problems. The current research sought to reveal a deeper understanding of how dyslexic learners can use their visual talents in emerging careers.

Landau (2011) described how colleges are looking closely into the talents and needs of dyslexic learners. The author cited a study by Shaywitz (2010): “Many high-achieving dyslexics have compensating strengths that enable them to rise to the top of various fields” (para. 6). This insight suggested more research on how the experiences of dyslexic learners can build on skills of discovery, innovative approaches, and entrepreneurial thinking. According to Dyer, Gregersen, and Christensen (2011), “Collectively, these discovery skills, the cognitive of association and the behavioral skills of questioning, observing, networking, and experimenting, constitute what we call the innovator’s DNA, or the code for generating business ideas” (p. 25). There was research that described the “big picture” thinking from dyslexics as an advantage associated with entrepreneurial leaders. Logan (2007) as cited by Eide and Eide (2012) said, “Fewer than 1% of middle managers are dyslexics” (p. 241). Leaders and managers perform different roles in an organization. Managers often supervise linear operations and projects. Leaders have bigger-picture vision.

Negative Experiences, Weaknesses, and Perceptions

Early difficulties in school, lack of knowledge, limited family or academic support, low self-esteem, and fear of exposing this “invisible” disability or difference to others may have presented negative results in the workplace. Dyslexics with low confidence and self-esteem may not have presented their ideas for fear of rejection. Sternberg (2006), as cited by Kiziewicz (2012), stated, “This can often mean that dyslexic individuals’ ideas are discounted even if they had a much better, more creative idea with long-term benefits” (p. 202). The negative perceptions by others held back dyslexics from sharing their talents and insights in the workplace. A dyslexic with a poor self-perception of their dyslexia may have reduced their chances for success. The causes of negative perceptions by others may have been due to misconceptions and myths about dyslexia. Poor self-esteem may have been based on earlier academic, psychological, and social experiences. A dyslexic with low expectations of their value may not have recognized their talents, or perhaps experienced discouragement or failure in career roles that were not aligned with their strengths. The decision to have adopted a “fixed” or “a positive psychology” (Lewis, 2016) and a “growth” mindset (Dweck, 2016) was critical to career growth for non-dyslexics, as well as dyslexics.

If a dyslexic learner adapted a “fixed” mindset, there were negative psychological aspects that could have constrained success (Dweck, 2016). A fixed mindset may have enabled a dyslexia learner to give up on learning and striving for success. A fixed mindset may have created “learned helplessness,” the belief that they were incapable of learning and developing their intelligence to succeed. There were dyslexic and non-dyslexic individuals who may have positive and growth mindsets or fixed mindsets. It was suggested that it is critical that a dyslexic learner develop a positive and growth mindset to succeed.

Difficulties with the processing of information common with dyslexia created challenges in areas including reading, writing, math computation, processing speed, organizational skills, and time management. This study explored how these challenges also created emotional obstacles for dyslexic learners in the workplace. One strategic system that employed innovative thinking: “SCAMPER” stood for “substitute, combine, adapt, magnify, minimize, modify, put to other uses, eliminate, reverse, rearrange” (Osborn & Eberle (2011) as cited by Dyer, Gregersen, & Christensen, 2015, pp. 63–64). Perhaps SCAMPER would be an effective method for evaluating an issue that might be applied to dyslexic learners in the workplace.

In addition, some dyslexics may be reluctant to self-identify and document their condition. Schwab (2000) described dyslexia as an “invisible disability” (para. 6). There needs to be a transformative shift from hiding dyslexia to declaring the advantages and opportunities of dyslexic talents in the workplace. Bringing dyslexia into the light may have provided a voice for these learners and 21st century employers.

Self-Perceptions of Dyslexic Learners and Perceptions from Non-Dyslexics

Positive experiences promoted confidence in the workplace. Negative experiences may have consciously or unconsciously affected success. Self-perception and advocacy had an impact on career success. Chalk (2015) explored the comparison between dyslexics who self-identified with a learning disability vs. dyslexics who were hesitant to disclose their challenges:

Mindfulness [self-awareness]) was positively associated with self-esteem in all groups, with the strongest relationship in those who self-identified as disabled. Findings suggest embracing one’s disability may be protective against the stressful effects of this marginalized identity [as dyslexic]. Clinicians should encourage individuals with dyslexia

to cultivate mindfulness skills, as they are associated with positive outcomes for this population. (p. 1)

Often people with dyslexia have had to be self-advocates and take a lead role in determining the outcomes of workplace accommodations. Price and Gerber (2008) as cited in Reid (2016), proposed the following factors of self-disclosure:

- Self-disclosure is driven by context and situation
- Self-disclosure is the management of personal information
- Self-disclosure is nestled in the larger concept of self-determination
- There is risk in self-disclosure
- Disclosure protects in some contexts
- Disclosure must include information and not just the label
- Disclosure is just the beginning. (p. 33)

Individuals with dyslexia needed to develop self-advocacy skills to succeed in careers (p. 34).

Advocating for oneself has also impacted the perception of dyslexia from non-dyslexics. It was argued that self-advocacy was also a teaching tool for educating non-dyslexics about the strengths and challenges of the dyslexic individual.

Roffman et al. (1994), as cited in Reid (2016), said that self-disclosure and “a greater self-understanding led to willingness to disclose in social and employment settings” (p. 33). It was suggested that self-advocating was important to bringing hidden strengths and talents into the light for dyslexics. If a dyslexic was working in a career role that was too linear, weaknesses in performance might have been exposed. Self-advocating and proactively stating one’s strengths and talents have transformed work performance for the positive. Admitting that there were areas

that should be delegated due to weaknesses might be accepted if the employer's needs for the strengths and talents outweighed the weaknesses.

Some dyslexics feared discrimination and judgment from non-dyslexics (Eide & Eide, 2012). The ways dyslexics perceived how others "saw" them could have contributed to or detracted from success. Some individuals with dyslexia hesitated to either self-identify or reveal their weaknesses to others (May & Stone, 2010). Lynch and Gussell (1996), as cited in Reid (2016), "explored disclosure and self-advocacy in post-secondary students with learning disabilities and found that they feared stereotyping and attribution of unfounded characteristics associated with learning disabilities" (p. 33). Some dyslexic students experienced early painful academic challenges that may have impacted their self-esteem. The participants in the study revealed how they survived academic, psychological, and social difficulties to flourish in their lives and careers.

Growth Mindsets: Impact on Success of Dyslexics in Careers

Dyslexic learners may have focused on "growth" in the workplace (applying talents and skills to positive and growth opportunities) or remain "fixed" (adverse to continuing to learn and grow, thus limiting their opportunities for success). According to Dweck (2016), a "fixed" mindset reflects a need to hide dyslexia, avoid challenges to learning, surrendering hope to learn (giving up), an inability to accept feedback, and a tendency to envy the learning success of others. A "growth" mindset believed that intelligence and competence can be developed, as opposed to a static view of abilities in a "fixed" mindset. Dyslexic learners with a growth mindset were often passionate about learning despite reading challenges, and welcomed challenges to improve their skills through learning.

Dyslexic learners with a growth mindset tended to make a great effort to achieve success, were open to constructive feedback, and felt it was important to empower the success of others (Dweck, 2016). According to Duckworth (2016), a growth mindset proposed the model that talent x effort = skill, and skill x effort = achievement. She stated “Talent, how fast we improve in skill, absolutely matters. But effort factors into the calculations *twice*, not once. Effort builds skill. At the same time, effort makes skill *productive*” (p. 42). This study argued that individuals with dyslexia who have worked very hard to learn and master skills since their early school days have great opportunity for success if they adopt a “positive, growth mindset” (Lewis, 2016) combined with “grit, passion, and perseverance” (Duckworth, 2016).

Preparing Students With Skills and Strengths Well Matched to Careers

Existing research demonstrated that dyslexics often found success as creative problem solvers. Creative fields such as advertising, visual communications, art and design, photography, and data visualizations (using spatial talents in 3D and 4D) offered opportunities for success across many fields. According to Davis (2010) as cited in Scott (2016):

Verbal thinkers process about five words per second compared to dyslexics who conceptualize 32 images. Picture or visual thinking gives dyslexics the ability to quickly understand how things work. Dyslexics also succeed in fields such as chemistry and biotechnology because of their ability to visualize and understand molecules and micro-organisms. (p. 1)

Fink (2002) cited a study of 60 successful adult dyslexics “in challenging professions including medicine, law, business, psychology, education, and the arts and sciences” (p. 118). The research suggested that having passionate interests was critical to career success. Fink (2002) further suggested:

Empathy is found to be central to the enduring self-concept of a majority of these (dyslexic) adults. There were no differences in gender, with 67% of both men and women citing the ability to empathize with others as key to their sense of who they are. (p. 127)

The participants in the study expressed empathy for people who struggled. They expressed that they enjoyed mentoring others, personally and in the workplace. It was suggested that mentoring was a reflection of their empathy as they guided and inspired others towards success.

There were emerging new career opportunities for dyslexic learners to identify visual patterns in complex data and in scientific imaging. Twenty-first century employers needed employees who thought differently and offered new perspectives to solve problems in a knowledge economy. There were research studies that linked the qualities of dyslexic learners with successful entrepreneurs. Logan (2007), as cited in Eide and Eide (2012), offered guidance to dyslexic learners about choosing career paths based on their unique strengths in thinking. The author suggested that these learners sought “jobs that fit well that engage strengths and avoid weaknesses” (pp. 238–242). Logan further advised, “Find jobs which *focus on results rather than methods*” (p. 240). It was suggested that dyslexics choose a company culture that welcomed creative thinking and flexibility in organizational structure.

Leadership skills that required vision and big picture thinking may have been better matched for dyslexics than linear-focused projects in middle management. How was thinking differently an asset when seeking areas of opportunity or solving challenging problems in careers? Different kinds of brains were needed to look at issues and create innovative solutions. According to Logan (2007), “The broader implication is that many of the coping skills dyslexics learn in their formative years become best practices for the successful entrepreneur” (para. 3).

The participants in the study found ways to learn from their early academic, psychological, and social difficulties, applying their strengths and talents to successful careers.

Describing the experiences of dyslexics shed more light on dyslexic learners who may have struggled with reading as a child and then achieved success in the workplace. According to Schramm (2012), as cited by Leiber (2012), “There’s no particular reason to think that you could connect the dots between a learning disability and entrepreneurs. It is because they are visionary and they do have an ability to see things other people don’t” (para. 4). A dyslexic learner may have developed different and innovative approaches to absorbing and understanding content, cultivating strong interpersonal communication skills, demonstrating resilience to difficulties, showing a genuine desire to learn, delegating activities that compensate for their weaknesses and soliciting support to achieve success. These skills may have translated well into the workplace when aligned with talents and strengths. There needed to be a reframing of dyslexia to focus on the strengths and talents rather than a narrow focus on compensating for weaknesses because of their unique brain orientations.

The research of Eide and Eide (2012) revealed how self-identifying as a dyslexic may have offered opportunities in 21st-century organizations that sought their talents and skills. One example was based on a series of seminars from self-identified dyslexia leaders in high tech fields. For instance, Shader (2015) attributed his dyslexic skills for understanding and explaining technology to others as part of his success at Microsoft. Sandell (2014) further attributed his abilities to build strong relationships in investing in new tech companies to his dyslexia talents.

Career Guidance for Dyslexic Learners

Expanding career guidance into new career fields that welcomed creative and visual-spatial talents will have had an impact on career choices. McLoughlin and Leather (2013)

offered an informative guide for dyslexic learners to develop successful lives, with a strong emphasis on academic/learning skills and career development strategies. Eide and Eide (2012) recommended that dyslexic learners should diligently strive toward “being proactive in pursuing opportunities, self-advocating with supervisors and coworkers, building partnerships, pursuing leadership opportunities, and using technologies to maximize productivity” (p. 242). Choosing career roles based on strengths and “goodness of fit” was encouraged over trying to awkwardly fit into roles that required high compensation for their neurological deficits.

Conceptual and Theoretical Frameworks

Conceptual Framework

Schnieders et al. (2015) cited a new model of success from studies of Frostig (2009) and Gerber (2012) “that combined internal, external, and linking successful factors” (p. 104). A brief description of this new model served as a conceptual framework in this study:

- Internal desire that links to creating coping strategies that leads to learned creativity
- Internal perseverance that links to reframing productivity that leads to finding supportive models
- Internal persistence that links to engagement/proactively (letting people know) that leads to social ecologies that provide strategic mentoring and support
- Internal flexible goals that link to careers with positions of “goodness of fit” and positive cultural work environments
- Internal awareness of strengths and weaknesses of dyslexia seeking to focus on strengths in career choices and development

- Linking factors include emotional coping, reframing dyslexia to be productive, proactivity, and goodness of fit.
- External factors include learned creativity (strategies, techniques, methods that enhance abilities and take advantage of strengths). These cognitive tools help the adult with dyslexia shape the environment to an advantage and find support systems/social ecologies. (pp. 4–21)

This new conceptual model provided a framework that supported the research questions and themes in the study. This model was also well aligned with the literature review, theoretical frameworks, and the Interpretative Phenomenology Analysis (IPA) methodology.

Theoretical Framework

Appreciative Inquiry (AI) was a theoretical framework that also blended well with the conceptual framework, literature review, and IPA analysis, and supportive of the research questions and themes. According to the Center for Appreciative Inquiry (2016):

It is a way of being and seeing. It is both a worldview and a process for facilitating positive change in human systems, e.g., organizations, groups, and communities. Its assumption is simple: Every human system has something that works right—things that give it life when it is vital, effective, and successful. (p. 1)

According to Bushe (2013), “the transformational potential of appreciative inquiry” (p. 1) encouraged people to ask positive questions about what is *possible for the future*, rather than dwelling on deficits (what was wrong) from problems in the past. The framework motivated people to positively change their thinking toward success. The attributes of positive psychology (Lewis, 2016); grit, passion, and perseverance (Duckworth, 2016); and the importance of developing a positive and growth mindset (Dweck, 2016) were core examples of existing

literature that shaped this study. These frameworks also reinforced the insights of the participants in the study.

Conclusion and Need for Future Study

The review of the literature supported the study of the transformative shift from viewing dyslexia as a disability to an opportunity for an advantage. Current and emerging research encouraged dyslexics to accept one's brain orientation and focus on strengths rather than weaknesses to achieve career success. Exploring the meaning and sense-making from the life experiences of adult dyslexics with successful careers may have revealed insights that also benefited the larger community of dyslexic learners, families, organizations, and employers. Review of the literature also contributed to increasing knowledge in the larger field of neurodiversity and recognizing the talents of people with different brain orientations.

CHAPTER THREE

METHODOLOGY

The purpose of this Interpretative Phenomenological Analysis qualitative study was to understand how the self-perception of dyslexia and the perception of dyslexia by others impacted the life experiences of dyslexics with successful careers. The rationale of this study was that people with dyslexia contributed different and innovative perspectives in critical thinking and talents in their careers. In this study the researcher listened carefully to the voices of the six participants, amplified their insights, and analyzed their data to deepen our understanding of how they navigated their careers to achieve and maintain success.

Central Research Question

This study sought to explore the central research question: *How does the perception of dyslexia impact the life experiences of individual dyslexics with successful careers?*

Subquestions

- How does self-advocacy contribute to successful careers for dyslexics?
- How can identifying and developing a growth mindset and positive thinking affect the success of dyslexics in the workplace?

Schnieders et al. (2015) cited a new model of success from studies of Frostig (2009) and Gerber (2012) “that combined internal, external and linking successful factors” (p. 104). This new conceptual model provided a framework to support the research questions, themes revealed from the participants in the interviews, research from the literature review, and the theoretical frameworks.

Methodology

The Interpretative Phenomenological Analysis (IPA) methodology used in this study provided an opportunity to understand each of the participants and their life experiences related to success. According to Smith, Flowers, and Larkin (2012), “IPA is concerned with human lived experiences and posits that experience can be understood via an examination of the meanings which people express upon it” (p. 34). This methodology aligned well with exploring the life experience of successful dyslexics in their careers and learning from the “personal meaning and sense-making in a particular experience” (p. 45). This study was “double hermeneutic because the researcher is trying to make sense of the participant trying to make sense of what is happening to them” (p. 3). The study was “ideographic” (p. 3) in that it sought insight from a particular individual. The researcher shared her dyslexia with the participants and was very conscious of this bias when conducting the study.

According to Smith, Flowers, and Larkin (2012), the qualities of an IPA researcher include:

- Open-mindedness
- Flexibility
- Patience
- Empathy
- Willingness to enter into and respond to the participant’s world. (p. 55)

Merriam and Tisdell (2016) described IPA as a way to understand “how people experience a phenomenon and make meaning of their life experiences” (p. 207). Smith, Flowers, and Larkin (2012) stated that IPA required that the researcher be a sensitive listener, encouraging “detailed stories, thoughts, and feelings from semistructured, one-on-one interviews” (p. 56). Learning

from the voices of the participants revealed some painful memories that required sensitivity not just in what the researcher asked the participants but how the questions were asked.

Setting

The individual in-person interviews were held in quiet, neutral settings in private offices and university conference rooms in the New York tri-state area. The researcher explained to the participants that the purpose of the study was to learn from their life experiences as individuals with dyslexia and successful careers. Smith, Flowers, and Larkin (2012) described the process as follows:

Successful IPA research combines both stances: It is empathic and questioning and the simple word, “understanding” captures it neatly. We are trying to see what it is like for someone and in the sense of analyzing, illuminating, and making sense of something.

(p. 36)

The researcher consulted with professionals who work with successful dyslexics, including Monica L. Creelman, Ph.D., affiliate member of the Dissertation Committee, University of New England Doctoral Ed.D. Program, in an effort to locate participants. Further, the researcher sent an online invitation letter to the Yale Center for Dyslexia and Creativity (YCDC). Other sources for potential participants were the community of The Dyslexic Advantage, the New York branch of the International Dyslexia Association, New York University Moses Center, and New York Women in Communications.

Participants/Sample

This study used recorded interviews as its main source of data collection, and there were interviews with six dyslexic participants, aged between 40 and 60 years old. According to Smith, Flowers, and Larkin (2012), it was suggested that the participants formed a “reasonably

homogeneous sample” (p. 3) and met the criteria as successful in careers. Within a study of successful dyslexics, the researcher sought to “examine in detail psychological variability within the group, by analyzing the pattern of convergence and divergence which arises” (p. 50).

Because IPA focuses on learning from the individual life experiences of each participant, this research emphasized “quality, not quantity, and given the complexity of most human phenomena, IPA studies usually benefit from a concentrated focus on a small number of cases” (p. 51). The small number of participants also had an impact on data saturation. According to Mason (2010):

There is a point of diminishing return to a qualitative sample—as the study goes on, more data does not necessarily lead to more information. This is because one occurrence of a piece of data, or a code, is all that is necessary to ensure that it becomes part of the analysis framework. Frequencies are rarely important in qualitative research, as one occurrence of the data is potentially as useful as many in understanding the process behind a topic. This is because qualitative research is concerned with meaning and not making generalized hypothesis statements. (p. 2)

The invitation from the researcher to participants also included the purpose of the study, the criteria for participants, and the potential contributions of the findings to research about dyslexia in the workplace. Merriam and Tisdell (2016) advised that the study be based on selecting a small group of successful dyslexic participants sampling “on the assumption that the investigator wants to discover, understand, and gain insight, and therefore must select a sample from which the most can be learned” (p. 96). The researcher followed the guidelines of Smith, Flowers, and Larkin (2012):

Informed consent must be gained not only for participation in data collection (you will need to think about how best to explain to your participants what to expect from an interview or focus group) but also for the likely outcomes of data analysis (and particularly, the inclusion of verbatim extracts in published reports). With regard to the data collection, it is normal practice to let the participant know the type of topics to be covered. (p. 53)

Participants were given pseudonyms and unique identifier numbers to protect their privacy and confidentiality. The researcher created a clearly written consent form and read the form to each participant to confirm understanding, consistent with the *Belmont Report* (1979): “The consent process can be analyzed as containing three elements: information, comprehension, and volunteerism” (p. 1). Each participant was asked to review and sign the consent form to indicate their agreement before the interviews commenced.

