

2019

Perceived Factors that Contributed to the Success of College Students with Dyslexia

Jessica Doyle
University of Central Florida

 Part of the [Disability and Equity in Education Commons](#), and the [Higher Education Commons](#)
Find similar works at: <https://stars.library.ucf.edu/honorsthesis>
University of Central Florida Libraries <http://library.ucf.edu>

This Open Access is brought to you for free and open access by the UCF Theses and Dissertations at STARS. It has been accepted for inclusion in Honors Undergraduate Theses by an authorized administrator of STARS. For more information, please contact STARS@ucf.edu.

Recommended Citation

Doyle, Jessica, "Perceived Factors that Contributed to the Success of College Students with Dyslexia" (2019). *Honors Undergraduate Theses*. 639.
<https://stars.library.ucf.edu/honorsthesis/639>

**THE PERCEIVED FACTORS THAT CONTRIBUTED TO THE SUCCESS OF
COLLEGE STUDENTS WITH DYSLEXIA**

by

JESSICA DOYLE

A Thesis submitted in partial fulfillment of the requirements for the Honors in the Major Program in Elementary Education in the College of Education and Human Performance and in the Burnett Honors College at the University of Central Florida Orlando, Florida

Fall Term 2019

Thesis Chair: Michelle J. Kelley, Ed.D

ABSTRACT

The purpose of this pilot project was to determine the factors or supports that college graduates perceived as helping them to thrive and attempt higher education, despite having a learning disability, specifically dyslexia. Based on the literature review, this pilot study examined the four main kinds of support that most students receive while growing up; including family support, peer support, teacher support, and support from other programs and resources. The specific research question explored: What encouraged or discouraged these now adults in their pivotal growing years in regards to dyslexia? This pilot study used a mixed-methods research design which included an anonymous online survey and interview. With only one interview completed a single-case study was derived. The results of this pilot study are shared, including implications for educators and suggestions for future research. What was found is that all four highlighted sources of support played a role in the lives of the participants. The common thread that wove them altogether was socioemotional support provided by those sources.

TABLE OF CONTENTS

Chapter One: Introduction-----	1
Rationale for Study-----	3
Chapter Two: Literature Review-----	4
Dyslexia: Characteristics and Diagnosis-----	4
Emotional Effects of Dyslexia-----	6
Peer Support-----	8
Teacher Support-----	9
Family Support-----	11
Support from Other Programs and Resources-----	12
Chapter Three: Methodology-----	15
Research Methodology-----	15
Target Population-----	15
Data Collection-----	15
Survey-----	16
Participants-----	17
Case Study Research-----	17
Interview-----	18
Data Analysis-----	20
Chapter Four: Results-----	21
Survey Results-----	21
Interview Results-----	32
Chapter Five: Discussion-----	33
Implications-----	39
Limitations-----	42
Conclusion-----	42
Appendix A: Survey Questions-----	44
Appendix B: IRB Approval-----	46
Appendix C: Recruitment Letter-----	48
Appendix D: Recruitment Flyer-----	50
Appendix E: Interview Transcript-----	52
References-----	62

CHAPTER ONE: INTRODUCTION

Throughout life, each and every one of us are presented with a variety of challenges that hopefully help us learn and grow. Sometimes it is a family situation, sometimes it is a living situation, and sometimes it is a disability that can manifest itself physically and/or cognitively. As these challenges are presented to us, whether at birth or later in life, we seek resources and supports to deal with them and grow from them. Many times, a child who is presented with a challenge, such as a disability, requires the help of the people around them such as: family, peers, and teachers. Hopefully, people surrounding students with disabilities can help them to learn how to grow and triumph over the difficult situation they are presented with. This may or may not include techniques for coping and overcoming these challenges. Sometimes these efforts are successful, but sometimes they are not helpful. How can we know what works and what doesn't work when working with children faced with such challenges? As these children enter young adulthood, how do they perceive the means with which they overcame a particular situation and/or challenge? What supports were most effective for them? How can elementary teachers learn from their experiences? Does the emotional and psychological effects of being identified as dyslexic stay with them or do they learn to compensate?

As an elementary education major these questions persisted and made me curious. As a future educator, I seek to be a teacher who will help children grow through the difficult situations they encounter, and I hope to equip them to continue to grow as they reach adulthood. One of the most common difficulties I have observed in children is learning disabilities, specifically dyslexia. I chose to study dyslexia as I am curious how children learn how to read and write if all

they see on the page is swimming letters, and/or if they are constantly being accused of not paying attention because they are unable to process letters and the sounds they make. Some questions I have pondered include: How does this stumbling block affect the child's psychological and emotional well-being or does it? How do children persevere through these challenges, or do they? I have observed students with disabilities who had a strong sense of confidence in their academics, and other students with disabilities who have not excelled, resulting in a low sense of confidence in their academics. This sense of confidence, in turn, has either inspired them or hindered them to take healthy risks and push themselves in the world of academia and beyond. Much of these choices and actions in regards to furthering their education are because of the people around them, but is that the only factor? Furthermore, how do the people around them support them? Are some approaches more effective than others? Do the psychological effects of having a learning disability continue into adulthood, even if the person thrived as a child? If so, do they affect how the now adult makes life decisions, especially in regards to the world of academia? I have personally witnessed students with disabilities postponing or totally disregarding higher education because they lacked confidence in their capability to pass tests and complete assignments. In fact their self-confidence was so low they didn't even want to try.

My goal with this pilot research project was to determine the perceived defining factors or supports that helped college students self report that allowed them to thrive and attempt higher education, despite learning disabilities, specifically dyslexia. What encouraged or discouraged these now adults in their pivotal growing years in regards to dyslexia? Recent legislation has been enacted to ensure that there is help and support at an early age for students with dyslexia. With these recent legislative directives in the State of Florida (s. 1008.25(5) F.S.) and around the

United States (Act 1268 of 2015) there is a need to explore questions related to current college students' perceived, as these self-reported factors will be able to add to and contribute to the research and important conversation on dyslexia that is currently going on.

Rationale for the Study

As a young girl, I myself loved to read. I started with picture books and quickly moved into small chapter book series such as the *American Girl* series. I then graduated onto the *Nancy Drew* books and from there have ventured into many different genres. Reading is a world that I can escape into and enter into another land, or learn more about the world around me, and fortunately it has never been difficult for me. As I grew up, though, and met more people and heard their stories, I realized that reading can be a difficult and discouraging journey for many, unlike my personal experience. One of my dearest childhood friends has struggled with reading her whole life because of her dyslexia and this struggle, in turn, has altered certain life decisions, especially her pursuit of higher education. Hearing her emotions related to her struggles made my heart ache and this ache only grew larger as I entered into college. As a college student I chose to study Elementary Education and I have loved it every step of the way. I have been able to learn how to cultivate the minds of the future, and have been able to work with many children throughout the last four years. I have been able to see the visible struggle that so many students have with reading and I have talked to many teachers who have either given up or they do not feel adequately prepared to deal with these students. As a future educator, and a human being, I am concerned with the possible long term effects that this struggle could have on students and, like my friend, on their life journey. I conducted this pilot research study so that I may play a part in the search to help these students and my future students with dyslexia

CHAPTER TWO: LITERATURE REVIEW

Dyslexia: Characteristics and Diagnosis

Reading difficulties have existed since the beginning of time. Although one might be weary in proclaiming it to be dyslexia, different historical figures throughout the years have seemingly struggled with reading and writing in various ways. From Woodrow Wilson to Carl Jung, reading disabilities do not discriminate. When looking more specifically at the history of dyslexia, one can find that it was first noticed in the 1800s in Great Britain. Many scientists and specialists considered it to be a visual problem, and therefore students with dyslexia went to the Ophthalmologists for help and insight (Guardiola, 2001). It was sir Cyril Henshelwood who decided to study different students and from that he pulled out the congenital nature and different levels of the disability. Soon research expanded and occurred not only among ophthalmologists, but also among neurologists, sociologists and educators. Moving closer to the present day, in the 1970s, neuroscience and cognitive psychology started to take the main stage when it came to research and treatment for dyslexia. Currently, there are institutes and foundations committed to research on this topic, yet for some reason, Dyslexia still proves to be a hazy diagnosis and somewhat confusing disability to address, especially in educational settings.