There was a line-by-line verbatim transcription of each interview for data analysis, consistent with Smith, Larkin, and Larkin (2012). “IPA requires a semantic record of the interview; that means a transcript showing all the words that are spoken by everyone who is present” (p. 74). These recordings were used for the benefit of this study with the written permission of each participant and the dissertation review committee at the University of New England. The recordings were kept in a secure and locked cabinet in the researcher’s home office and were deleted at the end of the study.

This interpretative phenomenological study sought to learn from the voices of the participants and their life experiences. The interview questions were semistructured in nature to both encourage participant engagement and allow the researcher the opportunity to hold a conversation, adding probing and follow up questions to enhance participant response. The

questions were prepared using the guidelines of Smith et al., (2009) “so that they are open and expansive; the participants should be encouraged to speak at length” (p. 59). Each participant was made fully aware that they could withdraw from the interviews at any time in the study. Participants were given an opportunity to review and check the written verbatim transcriptions for accuracy and to contact the researcher with any deletions, additions, or need for further clarity in content. The researcher hand delivered the written transcript to Participant 2, with her pseudonym, “Mary.” The other written transcripts were sent via secure emails as preferred by those participants. No participant responded with any edits or changes to the written transcripts.

Data

The interviews conversations were recorded in person using QuickTime player for Mac with backup recordings using a Phillips audio recorder and also an iTalk recorder app for iPhone to ensure accuracy and to observe nonverbal behaviors among the six participants. According to Smith, Flowers, and Larkin (2012), “if the event is an interaction, then it should be recorded, either on audio or video media” (p. 73). The use of audio gave participants the opportunity to review each of their interviews in the written transcripts as a part of the member checks.

The recordings were transcribed using Rev.com, providing an accurate living written document of the interviews. The participants were assigned pseudonyms to protect their privacy and confidentiality. The participants seemed comfortable and were very forthcoming expressing their lived experiences in the interviews. Five of the six participants had one round of interviews. Participant 1, “Hayden,” was interviewed for 2 hours, 30 minutes. Participant 2, “Mary,” was interviewed for 1 hour and 17 minutes. Participant 3, “Meri,” was interviewed for 1 hour, 55 minutes. Participant 4, “Cy,” was interviewed for 1 hour, 51 minutes. Participant 5, “Ambrose,” was interviewed for 1 hour, 55 minutes. Ambrose had a second interview for 1 hour, 17 minutes.

The types of questions in the interviews included the following to encourage participant responses, following the guidelines provided by Patton (2015):

- Experience and behavior questions
- Opinion and values questions
- Feeling questions
- Knowledge questions
- Sensory questions
- Background/demographic questions (p. 118)

The researcher was approachable, caring, and flexible in approach as the interviewer. It was important that each participant felt safe and comfortable. The interview questions were organized as guidelines for discussion. The participants were forthcoming with their experiences and open to sharing the insights that were most meaningful to them. There was a strong awareness that the participant's insights guided the flow of the conversation. Smith, Flowers, and Larkin (2012) advised the following:

The plan for IPA interviews is an attempt to come at the research questions “sideways.” Often, research questions are pitched at the abstract level and so it is not usually helpful or effective to ask the participant. We aim to set up the interview as an event which facilitates the discussion of relevant topics, and which will allow the research question to be answered subsequently, via analysis. (p. 58)

The purpose of collecting data in this study was to learn about the perspectives of the participants. The researcher also attempted to adopt a holistic view of each participant, collecting different points of data from oral, written, and nonverbal cues, such as voice or body language whenever possible.

Analysis

The researcher analyzed data from the interviewed participants, according to the guidelines of Creswell (2013) “for significant statements, meaning units, textual and structural description, and description of the essence” (p. 104) about the lived experiences of the participants and their career success. The researcher read and re-read the written transcriptions and began writing initial exploratory comments from the transcriptions. The researcher used NVivo 11 for MAC software (QSR International, 2017) to help analyze the meanings of the life experiences of the individual participants. Smith, Flowers, and Larkin (2012) recommended that the researcher search for “connections across emerging themes: (p. 92). Smith et al. (2012) noted that:

Themes reflect not only the participant’s original words and thoughts but also the analyst’s interpretation. They reflect a synergistic process of description and interpretation. Whilst initial notes feel very loose, open, and contingent, emergent themes should feel like they have captured and reflect an understanding. (p. 92)

Guidelines for effective data analysis, according to Creswell, (2013) included

- Rereading the transcripts and interview notes to gain a deep understanding of the meaning behind the conversations
- Seeking key language related to the life experiences
- Creating themes that are common to all participants
- Accurately describing the life experiences of each participant
- Confirming the findings with the participants, asking for “member checks” and comments during the final descriptions (p. 115)

The researcher initially used in vivo coding, that Saldana (2016) stated were words or phrases to “prioritize and honor the participant’s voice” (p. 295). The coding provided meaning behind the life experiences of the dyslexic participants. According to Rossman and Rallis (2012), as cited in Creswell (2014), “Coding is the process of organizing the data by bracketing chunks (or text or image segments) and writing a word representing a category in the margins” (p. 198). Creswell (2013) recommended that the researcher sought to identify meaningful statements from the use of coding and to organize them into “meaning units or themes” (p. 93). There were 470 phrases (nodes) captured and added to the NVivo 11 for Mac database to organize and segment the data into initial exploratory categories. The researcher reduced redundant phrases and chose 270 initial phrases (nodes) that best represented the voices of the participants.

For deeper analysis of the data, the researcher grouped together some of the initial categories that seemed similar in content and created sets. These sets revealed eighteen subthemes and eventually four themes as in *Figure 1-NVIVO Screen*.

The screenshot displays the NVivo 11 software interface. On the left, there is a navigation pane with sections for 'Nodes', 'Cases', 'Node Matrices', 'CLASSIFICATIONS', 'Source Classifications', 'Case Classifications', and 'COLLECTIONS'. The 'Nodes' section is expanded, showing a list of 270 nodes. The main window shows a table of nodes with columns for Name, Sources, References, Created On, Created By, Modified On, Modified By, and Color. The table lists various nodes such as '1-Importance of support...', '1-Psychological and Soci...', '1-Suffered Academically', etc. Below the table, there is a 'Summary' section for the selected node, '3-Nurturing a Growth Mind Set to Keep Learning, Growing and Succeeding'. This section shows a 'reference' view of a transcript snippet with five references coded, resulting in 0.30% coverage. The transcript text includes: 'being a scholar. You have to be able, you have to have that sort of critical mind and, and willingness to go the extra mile to see if that is really true', 'I constantly have to be improving', 'She couldn't do it because she's never done it before. And because she's never done it before, she could never do it. And I said, you know, "Do you realize what kind of a circle you're in"', 'think there are some people, you get to a certain age and, um, if, if they've thought in a certain way, they don't feel that they can jump out of that', and 'people gather because they're engaged in some way to be with each other.'

Name	Sources	Referen...	Created On	Created...	Modified On	Modified By	Color
1-Importance of support...	5	28	3/26/18, 3:20 PM	BAB	3/26/18, 3:20 PM	BAB	
1-Psychological and Soci...	5	26	3/26/18, 3:20 PM	BAB	3/26/18, 3:20 PM	BAB	
1-Suffered Academically	6	53	3/26/18, 3:21 PM	BAB	3/26/18, 3:21 PM	BAB	
2-Created and Envisioned...	6	20	3/26/18, 3:21 PM	BAB	3/26/18, 3:21 PM	BAB	
2-Created different ways...	4	23	3/26/18, 3:21 PM	BAB	3/26/18, 3:21 PM	BAB	
2-Delegated tasks not all...	4	6	3/26/18, 3:22 PM	BAB	3/26/18, 3:22 PM	BAB	
2-Recognized unique and...	5	8	3/26/18, 3:23 PM	BAB	3/26/18, 3:23 PM	BAB	
2-Self-advocated based...	6	53	3/26/18, 3:23 PM	BAB	3/26/18, 3:23 PM	BAB	
3-Embraced positive cha...	4	6	3/26/18, 3:23 PM	BAB	3/26/18, 3:24 PM	BAB	
3-Faced challenges as op...	5	18	3/26/18, 3:24 PM	BAB	3/26/18, 3:24 PM	BAB	
3-Learned capabilities of...	3	9	3/26/18, 3:24 PM	BAB	3/26/18, 3:24 PM	BAB	
3-Nurturing a Growth Min...	6	45	3/26/18, 3:24 PM	BAB	3/26/18, 3:24 PM	BAB	
4-Chose career roles wit...	6	13	3/26/18, 3:25 PM	BAB	3/26/18, 3:25 PM	BAB	
4-Contributed positive va...	6	18	3/26/18, 3:25 PM	BAB	3/26/18, 3:25 PM	BAB	
4-Developed visionary "b...	4	9	3/26/18, 3:25 PM	BAB	3/26/18, 3:25 PM	BAB	

Figure 1. NVIVO screen

A detailed view of the database shown in *Figure 2*-NVIVO screen detail grouped phrases from each participant into a series of categories.

The screenshot displays the NVIVO interface. At the top, a table lists themes with columns for Name, Sources, Referen..., Created On, Created..., Modified On, and Modified By. The theme '3-Nurturing a Growth Min...' is selected and highlighted in blue. Below the table, there are tabs for 'Summary' and 'Reference'. The 'Reference' tab is active, showing a list of references for the selected theme. The references are grouped by transcript: 'Internals\\Hayden Transcript' and 'Internals\\Louise Transcript'. Each transcript group shows the number of references coded and the percentage coverage. The references themselves are text excerpts from the transcripts.

Name	Sources	Referen...	Created On	Created...	Modified On	Modified By
2-Self-advocated based...	6	53	3/26/18, 3:22 PM	BAB	3/26/18, 3:22 PM	BAB
3-Embraced positive cha...	4	6	3/26/18, 3:23 PM	BAB	3/26/18, 3:24 PM	BAB
3-Faced challenges as op...	5	18	3/26/18, 3:24 PM	BAB	3/26/18, 3:24 PM	BAB
3-Learned capabilities of...	3	9	3/26/18, 3:24 PM	BAB	3/26/18, 3:24 PM	BAB
3-Nurturing a Growth Min...	6	45	3/26/18, 3:24 PM	BAB	3/26/18, 3:24 PM	BAB
4-Chose career roles wit...	6	13	3/26/18, 3:25 PM	BAB	3/26/18, 3:25 PM	BAB
4-Contributed positive...	6	10	3/26/18, 3:25 PM	BAB	3/26/18, 3:25 PM	BAB
3-Nurturing a Growth Mind Set to Keep Learning, Growing and Succeeding						

Internals\\Hayden Transcript
5 references coded, 0.58% coverage

Reference 1: 0.05% coverage
keep absorbing and learning how to do different things

Reference 2: 0.09% coverage
really curious and sort of that has led me into situations that have happened to be successful

Reference 3: 0.06% coverage
work with such high level, high functioning smart people.

Reference 4: 0.24% coverage
I guess my biggest fear or, I don't know if fear is the right word, but, um, is just stagnating. And it doesn't matter if, um ... I don't even mean just with work. It's like, although I do almost continuously try to be learning something else here.

Reference 5: 0.14% coverage
Yes. Because, and I know emotionally it's important for me because I will get dep-, like, depressed. Like, I'll start feeling, like, just sad

Internals\\Louise Transcript
6 references coded, 0.82% coverage

Reference 1: 0.25% coverage
I like what I do because, um, I make the right amount of money for me, and I am always in new places, meeting new people, and, um, constantly problem solving, because no production is ever the same

Reference 2: 0.05% coverage
My success, um, comes from not being intimidated

Figure 2. NVIVO screen detail

Data and connections across themes were grouped as follows, as suggested by Smith, Flowers, and Larkin (2012):

- Abstraction leading to the development of a theme
- Subsumption leading to the development of a theme
- Polarization (opposing relationships between emergent themes)

- Contextualization to identifying contextual or narrative elements within an analysis
- Numeration (frequency with which the emergent themes appear throughout the transcript)
- Function of the language intertwined with the meaning and thoughts of the participant (pp. 96–99)

The researcher used abstraction to identify and analyze the phrases representing the voices of the participants. The phrases were organized within broad initial categories. The phrases and categories revealed eighteen clustered subthemes within four themes in the study.

Participant Rights

The researcher followed the “ethical principles and guidelines for research of human subjects” (*Belmont Report*, 1979, n.p.) and adhered to requirements of the “Institutional Research Board for the Protection of Human Subjects” (University of New England, 2017, n.p.).

Furthermore, the researcher as interviewer remained fully aware of the ethical responsibilities to the participants (Smith, Flowers, & Larkin, 2012). The primary elements of conducting research with participants included “informed consent, risk/benefit assessment, and the selection of subjects” (*Belmont Report*, 2009). This study included:

- *Informed consent*. So that participants are provided with clear information about the research study and presented with information in an organized manner so that all participants could comprehend the information and make an informed decision with a clear mind, and with verbal and written agreement.
- *Risk/benefit assessment*. The intention of the study was to better understand the meanings and sense of the life experiences of successful dyslexics as a benefit, and not to cause harm.

- *Selection of participants.* The study selected six participants who fit the criteria as autonomous adults with dyslexia, who have successful careers in the New York City tri-state area.

Every effort was made on the part of the interviewer to carefully observe any sensitive responses from participants. The researcher's interview questions offered the opportunity for participants to reveal more information, or pause, move on to the next questions, or stop at any time. The questions were phrased as carefully as possible to help the participants feel comfortable about sharing insights that were most meaningful to them. Follow-up and probing questions allowed for a natural discourse and conversation to emerge between the researcher and participant.

The study also upheld the ethical principles outlined in the *Belmont Report* (1979), which offered guidelines for solving ethical problems with human subjects:

- *Respect for persons as autonomous agents*, with the understanding of gaining consent from participants before entering the study, keeping information confidential (using optimal safeguards to the best of the efforts by the researcher), and allowed the participants to voluntarily withdraw any time during the student study.
- *Beneficence* towards protecting participants from harm and maximizing benefits while minimizing risks.
- *Justice* toward treating each participant equally: (1) to each person an equal share, (2) to each person according to individual need, (3) to each person according to individual effort, (4) to each person according to societal contribution and (5) to each person according to merit.

Limitations

The limitations of the study included a small sample size of six participants. This study was also limited to individuals who self-identified as dyslexic and considered themselves successful in their careers. Since the researcher self-identified as a dyslexic learner, the researcher was conscious of this potential bias. This study was further limited to the responses of these particular participants through an Interpretative Phenomenological Analysis approach.

This study focused on the particular (idiographic) experiences of the participants within the context of dyslexia. According to Smith, Flowers, and Larkin (2012), “This is in contrast to most psychology, which is “nomothetic,” and concerned with making claims at the group or population level, and with establishing general laws of human behavior” (p. 29). The study, limited to a small sample of six participants, sought deeper analysis and meanings of the life experiences, rather than using a survey approach or larger quantitative study. According to Smith and Osborn (2003),

The aim of the IPA study is to say something in detail about the perceptions and understandings of this particular group rather than prematurely make more general claims. It is also possible to think in terms of theoretical rather than empirical generalizability. Readers make links between the findings of an IPA study, their own personal and professional experiences, and the claims in the extant literature. The power of the IPA study is judged by the light it sheds within this broader context. (p. 56)

Therefore, the researcher wished to examine the lived experiences from a fewer number of participants with deeper insight about each participant, rather than generalized knowledge.

Conclusion

The use of an Interpretative Phenomenological Analysis (IPA) provided a deep understanding of the meaningful life experiences of participants versus that of a larger quantitative design. The researcher/interviewer had to listen very closely and carefully to the responses of the participants. The responses were in words, in nonverbal gestures, and in sounds. What was *not said* by individual participants also offered meanings from their life experiences. It was also important that interpretation from the researcher clarified meanings and amplified the voices of the participants.

CHAPTER FOUR

FINDINGS

The purpose of this Interpretative Phenomenological Analysis was to understand how the self-perception of dyslexia and perception of others impacted the life experiences of individuals with dyslexia with successful careers. The rationale of this study was that people with dyslexia may contribute different and innovative perspectives in critical thinking and talents in their careers. This study considered how thinking differently, self-identification, self-advocacy, “goodness of fit” career roles, insights, positive and growth mindsets, grit, passion, and perseverance offered opportunities for empowerment and success. The six participants in the study shared their lived experiences and offered valuable insights about how they achieved career success.

Central Research Question

This study sought to explore this central question: *How does the perception of dyslexia impact the life experiences of individual dyslexics with successful careers?*

Subquestions

- How does self-advocacy contribute to successful careers for dyslexics?
- How can identifying and developing a growth mindset and positive thinking affect the success of dyslexics in the workplace?

According to Smith, Flowers, and Larkin (2012), “IPA is concerned with human lived experiences and posits that experience can be understood via an examination of the meanings which people express upon it” (p. 34). This methodology was well aligned with exploring the life experience of successful dyslexics in their careers and learning from the “personal meaning and

sense-making in a particular experience” (p. 45). The researcher shared the fact that she was dyslexic with each of the participants. There was a conscious awareness of this potential bias throughout the study by the researcher.

Description of the Participants

There were six participants in this study who self-identified as individuals with dyslexia and who had successful careers. To protect the identity of each participant and confidentiality regarding the content of each interview each participant received a pseudonym and a unique identification number. Participant 1 was renamed “Hayden,” Participant 2 was renamed “Mary,” Participant 3 was renamed “Meri,” Participant 4 was renamed “Cy,” Participant 5 was renamed “Ambrose,” and Participant 6 was renamed “Louise.” There were four female participants and two male participants between the ages 40 and 60 years. All participants revealed that there was at least one additional member of the family with dyslexia. Demographic and interview information is presented in Table 1:

Table 1.

Demographic and Interview Information of the Six Participants

	Participant	Age	Gender	Transcript Length*	Interview Length*
1	Hayden	40	Female	59	2:30
2	Mary	58	Female	76	1:17
3	Meri	60	Female	68	1:55
4	Cy	50	Male	88	1:51
5	Ambrose**	49	Male	114	3:12
6	Louise	59	Female	54	1:12

**Transcript and Interview Length are provided to give a sense of depth of discussions with each participant. Units are "Pages" and "hh:mm," respectively*

***Ambrose's Interview Length is a combination of two separate interviews, 1:55 and 1:17 in length*

Individual Profiles of the Participants**Hayden**

Hayden is a design coordinator of a global media giant, responsible for the look and feel of the company's legendary and iconic magazine. She grew up in an emotionally supportive family. She moved several times during her childhood and her family experienced extreme financial conditions ranging from living below the poverty line to living with relatives. Hayden mentioned that her dad was dyslexic. "My dad was part of the original Why Johnny Can't Read (Flesch 1955) landmark study." According to Golub (2015), Flesch was an "advocate of phonics and argued that children were being taught to recognize and memorize whole words when

instead they should be taught how to sound and spell these words out” (p. 1). Golub (2015) disagreed with this learning pedagogy, “Phonics is presented as the one-size-fits-all solutions, regardless of racial, socioeconomic, and regional differences in the student population” (p. 13). It was not clear from Hayden’s description of her father if learning phonetics helped her father learn to read, but Hayden admitted she didn’t learn from phonics in school. “I don’t sound out words. I think what I do is look at them as little pictures so I could see a silhouette almost of a word, it’s like a shape.” Hayden expressed how she felt about her father’s struggle with early reading challenges and the pride she felt about his eventual career:

I don’t know if he ever finished high school, but he went on to be a director for a large company. There is a huge training facility that is named after him, so he’s a very good example of somebody that overcame it, but definitely struggled a lot with it when he was younger.