The International Dyslexia Association (IDA) has a long yet thorough definition of dyslexia. It is as follows:

Dyslexia is a specific learning disability that is neurobiological in origin. It is characterized difficulties with accurate and/or fluent word recognition and by poor spelling and decoding abilities. These difficulties typically result from a deficit in the phonological component of language that is often unexpected in relation to other cognitive abilities and the provision of effective classroom instruction. Secondary consequences may include problems in reading

comprehension and reduced reading experience that can impede growth of vocabulary and background knowledge (IDA, 2017, p. 120).

This definition may seem lengthy, yet the reality is that dyslexia calls for a definition this comprehensive. This disability is not cut and dry, it is complex and is different from one person to another. In her paper titled “Perspectives of Dyslexia” Dr. Linda Siegel (2006) highlighted “...exactly where the line is between dyslexic and nondyslexic is subjective and controversial. This relative uncertainty does not dispute the reality of dyslexia, but instead indicates that there is some subjectivity in the diagnosis” (p. 581). Berninger and Wolf (2015), professors in childhood development, made a keen observation when they said that dyslexia is the result of a brain that is organized in a different way. It is not good or bad, it is just different. While dyslexia is technically a learning disability, it is different than any other type of learning disability. This is part of the reason why it often goes undiagnosed, and to go a step further, why it is hard to help people who have been diagnosed. This is not a disability that can be tested through a blood test, or diagnosed because of easy to see symptoms. For many years specialists believed that the answer was found in Intelligent Quotient (IQ) scores. They surmised that if the IQ score came out to be far higher than the reading score, then there could be a diagnosis of dyslexia, among other labels (Siegel, 2006). Since then this method of diagnosing has been disproved and specialists have continued to search for a better diagnosis process.

People who struggle with dyslexia have trouble decoding words and turning them into phonemes, which is the smallest unit of sound in words. The actual word itself breaks down to mean “difficulty with words” with “dys” meaning *poor or inadequate* and “lexia” meaning *words* (Hudson, High & Otaiba, 2004). Holly Lane from the Center for Collaborative Classroom (2019) stated, “It is not a visual problem but rather a neurological problem” (p.1). In the sense that this is not a disability that can easily be fixed by the use of glasses or other

assistive technology, rather it is a disability that takes training, or retraining, of the brain in order to learn to read.

There are other learning disabilities that often come with or are confused with dyslexia. Dyscalculia and dysgraphia affect how one sees numbers and how one writes. According to Learning Disabilities of Association America (2019), Dyscalculia is specifically different as it does not affect words or letters, but rather numbers and math. One common thread between these three similar disabilities is that the earlier they are diagnosed, the quicker the achievement gap can be closed or narrowed down. Early diagnosis is critical because it makes it easier to tackle learning inequalities and to help the student feel empowered over the disability at a young age. Universities, such as the University of Michigan and Yale, provide checklists to assist in describing the characteristics of students with dyslexia which can assist a teacher or even a parent in the diagnosis journey (Shaywitz, 2003).

Emotional Effects of Dyslexia

According to a study conducted by a group of assistant professors from East Carolina University, educational experiences have a monumental impact on the emotional health and self-esteem of adults with dyslexia, “Findings reveal that educational experiences have a compelling impact on the emotional health and self-esteem of adults with dyslexia” (Nalavany, Carawan, & Brown, 2011, p. 1). Childhood is an important part of everyone’s lives, and the experiences during that time can be a defining factor in the decisions made throughout the rest of one’s life. When a child struggles with dyslexia it can, and inevitably will spill into other areas of their life. Siegal and Ryan (1984) chronicled the social and emotional side effects of dyslexia when he noted that a dyslexics' frustration often centers on their inability to meet the expectations set out for them. Parents and teachers see a bright, consciousness child who is not learning to read and

write. Time and again, dyslexics and their parents hear teachers and guidance counselors explaining that the child is bright, but that they must just try harder. Ironically, no one knows exactly how hard the student is trying! Siegal and Ryan (1984) noted, “Their learning disability, almost by definition, means that these children will make many "careless" or "stupid" mistakes. This is extremely frustrating, as it makes them feel chronically inadequate” (p.3). I have been in the classroom when high school students, who I knew struggled with dyslexia, made silly errors when asked to read out loud. Often it was followed by quiet giggles that rippled throughout the classroom. Moments like this occur far too often and can be emotionally damaging as the student grows less and less confident in their abilities. Lois Letchford, author of *Reversed: A Memoir*, described the pain and hurt that she as a mother experienced as she saw her son Nicholas, a dyslexic, start to feel this way in his own classroom. She described the emotional meetings she had with teachers and guidance counselors, and the teary nights laying awake in bed. She gave us a glimpse into this pain when she spoke of her son, “Nicholas ... is like a snail, carrying an immense burden while crawling through life. Schools struggle with snails. It is my very first taste of being an outsider to the education system” (Letchford, 2018, p. 60). One solution that many schools have come up with is early detection and early testing, which can work well sometimes. Yet, testing can also lead to trauma if not done well. McNulty (2003) found that when testing and diagnosis did not provide helpful information or was not explained in a positive light, children often developed further trauma and therefore more negative feelings, especially towards school, which carried over into their adult lives.

Testing can be helpful in some cases because it can provide clarity regarding a learner’s difficulty, yet there are many instances where it can cause stress and confusion. How this can be fixed or addressed is beyond the scope of this research, but as a teacher, I believe it is imperative

to be aware of the emotional toll that dyslexia and other learning disabilities can take on children. Casserly (2013) studied the socio-emotional needs of children with dyslexia in Ireland and found that in order for children with dyslexia to fully access curriculum, educators must address the emotional aspects along with the academic aspects of learning. This is a fact that is rather well known in the world of education, yet is something that needs to be stressed over and over again to teachers, especially if they are working with students who are struggling with dyslexia.

As children work their way through the school system and navigate the different difficulties they encounter, they have different kinds of support that are able to help them through the process. The four types of support identified in the literature and discussed here include: peer support, teacher support, family support, and support from other programs and resources. Each of these supports (or factors), play a different part in the lives of students with dyslexia. With this research I specifically sought to see what factors seem to help the most and in turn use this information to inform other educators and future research.

Peer Support

Most children crave the support and acceptance of their peers. Do they fit in? Are they funny? Are they smart? These questions are usually being asked constantly throughout one's schooling years. Appearance matters, especially in the formative years. As discussed previously, many times students with dyslexia will make careless mistakes often without their own knowledge of it happening. They also have to work harder in order to keep up with everyone else. Cekiso, Makgato, Leseane, Mandende (2017) studied African school children with dyslexia and found that when dyslexic students work more than their peers to read and write, they quickly become the center of attention which then most often led to teasing and laughing.

Being different and sticking out was something that came out as a negative... something that is almost inevitable for a student with dyslexia. This behavior has the potential to spark a pattern of negativity that could follow them throughout their journey with reading and writing. On the other hand, consistent support from peers can be crucial. If a student has even one or two peers who are supportive in the classroom, it can be essential in giving them hope and encouragement as they move towards their goals.

The non-profit organization *Kids Together* published a list in 2010 that named all the different ways that peer support benefits the students involved in small groups, peer tutoring, partner activities, or whatever peer activities that are implemented in the classroom. According to Kids Together (2010), a few of the benefits of peer interaction for students with learning disabilities include: higher expectations, more friendships, increased parent participation, and others. In regards to the benefits for students without learning disabilities, the list reports respect for all people, greater academic outcomes, and increased appreciation for individual differences. Overall, peer support and partnership creates a culture where all student needs are better met and where there are greater resources for everyone. This necessary encouragement may be hard for many children to understand, specifically those who do not struggle with reading and writing. Students may find it difficult to accept what they cannot understand, for instance, if little Lucy is speeding along in her readers, how is she going to understand little Freddy who cannot seem to even read one? It is a teacher's job to promote this understanding and acceptance.