Hayden was very affected by the impact of dyslexia in her family. She showed much empathy when describing her dad’s reading challenges and was very inspired by his later career success. She also revealed that her brother was severely dyslexic and shared his early learning challenges with empathy and later successes in life and career with the same sense of inspiration.

He [brother] was held back twice in high school. I wrote papers for him and he finally just ended up dropping out of high school. He got his GED, went into the military and was then extremely successful. He was on a special team that trained with the Navy Seals. He works with “red collar” [unlikely to be rehabilitated] dogs. Whenever there’s a disaster, they would send him there because he had military and Navy seal training, you know earthquakes and stuff like that. He goes into those areas after natural disasters and gets abandoned animals. He has training and talent to be able to solve a problem in a

chaotic and dangerous situation. He also has now trained to be a vet there, so like doctor stuff. And . . . he never graduated while in high school.

She may have convinced herself that she didn't have dyslexia, at least compared to her dad and brother, in her early academic years, "I didn't know that I had any problems, or differences until I was in college, and in fact, my dad and brother and I are all dyslexic. I'm the least of the three of us." Hayden was not diagnosed during her early academic years. She *did* recognize that she thought differently and needed to find interactive ways to learn and retain information.

Hayden developed a love of learning as a child and noted that she was often self-taught. Her family encouraged her to learn on her own, not realizing that she was dyslexic. Hayden described how she learned in a way that best fit her strengths. "There are patterns, and it's a puzzle, and I can track it, and it's fun. I could match things up as far as arguments go, like we're all doing logic problems from my mom's puzzle books." Hayden excelled at math but expressed difficulties in reading, remembering what was read, understanding what the teacher was saying in front of the class, and writing. She admitted to trying to hide her learning difficulties in school.

I didn't want the teachers to be disappointed in me, so I would appear to be so engaged and nod and stuff and give them a lot of feedback. Basically even though I didn't probably remember a lot of it, or didn't understand it, that was their impression of me. I was this very interested student, you know, I was a good class participant.

Hayden seemed determined to succeed by creating her own learning strategies, including illustrations and use of colors and shapes to better inform her understanding of material.

I love patterns. I actually can read really fast but it's because I'm *not actually reading*.

I'm basically looking at a sequence of patterns. If you look at a sentence, here's a

silhouette of a word and I'll just fill in a word that makes the most sense. There's one word that looks like that word or that has that shape that fits there.

Hayden described herself as an engaged, interactive learner. She learned how to absorb information by doing things differently to figure things out. She loved problem-solving as a child and applied these skills to her studies and eventual career.

Hayden became a national merit scholar finalist and earned a place at an Ivy League college. Yet, Hayden admitted she didn't have many expectations for her future or career. She didn't quite understand why this college would be interested in her, but she applied at the suggestion of a theatre student she met at a summer repertory event. Her boyfriend encouraged her to apply too. "I've never been that ambitious. I'm just really curious and that has led me into situations that have happened to be successful . . . in spite of my insecurities, feeling like I'm gonna let somebody down."

A turning point for Hayden happened during her junior year at college. One of her professors (who was dyslexic) suggested that she be evaluated for dyslexia because of the discrepancy between her high intelligence and some underperforming academic work. She was eventually diagnosed with dyslexia, at 28 years old. Hayden commented that her career rise and success was based on learning how to think differently to solve problems, confidence in her visual talents, working with highly intelligent team members, and respect for the talents of others. Hayden said, "I work at being willing to work with people, being good at collaboration, and curious and seeing and anticipating problems."

Hayden was selected to join a small internal collaborative team to work with external engineers to envision and create the first mobile device for her global company that published

numerous print magazine properties. Hayden described how she communicated her design ideas to others in her company in a way they can understand:

I feel comfortable. Maybe it's also just a function of the work that I do, but more often than not, I have a positive response by other people, those who are not designers, but writers, or copy editors. When they come and watch me design a layout, they're just blown away. They don't understand how somebody could actually do that, and that it's . . . fun.

Hayden earned a Master's degree while she rose in her career. She documented the mobile device creative and production process in a project in the Master's program. She also designed a "coffee table" book showcasing her company's legendary photography collection. Hayden's recommendation to other dyslexics was to "keep absorbing and learning how to do different things. Use [dyslexia] to your advantage." She continues to learn and grow in her successful roles in the company. Her creative talents, her positive and growth mindset, and her engaging interpersonal skills contribute to her career success.

Mary

Mary was recently tapped as the Chief Executive Officer (CEO) for a national graphic communications media company. She was the President, Marketing Solutions Group, of another national graphic communications media company at the time of our interview for this study. Her professional career has spanned more than 30 years. Mary's career success was sharply different from earlier academic experiences as a child and emerging adult.

She described her early academic experiences as painful, embarrassing, and full of fear of failure. She was growing aware of her learning challenges related to reading, comprehension, and retention of reading content.

I always had difficulty reading. I had no comprehension. And I couldn't write. And I can't spell anything. What I do most is I mistake words. So, I was very uncomfortable in that atmosphere. But all of a sudden I had all the confidence with my eyes closed. So, it wasn't that I couldn't see it in my mind. It was that I couldn't see it when I opened my eyes and looked at it.

Mary commented that there wasn't much awareness of dyslexia when she was in school and expressed painful experiences:

When I was in the first grade, my parents were told that I wasn't functional at the same level as the other kids and that they had seen this type of thing before and that I was not capable of learning. That I was a sweet child, but that I was not bright. It actually says that I'm retarded on my first grade school report.

Mary must have suffered greatly in these early school years. "My mother insisted on keeping me within the classroom that first year, but all they basically did was give me crayons and put me in the back of the room. I wasn't allowed to participate." Mary realized that she excelled at math. "I could do numbers in my head. I didn't have to write it down to do it." Her grades were passable. "They just pushed me from grade to grade." Mary remembered how it felt to know *what* to say, even if she couldn't pronounce the words correctly.

I had an early experience . . . I'm gonna say I was in the third grade, in which I told the teacher I was afraid to stand up. She made me stand up and read a whole paragraph, where everybody else only had to do the sentence, because she felt that would help me. I don't think she did it to be mean. I think she did it because that's what she believed was the right thing to do. I wonder if some people separate it out, thinking well, if you have

trouble reading, maybe you could present your ideas better, and at public speaking, you need practice. She wasn't connecting the reason you couldn't read.

Mary's turning point came at the expense of a childhood illness. She was hospitalized a few times with a recurring kidney infection and sent to rehabilitation. Tutors worked closely with Mary one-on-one and verbally explained the lessons in her school work.

So I could take all the time I needed to read and understand and . . . when the tutor came in, she'd explain something that I didn't understand. And I'd go back and I'd take something that I couldn't figure out and then went through it.

Mary realized that she was able to work slowly and remember more of what she read by working one-on-one with the tutors. Mary began to develop more confidence in her ability to learn.

Mary experienced a transformative time as a student worker in the office of her high school. She discovered she was very capable at the job, running errands and handling small projects and in close contact with staff, teachers, and the school dean. She cultivated strong relationships in the school office. It was suggested by a member of the staff that a retired teacher in special education tutor her.

This nice elderly woman got up, and went to the blackboard, and started to write her story about who she was. And I realized all of a sudden that she was writing it backwards. Part of my problem was that I would write words backwards. She was like me . . .

Mary's tutor asked her to write down her name and address. Mary wrote the letters backwards. Then the tutor told Mary, "That's the last time you are gonna do that. You need to train your mind for that not to be right." Mary said, "When I do write something backwards, I do exactly what she said, even to this day, I stop, take a breath, I close my eyes for a minute. I think about it the right way. Her techniques were with mirrors at first to show me . . ." She credited this

dyslexic tutor with showing her techniques to improve her reading and writing skills. Mary developed learning techniques to improve her confidence and ability to read and understand information.

Mary did not consider herself “mentally retarded.” She knew she was smart. She just learned differently. Mary advocated for herself in high school by insisting on being accepted into courses about emerging computer technology in spite of being discouraged from trying by teachers. She practiced writing the Preamble to the Constitution, a requirement to graduate high school. Her school counselor offered her the opportunity to verbally recite the Preamble saying that it might be too much pressure for her to write the assignment. Mary responded, “I want to take that test, and I have a right to take the test.” Her family completely believed she was very capable of learning and succeeding. They practiced the Preamble with Mary over a few months.

It took everything I had. It took months of practice. I could say it, and if I could see it in my head and close my eyes I could write it. And it’s really how I got through. I didn’t want people to see me as less than anybody else. I was determined I was going to do it. Mary graduated with 100% on this final test. There was a “big celebration” at home. She can still recite and write the Preamble today.

It was the first time that I think I understood what that reading teacher had taught me and that is, I’m in control. I can get through this. I may have to do this differently than everybody else, and I may have to go through these ridiculous steps, and the breathing, and taking one word at a time and breaking it down and putting it back together, and slowing down and doing it at my pace, but I can do it, and I can understand it.

Mary’s self-perception as a dyslexic flourished after her academic years through her career. She also offered a positive perception of dyslexia with others. Mary did not want anyone in her

family to suffer in school as she did. She recognized her son's similar learning challenges by the time he was entering school. She sought an evaluation for her son in first grade that resulted in his diagnosis of dyslexia. Mary credited her son's strong family support and early learning intervention at school as strong foundations to his own success journey to being a doctor today.

Mary was officially diagnosed with dyslexia and dysgraphia (difficulties with writing) only after her son was diagnosed. She focused on seeking the best roles for her talents from the start of her career in graphic communications and publishing. She learned how to create code and computer typeset copy for publications, an emerging area in technology in her early career. Computer typesetting and positioning type in position in layouts revolutionized production in the field of graphic communications, from advertising to publishing.

I was going to try it and it turned out I actually loved it. It was fun. I could do it and I did it well. They were very good to me and supported me in that effort, and they supported me in learning, and they paid for all those classes.

The company later hired Mary to design and typeset more complex financial reports. This was a time when all public company financial reports were printed and sent by secured fax or courier to the government for review and approval. Mary's talent for numbers, design, typesetting, accuracy and calm attitude in a very stressful environment were a benefit in her work. There were several rounds of revisions in documents from the clients' legal teams until the couriers picked up the final documents. She advanced in the graphic communications industry by learning the production process hands-on.

I learned to run a printing press. I learned every job in that department. I wanted to be able to do it. I needed to understand more if I was going to grow and I was going to become very good at this.

Then one day, the owner of the company encouraged Mary to join their sales team. The owner was confident that Mary would succeed in sales, “I would have a unique ability to sell through educating [clients] how things were done.” A sales role was a new challenge for Mary. She listened to sales videos and sought advice. Her mother offered practical advice. “The secretaries come in at eight, so get to the office and start calling from seven on. The higher up, the earlier you call.” Her mother was right. Mary’s interpersonal talents, her ability to read people, a thorough hands-on understanding of the printing process, ability to think differently, and skills to educate her clients created a successful rise in Mary’s career. “It’s about creating what you visualize.” Her sales experience gave her higher visibility in the industry. She expressed her philosophy about educating clients:

I can explain things, process, parts of the business to clients . . . because my verbal skills are much better than my written skills. I learned to say things to people without insulting them. So sometimes when you’re selling, you’re telling people how they should do their business. I have a different way of doing that. I don’t think I’d tell anybody *ever* how to do their business. I think that I always respect their thought process and *how* they see things. I have a method of explaining the detail without making them feel I’m talking down to them. I’m pretty good at reading people. When they look at me, I can say to myself if they have no idea what they want. I back up and go in a different direction.

She became a pioneer of graphic communications technology in a male-dominated industry. She sought out empowered female executives who mentored her throughout her career, as well as highly respected male mentors. Her visual talents, her keen perception of color, understanding of the relationship of graphic elements and spatial acuity commanded much respect. “I didn’t realize I had put one of the very first complete computerized editorial networks into a major

publication. All of a sudden, I was on a roll.” Her ability to understand most facets of the business and her strong interpersonal skills led to her management career. She was a leader with empathy and the understanding to explain changes in the industry:

I think I’m a strong leader. I am able to lead people to do good things for the company, and also for themselves. I have the ability to deal with their fears in business, to deal with those challenges. I can alleviate fear of change, and that’s a hard thing to do. I teach people through an educational process. I like to explain how things are done. Our [industry’s] continual changes in technology cause a lot of fear.

She was passionate about learning new technologies to apply to her industry and sharing her knowledge with others. She described herself as always learning, enrolling in classes (that she eventually taught). Mary defined her career philosophy: “You need to first decide whether it’s good for the customer. Then you think about whether it’s good for you. Then whether it’s the right thing to do.” She is a visionary leader, wise educator, and an inspiring mentor in an extraordinary career.

Meri

Meri is a Ph.D. student at a university in the New York area. Meri said she wanted “to bring more of an exchange between what’s happening in education and what’s happening in science.” Her career journey revealed a strong sense of self-advocacy and advocacy for her family, education, and community. Meri said that her daughter was diagnosed with dyslexia. She didn’t want her daughter to suffer as she did in school as a dyslexic. Mary expressed her views about the lack of understanding in schools:

What I was observing personally with my kids and our educational experience . . . in the school district about learning disabilities. I thought to myself, I don’t understand. How

can this be that essentially 30 years after I was diagnosed with dyslexia . . . I'm in a district that doesn't recognize it? We know so much about how the brain works and none of it is finding its way into our educational settings.

Meri described her father as “likely dyslexic and an intellectual person of the highest order.”

Meri was diagnosed with dyslexia at a research center in the third grade. Meri described how she felt when her parents told her she had dyslexia:

The reason that I didn't like reading and found it difficult to do . . . and found spelling hard was that I had something called dyslexia. And that it didn't mean that I couldn't learn to read. It was just gonna mean that it was going take a lot longer for me to learn to read. I was gonna have special classes in school and that, it was like sort of dumped. On one hand, it wasn't like a big to-do, on the other hand, it wasn't like there was a whole lot of support. That was also the year that my parents got divorced. So a lot of the focus on the [diagnosis] went out the window.

Meri admitted that there wasn't much support at school for her learning challenges:

So it was really up to the school to make sure that something was happening and they didn't. They really didn't know what to do with dyslexia. The only thing I remember about intervention in school was the first part of the fourth grade . . . I was pulled out of class for about an hour a week . . . and I worked on reading maps. I'm sure that it has nothing to do with maps or that time I spent with that woman in that room. I would say that it probably goes to show you that whatever they were doing was *so not* what I needed.

Meri added that reading maps was very easy for her. “I organize space and how I organize myself, it's all visual spatial.” Meri thought the reason the school placed her in the map room

was because they knew she would find it easy. “I mean maybe that was their strategy.” Meri may have thought that her teachers didn’t have high expectations of her. She shared a story about her third-grade teacher who held up her spelling test in front of the class each Friday as a lesson in spelling errors.

I was completely humiliated. I remember . . . my best friend in the whole world, and I mean we’re still friends today. She’s a gifted writer, a journalist. Her tests were always perfect. And I remember taking her pencil thinking that her pencil would help me to spell. If I had a different instrument, maybe it would improve my spelling.

I think that when I talk about it, I have to overcome that feeling of shame. I think it just comes from being somewhat of a perfectionist and just never being able to demonstrate in those formative years what I was capable of doing. Shame is for me a matter of feeling inferior, feeling incapable in a situation where you desire to be capable.

Frustration I find to be a much more productive emotion because I can work through frustration. Frustration is just something that tells you the way you are approaching something is the wrong way. That is why, for me, it is more shame than just a frustration. In a lot of the individuals that I’ve spoken to, especially when they think about their elementary school years . . . shame is what many people have described to me. I think because at the very core of who we are, all we wanna do is be good. We don’t go out into the world to be bad people or not to measure up to be less than what somebody expects of you.

A high school teacher told Meri that she was “one of the hardest working students he had ever encountered.” She misinterpreted his remark to mean that she couldn’t be smart if she *had* to work so hard. “I was curious and I liked my courses, but I had to work really hard, which must

mean that I wasn't smart." The school placed Meri in core classes. "Work was given to me that wasn't as challenging." Meri described her determination to succeed in high school, "I was always so curious and always such a productive human being . . . that I just felt like I had to continue to push until I found what I wanted to do. So it wasn't like I ever felt like I wouldn't be successful." Meri's determination to find an area of passion started in college. Meri found her voice as a sociology major in a small class environment in her university.

I loved it in part because there were small classes and you were really challenged to take on issues from new perspectives. And it was there that I sort of put together that how I saw the world was very much connecting the dots from a very big picture. And that's when all of a sudden I started to recognize that the way I thought was very different than how other people thought.

She began her professional career in marketing and advertising. Her talents for creative strategy and her way of thinking differently were well appreciated. Meri married (an advertising man) and raised her children. She worked as an independent writer and coauthored two guidebooks for metro parents. She became the president of the parent's association in her children's school district, covering "six schools and 4,000 families."

Meri's experiences as a parent advocate for her children and community brought Meri to the next stage of her academic career. She enrolled in a Master's degree program. She prepared for this rigorous program by reviewing and learning biology, chemistry, and neuroscience. She also volunteered at the lab at her university to gain further knowledge and meet colleagues in related fields. The director of the Master's program encouraged Meri to pursue a Ph.D. degree. Meri was teaching and completing her doctoral dissertation at the time of this interview. "Having to design a course, ultimately you have to teach a course. You're taking this body of information

and you are repackaging it in a way that makes sense across a sequence of time with a certain audience.”

Meri’s academic career is passionate, hard earned, and authentic in her goal to share more knowledge between science and education. She is an advocate for herself and for others with dyslexia.

Cy

Cy is a top advertising photographer. He specializes in hospitality travel. His clients represent premier leaders in the field. Cy said he recognized the “big picture” thinking and an ability to envision ideas that other people didn’t have. “Genius is not in photography. It is how I see the world.” He stressed that he was always learning and visually researching his subjects. He described his thinking process:

I can belt out ideas really well and I’m really good at it. I am good at spotting trends and that’s why I’m very good at photography. We as a culture are being inundated with images and I weirdly catalog them . . . in my mind. And I can recall them, not the details but the big picture. I specialize in hospitality advertising. I’m research crazy, but it’s all visual research. I don’t want to read about what’s going on in Cartagena, Columbia, but show me pictures and I’ll absorb every single one of them.

Cy advised that dyslexics should accept their condition and focus on their creative strengths,

You should embrace it and run with it and don’t try to fix it and don’t take drugs for it and just learn coping mechanisms. But know . . . that you’re like an Olympic athlete of creativity. It’s gonna change some things, but you don’t fight it. You work with the hand you’re dealt.

Cy showed a positive and growth mindset in his life and career. He recommended that individuals with dyslexia continue to learn. “Do everything. I take lots of classes, my whole life. I take interior design classes. I take painting. I take sculpture. I take art history, as long as they’re projection and not books.” He also counseled other dyslexic photographers to remember what his father told him,

Don’t get bogged down in photography. Photography’s a tool that you will learn to express your other passions. Then do what you can’t live without doing. So many people are trying to find out what to do. Maybe for us, we have to find out what we’re NOT going to do, and that will lead us to what we’re going to do.

Cy described his childhood as the adopted son in a close family in a small town in the Midwest. He and his adopted sister grew up in a positive, supportive, and entrepreneurial family. His adopted father owned a photography business. Cy considered himself a more creative photographer (but less of a businessman) than his father. Cy appreciated that his parents embraced his strengths and didn’t try to push him into areas where he didn’t do well.

Cy struggled with learning to read and understand language in school. He admitted he was a “difficult, class clown. I just wasn’t gonna sit in class and read for 40 minutes. I was gonna sharpen my pencil a lot.” He admitted that he preferred being in the regular classroom even with his early academic challenges. He didn’t want to move to a different class with other kids with learning issues. “I learned I have to deal in the real world with people who aren’t like me.” He described his reading and language difficulties, using humor to perhaps disguise his pain:

I’m terrible with language, absolutely terrible. I don’t hear language. I don’t see language. I’ve learned just enough to get by in the world. My sentences don’t make

sense. They're all misspelled. I always joke, I took English as a second language and then never took a first.