Teacher Support

As I have researched the topic of teachers and their knowledge and support of dyslexia, I have found that there is simply not a lot of research done related to teaching children with dyslexia. What little is out there has found that teacher training and knowledge of dyslexia is

minimal. In 2017, Nascimento, Rosal, and Queiroga, studied a group of well-experienced teachers in Brazil and looked at their knowledge of dyslexia. All of the teachers had at least one degree, and some even had graduate degrees, yet they all expressed that they did not receive even basic training when it came to dyslexia. They reported that they had no experience with dyslexia and they identified this as a gap in their training as an educator. Their passion for teaching and for helping students with dyslexia was there, but a basic knowledge of how to help was not. This gap can have consequences not only on the teachers but most certainly on the students.

Gwernan-Jones and Burden (2010) looked at teacher attitudes towards students with dyslexia and found that teachers often assumed that the student is simply lazy, or not working hard enough. With proper training and tools teachers should be able to help students with dyslexia and make strides in their learning and understanding.

Something that we do know for sure is that teachers make a huge impact on their students. Almost every person can recall a teacher, in any form, who had an impact on their life. RAND Corporation (2019), an American research think tank, has done several studies on this topic and has determined that when comparing the different school factors, such as services, facilities, and leadership, a teacher is estimated to have two to three times more of an impact on student learning. On a more personal level, Letchford (2018), the mother of a child with dyslexia, recalled in her memoir detailed the hope and belief that one swim instructor had in her child. She described how this belief inspired her son, and his family, for years to come.

When it comes to teaching strategies in the classroom, different teachers use different strategies, some that help and some that do not. The California Dyslexic Guidelines (2017) highlighted a few key strategies used in the classroom that are research based and encouraged.

The first approach is a multimodal approach which is an approach that incorporates multiple learning styles and senses at once. Another is direct and explicit instruction, which is a step by step, teacher to student teaching method. Through this method, learning is never assumed and is deliberately taught and practiced. Many teachers experience the most success when their teaching is in between these two methods. Helping students see, hear, and feel the words, phonemes, and letters can help students with dyslexia gain a clear grasp on concepts. On the other hand, explicit instruction needs to come alongside multimodal approaches such as these in order to help ensure students with dyslexia are learning.

Family Support

As more research has been conducted, it is clear that family support plays a huge factor in the development and well-being of students with learning disabilities. Batt (2011) researched parental support in her 3rd grade special needs classroom using qualitative and quantitative methods. Batt learned that “students are more motivated in school when they have supportive parents at home. Parents who help their children at home with homework, come to meetings, and participate in the classroom should their children that school is important” (2011, p.26). Parents who are actively involved in their students lives, and more specifically in their classroom lives, have a stronger impact on student achievement. Research has found that even the perception of family support, goes a long way in the emotional development and well being of dyslexics, as evidenced in Letchford’s memoir (2018). The help of one fierce, patient, caring parent or family member can make a difference. Many times, as the student goes through an emotional journey, the family is right alongside them. Hartwig (1983), the parent of a dyslexic, explained that it is not uncommon to go through different stages of grief as a parent when you realize that your child’s education path will not be as easy as they, or you, expected it to be. When talking about

his experience with his son Eric, he noted that dealing with learning disabilities, or similar handicaps, creates a reaction in those dealing with it as if a serious illness were present. He explained the distress that his family went through and he wished that he had been mentally and emotionally prepared for the reaction that he and his family had to his son's dyslexia. Upon watching a video about new laws made in Arkansas to help dyslexics, I was moved to tears at the sight of aunts, grandmothers, and parents, sharing the hardships that their student went through and sharing how they were ready to make a difference for all dyslexic children.

Ivy school universities, with Yale at the forefront, are making strong strides to make sure that parents and families feel supported and informed as they navigate the school system for and with their child who is dyslexic (Shaywitz, 2003). Parents can be some of the first people to notice a child's struggle in reading, and therefore can be the first ones to say and do something about it. As discussed previously, early detection is key in helping students manage dyslexia, so having parents who are knowledgeable and observant is key. Many parents have to learn how to "navigate system failures" (Delany, 2017) along with their child and are learning the tricks of the trade at the same time. Some parents, although, have already gone through the process and may possibly be ready to support their child with tips and tricks that they have already learned. As noted previously, dyslexia is hereditary, which may mean that there are parents out there who are advocating for their child in a way that they did not have in their educational journey.

Support from other programs and resources

Along with support from the people in their lives, students with dyslexia may also receive support from different programs and resources that have been created specifically to help them. This can be everything from legislation, to programs, to simple teaching strategies that are used in the classroom. One of the leading teaching resources available is the Orton Gillingham

teaching approach. According to the Orton Academy website (2018), this approach is a direct, explicit, multisensory, structured, sequential, diagnostic, and prescriptive way for teachers to teach literacy to students who might struggle with reading and writing. This means that it involves all of the senses which helps immerse the student fully in their learning and it also. The University of Michigan along with the University of Florida are two key universities that are making strides to provide helpful resources for students, teachers, and families alike. The University of Michigan has an institute and an online support website entitled Dyslexia Help (2019) that provides apps, games, technology, and the latest on the research on dyslexia to support parents and students with dyslexia, as well as those working with students with dyslexia. At the University of Florida, the University of Florida Literacy Initiative works to help the children in the community and beyond who struggle to read and write. Additionally they offer educators a Dyslexia Certificate online to equip them to work with students with dyslexia (2019).

Along with different approaches and universities that are working to help, several states in the United States have stepped up to the plate when it comes to supporting their students with dyslexia. The state of Arkansas has been a trail blazer, as parents and family members have pushed for legislation that mandates the use of explicit instruction in the area of phonics in all schools (ACT 1294 of 2015, 2015.). This is an instructional technique that breaks words down letter by letter, phoneme by phoneme. It uses multisensory techniques to utilize all of the human senses to facilitate learning (DeVries, 2015). The state of Florida, where I reside, has recently made several changes in legislation designed to tackle dyslexia in the way of early intervention and testing to spot and help students at an early age through different acts (Title XLVIII, 2018). When it comes down to it, it seems as if there are different programs, agencies, and legislation

that are working to make a difference, yet the real question is whether or not they are actually making a difference.

Along with legislation, approaches, and institutes, there are different in-class resources and technology that can and does help students with dyslexia. 504 plans and Individualized Education Programs (IEPs) are two of the most common ways that students with dyslexia can be helped. These two resources are similar in the way that they provide and outline accommodations that should be made for the student while in the classroom. An IEP is a little bit more in depth and is for students that qualify for special education services, while 504 plans outline accommodations for students that are within the general classroom. These are helpful for the student as they are given extra time, assistance, or whatever else they may need in order to succeed. According to the California Dyslexia Guidelines (2017), assistive technology is something used to help students with disabilities. Specific to students with dyslexia, assistive technology is a tool or device that enables the student to accomplish a task which without the assistive technology may not be feasible or might be challenging, if not impossible. The technology assists students in reaching past the barriers that present themselves throughout the average school day. For students with dyslexia this can mean anything from speech to text, text to speech tools, to reading pens. Even tools as simple as strips of material that highlight certain sentences or words can be helpful (McLean, 2017). Teachers have to work alongside other forms of support (such as parents, and/or a reading coach) to discover assistive technology that is best suited for each student with dyslexia.

CHAPTER THREE: METHODOLOGY

Research methodology

This chapter describes the methodology of the research done in this pilot study. It includes a description of the multiple methods employed (survey and interview questions), procedures followed, participant information, and data analysis. The goal of this pilot study was to look at the four different sources of support identified and discussed in the literature review: peer, family, teachers, and resources from the point of view of successful college dyslexic students. Both quantitative and qualitative methods were used in order to describe their journey and tell their stories.

Target population

The goal of this research was to formally survey and interview current or post college students who have struggled with dyslexia.

Data collection: IRB and participant recruitment

I used a survey (see Appendix A) along with a personal one-on-one interview to answer questions pertaining to the perceived supports (or lack of support) of successful dyslexic students. I used a survey to obtain consent to participate in the study and to gather background information, such as gender, setting of education, initial diagnosis and the following diagnosis journey, and finally, what type of support and interventions were implemented. From these data sources I was able to describe their individual experiences and identified common themes among the participants. Prior to data collection, I obtained approval for my research from the UCF's Institutional Review Board (IRB). Appendix B is evidence that this research study was vetted

and approved by the IRB prior to data collection. As described above, in order to collect proper data for the pilot study I turned to several outlets and crafted an email to be distributed (Appendix C), along with a recruitment flyer (Appendix D). First, I reached out to my own school, the University of Central Florida. I hung up flyers and sent out the Qualtrics link to several offices at the university that seek to help students with disabilities. I then turned to other resources such as support groups on Facebook like Decoding Dyslexia for Florida and the United States. I also looked to authors on dyslexia such as Lois Letchford and universities such as the University of Michigan for help and promotion of my survey and interview opportunity. And finally faculty at the UCF shared my survey on social media such as Facebook and Twitter.

Survey of support sources

The goal of this pilot study was to determine the perceived defining factors or supports that helped students thrive and move past their learning disability, specifically dyslexia. What encouraged or discouraged these now adults in their pivotal growing years in regards to dyslexia? And ultimately, from this data, what can educators do to better support students with dyslexia? Therefore, I created a survey (see Appendix A) reflective of the four supports identified in the literature review. The survey was developed and distributed to reach current and post-college students with dyslexia to collect background information and to answer my research question. On the survey participants were asked to volunteer to be involved in an interview. From volunteers, a one-on-one interview was conducted which asked questions that helped illuminate student experiences with dyslexia with each of the four areas of support, and from their reflections what specifically helped or hurt their experience with dyslexia, reading, and education in general.

Participants

The survey was open for over a month, but only 16 people initiated the survey and only four fully completed the survey, two males and two females, of which all were college graduates. Two survey completers indicated that they were in between the ages of 26-35 with the other two indicating that they were 56 years old or older. Only one person agreed to be interviewed for the pilot study. The interviewee is a male, in the 26-35 year old age range, who is currently pursuing his PhD in Mathematics Education. Due to the limited number of surveys and only one interview, the survey data is analyzed in chapter 4 by question asked utilizing descriptive statistics and the interview data is reported as a single case study, followed by discussion in chapter 5.

Case study research

Since only one participant was interviewed for this pilot study I have used his experience as a case study in the results and woven in survey data to better describe the experiences of college graduates with dyslexia. Qualitative case study is a research approach used to explore a phenomenon within its context, and can use a variety of data sources. By using multiple data sources, multiple facets of a phenomenon can be revealed and better understood. Stake (1995) and Yin (2012) have identified specific types of case study approaches. Stake (1995) and Yin (2012) base their approaches on a constructivist paradigm that claims that truth is relative and dependent on one's perspective. The approach aligned with my pilot study is a descriptive case study which can involve a detailed description of an individual's experience and an in depth analysis to identify issues and themes (Stake, 1995; Yin, 2012). One of the advantages of a case study approach is the close collaboration between the researcher and the participant, while enabling participants to tell their stories (Crabtree & Miller, 1999).

Interview

The following questions were crafted in order to provoke and prod the interviewee to tell his story. They were designed to reveal emotion and the thought process that the student has had through their childhood years as they navigated the journey of learning with dyslexia. I presented him with the four different areas of support and got feedback on his experience within each support area. In addition to developing interview questions aligned to my research questions, I created an interview protocol and assent statement provided below.

Interview protocol

Thank you for agreeing to be interviewed for this research study. To facilitate note-taking, I would like to audio record our conversations today. The audio recording will be destroyed after transcribed. In addition, you must sign a form devised to meet our human subject requirements. Essentially, this document states that: (1) all information will be held confidential, (2) your participation is voluntary and you may stop at any time if you feel uncomfortable, and (3) I do not intend to inflict any harm doing this research.

I have planned this interview to last no longer than one hour. During this time, I have several questions that I would like to cover. If time runs short and you are willing, the interview may extend beyond an hour, but at any time, you may cut the interview short. Your participation is appreciated.

Interview introduction.

You have been selected to speak with me today because you have been identified as a college student or former college student with dyslexia. This research project focuses on the self-reported factors that contributed to the success of college students (current or former) with dyslexia. Of particular interest is how you perceive supports success as peers, family, teachers,

and programs and resources. However, this research study is not limited by these four factors. This research hopes to inform educators how to better support students with dyslexia and your insight will provide valuable information to guide these recommendations. My study does not aim to evaluate your experiences, rather I am trying to describe your experiences and inform other educators working with students with dyslexia.

Interview questions.

1. When did you first discover that you were dyslexic and who helped you reach that conclusion?
2. What are some of the emotions that have been associated with your dyslexia? Why?
3. In regards to your peers, what kind of support have you received from them? Did you have experiences that helped or hurt? Explain.
4. In regards to your teachers, what kind of support have you received? Did you have experiences that helped or hurt? Explain.
5. In regards to your family, what kind of support have you received? Did you have experiences that helped or hurt? Explain.
6. Were there any specific strategies or resources that helped you with your dyslexia? What were they? Why do you think they helped you?
7. Looking back on your childhood, what or who would you say helped you out the most and gave you the confidence to move forward related to your dyslexia?
8. Looking back on your childhood, what or who would you say discouraged you the most related to your dyslexia?
9. What advice would you give someone who is dyslexic?
10. What would you say to the family of someone who is dyslexic?

Data analysis

The survey gathered quantitative data regarding the participants' background, whereas the interview was used to gather qualitative data so that I could better tell the personal stories of college students with dyslexia and identify common themes. I used an interview protocol to record and write down information during the interview and I audio-recorded the interview (Creswell, 2014). After I transcribed the interview, I synthesized the responses into categories and have reported this data in the results section (in Chapter 4). Ultimately I looked for themes across the data themes, reported on them, and discussed them. I looked at the interview as a descriptive case study, as described by Yin (2012).

CHAPTER FOUR: RESULTS

For my pilot study, I collected and analyzed results from a survey along with an interview conducted. I found that participants for this pilot study were difficult to find, for reasons that I discuss and reflect on later in chapter 5. Since the survey was only completed by four people, and one of them volunteered for an interview, I have provided descriptive statistics and interpretation of the survey, and focused mainly on the interview when discussing my results throughout this chapter. As I wrote the survey questions and even more specifically the interview questions, my goal was for the participants to paint a picture of their journey with dyslexia which I could in turn tell and then extrapolate suggestions for educators working with students with dyslexia. In the survey I intentionally asked questions that were vague to give room for a variety of answers, of which are discussed here. For the interview however, I formatted questions that were designed to dig a little bit deeper in order to draw out the story.

Survey results

The survey was fully completed by four different people, two males and two females, of which all were college graduates. Two indicated that they were in between the ages of 26-35 with the other two indicating that they were 56 years old or older. I report the quantitative data from the survey by question based on the four participants' responses and then I move on to the interview that was completed. I begin by observing at each participant's original diagnosis and support from IEPs, then move to the four sources of support, and advice for educators. When appropriate I have provided figures that paint a picture of the information obtained from the survey and a short summary to tease out the survey data.

Analysis of diagnosis

When asked when they were diagnosed, only one participant (25%) indicated that they were diagnosed before elementary school, with the other three (75%) indicating that they were diagnosed once they graduated from high school and pursued higher education (Figure 1). Later in the survey, participants were asked to share how they were diagnosed. Two (50%) declared that they were self-diagnosed, with the other two sharing that they were diagnosed either by a specialist or by a professional in college.