He expressed a talent for doing math in his head and a weakness in proving the problems on paper:

I'm good at math when I can visualize it. I'm not great at doing long math on paper. I can literally see it in my head. But, if it's got nine steps when you have to write it down, I can get bogged down pretty quickly.

Cy developed his art talent in the eighth grade. "I had an amazing art teacher. Fascinating man. He believed that every once in a while there were kids in his class that needed . . . that had the potential to go big." Cy declared his eighth-grade art teacher to be a "game changer" in his life. Cy said his art teacher supported him academically too:

I would go in and he would help me with other homework. I would show him my history book and he would say, "okay, let's talk about it. And he would put the book away. And say . . . "Imagine George Washington is on his boat, going across the Delaware." He would show me the painting.

He was realistic about his learning challenges and focused on his passion for art. "I look in the mirror every morning to this day and I say, 'There is no Plan B. This (art) is what I'm cut out to do.'" He saw the value of learning with students who were different from him. He believed having dyslexia was an advantage in his creative career as a photographer. "I see things the world doesn't." Cy clearly gravitated toward a career that expressed his creative talents.

Cy admitted that he still struggles with reading, writing, and spelling. "I can't proofread. It literally sounds like a movie at the end where it's just flickering. If I write a quick email either

to my wife or my agent, I'm like, please rewrite this. I found enablers." It can be suggested that Cy learned how to delegate very well to compensate for his weaknesses.

Cy's sense of humor about dyslexia was evident throughout the interview. He described one experience with a friend that explained how his mind worked:

She is one of the most read human beings. You go into her house the entire house is books. And she's ready every single one, front to end. She got mad at me 'cause I arranged all my books by color. So I made a rainbow on the wall. And I was thinking, "I know I'm never gonna read it (the book) again." She asked, "But how do you find the book?" And I said, "I don't need to find it. I already read it. I remember it was *red*."

Cy's humor confirmed his belief that dyslexia was an advantage in his career. He was describing career roles that require linear tasks vs. creative roles. "They check boxes. And we (creatives) don't check boxes. We create boxes." Cy's creative career is dynamic and will evolve with the changing preferences of clients and advertising agencies in the travel field. It is likely that Cy will keep creating new boxes in his successful career.

Ambrose

Ambrose described himself as a researcher, educator, and artist. His successful academic career grew from a determination to learn from early struggles in school to read, write, and spell. He focused on his talents in art, his research interests in art, religion, and philosophy and his passion for education.

Ambrose was slow to talk, began to receive speech therapy in kindergarten and continued this therapy throughout elementary school. Ambrose did not learn to read from early teaching models. He described that experience in early grades. "We're gonna teach reading in such a way where you just remember the words, and you just read all the time. And that wasn't helpful to

me, because I needed some tools.” Ambrose felt that learning phonetics in the third and fourth grades helped him learn to read. “That was a breakthrough for me. I started to make some progress.” As he progressed in reading, he also recalled a negative message; he had “a teacher in the 5th grade who told my parents that I would probably never make it to college.” Ambrose’s family supported him outside school. His mother’s friends from church tutored him in reading once a week.

I remember these experiences where I read my first book cover to cover. I remember them reading to me. They would have me read and I read out loud. My mother wasn’t someone who enjoyed reading. She had to do a lot of research. And so she learned all about it. She became a little scholar.

Ambrose admitted he felt unmotivated in elementary school through high school. “I had been struggling with low self-esteem, low confidence, and not really sure what I would be doing with my life.” Ambrose shared a memory about writing a paper in high school and the response from a teacher:

My best friend in freshman high school English class and I, we decided to write summaries for our papers. We’re gonna read the same books, but at different times, and then we would turn in each other’s papers. And I remember he ended up getting a B on a paper (I wrote) and I ended up getting a C on a paper (he wrote).

Ambrose thought that the reason he received the lower grade was because of the perception of dyslexia from his teacher. He didn’t speak up because he would have needed to reveal that he and his classmate exchanged papers.

Ambrose became more motivated when attending community college, an environment that offered many art courses and a supportive educational community:

Community college was the greatest thing that ever happened. I can take classes when I'm ready to take classes and hanging out with all these Ph.Ds. These professors are educated and they're interesting to listen to. I just lit up.

Ambrose increased his focus through an introduction to mindfulness and meditation. He thrived after he transferred to a four-year college as a fine arts major, until his last semester before his scheduled graduation. Ambrose described the challenging experience that derailed his college graduation for a few years. He failed the English proficiency exam, a requirement for graduation. Ambrose enrolled in a second and third major and failed the English exam two more times. "I figured it would give me more experience writing, more experience doing research." Ambrose was reluctant to reveal his dyslexia. He felt revealing his dyslexia might lower the expectations of his teachers.

The school analyzed his performance on the prior exams and met with Ambrose. Ambrose admitted that he thought he had dyslexia. He was evaluated and given a diagnosis of dyslexia, at age 28. His diagnosis explained why his ideas were good, but his spelling was so poor that he failed the exams. He accepted the appropriate accommodations based on his diagnosis of dyslexia and successfully passed the English proficiency exam the third time, scoring ten points over the passing grade. His determination to graduate from college was stronger than his hesitation to disclose his dyslexia.

Ambrose developed an interest in design and data visualization, the graphic representation of data. He taught art in an undergraduate program in the New York tri-state area. "I've been in school so long and it's just because this is an environment that is going to challenge me." Ambrose's academic career interests led him to pursue a Master's degree.

Ambrose was very impacted by the self-perception and perception of others about having dyslexia. He still struggled with whether or not to talk about his dyslexia. He was afraid the program director of a Master's program wouldn't think he could handle graduate level work. While Ambrose expressed a positive and growth mindset about his passion for art, there was still a part of him that felt afraid of disclosing his dyslexia. He was uncertain of how others would perceive or judge his dyslexia. He finally decided to tell his graduate academic program community about his strengths and weaknesses:

I wanted to be transparent and if I have difficulties with understanding some of the theoretical work, I wanted them to understand why. It's not because I'm apathetic, it's because I'm actually struggling with (dyslexia). I'm not going to accomplish anything unless I completely believe in myself. I'm getting involved in all sorts of things that I don't know if I can do it. But I'm going to work as hard as I can to try. If I believed I was limited by these perceptions, then I wouldn't have accomplished what I've accomplished. Ambrose completed his Master's degree and "kept writing and doing research." His next step in his academic career was pursuing a doctoral degree. He is currently enrolled in a doctoral program studying a topic through a unique lens as an individual with dyslexia. "I can't jump outside of my experience. I don't know what it's like to not be dyslexic. So everything that I am talking about is gonna be seen through that lens." It can be suggested that Ambrose will reveal innovative insights from his doctoral research because of his dyslexia.

Louise

Louise is a successful independent global line producer for the commercial video and film industry with more than 30 years' experience in the industry. "You have a formula on how you produce something, but it's really about being ready, staying loose, ready to be agile, act on

change, and problem solving.” She attributed her success to a curiosity to keep learning and bringing a fresh and positive outlook to her work. “A lot of people by the time they get to the point I’m at my age, there’s a little bit of jadedness; my success comes from not being jaded.” She added, “I see the broad, the bigger picture.” Louise embraced new technologies to align with the fast pace of her industry. “I know everything there is to know as far as technology and computers with our industry. Technology . . . those who didn’t go on that ride aren’t in the industry anymore.” Louise advocated for herself and her family (her brother and children were dyslexic) and emerged as an inspiring mentor to students in her community. “I’m now in a position where I really mentor a lot of people, a lot of kids. I think I keep things simple and I don’t complicate things.”

Louise “aced elementary school because it was interactive.” She read and processed information slowly. She also struggled to pronounce words out loud in school. It was hard for her to remember what she had read, especially since the reading passages were longer and more complex in middle and high school. She confessed that she couldn’t retain information from her teachers in high school. Louise hid her dyslexia in school by being social and active in school events. She was a varsity athlete too. “I felt stupid, but being able to create an aura about me, confidence that nobody would know I felt stupid.” She stressed that there wasn’t an awareness of dyslexia when she was in school.

You’re smart and this is how it is, you’re smart and you’re not. Well but just ’cause you’re dyslexic doesn’t mean you’re not smart. You learn differently. But when I was in high school, people weren’t as sophisticated in the conversation. I could hide socially. I could do all my things and show up and sit at my desk. I did a lot of doodling, barely paying attention. Nobody would notice. And I could squeak by with a C.

Louise found her career direction in college where she majored in and loved directing theatre.

“There’s something else going on with somebody else. So I think I got into directing to understand a person’s character. They (master actors) are each coming at the story from a different angle.” She continued on to earn a degree in theatre.

Louise said that having dyslexia helped to guide her career direction. She enjoyed being creative. While she also enjoyed theatre and film, she preferred the shorter medium of video. She described the love and support she received in her life because of her dyslexia. “There was never you can’t and you won’t. There was always, you *can*.” She learned how to delegate tasks that exposed her weaknesses. “The key to a really good dyslexic, successful dyslexic is being able to delegate.” She worked with a team of people who had different skills that complemented each other. “I don’t really know what my IQ is, but I know I have a high emotional IQ.” She became an empowered female leader in a very male-oriented video industry. She was positive and enthusiastic.

There are many ways to enter a house. You can go in the window, the back door, the front door, the side door. Ok, so if I couldn’t go in the front door, I’ll get in the house some other way.

Louise leads in a career that is creative, fulfilling and inventive:

I have reinvented myself so many times over the last 30 years, as far as who I am and what I do. What makes you happy? Start from there. I feel I have really helped people throughout my journey just with my success, realizing, Wow, well look, she’s done it.

Her talent for “big picture” thinking lives through her video productions. She has an extraordinary and long career, full of growth, energy and inspiration to others.

Reflections From the Interviews With Six Study Participants

The interviews revealed meaningful comments and stories from each of the six participants in the study. The participants offered insights about their lives that expressed a valuable holistic view of their lived experiences. An early reflection on the interviews showed strong memories of challenging academic experiences as a child through emerging adulthood. The findings from initial data analysis, via in vivo coding, suggested that these early academic experiences were still vivid even after years of success. The subsequent research findings suggested that participants rose above early and often painful academic experiences to create and cultivate their own career success and the success of others.

The Interview Process

Each participant was interviewed in person in the New York area. The duration of each semistructured interview was longer than originally anticipated, between an hour-and-a-half to two hours. The researcher met with Hayden, Mary, Meri, Cy, and Louise each for one session. There was a second session with Ambrose in order to gather more information related to the interview questions.

The semistructured interviews were audio recorded and transcribed verbatim through Rev.com, a professional transcript service. Each transcript was returned and given an order number as identification. The interview questions were guidelines to help each participant focus on their lived experiences. The voices of the participants spoke of details important to them, not necessarily answering all the interview questions or in order of being asked by the researcher/interviewer. One transcript was hand-delivered to a participant. The other transcripts were emailed to the participants at their preferred email addresses and they were asked to check the

accuracy of the information in the transcripts. All participants were asked to respond if they had any changes (deletions or added content). None of the participants contacted the researcher with any changes in the transcripts.

The Research Data Process

The transcripts from the six participants were read through several times to learn from the participants' voices. The researcher initially used in vivo coding to organize the data from the transcripts. The use of NVivo 11 for Mac (QSR International, 2017) software allowed the researcher to capture words/phrases from the transcripts using in vivo coding, and to organize meaningful data into groupings and sets that offered insights related to the research questions. The researcher exported tables from NVivo 11 for Mac and did further data analysis in Excel for Mac based on those records.

First Stage

The researcher continued to reread the transcripts several times to gain a deeper understanding of the voices of the six participants. The meaningful words/short phrases (nodes) revealed initial exploratory categories. The researcher created these categories as a way to begin to segment and organize the data. The initial exploratory categories were (1) early academic performance, (2) career strategies, (3) career success, (4) self-advocacy, (5) growth mindset, (6) experiences of support, (7) continuous learning, and (8) problem solving. The early reviews of the transcripts indicated that the participants voiced more responses in the "early academic performance" category than other categories, as presented in Table 2.

Most of the initial data analysis in the study used in vivo coding to "honor the voices of the participants." The researcher added frequency coding to determine which initial categories produced the most words/short phrases (nodes) from the six participants.

Table 2.

Initial Aggregate Number of Meaningful Words/Short Phrases (Nodes)

<u>Node Count</u>	<u>Initial Exploratory Categories</u>
106	Early Academic Performance
74	Career Strategies
69	Career Success
49	Self-Advocacy
42	Experience of Support
41	Growth Mindset
24	Continuous Learning
<u>22</u>	Problem Solving
Total 427	
Nodes from Transcripts of 6 Participants, via NVivo 11 for MAC, In Vivo Coding.	
Organized within Eight Initial Exploratory Categories	

The data showed that there were a total of 427 nodes organized within eight initial categories.

Second Stage

The researcher wrote marginal notes on the transcripts as she read through them repeatedly, coming to understand the meanings and range of responses from the six participants.

These notes were aligned with the central research question and two secondary research

questions. Refer to Appendix A for sample marginal notes grouped within the eight initial exploratory categories developed initially by the researcher.

Third Stage

The researcher became much more familiar with the transcripts and continued to explore the descriptive, linguistic, and conceptual meanings from the voices of Hayden, Mary, Meri, Cy, Ambrose, and Louise. The data suggested eighteen emerging themes beyond the eight earlier categories, themes that clarified the voices of the six participants and best addressed the primary and two secondary research questions. Smith et al., (2012) noted:

In looking for emergent themes, the task of managing the data changes as the analyst simultaneously attempts to reduce the volume of detail (the transcript and the initial notes) whilst maintaining complexity, in terms of mapping the interrelationships, connections and patterns between exploratory notes. (p. 91)

The emerging themes reflected and illuminated the voices of the participants through patterns, common insights and different perspectives. According to Smith, Flowers, and Larkin (2012) “Themes are usually expressed as phrases which speak to the psychological essence of the piece and contain enough particularity to be grounded and enough abstraction to be conceptual” (p. 92). Refer to Appendix B for representative phrases (nodes) from each of the six participants grouped by subthemes and themes.

Fourth Stage

The data revealed four themes which were created from the eighteen subthemes:

- (1) challenging academic experiences, (2) thinking differently and creating success,
- (3) championing a growth mindset and positive thinking and (4) leading with strengths and talents.

The eighteen subthemes are clustered within the four themes and presented in Table 3.

Table 3.

Eighteen Subthemes Clustered Within Four Themes

<p>1. <u>Challenging Academic Experiences</u></p> <p>Felt schools lacked knowledge of dyslexia</p> <p>Suffered academically</p> <p>Psychological and social challenges: Self-esteem</p> <p>Importance of support: Role of family, friends, community, tutors</p> <p>Developed learning strategies and identified areas of strength in later academic years</p>
<p>2. <u>Thinking Differently and Creating Success</u></p> <p>Recognized unique and valuable career journey</p> <p>Self-advocated based on talents and strengths</p> <p>Created different ways of looking at problems and challenges</p> <p>Created and envisioned innovative ideas and solutions</p> <p>Delegated tasks not aligned with learning styles or strengths with dyslexia</p>
<p>3. <u>Championing a Growth Mindset and Positive Thinking</u></p> <p>Faced challenges as opportunities for success</p> <p>Embraced positive change for the future with passion, persistence, and effort</p> <p>Nurtured a growth mindset to keep learning, growing, and succeeding</p> <p>Learned capabilities of new technologies to strategically apply to their fields</p>
<p>4. <u>Leading with Strengths and Talents</u></p> <p>Developed “big picture” conceptual thinking and ability to synergize ideas</p> <p>Chose career roles with “goodness of fit”</p> <p>Empowered success in others</p> <p>Contributed positive value and growth in the 21st century “knowledge” economy</p>

The researcher created a mind map to illustrate the eighteen subthemes clustered within the four themes in the study as an alternative way to consider the insights from the participants.

See the mind map in Figure 3. The frameworks used in this study were listed at the bottom center of Figure 3.

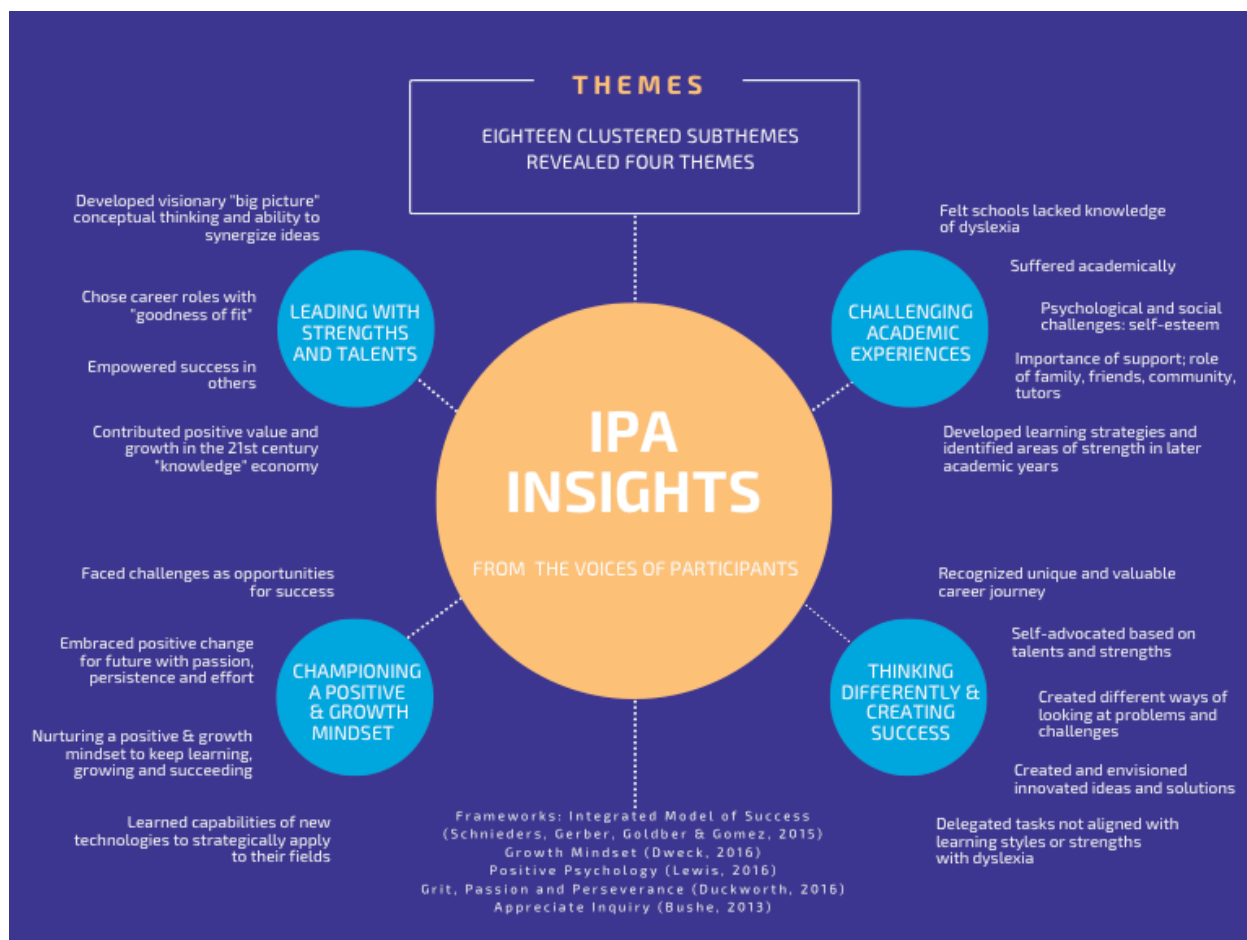


Figure 3. Mind map of 18 subthemes grouped by theme, leading to IPA insights from participants

Connections Across Themes

The participants expressed moving insights into how dyslexia impacted their individual lives and careers. These insights showed connections across the eighteen subthemes that revealed the four themes: (1) Challenging Academic Experiences, (2) Thinking Differently and Creating

Success, (3) Championing a Growth Mindset and Positive Thinking, and (4) Leading with Strengths and Talents.