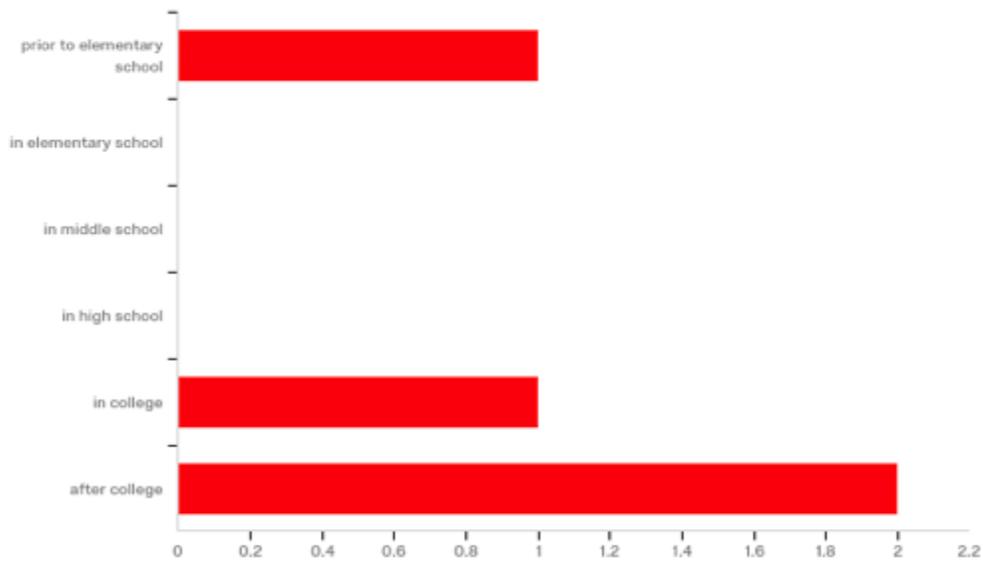


Figure 1. Diagnosis of dyslexia. This figure illustrates when the participant was diagnosed with dyslexia.

IEP or 504

In regards to a 504 plan or an IEP (Individualized Education Program), half of the participants (50%) indicated that they had an IEP, while the others did not, as shown in Figure 2 below. Since two participants were self-diagnosed this data makes sense, as they would not have a 504 plan or an IEP based on a self-diagnosis.

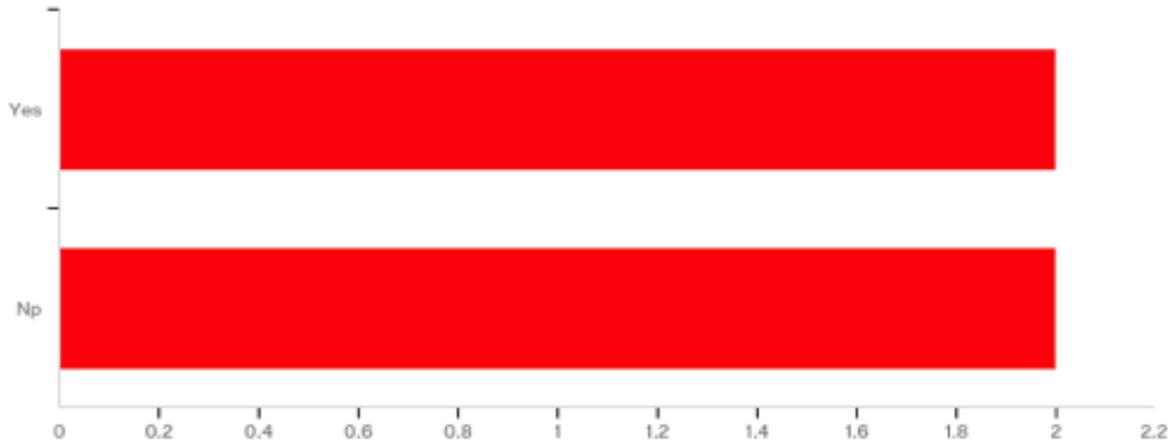


Figure 2. IEP or 504. This figure indicates whether or not the participant had an IEP or 504 to assist them.

Sources of support

In regards to sources of support, participants were asked to select the sources of support that they had experienced, thus they could select more than one support source. There also was the ability to identify “other” and type in what the support source. The results of this question are graphically depicted in Figure 3 below. Family and Programs and Other Resources stood out as the most prominent sources of support, with three out of the four (75%) picking those. Peers and teachers impacted 50% of the participants with one (25%) indication “other” forms of support. Unfortunately, this participant did not type in what “other” meant.

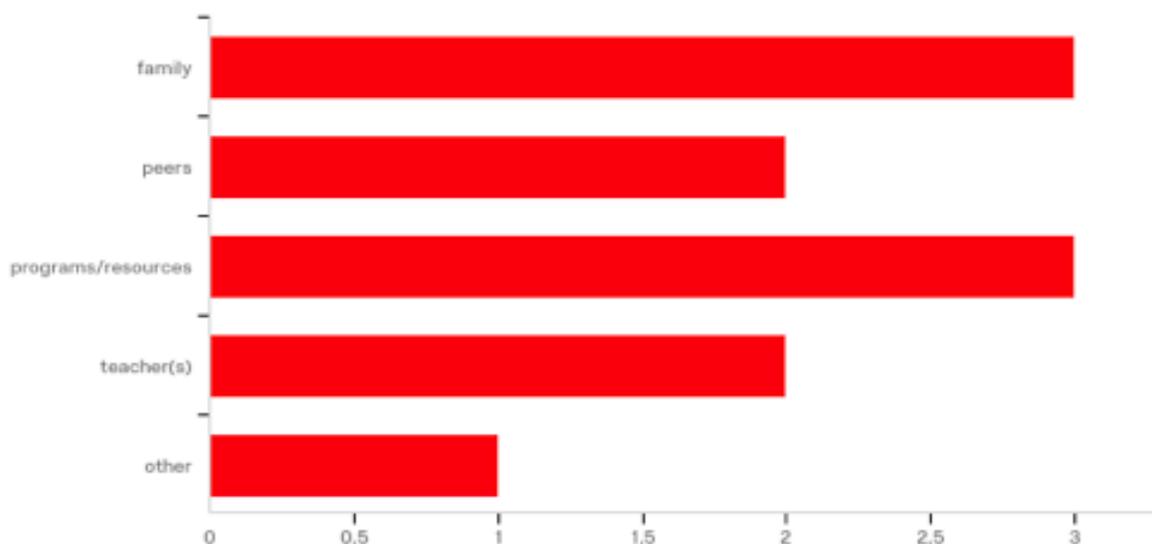


Figure 3. Sources of Support. This indicates where the participants received support from.

Ranking sources of support

Participants were asked to rank order five different sources of support on a scale of one to five with five being the most helpful and one being the least helpful. Figure 4, below, provides a graphic representation of their rankings. The four different participants responded as follows: For number one, least helpful: two responded with family (50%), one with programs/resources (25%), and one (25%) with other (they chose not to respond when asked to be specific in regard to this answer). For number two: three responded with teachers (75%), and one (25%) responded with other (they chose not to respond when asked to be specific in regard to this answer). For three: two responded with peers (50%), and two responded with programs/resources (50%). For four: Two responded with peers (50%), one responded with programs/resources (25%), and one (25%) responded with teacher(s). For five, the most helpful: two responded with family (50%), and two (50%) responded with other (they chose not to respond when asked to be specific in regard to this answer).