According to Smith, Larkin, and Flowers (2012), “Some of the best Interpretative Phenomenological Analysis (IPA) has this dual quality—pointing to ways in which participants represent unique idiosyncratic instances but also shared higher order qualities” (p. 101). This study used “abstraction” as a way to identify similar insights and group them into themes. “Abstraction is a basic form of identifying patterns between emergent themes and developing a sense of what can be called a super-ordinate theme. It involves putting like with like and developing a new name for the cluster” (p. 96). The voices of the participants created 427 phrases (nodes) that reflected their insights about the impact of dyslexia on their career success. These insights were analyzed and abstracted to create the eighteen subthemes clustered around four themes.

Theme 1: Challenging Academic Experiences

The findings showed that all the participants had difficult academic experiences in school from childhood through emerging adulthood. The impact of dyslexia created some painful and reflective academic experiences that carried forward into their adult lives and careers. Mary remembered that her teacher told her parents, “I was considered mentally retarded when I was in first grade.” Hayden felt that she needed to hide her academic difficulties as a child and emerging adult. “I didn’t want the teachers to be disappointed in me.” Louise diverted attention away from her academic challenges by excelling in varsity sports and social activities. “Like feeling stupid but being able to like create this aura about me, confidence about me that nobody would know I felt stupid.” Cy described his inability to understand his teachers in class. “I’m terrible with language, absolutely terrible. I don’t hear language. I don’t see language.” Meri

described the shame she felt in school, “Just never being able to demonstrate in those formative years what I knew I was capable of doing.” She continued, “In some respects that has made me more reflective on every experience that I have in measuring up. Okay, what do I need to be successful at this?” Ambrose remembered, “In the fifth grade, I had a teacher that told my parents that I would probably never make it to college.” The data showed that there were more phrases from the participants in this academic theme than the other themes.

The participants each had unique lived experiences in their early academic years, but they all had learning difficulties in common. Five of the participants, Mary, Meri, Cy, Louise, and Ambrose were openly humiliated by their academic challenges. Hayden was the only participant who didn't recognize she had dyslexia at least compared to her very dyslexic father and brother. She thought differently from the other students and developed learning techniques to help remember concepts, including drawing shapes, associating colors with personalities, and illustrating ideas. The participants expressed vivid memories of their academic challenges as adults in their careers. It is suggested that there could have been a negative impact on their lives and careers due to poor self-perceptions and fearful perceptions from others about their dyslexia. They could have fallen into a debilitating habit of learned helplessness and a fixed mindset. However, the six participants in this study decided to develop a positive and growth mindset. They believed that they had talents and skills to contribute in their careers. They were highly motivated to learn, confident about their career choices, and passionate about their work.

Subtheme 1: Felt schools lacked knowledge of dyslexia. The participants believed that schools did not have the awareness, knowledge and training to effectively teach students with dyslexia. The perception of dyslexia and issues related to dyslexia impacted their abilities to read, comprehend what they read, and maintain the pace of their classes. Mary lamented:

My school did not understand what learning disabilities were. When I was in the first grade, my parents were told that I wasn't functional at the same level as the other kids and that they had seen this type of thing before and that I was not capable of learning. That I was a sweet child, but that I was not bright. It actually says that I'm retarded on my first-grade school report. They just pushed me from grade to grade. They weren't connecting the reason you couldn't read.

Meri commented that "teachers have to be at the forefront of that, and I think that many of them are most resistant." She felt disappointed that this is "just the system we have and how the system doesn't help to create change." Meri was disappointed about the lack of understanding about dyslexia in her daughter's school and said, "We know so much about how the brain works and none of it is finding its way into our educational settings." Meri believed her teachers didn't have very high expectations of her, either, when she was in school. She shared a story about her third-grade teacher who held up her spelling test in front of the class each Friday as a lesson in spelling errors.

The participants learned to self-advocate in and out of school. They sought guidance and support to help them learn and grow. Years later, they advocated for their children who were dyslexic in school. They mentored and inspired others with empathy, a common characteristic among the participants.

Subtheme 2: Suffered academically. Dyslexia had a profound impact on the lived experiences of the participants as students, especially from childhood through high school. The participants expressed more insights about their academic challenges than other themes in the study. About 25% of the nodes were grouped under "early academic performance." While there were strengths in some academic areas (Hayden, Cy, and Mary excelled at visualizing math in

their heads), participants experienced academic difficulties in reading and language. Teachers who were unaware or not knowledgeable about dyslexia contributed to the painful and challenging experiences by calling out the participants in class for their academic failures.

The early years of academic failure set the course for future academic suffering as the amount of information grew and the students and teachers became more aware of the perceived impact of dyslexia. Mary said, “I am never going to succeed.” She added, “I was considered mentally retarded when I was in the first grade.” The label “mentally retarded” remained on her permanent school record through high school. “They thought I was incapable of learning. I was basically given crayons and put in the back of the room.” Cy told the researcher he “couldn’t understand what the teacher was saying in class.” He remarked, “My sentences don’t make sense . . . they’re all misspelled.” He covered his learning challenges with a joke, “I took English as a second language and then never took the first.” Ambrose mentioned, “In 5th grade I had a teacher that told my parents that I would probably never make it to college.” (Ambrose is currently a doctoral student.) Hayden said she “didn’t sound out words. It’s the words that get in the way for me.” Louise told the researcher that she couldn’t retain information in class citing “once I read it, it was gone.” They focused their efforts on finding career roles with goodness of fit. They continued to learn to master new skills. They focused on the big-picture thinking abilities. They found support in reading, writing, and speaking in their careers, delegating linear tasks that exposed their weaknesses. They self-advocated for their strengths and talents, which contributed to their career success. They remembered but were not defeated by their early painful academic experiences.

Subtheme 3: Psychological and social challenges, self-esteem. Challenging academic experiences strongly affected the psychological and social well-being for the participants in

school. The impact of having dyslexia created low self-esteem, self-perceptions of embarrassment and humiliation, and fears that others would perceive them as failures. The psychological and social challenges contributed to this theme of challenging academic experiences, perhaps as much as the actual academic failure. Louise didn't want her classmates and teachers to think she was stupid. "I created an aura, a confidence about me so that nobody would know I felt stupid." Hayden was aware that she did have some learning challenges and sought to hide them in school. She didn't want the teachers to be disappointed, "I have compensated a lot in school by paying attention so enthusiastically that it didn't really matter." Mary and Meri described haunting and humiliating experiences of teachers holding up their spelling tests in front of the class showing their academic failures. Meri felt "inferior" and a sense of "shame" because of her learning challenges. Meri said:

I have to overcome that feeling of shame. I think it just comes from being somewhat of a perfectionist and just never being able to demonstrate in those formative years what I was capable of doing. Shame is for me a matter of feeling inferior, feeling incapable in a situation where you desire to be capable. Frustration I find to be a much more productive emotion because I can work through frustration. Frustration is just something that tells you the way you are approaching something is the wrong way. That is why, for me, it is more shame than just a frustration.

Ambrose said that he suffered socially because "he spent his recess time in the classroom to finish up work." The participants voiced feelings of inadequacy and poor self-esteem because of their academic challenges. These six participants with dyslexia who have achieved much success in their careers still carried these hurtful psychological and social memories with them.

Subtheme 4: Importance of support: role of family, friends, community, tutors. The participants described the experiences of positive support from family, friends, community, and tutors. The experience of having positive support had an impact on how they survived the negative messages from their academic challenges in school. Louise grew up knowing “her parents [were] always supportive of her choices.” She added, “My mom was an incredible role model and had incredible empathy and common sense.” Mary described a dyslexic tutor who was able to teach her techniques to improve her reading. Mary’s mother taught her to stand up and advocate for herself in school. Cy had an “amazing art teacher” who mentored him to develop his art.

The participants voiced a determination and resilience to explore their talents and strengths, rather than focusing only on academic challenges. Hayden described the encouragement and support from her colleagues at work. “I got enough support that I was able to be encouraged to keep moving forward. Then once you start succeeding at something and getting positive response, you are like, oh, I *can* do this.” The participants expressed the importance of support and encouragement outside of school and in their careers. They were painfully aware of their challenges and determined to keep learning and mastering their skills and talents. They recognized that their success depended on their positive outlook and confidence in their strengths. Their confidence was associated with the encouragement of others.

Subtheme 5: Developed learning strategies and identified areas of strength in later academic years. Challenging academic experiences created opportunities for the participants to develop some learning strategies and identify areas of strength in later academic years. Emerging adulthood created a shift in the minds of the participants, a signal that they could explore further academic opportunities and/or launch a career focused on their talents and strengths. The

participants with dyslexia expressed more confidence that balanced (or surpassed) their earlier academic challenges. Hayden drew images, shapes, and colors that represented personalities for her to relate to concepts in school. Meri said, “You can really learn anything if you spend the time to learn it. It might take you longer than somebody else, but you can become an expert in this.” Mary offered a learning strategy, “I was slowing down and doing it at my pace, but I can do it, and I can understand it.” Louise found it helpful to create goals and sharing her goals with others to motivate her to succeed, “I challenged myself in the sense that I set goals, and by sharing my goals with other people, it forces me to actually work toward and fulfill those goals.” Meri commented, “I had to do a lot of independent learning.” The participants developed strategies that helped them, especially as they emerged into adulthood. They continued to learn and apply learning strategies throughout their careers.

Theme 2: Thinking Differently and Creating Success

The findings showed that their thinking differently seemed to actually cause all the participants’ success. Cy said, “It’s gonna take me longer, but I’m gonna come back with four other ideas.” Mary added, “It was about creating from what you visualize.” Mary described insight into her success: “I was able to lead people to do good things for the company, and also for themselves.” They understood that it was in their best interest to delegate tasks that exploited their weaknesses so they could focus on their strengths to contribute and be successful. “The key to a really good dyslexic, successful dyslexia is being able to delegate” (Louise). The participants recognized that their strengths and talents contributed to their success and the success of their clients and companies.

Self-advocating as individuals with dyslexia was seen in positive responses from four participants: Mary, Meri, Cy, and Louise. Hayden and Ambrose carefully selected to whom to

disclose their dyslexia. Mary was confident in her talents. “I decided I am not retarded (laughs) and nobody was going to put me in that.” Meri advised, “You have to get a sense of yourself, how long it takes you to learn something, how you can learn something.” Cy believed having dyslexia was an advantage, giving him creative talents to see the world differently than others. “It doesn’t mean you’re a photographer or a painter or interior designer. It means you’re not a linear person.” Louise said, “I think all of the way I was brought up and my limitations put me into this world of being able to do these other things and building strengths here and there.”

Subtheme 1: Recognized unique and valuable career journey. The impact of dyslexia on the lived experiences of the participants created their unique and valuable career journeys. The participants recognized that they had different paths to success. They leveraged their individual talents and strengths. They experienced career success as individuals and as a group with dyslexia. The participants emphasized that thinking differently was one of their talents that contributed to their career success for themselves and others. Their early academic difficulties had prepared them to persevere in their goals, to be resilient when faced with adversity. The participants learned to imagine different, creative, and innovative approaches to solving problems. Hayden believed that her talents to think differently, see patterns, and solve puzzles contributed to her career growth. Hayden added that her ability to think differently “led me into situations that have happened to be successful.” Meri suggested that learning by doing was a key factor in creating success. “I believe very deeply that this is really how we all learn, and that’s how education has to be transformed.” Cy remarked, “I see things the world doesn’t.” He also enjoyed working with people with diverse thinking styles, “You’re different but you complement each other and you appreciate the differences.” Mary described her ability to “see things visually.” Louise encouraged dyslexics to promote their conceptual thinking and not be

discouraged by thinking in the same way as a linear learner. “You don’t have to fit a square peg in a round hole.” The participants decided to focus on their strengths in their careers and not limit their potential to succeed.

Subtheme 2: Self-advocated based on talents and strengths. The participants recognized that self-identifying and advocating as dyslexic would bring this invisible disability into the light. Self-advocating based on talents and strengths would also transform the perception from disability to advantage. Becoming self-aware of strengths, talents (and weaknesses) with dyslexia would impact their experiences. Ambrose finally decided to self-identify with dyslexia: “I’m going to have to talk about dyslexia.” He realized he couldn’t “jump out of his experience” of being dyslexic. Mary said, “I needed to understand more if I was going to grow and I was going to become really good at this.” Meri added, “Just find something you love doing and you’ll be successful at it.” The participants recognized that they were talented and deserving of success. They also realized that self-advocating was necessary to help non-dyslexics see and value their talents. They wanted to bring their dyslexia into the light.

Subtheme 3: Created different ways of looking at problems and challenges. Finding different ways to view problems and challenges opened opportunities for the participants to succeed, and the ability to see different pathways gave the participants confidence. The participants contributed their different insights to their teams. Meri remarked, “All of a sudden I started to recognize that the way I thought was very different from how other people thought.” She added, “I am consolidating it in a sort of visual structure like organizing the information.” Mary commented, “I feel good about the way that I think. There are different ways of figuring things out. It has to do with the way you learn.” Cy believed that thinking differently expanded his creativity. “It’s going to take me longer, but I’m gonna come back with four other ideas.”

Hayden said, “There are several types of things that I figured out just what to do because it made it easier or more fun.” She added, “I engage with the space around me and it’s just in a different way than other people do.” Creating different ways of looking at problems and challenges offered opportunities for the participants to succeed. Their different approaches in thinking gave them “new eyes” in looking at problems.

Subtheme 4: Created and envisioned innovative ideas and solutions. The ability to create and envision innovative ideas and solutions came from thinking differently. The participants were poised to ask positive questions to determine what was possible, and then sought creative and innovative approaches. Hayden believed creating innovative ideas was an advantage in her career. Cy remarked, “I see things the world doesn’t.” He also said he had a talent for “spotting trends.” Louise compared creating and envisioning innovative ideas and solutions with entering a house. “If I couldn’t go in the front door, I’ll get into the house some other way. You can go in the window, the back door, the front door, the side door.” Hayden recommended that “you should use it (dyslexia) to your advantage.” The participants did figure out how to create new ideas and create new applications for current ideas to create growth in their careers.

Subtheme 5: Delegated tasks not aligned with learning styles or strengths with dyslexia. The participants felt it was important to delegate tasks that were too difficult and too time-consuming for them to execute efficiently. Tasks that exploited their weaknesses, were too linear, required extensive detail and time to complete were delegated to those individuals who had those strengths. Cy, the photographer, hired an agent to handle the administrative side of his business. Hayden, the senior design coordinator, was surrounded by teammates who handled editorial and administrative functions. Mary, CEO, had staff members review her speeches and

edit her writing when needed. Ambrose, the doctoral student and artist, had acquired an academic style in his writing and often presented his artwork. Meri worked closely with her colleagues and her dissertation committee for her data work and writing. Louise, the video line producer, worked with staff who handled administrative work, including scheduling and written details about her video shoots. The recognition by the participants that they should delegate such tasks afforded them opportunities to focus on their strengths and talents for successful results. Louise stated, “The key to a really good dyslexic, a successful dyslexic is being able to delegate. For those people with dyslexia who haven’t figured out how to delegate . . . it’s an eye opener when they figure that out.” Learning to admit learning challenges with linear tasks was an important skill for the participants. It was suggested that this was an important key to their success.

Theme 3: Championing a Growth Mindset and Positive Thinking

The findings showed that all the participants were positive thinkers who believed intelligence could be developed, that one could grow and improve with time, effort, and passion. The participants expressed different ways to learn and grow. Whether they visualized their concepts in their heads (Mary), drew concept maps on a large whiteboard (Meri), listened to audio tapes (Mary), created data visualization charts to graphically explain complex data (Ambrose), drew colors and shapes to remember stories (Hayden) or researched global locations visually (Cy), the participants found innovative ways to learn and grow. They never stopped learning. Ambrose said, “I constantly have to be improving.” Cy recommended, “Never be complacent.” Meri counseled that dyslexics should be careful to focus their passions, saying, “A growth mindset needs to be tempered.” These were valuable insights about creating a positive outlook and a growth mindset to create success.

Subtheme 1: Faced challenges as opportunities for success. The participants expressed their desire to continue to grow and learn in their careers. They embraced challenges as opportunities to learn and grow. They persevered through obstacles, worked very hard to master new skills, and encouraged their teams to learn and grow as well. Louise believed that announcing a challenge would help her reach her goals. “I challenged myself in the sense that I set goals, and by sharing my goals with other people, it forces me to actually work toward and fulfill those goals.” She confirmed her desire to face challenges in how she learned and processed information. “There was never ‘you can’t’ and ‘you won’t.’ There was always, ‘you can.’” Ambrose explained his passion for continuing his academic career. “I’ve been in school so long and it’s just because this is an environment that is going to challenge me.” The participants decided that they would not retreat into an attitude of learned helplessness. They affirmed that they deserved success by self-advocating for their talents and inspiring others.

Subtheme 2: Embraced positive change for the future with passion, persistence, and effort. The participants were motivated to embrace positive change as part of learning and growing to create successful careers. They were passionate about contributing their talents and had honed the traits of perseverance and tremendous effort early in their academic lives. Hayden said, “Change doesn’t frighten me at all.” Hayden told the researcher that she needed to be constantly learning new skills. Mary suggested that we shouldn’t “be afraid to fail.” It can be argued that the participants had to figure out how they learned best, how to solve problems, be creative, and know when to delegate tasks to be successful. These dyslexic participants may have become well practiced in change, embracing challenges to reframe as opportunities. The dyslexia experience can be viewed as dynamic, always fluid, changing to adapt as needed.

Subtheme 3: Nurtured a growth mindset to keep learning, growing, and succeeding.

The traits of resilience and perseverance that grew out of their earlier difficult academic experiences also created a “growth mindset,” “positive thinking,” and “grit, passion, and perseverance” in their careers. Cy described his need to live a dynamic and passionate life. His fear of stagnation motivated him to “never quit absorbing and learning.” Hayden also agreed it was important to “keep absorbing and learning how to do different things.” Ambrose also insisted that he had to be “constantly improving.” Mary described her mindset as “growth.” The participants realized that the more they knew about their careers, the more they could contribute ideas and solutions. The more they knew, the more empowered they would feel. The more they knew, the more valuable they became to their employers and industry.

Subtheme 4: Learned capabilities of new technologies to strategically apply to their

fields. Learning to understand the capabilities of new technologies was important for the participants. They expressed the need to integrate these technologies into their careers. Cy discussed the advantages of using speech-to-text emails and to send phone messages. Meri was passionate about technology that allowed instruction to be exceedingly individualized. Students with learning differences may benefit from personalized learning and learning at their own pace. Mary applied new technologies to her company’s production process to create higher quality, personalized communication materials to her clients. Mary said, “I learned every job in that department. I wanted to be able to do it.” She added,

I am learning about marketing, about programming, about data, big data, analytics. Our roles as printers have changed and with that we need to continue to educate ourselves and understand. Technology drives a convergence in the industry and with other industries. Because of that, we have to learn.”

Mary continued, “I worked for a national company that gave me all the support from a technology perspective.” Louise knew the importance of looking ahead to technological advances in video production. “I know everything there is to know, as far as technology with our industry.” Understanding how technology can be created and applied to industry is a key component for the future. Thinking differently for dyslexics will offer valuable perspectives on how to leverage the opportunities of accelerating technology in the 21st century knowledge economy.

Theme 4: Leading with Strengths and Talents

The findings showed that all the participants were able to imagine or envision success for themselves and their organizations. Meri reflected on the benefit of listening to different perspectives. “I create consensus among very diverse thinkers.” It can be argued that they developed a holistic view of ideas, applications, and solutions because they needed to learn “how to learn” through their academic challenges. Mary suggested that a leader “meet experts in multiple disciplines within the industry.” Meri thought it was important to “engage with other people’s ideas.” While the participants may have recognized weaknesses in some linear, detailed, and procedural tasks, they also recognized their high conceptual thinking and big-picture skills. Meri noted the importance of leading and motivating teams. “I can engage successfully with teams. I think that’s something that companies need even more in the future.” Mary believed it was important to “teach people through an educational process.” The participants were empathic leaders who shared their passion with their employees, clients, and colleagues. They leveraged their talents to advance their careers and the careers of others.

Subtheme 1: Developed “big-picture” conceptual thinking and ability to synergize ideas. The participants created success in their individual careers with visionary strengths, big-

picture thinking and the understanding of how to integrate ideas for success. They represented different fields of success. As a group, the participants all voiced their desires to excel in career roles with goodness of fit, to inspire others to succeed and contribute positive value and growth to the 21st century knowledge economy. Their challenging academic experiences, talents of thinking differently, their positive and growth mindset, and abilities to lead with strengths and talents empowered their dynamic success. Mary advised, “You want to lead people to do good things for the company, and also for themselves. As a leader, you are creating what you visualize.” Louise said that her strength was visualizing the project. “I can see the broad, the bigger picture.” Meri added, “I care that what I create serves a purpose.” Cy remarked that his strength was seeing an “aerial view of problems.” Meri described her leadership talent. “I put together how I saw the world and very much connected the dots from a very big picture.” Their abilities to bring together ideas also empowered the talents of others in their organizations to contribute to developing and executing plans.

Subtheme 2: Chose career roles with “goodness of fit.” The participants gravitated toward career roles best suited to their strengths. They continued to learn and grow as they excelled in these roles. Hayden is a senior design coordinator. Mary is a CEO of a national graphic communications company. Meri and Ambrose are doctoral students. Cy is a photographer. Louise is a line producer for video commercials. While you don’t have to be dyslexic to be creative, Cy suggested that dyslexics think of themselves as “the Olympic athletes of creativity.” Mary felt that her interpersonal skills were key in her career roles. “I am pretty good at reading people.” Louise added, “I don’t really know what my IQ is, but I know I have a high emotional IQ.” The participants recognized their weaknesses and agreed that delegating

tasks that weren't aligned with their strengths were better executed by professionals with a "goodness of fit" for those other tasks and roles.

Subtheme 3: Empowered success in others. The participants were interested in motivating and encouraging other talented people to learn, grow, and succeed. The impact of their early painful academic experiences may have sensitized them to reach out and motivate other people to succeed. Hayden said it was important to be "loyal to each other." Louise believed that we should have "more empathy towards people's struggles." Mary said it was very important to "show respect to everybody." She believed that a leader should "have empathy and ability to guide them through." Ambrose expressed a desire to live in a culture, in a society where everyone has an opportunity to contribute. Perhaps the challenges and struggles gave the participants a deeper understanding and determination to succeed for themselves and others.

Subtheme 4: Contributed positive value and growth in the 21st century "knowledge" economy. The findings showed that the participants understood the importance of offering positive value and growth in the 21st century knowledge economy. They also recognized that they had talents and skills needed for the future. Talents included areas such as thinking differently, creativity, innovation management, visuospatial visioning, invention, synergizing ideas, empathy, and building a shared vision. Mary said, "I understand that different people have different capabilities. I have information that's important to people." Meri added, "I care that what I create serves a purpose." The participants felt that what they contributed to their clients, academic community, and employers had positive value and purpose. They seemed to look ahead and sense what was needed next. It can be suggested that contributing positive value and growth was important to them because they may have received earlier negative messages that they underperformed in the expectation of others.

Summary

The purpose of this study was to learn from the life experiences of individual adult dyslexics with successful careers. Exploring how these successful dyslexics created meaning and sense from their life experiences revealed a deeper and broader understanding of strengths and talents of dyslexics due to their brain orientations. Dyslexics in the workplace need to find roles that promote their strengths, while at the same time delegating some areas of weaknesses such as linear and sequential tasks to others with those strengths. This researcher listened to the voices of the six dyslexic participants to identify insights that might have contributed to their career success. Dyslexia has been described as a “hidden” disability. Insights learned from the participants may bring the talents of dyslexics out of hiding, into the light.

This study argued that there was a transformative shift from seeing dyslexia with a narrow focus on neurological weakness or disability to a wider lens of strengths, abilities, and gifts in dyslexic brain differences. Dyslexia was viewed as an “advantage” (Eide & Eide, 2012) when talents of dyslexics were well matched in career choice. The findings from the study revealed that individuals with dyslexia could “craft an environment towards success building on signature strengths” (Nicholson, 2015, as cited by Alexander-Passe, 2016, p. 90). The findings from the interviews in the study also indicated that childhood learning experiences remained as vivid, painful memories with each participant.

Chapter Five combines an interpretation of the findings, implications from the study, recommendations for action, further study and a conclusion.

CHAPTER FIVE

CONCLUSION

The purpose of this Interpretative Phenomenological Analysis (IPA) study was to understand how the self-perceptions of dyslexics and the perceptions about dyslexia from non-dyslexics impacted the life experiences of individuals with dyslexia with successful careers. According to Smith, Flowers, and Larkin (2012), “IPA is concerned with human lived experiences and posits that experience can be understood via an examination of the meanings which people express upon it” (p. 134). This methodology was well aligned with exploring the life experiences of successful dyslexics in their careers and learning from the “personal meaning and sense-making in a particular experience” (p. 45). This study delved deeply into the meaningful experiences of six successful dyslexic participants through individual semistructured, in-person interviews. According to Smith and Osborn (2003), the semistructured interview “facilitates rapport/empathy, allows a greater flexibility of coverage and allows the interview to go into novel areas, and it tends to produce richer data (p. 59). The interview questions were designed as guidelines. The participants themselves became the real guides as they shared their meaningful experiences. According to Smith and Osborn (2003), “A two stage interpretation process, or a double hermeneutic, is involved. The participants are trying to make sense of their world; the researcher is trying to make sense of the participants trying to make sense of their world” (p. 1). There were flashes of excitement when each participant talked about their career journeys. They shared how they felt about their early academic challenges and later career success. There were brief silences that signaled a desire to go into more detail about an event or sometimes change direction in the conversation. The researcher created prompts to encourage each participant to share their stories in ways most comfortable for them.

The researcher is an individual diagnosed with dyslexia. There was a sensitive and conscious determination to be aware of this bias throughout the study. The fact that the researcher is dyslexic may have helped the participants feel comfortable in sharing their insights. Furthermore, this study was written by a dyslexic interpreting the meaningful insights of dyslexic participants. The result was that the researcher was transformed by the voices of the participants. The researcher was honored that the participants were so forthcoming about their challenges and success. The participants offered a deeper understanding of dyslexia through their experiences, and expressed a profound belief in leading with one's strengths and talents to flourish in their careers.

Interpretation of the Findings

This study sought to explore this central question: *How does the perception of dyslexia impact the life experiences of individual dyslexics with successful careers?*

Subquestions

- How does self-advocacy impact the life experiences of dyslexics?
- How do developing a growth mindset and positive thinking impact the life experiences of dyslexics?

These questions were explored through the voices of the six dyslexic participants in individual semistructured in-person interviews in the New York tri-state area. The researcher extracted 470 meaningful words/short phrases (nodes) from the interviews and organized them into initial categories. Further analysis of their insights revealed eighteen subthemes, clustered around four themes: 1) challenging academic experiences, (2) thinking differently and creating success, (3) championing a growth mindset and positive thinking and (4) leading with strengths and talents. These themes reflected the impact of how the participants felt about themselves and

their perception of how others felt about them as successful career dyslexics. The following sections discuss major interpretations of the findings.

Review of Frameworks That Supported the Study

Chapter Two defined in detail the one conceptual framework and four theoretical frameworks used in this study. As a reference in this Conclusion the mind map and the table below were prepared, Figure 4 and Table 4.

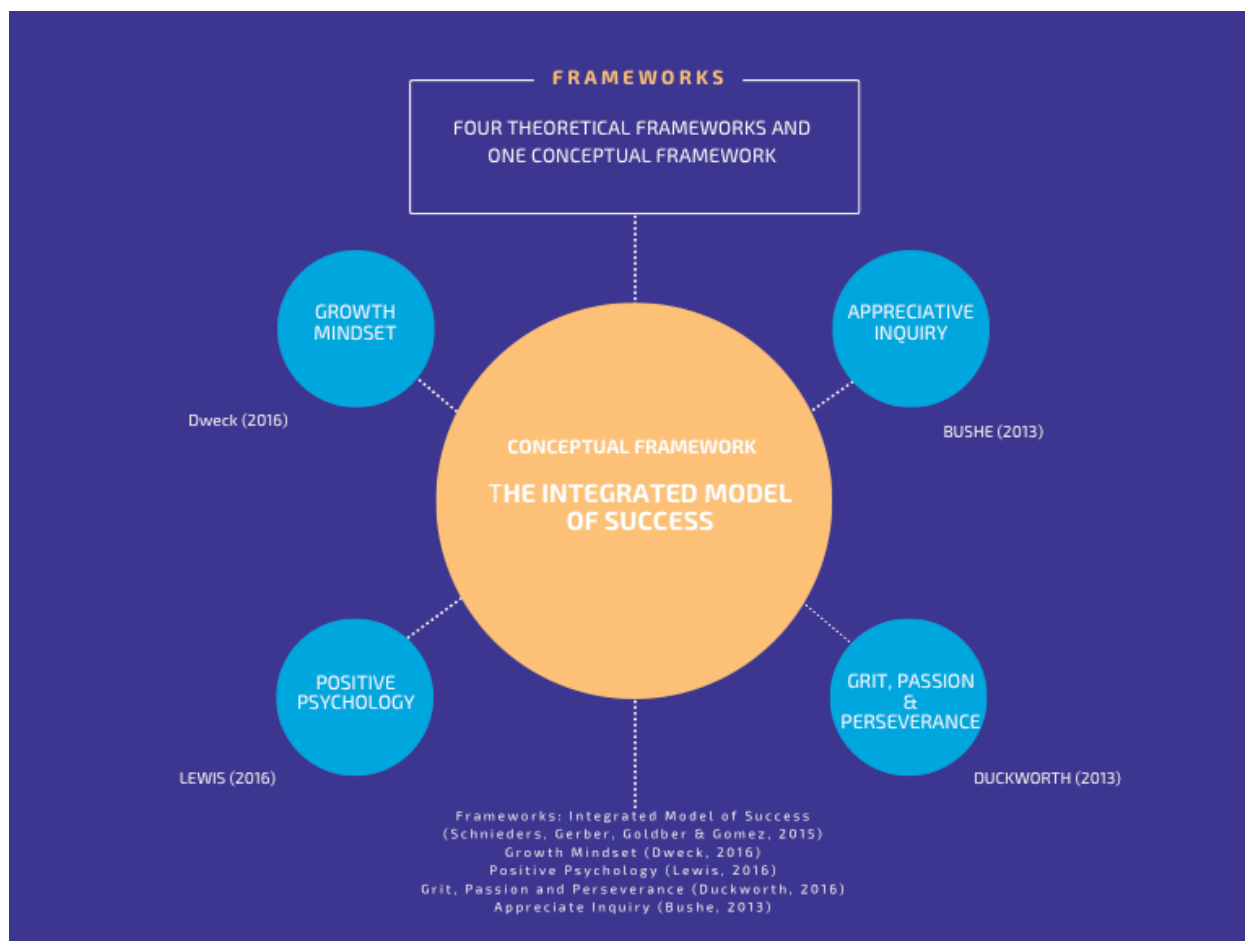


Figure 4. Mind map of conceptual and theoretical frameworks

Table 4.

Table of Conceptual and Theoretical Frameworks

Framework	Author	Type	Description
The Integrated Model of Success	Schnieders et al., (2015)	Conceptual	Dyslexics can integrate their thinking and actions to achieve success, with internal, linking and external factors.
Positive Psychology	Lewis (2016)	Theoretical	Adopting talents and strengths to create success and transformational change.
Growth Mindset	Dweck (2016)	Theoretical	Applying talents and skills to positive and growth opportunities so as to not avoid opportunities for success
Grit-Passion-Perseverance	Duckworth (2016)	Theoretical	Talent and skill must be multiplied by double effort to achieve and maintain success
Appreciative Inquiry	Bushe (2013)	Theoretical	Approaching problems from a different direction or looking at issues with new eyes.

Interpretation #1: The Impact of Academic Challenges Carried Forward Into Careers, But Reframed for Successful Outcomes

All six participants expressed feelings of rejection because they had difficulty reading and understanding information. Two of them remembered being in the third grade and being asked regularly to stand in front of the class while a teacher used them as an example of poor spelling, not thinking about it possibly being a problem with their reading. The parents of another were told she was mentally retarded. Another was afraid to get up and speak for fear of pronouncing words incorrectly. One couldn't even go out to recess because he had to finish his work from class. The participants talked about psychological problems, about having low self-esteem, and being ostracized socially. They suffered from being different from others and felt their schools had very low expectations of them and did not provide much support.

But they persevered. They reported that the qualities they had to develop to overcome all these negative messages about their lack of ability, low intelligence, and poor social position helped them later in life to overcome obstacles and become the successes they were today. The participants had all experienced pain in school that undermined their potential yet they were able to use those painful memories to their advantage in their careers.

The experiences of the participants fit into the theoretical frameworks in this study. All of the participants adopted a positive psychology (Lewis, 2016), a positive and growth mindset (Dweck, 2016), and used grit, passion, and perseverance (Duckworth, 2016). Another theoretical framework that fits is Appreciative Inquiry, about focusing on what could happen going forward rather than on what has happened in the past. What was a failure in school became “what is possible” with them using their big-picture strengths.

Their experiences also fit into the Integrated Model of Success conceptual framework (Schnieders et al., 2015) in that: (a) The participants persevered during unpleasant early academic experiences, created goals for themselves and became aware of the reasons for their situation (Internal Factors); (b) they reframed these negative early academic experiences as they matured (Linking Factor); and (c) they reapplied the coping mechanisms learned earlier to being successful in their careers (External Factor).

The same brain differences that created reading and language difficulties in school were the brain differences that contributed to the participants’ strengths in visual and conceptual thinking in their successful career journeys (Eide & Eide, 2012). The six participants grew from their traumatic academic experiences (Alexander-Passe, 2016) to create positive experiences in their careers.

Interpretation #2: “Thinking Differently and Creating Success” Impacted Positively

All the participants recognized that the way they thought was different from the way other people thought, with some realizing it earlier than others. All of them had realized by early in their careers that the way they thought differently contributed to the way they could handle a problem or challenge at work. All had stories about bringing new ideas to solving a problem. They had a sense of vision. They could take in information from many sources in a holistic way. They noticed patterns or gaps in information. They had the ability to look at problems with “new eyes.” Cy said, “It’s gonna take me longer, but I’m gonna come back with four other ideas.” Mary added, “It was about creating from what you visualize.”

The experiences of the participants to think differently aligned well with the theoretical frameworks. All of the participants applied their strengths of thinking differently to the framework of Appreciative Inquiry (Bushe, 2013) as they asked about what was possible in the future through thinking differently. They created positive and valuable ideas (Lewis, 2016) by thinking differently. They approached their careers with a positive and growth mindset, as they learned to master their skills and learn new ones in their careers (Dweck, 2016). Their grit, passion, and perseverance encouraged the participants to embrace their thinking processes (Duckworth, 2016). The participants recognized that thinking differently gave them a competitive advantage because of their dyslexia (Shaywitz & Shaywitz, 2018).

Their experiences also fit into the Integrated Model of Success conceptual framework (Schnieders et al., 2015): (a) The participants desired to excel, created goals based on their strengths and applied their strengths in thinking differently (Internal Factors); (b) they were proactive and confident in demonstrating their talents based on thinking differently (Linking

Factor); and (c) they created strategies to develop those strengths in an environment that supported their thinking process (External Factor).

The participants considered their talents for thinking differently as a valuable asset. Thinking differently allowed them to see ideas from different directions and perspectives, thinking quickly through complex information and creating new ideas (Gershoni, 2017). The participants' talents for bringing new and different perspectives created a visible indication of their higher cognitive thinking, reasoning, and problem solving (Shaywitz, 2017) Their career journey was different, unique, and valuable because of their dyslexia. The participants also demonstrated skills needed for the 21st century that featured the ability to think differently. Such abilities included proactivity, innovation, big picture thinking, visuospatial talents, teamwork, empathy, and communication (Nicholson, 2015). The talents associated with thinking differently, such as visioning, inventing, and relating (Ancona, 2005) gave the participants a way to be recognized in their careers.

Interpretation #3: Positive Self-Perceptions and Perceptions of Others Contributed to Success

The participants were confident about their talents. Cy said he was able to “see things the world doesn't.” Hayden said she had a positive response from non-dyslexics about her creative work. Mary respected the talents of others and enjoyed educating clients. Cy suggested that dyslexics embrace who they are and focus on their creative strengths. All the participants described how their positive self-perceptions created their success.

A positive self-perception and a positive perception of others about them fit well into the theoretical frameworks. The participants felt good about themselves and felt they deserved to be valued by non-dyslexics, too. (Lewis, 2016). The participants believed the more they learned, the

more value they offered to themselves and to others in their careers (Dweck, 2016). The emotional strength they used to meet the challenges of adversity showed their traits of grit, passion, and perseverance (Duckworth, 2016). The participants voiced insights that matched their beliefs in a positive self-perception and the framework of appreciative inquiry (Bushe, 2013).

Self-perceptions of the participants also fit into the Integrated Model of Success conceptual framework (Schnieders et al., 2015) in that: (a) The participants desired to create a positive self-perception (Internal Factors); (b) they reframed old feelings of inadequacy to confidence in their strengths to succeed and persevered to strive for success in the face of adversity (Linking Factors); (c) the participants asked for support that maintained positive self-perceptions and bolstered their abilities to succeed (External Factors).

Dweck (2016) suggested that having a growth mindset had an effect on self-perception, motivation and achievement. The participants contributed ideas in their careers because of their positive self-perception. In contrast, Steinberg (2006) warned dyslexics not to hold back their ideas fearing that they would be turned down if others knew they were dyslexic. The participants did not hold back.

Interpretation #4: Championing a Growth Mindset and Positive Thinking Contributed to Career Success

A growth mindset is being open to change and to learning and believing that you can contribute more if you know more. The participants found ways to challenge what they knew, embracing change and growth. They believed that their intelligence could be developed. These six participants rejected the opposite, a fixed mindset, the idea that intelligence can't be developed.

Mary sought to learn how to master the skills in the production process in her company. She used that knowledge to jump forward in her career by educating her clients and rising up in sales. Hayden said she knew it was time to leave a company when she was no longer learning anything new. She didn't want to leave, but she believed in continually learning new things. Meri enrolled in courses about biology, chemistry, and neuroscience before beginning the robust curricula in her Ph.D. program. She volunteered in the lab to gain hands-on knowledge about the doctoral program. All were interactive learners who needed to be involved, to be passionate about what they were doing. If they got bored they lost their focus. The participants believed they had an "advantage" because of their desire to learn and grow.

Developing a growth mindset fit well into the theoretical frameworks in the study. The participants engaged in a positive approach to wanting to improve, learn new skills, and develop their potential (Lewis, 2016). The participants were passionate about learning new things and mastering their skills (Dweck, 2016). The participants showed grit, passion, and perseverance (Duckworth, 2016) in maintaining their growth mindsets in times of adversity. Learning to live with a growth mindset also fit well into the framework of Appreciative Inquiry (Bushe, 2013) in that asking questions that led to new ways of looking at issues was part of the DNA of the participants in this study.