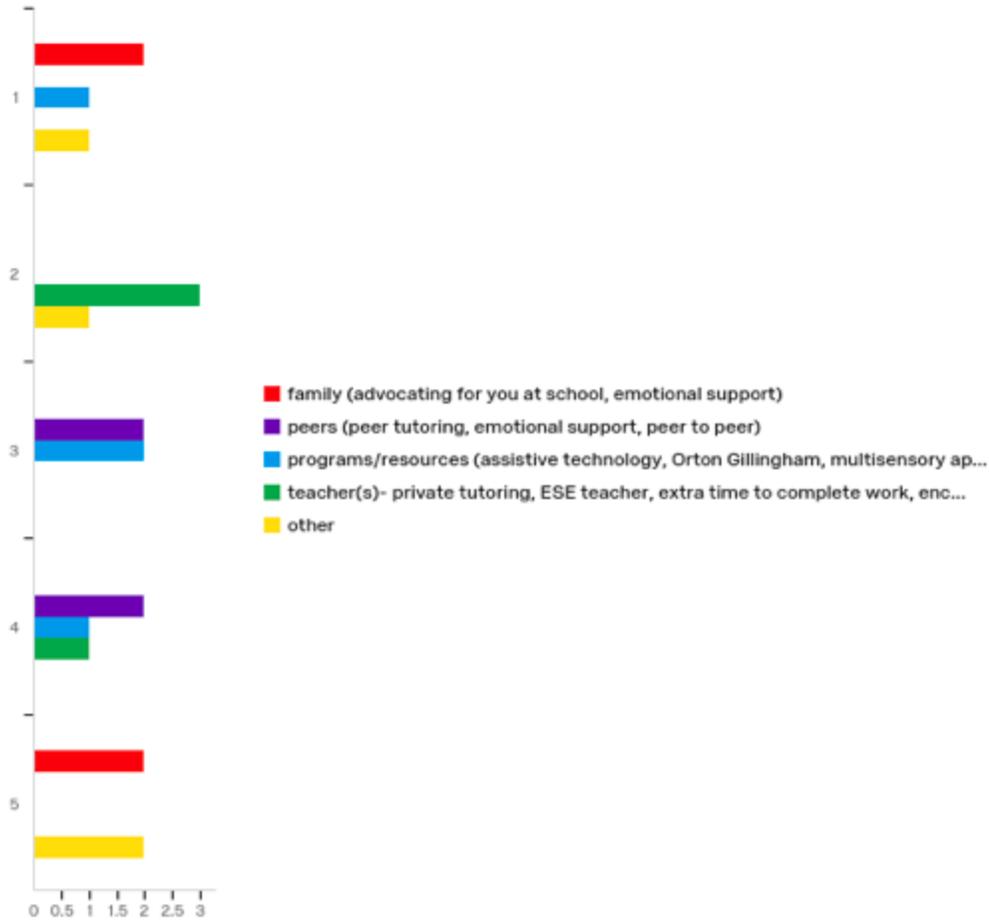


Figure 4. Ranking sources of support. Participants were asked to rank five categories of support on a scale of one to five with five being the least helpful and one being the most helpful.

Specifics on help from each support

The subsequent questions on the survey asked the participants to specify how the sources of support helped them. What follows are their responses based on the four main sources of support focused on based on the literature review (family, peer, teacher, and programs/resources).

Family

When asked about family support, one participant (25%) shared that they had no support from their family, while the three other participants (75%) shared specific ways in which their family supported them. These supports ranged from a mother who advocated for the student at

school and worked with them at home, to a husband who would read assignments to his wife, to parents who would go to college with the student to make sure that they were signed up for the right resources.

Peer

When asked about peer support, one participant (25%) marked this answer as N/A (not applicable), presumably because they did not receive support from their peers. Another (25%) mentioned that they had very little peer support. The other two participants (50%) gave examples of peers helping with note taking, reading out loud, or writing down words while the student dictated.

Programs and resources

When asked about programs and resources that supported them, one participant (25%) mentioned multi-sensory instruction along with recording lectures as supports. One participant (25%) explained that they had technology that would read textbooks to them while they were in college, but they said that they did not have any support before then. The last two participants (50%) specified speech to text and staff who ran the programs that would advocate for the student as related supports.

Teachers

When asked how teacher's assisted in their journey one participant (25%) answered that their teachers were encouraging, another (25%) explained that most teachers would allow for extra time or other methods, one (25%) specified that they were in special education and received pull out instruction daily. The last participant (25%) shared that they did not get any teacher support, with their reasoning being that, according to them, they just were not smart.

Interview results: Single case study

For the interview, the interviewee was a male, in the 26-35 year old age range, who is currently pursuing his PhD. Appendix E is the full transcript of the one-on-one interview. Rich, descriptive data was obtained from the interview which I believe provide a wealth of insight and knowledge that can potentially help educators of all types. In the rest of this chapter I strictly discuss the qualitative results and then in chapter 5 I continue to analyze and reflect on the participant's responses, along with supporting survey data. In order to make the discussion easier I will be using a pseudonym for the participant, Andrew.

Diagnosis

Andrew noted “dyslexia is different because it’s an invisible disability so the majority of people will go forever without knowing it so it can be difficult to overcome” (Appendix E). He further noted that “dyslexia is almost like a spectrum” and therefore if you have two students with dyslexia they more than likely will have different symptoms and different needs. He described his challenges in terms of reading. He said he often skips lines when reading, “I read 75% right now”. He indicated that he was first technically diagnosed with dyslexia in college. He noted that he had been diagnosed with reading and writing disabilities in elementary school, but that was the extent of any diagnosis or his time in special education. By 5th grade he “tested out of the need for modifications” and since Response to Intervention and Multi-Tier System of Support did not exist, he had little to any support (Appendix E). The state where he grew up, does not acknowledge dyslexia as a diagnosis for a specific learning disability.

Emotions tied to dyslexia

Andrew explained that frustration played a huge part in his journey. He also explained that anxiety in reading aloud is something that is still rather prominent, even in his job as a

teacher. He noted, "... there's a lot of anxiety that is involved. So now, as a student who is at the level that I am at, I am still working through that and I have this kind of educational trauma that doesn't get mentioned enough" (Appendix E). He described vivid experiences within classrooms, with peers, with teachers and professors that have affected him still today. He described an issue with testing, noting that the ACT was particularly challenging. He shared that his score was 18, which he stated was "insane", especially related to his current schooling in a PhD program. Later in the interview he noted, "A lot of embarrassment came from when they would differentiate, because I was different. So, because of that I often didn't show what I might have needed which resulted in poor ACT scores and a horrible GRE score" (Appendix E). Further emotions included a lack of confidence in his academic abilities. In fact he reported avoiding advanced placement classes and honors classes because he did not identify with them. He did not believe he would be successful in these courses.

Peer support

When asked directly about peer support Andrew noted, "... in high school I tried to hide my differences from my peers and I think a lot of that was me just not being comfortable with who I was" (Appendix E). In college he joined a friend group that realized his struggles, and they accepted him and helped him with classes. He gave examples of them helping him by taking notes or giving a summary of a reading that he just couldn't physically get through. Interestingly, though, peer support popped up later in our interview when he was asked to discuss programs or resources that supported him. He explained,

One of the things that's not often talked about is the social aspect to dyslexia. So, because of this, I did not have any friends until the third grade, which is something that they [his parents] picked up on too. Back in those days they still did kindergarten and first grade together, so it wasn't until 2nd grade that we had the family friend [his 2nd grade teacher] who decided to look at why I wasn't making developmental milestones (Appendix E).

Teacher support

Andrew started off his answer by telling me that he had several really good teachers, and some poor teachers. He gave examples of teachers and professors who pulled him aside in order to specifically tell him that he was not capable of accomplishing what he wanted to do-whether that was going to college or becoming a teacher. But he also gave me examples of teachers who helped him from the time that he was very young, in high school and in his college years. He gave one specific example of a spanish teacher that he had. He intentionally took her classes over a period of five years just because he appreciated her support and he knew that he could go and speak to her if he needed to. Andrew said, “I don’t think we talk about it enough but good teaching helps all students. So if you’re teaching well it doesn’t really matter what you’re addressing because you accommodate and modify in the moment” (Appendix E).