Adopting a growth mindset fit into the Integrated Model of Success conceptual framework (Schnieders et al., 2015) because: (a) The participants desired to keep learning and growing in their careers; (b) they were persistent in setting goals of achievement, they were aware of their talents, and recognized talent alone would not create success (Internal Factors); (c) they proactively met challenges as opportunities and looked for environments where they would succeed as they continued to learn and grow (Linking Factors). The participants created

strategies to enhance their abilities and promote their strengths with their growth mindset (External Factors).

Interpretation #5: Self-Advocacy, Advocating for Others, Support Were Critical Factors

Self-advocacy is a promotion of one's strengths and of what one can contribute, saying "I deserve to be successful, am deserving of an opportunity, and am asking for that opportunity." The participants learned how to self-advocate to be recognized for their talents. Mary was told she couldn't enroll in an elective technology course in high school but she insisted, saying she was a student and had a right to take the classes she liked. That started her love of technology. Meri transferred from a large college program to a smaller one, as a sociology major. She became known for coming up with different perspectives in class topics and found she liked being thought of that way. She ended up with a significant career in academia, a Ph.D. student at a top university. Ambrose admitted that he needed to self-identify and self-advocate as a dyslexic in his doctoral program citing, "I can't jump out of my own experience and see what someone else perceives the world." He realized that advocating for his abilities offered him better opportunities to succeed in this academic environment.

Self-advocating as a dyslexic fit well into the theoretical frameworks in the study. The participants who disclosed their dyslexia adopted a positive outlook about their abilities to succeed in their career roles (Lewis, 2016). The participants continued to learn and grow to enhance their knowledge (Dweck, 2016). The participants need to have grit, passion, and perseverance (Duckworth, 2016) to weather the negative misconceptions from some non-dyslexics. Self-advocating also meant asking for an opportunity to show that they had new questions, new eyes on problems applying appreciative inquiry to their roles in the workplace (Bushe, 2013).

Self-advocating also fit into the Integrated Model of Success conceptual framework (Schnieders et al., 2015) because: (a) the desire to succeed included persistence in speaking up about their strengths and disclose their weaknesses; (b) they were self-aware of their challenges and strengths to self-advocate successfully (Internal Factors) and were proactive in self-advocating for themselves (Linking Factors); (c) and selecting mentors and work champions to guide them was a positive strategy to help guide them to navigate in the workplace. (External Factors).

Self-advocating for oneself in the workplace protected the participants from the stressful effects of a marginalized identity (Chalk, 2015). Asking for support and delegating linear tasks that were not aligned with one's strengths also offered an opportunity for dyslexics to focus more of their efforts on their strengths and positive contributions in the workplace (Roffman et al., 1994). Self-disclosure and advocacy were important to bringing hidden strengths and talents into the light for the participants. These participants self-advocated when they decided to say "I'm not good at this but I'm good at that." They felt the rejection, it hurt them, but they kept trying to find things they were good at. The researcher heard from the participants that the reason to self-identify and self-advocate was to be visible to people and to be able to tell them what you're good at. If you don't, people won't know if you're good at something or bad at something.

Participants who self-advocated also had the opportunities to advocate for others in the workplace. Mary said she was very open about talking about her dyslexia in her company. She encouraged her colleagues to advocate for their learning differences, promoting strengths and delegating tasks that expose weaknesses. Louise said that she enjoyed mentoring students, especially those with learning challenges. The participants self-advocated and recognized the

importance of advocating for others who struggled in the workplace. Mary added that she had information that was important to others.

Interpretation #6: Found a Career With Goodness of Fit by Understanding Their Own Strengths and Talents

Goodness of fit is the right kind of role for your abilities, strengths, and talents. Your strengths and talents are aligned with that role. The participants said there wasn't any point to hitting your head against a wall in areas to which you weren't suited. Cy said, "There is no Plan B." You have to find the roles that match who you are and how you think. They learned to look for positions where they fit and to study why they fit there, to think about what worked for them and why that worked for them. Because they fit well in the roles toward which they gravitated, they said they were able to rise up, become even more successful, to the point where they had leadership roles, using their strength and their vision, and their ability to see the future.

The participants felt it was more important *internally* to feel they were in the right position with goodness of fit and that they were contributing, even more than the external recognition of other people telling them. They needed to know internally that they were good at something.

But the participants reported that they had to find ways to perform at least some tasks they weren't naturally good at, and that delegating was a key skill they had acquired. Mary said she needed help writing her speeches in her role as CEO. Louise's job was to produce videos and she focused on that, on what she was good at, while other people on her team did work she wasn't good at. Meri said that in her Ph.D. program she learned how to use advanced data analysis technologies so she is successful, delegating some of her work to a system and software.

Choosing a career with goodness of fit was well aligned with the theoretical frameworks in the study. The participants adopted a positive psychology to seek the best roles for their strengths (Lewis, 2016). Developing a positive and growth mindset gave the participants more information about which career roles would best fit (Dweck, 2016). To accomplish their goals, they continued to work very hard to ensure their continued success, a lifelong trait (Duckworth, 2016). The participants continued to think of new questions with new perspectives, using Appreciative Inquiry as a way of focusing on imagining a positive future (Bushe, 2013).

The participants chose career roles with goodness of fit in a way that was also well-aligned with the Integrated Model of Success conceptual framework (Schnieders et al., 2015) in that: (a) The participants were passionate about setting and achieving goals that matched their visions and desires; they were very self-aware of their strengths in their roles (Internal Factors); (b) they were proactive in seeking the most receptive working environments for their strengths (Linking Factors); and (c) the participants adopted strategies to leverage their strengths through learned creativity and support. They sought and received guidance from mentors (External Factors).

Choosing a career role with goodness of fit gave the participants a learning advantage; they were in the right job at the right time in their careers (Eide & Eide, 2012). Finding the right roles allowed them to flourish in their careers and inspire others. The participants were able to view their dyslexia not just as an “impediment” (Paul, 2012) but as an advantage in their career.

Implications

The very nature of an IPA analysis allows a researcher to listen, respond, and interpret the voices of the participants and their experiences of career success. The more that can be learned from the insights of individuals with dyslexia who created successful careers the more

leaders can share strategies with other individuals with dyslexia. The insights from the participants could be amplified to benefit stakeholders like educational leaders, teachers, and administrators as they sought to transform how we educate students, how our students learn, and how we share and distribute knowledge.

The results of this study showed that there are different types of minds and different ways of solving problems (Pink, 2006). Sharing these findings contributed to a deeper understanding of dyslexia and the paths to success, as the researcher was transformed by their voices and insights. Interested stakeholders would include the participants themselves, other individuals with dyslexia, families, communities, and educational and industry organizations. There would be interest among educational research groups and organizations providing information about dyslexia.

This study explored the impact of dyslexia on the experiences of six participants with career success. There are more success stories to be heard. Companies such as Microsoft, Deloitte, IBM, and Ford have employed people with neurodiverse profiles (Austin & Pisano, 2017). Employers in the media and communications fields have embraced the talents of dyslexics on the client and agency sides due to the creative and innovative thinking associated with dyslexics (Gershoni, 2017). Gershoni suggested that more companies in the near future will be seeking, nurturing, and retaining valuable talent such as dyslexics.

Recommendations for Action

Recommendation for Action #1: Teach Self-Advocacy and Self-Determination Priorities for Students Through Personalized Learning Opportunities

The six participants in this study experienced learning environments in schools that did not support how they learned best. The first recommendation for action is to teach students to

self-advocate for their strengths and encourage self-determination so they can find effective pathways to learn. The National Center for Learning Disabilities (2017) described self-advocacy as knowing your skills, personal strengths, weaknesses, and understanding your rights and the ability to communicate those rights to others. Self-determination is described as a state of mind in which individuals voice their choices and make decisions to pursue their goals. It was recommended that personalized learning be integrated into the curriculum and not considered an extra add-on option. According to *Understood.org* (2018),

Personalized learning, when done well, can build a supportive, healthy learning environment that increases the self-esteem of students with disabilities, with the added benefit of increased engagement and achievement. Personalized learning creates a learning culture that embraces and acknowledges that every student has different learning needs and styles—instead of treating every student as the same type of learner.

Students who can self-advocate and express how they learn best may benefit from personalized learning in their curriculum. Self-advocating and self-determination will mean that students will proactively partner and “own” their learning.

Recommendation for Action #2: Share Best Practices Among Educational Environments

The impact of emerging neuroscience evidence can inform leaders in all educational environments. Meri, one of the participants in the study recommended that “there should be more of an exchange between what is happening in education and what’s happening in neuroscience.” In order for educators to prepare their students in this 21st century, they need to urgently improve their understanding of how students learn and how students learn best. Sharing best practices as an educational community is an important action. On-site and virtual forums,

seminars, and conferences offer flexible and convenient opportunities on different media platforms for discussion and debates.

Recommendations for action include dynamic training for educators that continues to build upon emerging knowledge from scientific evidence. Organizations such as the Yale Center of Creativity and Dyslexia (2018) that provide news, scientific research findings, and educational and advocacy information would be an example of an organization to partner with in sharing best practices. University programs in neurocognitive research and education would also be good partners to join educators in creating best practices. Other interested stakeholders would include city, state, and federal policymakers; families; and educational communities. In addition to the benefit of creating and updating best practices as a group, a live presentation of findings from the group's work could be available to local communities and streamed on-line to reach interested audiences.

Recommendation for Action #3: Educational Upgrade for the 21st Century

It is a positive and significant indication that educational researchers and institutions are reviewing what we are teaching students and how we are teaching them for positive learning outcomes in 21st-century society. Ledward and Hirata (2011) found that an educational upgrade could provide opportunities to each student in flexible learning environments, both onsite and virtual, to accommodate the different needs of students. Sak-Min (2009) and Black (2007) recommended that these learning environments offer students access to high quality learning tools, technologies, and resources to help students cultivate 21st century skills.

Hanover Research (2011) recommended the following four main skills apart from technology that support the needs of employers in the 21st century: (1) collaboration and teamwork, (2) creativity and imagination, (3) critical thinking, and (4) problem solving.

Individuals with dyslexia may be well suited to contributing these skills to the market. There should be increased communication promoting these skills and talents to employers, highlighting the need for talent diversity. Individuals with dyslexia should be proactive in presenting their skills and talents to employers. According to Pink (2006), there is a demand for “right brain” skills and talents from 21st century employers. Dyslexics will need to be proactive and self-advocate to fill these needs based on their unique individual profiles.

Recommendation for Action #4: Create Educational Panel Events With Successful Dyslexics

The researcher was honored by the opportunity to learn from the insights of the participants. It may be that a broader audience of interested stakeholders may benefit from listening to other stories of career journeys like these. A recommendation for action is to create and host a small panel event with four to six dyslexics with career success. Panels and presentations should be available digitally (preferably as a live stream) and posted on educational websites as well as marketed in print and digital channels of social media.

Recommendation for Action #5: Create Educational Panel Events With Employers and Dyslexic Talent

It could be beneficial to create and present panel events that include employers who have hired dyslexic talent and educators on topics related to the skills and talents needed in this 21st century economy. According to Paige (2009), 21st century skills include technological literacy and innovation, critical thinking, problem solving, communication, and working with teams and diverse perspectives. The panelists would demonstrate the various opportunities in different kinds of companies with different kinds of minds (Pink, 2006). This can be hosted by

educational, industry, and advocacy organizations whose mission it is to share insights about “what is working well” for employers and dyslexic talent in successful careers.

Gather together “dyslexic champions” who are successful and can inspire others. Gather employers who champion them. Shader (2015) credited his dyslexic skills for understanding and explaining technology to others as part of his success at Microsoft. Sandell (2014) attributed his dyslexic talents to his abilities to invest in new tech companies. Gershoni (2018) mentioned that many of the creative employees in his advertising company were dyslexic and contributed innovative ideas to their clients. Developing a program for successful dyslexics to mentor dyslexic students launching their careers would offer valuable experiences in a welcoming company culture.

Recommendations for Further Study

Exploring the meaning and sense-making from the life experiences of adult dyslexics with successful careers revealed insights that could benefit the larger community of dyslexic learners, families, organizations, and employers. It is recommended that there be further study into the larger field of neurodiversity, recognizing the talents of people with different brain orientations.

Recommendation for Further Study #1: Create More IPA Studies as a Follow-up to This Study

This study explored the impact of the perceptions of six dyslexic participants with career success. It is recommended that a follow-up IPA study explore another small sample of successful dyslexic participants across different regional areas in the U.S. The International Dyslexia Association (2018) has state and local chapters that may be interested in studying the impact of dyslexia on dyslexics with career success in their areas. The annual conference for the

International Dyslexia Association would be a strategic environment to propose a follow-up study to researchers and the dyslexic audiences. Another option for follow-up studies in the U.S. and in different global locations would be through the individual country branches of the International Dyslexia Association. Such IPA studies with dyslexics with successful careers would inform more research on this topic.

Recommendation for Further Study #2: Study More Successful Dyslexics Within Various Industries

Develop more research studies and published profiles of successful dyslexics in the workplace. The Yale Center for Dyslexia and Creativity (2016) published the profiles of more than 60 successful dyslexics in various fields. The profiles represent how slow readers can be “fast and creative thinkers” (Shaywitz, 2016). Rooke (2016) highlighted the stories of 23 creative dyslexics with successful careers. The participants in this study also reflected career success through their insights. Further studies can focus on successful dyslexics in various fields and industries to inspire a greater understanding of their lived experiences.

Recommendation for Further Study #3: Study to Attract, Nurture, and Retain Their Employees Within These Industries

Proactively educate companies about the benefits of hiring employees who are also dyslexic. Researching and analyzing the talent needs of a company today could help them focus on the types of talent they need now and in the future. It can be implied that the organizational structures, titles, and roles have to be updated to meet the demand of the 21st century economy. It could also be implied that companies may not be proactively evaluating their talent needs often enough to be competitive in their markets.

Conclusion

The goal of this study was to understand how the perception of dyslexia impacted the life experiences of individuals with dyslexia who have successful careers. The study argued that there was a transformative shift from narrowly viewing dyslexia as a neurological deficit or learning disability to a wider and more holistic view of dyslexia as an “advantage” for dyslexics in roles that match their talents and strengths. The primary research question and subquestions guided the study and analysis. An Interpretive Phenomenological Analysis (IPA) methodology was used to analyze the voices of six dyslexic participants who had experienced career success. The analysis of the findings revealed four primary themes: (1) “challenging academic experiences” (2) “thinking differently,” (3) “championing a positive and growth mindset,” and (4) “leading with talents and strengths.”

The significance of the study was in contributing and honoring the voices of these successful participants to facilitate a greater appreciation of how they achieved their success. Their career journeys reflected their academic, psychological, and social challenges; their recognition of talents and skills of thinking differently; their positive and growth mindsets and visionary leadership. The researcher was dyslexic and consciously aware of bias when interviewing the six participants. It could be argued that the participants felt comfortable opening up about the meaning of their lived experiences because the researcher was also dyslexic. The participants were forthcoming about their lives and career success. This study was limited by the voices of these six participants who shared their *own meanings* of career success.

The study benefited from researching the existing and emerging literature. The findings also contributed to the body of knowledge of dyslexic individuals who have successful careers.

The study recommended action steps to increase knowledge of the talents of dyslexics among educational and industry audiences. There is a need for further study.

This study was limited because there was a small sample of six participants. The researcher recommended ideas for additional studies to deepen an understanding of how dyslexic talent could contribute to the need for skills and talents in the 21st century economy. Individuals with dyslexia with career success will still need to counter the myths and misconceptions of dyslexia with the reality of their authentic achievements. Shifting the perception of dyslexia from a narrow “deficit” model to a wider, more holistic view of dyslexia as an “advantage” will create transformative opportunities for success.

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APPENDIX A

Sample Marginal Notes Grouped by Initial Exploratory Categories

<u>Categories</u>
<p>Researcher's Marginal Notes</p>
<p>1. <u>Early Academic Performance</u></p> <ul style="list-style-type: none"> Feeling embarrassed and humiliated Academic failure Becoming self-aware of creative skills Showing results using different methods in school Fear of disappointing teachers Isolated from participation in class Teachers not understanding dyslexia Little was known about dyslexia when participants were in school Lack of support from school Strong family and community support and guidance A few educators (teachers and tutors) had positive impact Feeling of not fitting in with other kids Fear of failure mixed with success Feeling limited opportunities for success Recognized that they may learn differently, but they are smart Demonstrating strengths in non-academic areas such as sports, theater, art Beginning to make choices as emerging adults based on their self-awareness of strengths and weaknesses
<p>2. <u>Career Strategies</u></p> <ul style="list-style-type: none"> Sensing that they have a unique and valuable career journey Find your passion Seek goodness of fit in your career roles Belief that difficult academic challenges didn't have to do with intelligence Growing confidence in their talents because of dyslexia Delegate tasks that exploit your weaknesses

3. Career Success

- Lead with vision and “big picture” thinking
- Envision and develop successful solutions
- Seeking more creative roles than linear roles
- Embrace challenges as opportunities
- Teach and mentor others
- Promote success in others
- Motivate others to think about issues differently with forward-thinking perspectives
- Show empathy for people who struggle

4. Self-Advocacy

- Belief that difficult academic challenges didn’t have to do with intelligence
- Self-identifying as a person with dyslexia
- Resilience, determination to succeed
- Growing confidence in their talents because of dyslexia
- Identify with your talents because of your dyslexia
- Appreciative inquiry: Ask questions to focus on positive future, not on problems in past

5. Growth Mindset

- Embrace positive change
- Developing a growth mindset and positive thinking
- Learning capabilities of new technologies
- Asking what is possible. Don't dwell on negative limitations

6. Experiences of Support

- Strong family support and encouragement
- Families advocating for students in school
- Support from tutors, community, and friends

7. Continuous Learning

- Continuing to learn and grow
- Constantly trying to improve
- Making tremendous effort to succeed
- Learning by doing
- Learning differently and well
- Learning by using visual information

Never be complacent

Sharing what you learn with others

Apply creative talents to achieve success

8. Problem Solving

Seek a collaborative group with diverse strengths

See challenges as opportunities for success

Use your talents with dyslexia to look at problems differently

Look for innovative solutions

APPENDIX B

Sample Excerpts From Each Participant Grouped by Subtheme

<u>Emerging Themes</u>			
<u>Phrases (Nodes)</u>	<u>Name</u>	<u>Page</u>	<u>Line</u>
<u>1. Felt schools lacked knowledge of dyslexia</u>			
They really didn't know what to do with dyslexia	Meri	4	7
They just pushed me from grade to grade	Mary	14	15
She wasn't connecting the reason you couldn't read	Mary	21	31
There are incredible complications (laughs) in trying to deliver education to children	Meri	9	11
I feel like in our school settings, we don't provide that (support). And I think it's exceedingly disadvantageous for kids who learn differently	Meri	44	7
<u>2. Suffered Academically</u>			
I was considered mentally retarded. Um, when I was in first grade . . .	Mary	13	10
In 5th grade I had a teacher that told my parents that I would probably never make it to college	Ambrose	22	16
What they (teachers) basically did was give me crayons and put me in the back of the room.	Mary	13	31
I could read. Um but I couldn't comprehend	Mary	14	4
I was never going to succeed	Mary	5	29
They felt I would slow everybody down	Mary	17	4
<u>3. Psychological and Social Challenges; Self-esteem</u>			
. . . and that I was not capable of learning	Mary	13	16
I was afraid of failing out of school	Mary	10	15
. . . feeling inferior	Meri	20	1
Like feeling stupid, but being able to like create this, um, aura about me that, confidence about me that nobody would know I felt stupid	Louise	53	6
I didn't want the teachers to be disappointed in me	Hayden	25	19
conflicted about who I was and how I saw myself	Meri	4	26