Family support

Andrew named family as his number one support in his journey with dyslexia. He explained that his dad, most likely, struggles with dyslexia and that his own journey motivated him to help his son. He believes that his older sibling (10 years older) is also dylsexic, but that his parents were so young they did not catch it and support her like they did him. He told stories of his mom supporting him by spending intentional time reading to him and advocating for him at his school. Andrew described,

Distinguishing and differentiating was very difficult for me. I don’t sound words out, so I read based on memory. Which is something a lot of dyslexics do, which is why it is not smart to have them sound things out slowly. My mom would read a lot of Harry Potter to me which is why I think I can absorb more through conversation and listening (Appendix E).

While his mom supported him more with academics, he said his dad, who dropped out of school and attended trade school, was his number one cheerleader and told him to never give up. This

manifested itself as another aspect of support that his parents showcased was their expectation for him to go to college. Both of his parents did not go to college so they, in turn, wanted him to go and receive a higher education. He noted that there really was not another option for him. Once he decided to pursue a degree in education his parents continued to be a source of support as they encouraged him by helping him “see the silver lining within his disability” (Appendix E). If he had struggled with reading and writing, he would then be able to empathize to a high degree with his students who struggled with similar things.

Support from programs and resources

While interviewing Andrew, I came to realize how little his elementary, middle, and high schools had in the way of assistive technology. It was only in college that Andrew was exposed to technology that could help him, such as programs that would read his textbooks out loud. He reflected,

I can't remember any specific strategy, like printing stuff on yellow pages, I think a lot of that is not actually very helpful. For me it was about understanding my own struggles. It was understanding exactly what I would have difficulties with and then learning how to work through it. Sounding things out, tracking on different pages. Typically, when I would finish a line, I would go down to what I would perceive to be the next line, when in reality I would have skipped a line. Or, for instance, the way that you process a word is that you look at the first and last letter and your brain fills in the middle, but my brain would fill in a different middle or see different letters at the end and create a whole new word. Often times I would get halfway down a page and realize that what I was reading didn't make any sense. So, because of that I became very good at main ideas and what generally is happening (Appendix E).

He explained that his parents were the ones that often came up with the techniques to help him throughout his schooling. Some of them were simple, such as using an index card to track the lines as he read. Some of them were more intrinsic, such as self-reflection and awareness when it came to his disabilities, and using this to persevere.

Most helpful source of support

When I asked Andrew what his biggest, and most helpful source of support was, without skipping a beat, he immediately said his family. When answering, he went on to specify that it was his dad who provided the emotional support and stability, while his mom did her best to support him academically in the home and by reaching out to the community. One example he provided was related to his acknowledgement that being organized was challenging for him. He realizes now that a lot of it was related to “...metacognition, and my parents did a lot of that with me. They would help me think through my own situations in regard to what I was doing, which was very helpful. They encouraged me to be very reflective in certain situations. Those things were extremely helpful to me” (Appendix E). He reflected that his family is why he is where he is today.

Most discouraging source of support/experience

As mentioned earlier, teachers and professors provided some rather traumatic educational experiences for Andrew. He specifically noted an experience he had with a college professor. “I had sent her an email and had misspelled several things, or done something weird, and she called me into her office and said that I might want to consider a different career” (Appendix E). He described being pulled aside or called into a teacher’s office on multiple occasions and specifically told that it probably was not a good idea to pursue a degree in college or to become a teacher.

Advice for other people who struggle with dyslexia

Andrew’s advice was two parts. First, he encouraged other people with dyslexia to get to know themselves. To really learn what they struggle with and to find strategies and resources to help them. The second, as simple as it seems, is to just keep going. He mentioned that those

words were a source of encouragement and strength to him as he travelled, and continues to travel, on his journey. He said that even just having one or two people who had faith in him and spoke the words “you can do it” was incredibly helpful.

Advice for families who are struggling with dyslexia

Andrew’s advice here is to not let your student feel like they are failing. He explained that, often times, through these feelings is how we develop identity. He emphasized that the people around you really can make or break your experience. He encourages families to get to know their child’s teacher and to become an advocate in the school. He says that prioritizing organization is key, such as using schedules and planners, as this can eliminate some problems for students with dyslexia.

In the next chapter I discuss my findings further, exploring themes I have identified, in particular from Andrew’s interview, along with implications, limitations, and my conclusion.

CHAPTER FIVE: DISCUSSION

I wanted to conduct this pilot study to better understand the supports that college students with dyslexia perceived contributed to their success, in order to use this information to better inform future educators, in-service educators, and families of students with dyslexia. The survey questions were developed based on the literature review and centered around the four supports identified from previous research, and frankly the supports I expected the participants to reflect on and connect with. However, when I wrote the questions for the interview, my goal was to prompt stories and long answers that would give me a clearer picture of their journey with dyslexia and in turn inform educators and others. While I had hoped that I would have more participants in this pilot study, Andrew's willingness to share and be open about his journey have provided the framework for this discussion. Additionally, I have brought in survey data to further explain the themes that I identified.

Lack of teacher support for students with Dyslexia

I started out the interview by discussing Andrew's childhood journey and then moved on to insights he might have for other people and families struggling with dyslexia. For the interview, I asked Andrew to start off by specifically sharing when he was diagnosed and who helped guide him towards that result. I was shocked when Andrew shared that he was first diagnosed with Dyslexia during his undergraduate degree. He went on to mention that his home state did not recognize dyslexia as a diagnosis for a specific learning disability which I elaborate on in this chapter. This left me with a mixture of feelings. Part of me was not surprised, as this was mentioned in my literature review. Yet, the other part of me felt frustrated. Frustrated for

Andrew and for the lack of support that school ended up being for him, and others, as was clear in the survey data, as only one participant (25%) reported that their teacher(s) were of support, mentioning that they were encouraging. One participant (25%) reported teachers giving extra time and using other methods to support them, while one (25%) shared being in special education in a pull out program. The final participant (25%), stated that teachers did not provide support because as they perceived, they were not smart.

Educational trauma from dyslexia

As we dove deeper into the interview, Andrew used a specific term that caught me off guard when describing his emotional experiences *educational trauma*. He alluded to this concept throughout his interview and even gave specific examples that explained this term. From experiences of being isolated in elementary school to being discouraged to pursue college after high school, there were particular instances in which it would have been easy to be convinced to give up on his educational career. Even when taking college courses he had an experience in which a college professor called him in to their office only to discourage him from chasing his dreams of becoming a teacher, all because of a few spelling mistakes in an email. One might say that Andrew's educational journey was nothing short of a miracle in the face of his *educational trauma*. Thankfully, despite the harsh words spoken towards him, he continued on and is currently pursuing his PhD in mathematics education. This calling is something that he is passionate about, especially because of his struggle in school. The idea of *educational trauma* was also reflected in the survey data as I described above and was exemplified by one participant (25%) reporting that they did not receive any support from a teacher.

Empathy towards others with learning issues

One of the more encouraging parts of the interview, for me, was hearing the heart and empathy that Andrew has towards his current profession. He described how his childhood experiences affected his teaching experience when he said,

I came out of college with a degree in K-6 and K-12 for special education, so once I started to teach we had a lot of students who were on the RTI model. Because of this, you had a lot of parents who were confused when you would move their child from tier to tier. I would be able to explain what it was from my own personal experience. I was able to explain that these are good things. (Appendix E).

He was and is able to relate to and empathize with his students on a personal level that not all teachers are able to provide, which gives him an advantage when it comes to helping them create a plan and giving them guidance. He is also able to help guide the parents in the classroom, as mentioned before, by explaining the system in a way that most teachers might not be able to.