It negatively impacts me by having that little girl inside of me when it comes to negotiating for myself.	Mary	60	9
4. <u>Importance of support; Role of family, friends, community, tutors</u>			
My parents were always supportive of my choices.	Louise	29	27
I happened to get a good hand, and I, in the sense that I had so much love and positive support	Louise	43	2
I had an amazing art teacher	Cy	21	20
We were having a conversation with me and all of a sudden I started to get better grades through the tutors.	Mary	15	19
She taught me to read the sentence, and think through the meaning of the sentence	Mary	20	24
. . . early intervention	Mary	45	3
My mom was an incredible role model and had incredible empathy and, and common sense, and I, I learned so much of that from her. Um, that, um, I, I look at myself as, I, I'm street smart	Louise	28	24
5. <u>Developed learning strategies and identified areas of strength in later academic years</u>			
I was very creative	Meri	7	1
I was slowing down and doing it at my pace, but I can do it, and I can understand it	Mary	25	18
I challenged myself in the sense that I, I set goals, and by sharing my goals with other people, it forces me to, um, actually work toward and fulfill those goals	Louise	33	15
You can really learn anything if you spend the time to learn it. It might take you longer than somebody else, but you can become an expert in this	Meri	32	20
I had to do a lot of independent learning	Meri	12	13
6. <u>Recognized unique and valuable career journey</u>			
I was able to lead people to do good things for the company, and also for themselves.	Mary	58	6
. . . led me into situations that have happened to be successful	Hayden	13	25
It was serendipitous, being in the right place with the right people	Hayden	5	2
I'm a strong leader	Mary	58	6
For me, it's definitely about doing. And I don't think I'm unique in that. I believe very deeply that that's really how we all learn, and I think that that's how education has to be transformed	Meri	42	1

<u>7. Self-advocated based on talents and strengths</u>			
It's gonna take me longer, but I'm gonna come back with four other ideas	Cy	17	10
I needed to understand more if I was going to grow and I was going to become really good at this	Mary	9	15
I'm going to have to talk about dyslexia	Ambrose	68	23
I organize space and how I organize myself, it's all visual spatial	Meri	17	20
In a collaborative environment, you have the right combination hopefully of strengths	Meri	49	8
Just find something you love doing and you'll be successful at it	Meri	57	4
<u>8. Created different ways of looking at problems and challenges</u>			
Keep absorbing and learning how to do different things	Hayden	3	33
I am consolidating it in a sort of visual structure like organizing the information	Meri	23	10
It was about, creating from what you visualize.	Mary	6	2
I know spatial things, color, patterns, design	Hayden	18	14
People aren't necessarily good at all things	Meri	49	1
I have the ability to be able to see things in a different way than other people can see them	Hayden	44	14
looking at a sequence of patterns	Hayden	17	9
I engage with the space around me and it's just in a different way than other people do	Hayden	19	32
<u>9. Created and Envisioned Innovative Ideas and Solutions</u>			
I see things the world doesn't	Cy	8	3
use it (dyslexia) to your advantage	Hayden	44	15
... spotting trends	Cy	8	15
It was a good sort of combination of being curious and being with people that were encouraging me to be that way in whatever my sort of innate sort of talent for it too, and it wasn't, certainly wasn't all learned, and it runs in my family. There are so many different, artists in my family, that I think, that there's something in there.	Hayden	4	26
I am always sort of the innovator	Meri	7	27
We have a better shot of making more inroads. And given the sophistication of the problems that we are facing, um, that's in	Meri	26	18

learning how to, um, create consensus among very diverse thinkers			
I can repackaging ideas in a strategic way	Meri	24	18
There are patterns, and it's a puzzle	Hayden	13	1
10. <u>Delegated tasks not aligned with learning style or strengths with dyslexia</u>			
The key to a really good dyslexic, successful dyslexic is being able to delegate	Louise	50	2
This is pretty critical because there are some things that would take me so long to do	Ambrose	98	11
I always have somebody proof my work	Meri	39	14
If I write a speech, I have someone help me do it	Mary	41	15
I have the strategy and a technique to delegate	Meri	48	6
Those people with dyslexia who haven't figured out how to delegate, or know that they can, um, it's an eye opener when they figure that out	Louise	50	8
11. <u>Faced challenges as opportunities for success</u>			
There was never you can't and you won't. There was always, you can	Louise	43	5
Frustration is just something that tells you the way you are approaching something is the wrong way	Meri	19	25
I've never looked at this (dyslexia) as a hindrance, but I have looked at is a challenge. I think that's probably a . . . It's not a problem	Cy	9	19
I would much rather fail and do my best rather than not do anything at all	Ambrose	52	16
I've been in school for so long and it's just because this is an environment that is going to challenge me	Ambrose	100	20
There is a piece of this that's forever sort of holding me back. Um, but in some respects that has made me more reflective on every experience that I have in measuring up, "Okay, what do I need to be successful at this?"	Meri	22	17
I am getting involved in all sorts of things that I don't know if I can do it. But I'm going to work as hard as I can to try	Ambrose	52	4
12. <u>Embraced positive change with passion, persistence, and effort</u>			
Change doesn't frighten me at all	Hayden	41	1
Don't be afraid to fail	Mary	64	6

I have reinvented myself so many times over the last 30 years, as far as who I am and what I do	Louise	31	16
I can alleviate fear of change	Mary	58	10
13. <u>Nurturing a growth mind set to keep learning, growing and succeeding</u>			
I constantly have to be improving	Ambrose	100	19
My fears are fixed. My mindset's growth	Mary	63	33
Never be complacent	Cy	62	8
A growth mindset needs to be tempered	Meri	52	21
I work with such high level, high functioning smart people.	Hayden	42	27
I guess my biggest fear or, I don't know if fear is the right word, is just stagnating. And it doesn't matter if, um . . . I don't even mean just with work. It's like, although I do almost continuously try to be learning something else here.	Hayden	52	1
Never quit absorbing and learning.	Cy	62	4
14. <u>Learned capabilities of new technologies to strategically apply to their fields</u>			
I know everything there is to know, as far as technology and computer and, um, with our industry	Louise	5	10
Technology: those who didn't go on that ride aren't in the industry anymore	Louise	5	7
Technology allows the instruction to be exceedingly individualized	Meri	42	8
I learned every job in that department. I wanted to be able to do it	Mary	26	21
I am learning about that, to also becoming knowledgeable about marketing, about programming, about data, big data, analytics. So our roles as printers have changed and with that we need to continue to educate ourselves and understand. Technology drives a convergence in the industry with other industries. Because of that we have to learn.	Mary	3	1
I worked for a national company that gave me all the support from a technology perspective.	Mary	30	20
15. <u>Developed visionary "big picture" conceptual thinking and ability to synergize ideas</u>			
I see the broad, the broad, the bigger picture	Louise	49	22
I see aerial views of problems	Cy	8	5
I am creating from what I visualize	Mary	6	22
I put together how I saw the world and very much connecting the dots from a very big picture	Meri	6	21

I create consensus among very diverse thinkers	Meri	16	20
Meet experts and, and multiple disciplines within the industry	Mary	10	10
Engage with other people's ideas	Meri	43	13
You're different but you complement each other and you appreciate the differences	Cy	32	9
16. <u>Chose career roles with "goodness of fit"</u>			
We do need to question the modes in which we are judging what is, what is not competent in certain fields	Ambrose	96	20
I have an ability to see things visually	Mary	8	15
Olympic athlete of creativity	Cy	19	9
You don't have to fit a square peg in a round hole	Louise	32	26
I am pretty good at reading people	Mary	30	9
I can engage successfully in, in teams. So, I think that's something that companies need even more in the future	Meri	43	5
I don't really know what my IQ is, but I know I have a high emotional IQ	Louise	26	2
17. <u>Empowered success in others</u>			
Have an empathy and ability to guide them through	Mary	59	13
Show respect to everybody	Mary	53	20
I love mentoring. When I got here with my kids, um, I was a soccer coach. I'm also athletic, which also helped	Louise	37	1
There's something else going on with somebody else. So I think I got into directing to understand this is this person's character. They are each are coming at the story from a different angle	Louise	22	22
Teach people through an educational process	Mary	58	16
You're all working as a team	Hayden	6	10
Loyalty to each other	Hayden	5	23
If I met someone who was dyslexic and they were being told by their teachers that they weren't going to be successful, I would say, "That's not true"	Ambrose	107	12
18. <u>Contributed positive value and growth in the 21st century "knowledge" economy</u>			
I care that what I create serves its purpose	Meri	62	6
And I think that I could do that because of the dyslexia	Mary	10	32
It (dyslexia) works in my advantage, than a disadvantage	Hayden	32	29

If I believed that I was limited by, by these perceptions, then I wouldn't have accomplished what I've accomplished	Ambrose	108	1
I have information that's important to other people	Mary	42	21
I have a lot of loyalty to the company I work for. They've given me a lot of room to grow, and I appreciate that. I feel like I have grown up so much, for most of my adult life has been at this company. And it's like a part of my identity now.	Hayden	3	12
I'm in control	Mary	25	13

APPENDIX C

Invitation to Participants to the Study

University of New England

Study Invitation for Participants

February 2018

Project Title: Transforming Disability to Advantage: An Interpretative Phenomenological Analysis of Career Success for Dyslexics.

Principal Investigator: Bonnie A. Blake, Doctoral Student, University of New England, Ed.D. Program in Educational Leadership.

Dear Potential Study Participant:

As a doctoral student completing her dissertation study through the University of New England, I am inviting you **to share your meaningful insights from your life experiences as an adult dyslexic with a successful career in the New York tri-state area in an individual semi-structured interview (with a possible follow-up second interview)**. This study focuses primarily on learning from your life experiences. By participating in this study, you are providing a valuable contribution to emerging knowledge of dyslexia.

Research Questions: This study seeks to explore this central question: How does the perception of dyslexia impact the life experiences of dyslexics with successful careers?

Other questions:

- How does self-advocacy impact the life experiences of dyslexics?
- How does developing growth mindsets/ positive thinking impact the life experiences of dyslexics?

Study's Purpose: The purpose of this study is to learn how the perception of dyslexia impacts the life experiences of individual adult dyslexics with successful careers. This study argues that there is a transformative shift from viewing dyslexia through a narrow focus of disability to a wider lens of strengths, abilities, and gifts. This study will explore how you, as a successful dyslexic, create meaning and sense from your life experiences. The study will include a participatory research approach because the researcher is dyslexic. This study focuses on your experiences, as a participant, and gives a voice to your accomplishments and challenges.

Procedures: Your participation in this research study is completely voluntary. You are invited to participate in an individual semi-structured interview (with a possible follow-up second interview) in person or online, video-taped and/or audiotaped for later transcription and analysis. The physical setting for the in-person interviews will be in a neutral private office or a neutral quiet public location in the New York tri-state area. There will be secure login codes through Go-to-Meeting and Camtasia software. It is anticipated that each interview will be 60-90 minutes.

The study will run from December 2017–March 2018 with results/findings published in April–May 2018. Upon your request, I can send you a copy of your individual interview written transcriptions and recordings, as well as a copy of the completed dissertation. You may choose to review the written transcriptions and the audio and/or video recordings during the study. You can add and clarify material from the audio/and or video recordings and written transcripts. You can also ask to remove information, to not answer any question and/or stop the interviews at any time.

Your valuable time invested in this study will contribute to increased knowledge of dyslexia. Insights from your life experiences may empower other dyslexics in the workplace, help raise recognition of the talents and gifts to employers and contribute to a deeper understanding of dyslexia.

Confidentiality: Your identity will be protected throughout the study and thereafter. To ensure confidentiality the principal investigator (researcher) will provide you with a pseudonym, login codes and a unique identifier throughout the study and published dissertation. Your name will not be shared with anyone else, either internally at the university or externally to individuals, employers, or organizations. Your confidentiality will be protected in compliance with the University of New England's Institutional Review Board's research with human participants' policies and procedures.


Compensation: No monetary or non-monetary compensation will be provided for your input or time.

Questions: If you have any questions or concerns regarding this study and your participation, you may contact me, the researcher, via e-mail at bblake1@une.edu or via my personal phone at 917-596-1021. You also may contact Dr. Brianna Parsons, my faculty advisor, at the University of New England at bparsons4@une.edu or by phone at 207-221-4960.

Please contact the researcher, Bonnie Blake, via email (bblake1@une.edu) or phone (917-596-1021) to begin the process of scheduling an interview. The beginning of the first interview is reserved to discuss, review, and sign the consent form. After the form is signed by both the participant and researcher, the interview questions will begin.

Thank you for your valuable insights and willingness to participate in this research study. Your contribution not only supports my dissertation study, but also future knowledge in the field of dyslexia.

Sincerely,

A handwritten signature in black ink that reads "Bonnie A. Blake". The signature is written in a cursive, flowing style.

Bonnie A. Blake, Doctoral Student, University of New England
Ed.D. Program in Educational Leadership
Private Cell: 917-596-1021 Bblake1@une.edu

APPENDIX D

IRB Approval



Institutional Review Board
Olgun Guvench, Chair

Biddeford Campus
11 Hills Beach Road
Biddeford, ME 04005
(207)602-2244 T
(207)602-5905 F

Portland Campus
716 Stevens Avenue
Portland, ME 04103

To: Bonnie A. Blake
Cc: Brianna Parsons
From: Olgun Guvench
Date: September 19, 2017
Re: IRB Protocol Approval: Initial
Project # & Title: 071417-006, Transforming Disability to Advantage: An Interpretative Phenomenological Analysis of Career Success for Dyslexics

The Institutional Review Board (IRB) for the Protection of Human Subjects in Research has received and reviewed the materials you submitted in connection with the above referenced study, including the requested revisions. Your study has been approved by the UNE IRB after expedited review. This study is not a greater than minimal risk study.

If you wish to change your protocol at any time, you must first submit the changes to the IRB and receive its written, unconditional approval before implementing them. This includes any changes to the version of the consent forms approved by the UNE IRB. If the subjects of your study are exposed to any unusual or unanticipated risk or injury as a consequence of participating in it, you must report such events to the IRB within one working day of the occurrence.

Approval for this study expires on the date indicated below. If you need to continue your research project beyond that date, please submit a formal request (as outlined on the IRB website) at least 60 days prior to the expiration date. Please notify the IRB if you terminate the study before completing it, or upon concluding it.

Attached you will find the stamped and approved copies of the consent forms for use in the study. Please use these documents throughout the course of the research.

APPENDIX E

UNE Consent to Study

Appendix B

University of New England

Consent For Study Participants

Project Title: *Transforming Disability to Advantage: An Interpretative Phenomenological Analysis of Career Success for Dyslexics*

Principal Investigator(s): *Bonnie Blake*
Doctoral Candidate, University of New England
Ed.D. Program in Educational Leadership
28 East 10th Street, Apartment 5B
New York, NY 10003
917-596- 1021
bblake1@une.edu

Lead Faculty Advisor: *Professor Brianna Parsons, Ed.D.*
207-221-4960
Bparsons4@une.edu

Approved for Use Between

9/19/17
9/18/18

University of New England
Institutional Review Board**Introduction:**

- Please read this form, you may also request that the form is read to you. The purpose of this form is to provide you with information about this research study, and if you choose to participate, document your decision.
- You are encouraged to ask any questions that you may have about this study, now, during or after the project is complete. You can take as much time as you need to decide whether or not you want to participate. Your participation is voluntary.

Why is this study being done?

- The purpose of this study is to understand how the perception of dyslexia impacts the life experiences of dyslexics with successful careers. Understanding the meaning behind the voices of the participants may encourage more dyslexics, organizations and communities to create a transformative shift in viewing dyslexia as an advantage in a well-matched career.

Who will be in this study?

- There will an individual semi-structured interview (with a possible follow-up second interview) with 5-8 adult participants who have self-identified as dyslexics with successful careers. Participants are ages 24-65+, and share a desire to offer insights about their life experiences.

What will I be asked to do?

- You are invited to participate in an individual semi-structured interview (with a possible follow-up second interview). You will be asked interview questions as a guide. You are encouraged to share your insights about your life experiences. The interviews will be in person or online via video and/or audio recordings, using Camtasia and Go- to-Meeting software. The individual semi-structured interview(s) will be between 60 and 90 minutes. You can review the written transcriptions, video or audio recordings. You can add and clarify material from the audio/and/or video recordings and written transcripts. You can stop the interviews and/or recordings at any time. The analysis of the study will be shared with you before the report is finished.

What are the possible risks of taking part in this study?

- The intention of the study is to better understand the meanings and sense of your life experiences and not to cause harm. You are self-identifying as an adult dyslexic with a successful career as a participant.
- The researcher is very aware that self-identifying as dyslexic for the study is separate from self-identifying as dyslexic with others outside the study, such as employers or other organizations. To reduce the risk of exposing the participants' diagnoses of dyslexia (and related diagnoses with dyslexia), the researcher will provide safeguards to protect the confidentiality of the participants' diagnoses of dyslexia by giving participants pseudonyms, and secure logins (for online interviews) to be used throughout the research and publication. The names and identities of participants will not be shared with anyone internally within the university or externally to individuals, employers or organizations. Each participant will review and sign the consent form to indicate their agreement. These recordings will be used for the benefit of this study with the written permission from each participant and the IRB at the University of New England.

- There are potential emotional risks to participating in this study; you may discuss some personally sensitive information. You have the right to refuse any question asked of you, and any problems or discomfort will be addressed immediately as they occur by the researcher and their advisory committee. Withdrawal or refusal to participate will not impact or affect the participant in any way.

What are the possible benefits of taking part in this study?

- There are no direct benefits to you for participating in this study. There may be a benefit to research on dyslexia, other dyslexics, families, dyslexia organizations, employers etc.

What will it cost me?

- There are no financial costs for participants in this study.

How will my privacy be protected?

- Your name and identity will be replaced with a pseudonym, a secure login code and unique identifier throughout the entire study. Your privacy will be protected so that no personal information will be shared internally at the university or externally to anyone such as employers and organizations.
- In-person interviews will be held in a neutral private office or a neutral quiet public location in the New York tri-state area.
- The results of the study will be published in a doctoral dissertation that will be accessible through ProQuest Central.

How will my data be kept confidential?

- Recordings and videos will be confidential, kept in a secure location and deleted after the study.
- All research findings will be presented to participants.
- Please note that the Institutional Review Board may review the research records.
- A copy of your signed consent form will be maintained by the principal investigator for at least 3 years after the project is complete before it is destroyed. The consent forms will be stored in a secure locked location in the researcher's office and will not be affiliated with any data obtained during the study.

What are my rights as a research participant?

- Your participation is voluntary. Your decision to participate will have no impact on your current or future relations with the University.
- You may skip or refuse to answer any question for any reason.
- If you choose not to participate there is no penalty to you. You are free to withdraw from this research study at any time, for any reason. If you choose to withdraw from the research there will be no penalty to you.

What other options do I have?

- You may choose not to participate.

Whom may I contact with questions?

- The researcher conducting this study is Bannie Blake. For questions or more information concerning this research you may contact her at 917-595-1021 or bblake1@une.edu.
- If you choose to participate in this research study and believe you may have suffered a research related injury, please contact Professor Brianna Parsons, Ed.D., at The University of New England at 207-221-4960 or bparsons1@une.edu
- If you have any questions or concerns about your rights as a research subject, you may call Ogun Guvench, M.D., Ph.D., Chair of the UNE Institutional Review Board at (207) 221-4171 or irb@une.edu.

Will I receive a copy of this consent form?

- You will be given a copy of this consent form.

Approved for Use Below

9/19/17
9/18/18

University of New England
Institutional Review Board

PARTICIPANT'S STATEMENT

I understand the above description of this research and the risks and benefits associated with my participation as a research subject. I agree to take part in the research and do so voluntarily.

Participant's signature or
Legally authorized representative

Date

Printed name

RESEARCHER'S STATEMENT

The participant named above had sufficient time to consider the information, had an opportunity to ask questions, and voluntarily agreed to be in this study.

Researcher's signature

Date

Printed name

Approved for Use By:

9/19/17
9/18/18

University of New England
Institutional Review Board