While listening to his story, I saw that his parents had a big affect on his viewpoint in this area. He spoke to this when he said, “It was in college that my dad helped me spin the whole dyslexia thing to being more of a support and more of a way of being relate to my students. That was really helpful” (Appendix E). Being able to take hardships and struggles and turn them into something for good is not an easy task, yet it can often mean that the hardships are redeemed in a way. There is often a *silver lining*, as Andrew described, to the hardships in life that may not be revealed right away, and that may take some digging to find. Yet, as educators, parents, peers, and supports of all kinds, it is up to us to help students struggling around us see the good that can come from their disability. We must look to help prior *educational trauma* from manifesting itself and must work to see that it is turned around and processed properly. This is not an easy feat, and one that may take several sources of support and years to properly procure. In order to get started, though, one must be able to understand the prior *educational trauma* that

has happened. It may take investigating, but it usually starts in one place: diagnosis, or lack thereof.

Diagnosis of Dyslexia as an issue

From Andrew's interview and what was evident in the survey data, only one (25%) of the participants was identified with dyslexia prior to college, diagnosis of dyslexia appears to be a stumbling block, especially in the educational realm. While the literature review highlighted this issue, it suggested that there seems to be progress in this area. Obviously, the people I surveyed and interviewed did not benefit from this progress, perhaps due to their ages. However, I believe the reality is that diagnosing dyslexia still remains a significant problem, mainly because the learning disorder manifests itself differently in students, as Andrew described in the interview, it may be that certain students specifically struggle with decoding, while others have a hard time keeping track of where they are in the text. Because of the vast differences among students with dyslexia, it can be hard for parents or teachers to even realize that a diagnosis may be necessary.

I believe that dyslexia is similar to autism in the way that there is no specific medical test that can be done to test for a gene or certain chemical compound which would lead to diagnosis. In addition to issues with diagnosis, but similarly, once identified it can be particularly challenging to provide interventions that target each student's needs, since there is not one clear intervention or support that works for all dyslexics, as Andrew pointed out in his interview. As I stated previously, progress and research is being done that will hopefully help with diagnosis in the future. A diagnosis, in a lot of ways, can be almost a relief for a student and their family, as it gives an insight into the difficulties that the student is having which will help guide them as they work to grow educationally and emotionally. Yet, the diagnosis process can also be a devastating experience if not done properly, or if not done at all.

Emotions of Dyslexia

While only one question in the interview focused on the emotions associated with dyslexia, good and bad, it became a theme throughout this pilot study. This theme permeated the interview experience and was a hallmark of Andrew's educational journey. It also was prevalent in the survey data. As most of us know, and many of us have experienced, educational failure can hurt down to the core of one's being. If an educator sets expectations, yet fails to help students work towards them, it is almost as if you are leaving the students behind in the dust as you rush ahead. This could lead to frustration, anxiety, embarrassment, and eventually lack of self-confidence and self efficacy. Andrew noted this when he gave insight to families of a student who is dyslexic. He said, "The important part is to not let them feel like they are failing. Through that feeling is how we develop identity" (Appendix E). Many students who struggle with dyslexia may feel like they are simply not smart, as evidenced in the survey and in Andrew's interview. When speaking on discouragement from teachers specifically, he stated, "I didn't take any advanced placement courses or honors classes because I had self-identified with that and I had to work through that" (Appendix E). This can be devastating as the student grows older and seeks to make big decisions in regards to career and higher education. Instead, an educator can set expectations, working alongside students, instilling in them the simple belief that they are indeed smart and capable.

Andrew's advice pertains to families as well, if the student is being supported and encouraged at home, the chances that they will overcome educational trauma outside of the home increases in a major way. He went on to speak of his parents "can do" attitude that was fueled by the simple sentence "you can do it.". He recognized this when he said, "I think that's the most meaningful thing there as far as them really pushing me to want to be more than a specific

label” (Appendix E). And while the survey data did not support this theme of family support, when asked to rank order the supports 50% of the participants identified family as the least helpful support. However, this might be explained by the fact that 75% of the participants did not have a dyslexia diagnosis prior to college and this could account for families not realizing their child has dyslexia and not knowing how to support them. This data is in contrast to the participant’s responses to the question asking them to identify the types of support they received, as 75% of the participants noted that family and programs and resources supported them.

Peer and family support with Dyslexia

While only 50% of the participants identified with peer support, this could also be explained by the fact that only 25% of the participants were identified as dyslexic prior to college, therefore peer groups may have not been as much as an influence as they could have been had they been diagnosed earlier. Andrew noted related to his peers, that he just wanted “...somebody to say ‘Look, this sucks’”, when I followed up with whether he wanted empathy or sympathy, he responded “Yes” (Appendix E). From what I gathered, this was Andrew’s first friend group that truly accepted his and then went on to support him in it. He gave specific examples when he explained that “...if we had a class together, they would help me with notes or give me a summary on reading that I just couldn’t get through physically” (Appendix E). Most students who struggle in the education world are simply looking for a teacher, friend or friend group, or parent who cares enough to at least empathize and sympathize. This can often be the first step to helping students get on to a path that will help succeed not only in school but in all aspects of life. Earlier, in the review of literature, it was noted by Siegal and Ryan (1984) that a dyslexics' frustration often centers on their inability to meet the expectations set out for them. As I look back on Andrew’s interview, I see that his parents did a brilliant job of setting

expectations in a loving and nurturing way. He explained that there were expectations set for him, but that his parents were also ready and willing to support him in meeting these expectations. As evidenced with Andrew's parents, the mantra "You can do it" can go a long way. This goes to show the importance of socioemotional support, which I will discuss further in the next section, implications.

Implications

There are many implications that can be taken from this pilot study. I am going to highlight some of the key ideas that I was able to draw from the survey and interview results. One of the first things that I noticed in regard to Andrew's journey was the lack of support that his schools and teachers provided. Not only in lack of diagnosis, but even more so in lack of assistive technology and supportive methods/approaches. I believe teachers need to receive more training on how to recognize and instruct students with dyslexia. A student does not have to be diagnosed specifically with dyslexia in order for them to receive access to and benefit from assistive technology. Assistive technology can range from simple or low technology to complicated or high technology. In his interview, Andrew spoke to this topic, when he recognized his mom for her ingenuity in coming up with simple technology, such as an index card to track reading, to help him. She was able to come alongside him and see specific needs that needed to be met. As teachers, we need to dig into our own sense of ingenuity while also being aware that what works for one student will not always work for another. We need to be able to sit down with our students and ask them what type of support they think they need. Often times, a student will be well aware of what they need help with and will most likely know how they can be helped. In many cases the student has found coping strategies that they have been using. If you look at the story of Andrew you will see that he, along with 75% of the

survey participants, was diagnosed in or after undergraduate. At this point, the students have made their way to college without any formal form of support. What this tells me is that they have worked out their own strategies to get by. Andrew exhibited this when he said

Those things were extremely helpful to me. I can't remember any specific strategy, like printing stuff on yellow pages, I think a lot of that is not actually very helpful. For me it was about understanding my own struggles. It was understanding exactly what I would have difficulties with and then learning how to work through it. Sounding things out, tracking on different pages. (Appendix E)

Teachers must work to be creative in assisting their students find ways to read and write to the best of their ability, if they have not already figured it out for themselves. Dyslexia is not an easy disability to simply help, yet it is definitely possible in each and every case to differentiate instruction and tailor interventions to each child.

In some cases, helping might merely mean being an emotional support for the student. Yin (2012) suggests that case study research can illuminate unanticipated and unusual concepts of interest, and for me the idea of *educational trauma* that Andrew shared is just that. Teachers need to be on both the offense and defense for their students, guarding them from *educational trauma* that may arise. While not every case is preventable, the socioemotional needs of students are worth protecting and cultivating. As quoted previously in the review of literature, "The socio-emotional needs of students with dyslexia are numerous and need to be better acknowledged and addressed by teachers" (Casserly, 2013, p. 89). As referenced in the literature review, in her memoir, *Reversed*, Louis Letchford gives insight into the burden her son was carrying from his struggles. She explained when she said "Nicholas ... is like a snail, carrying an immense burden while crawling through life. Schools struggle with snails." (Letchford, 2018, p. 60). And indeed, they do. Andrew highlights the importance of socioemotional support several times throughout his interview, with one of his key points being

when he explained what happened after a particularly discouraging experience with a professor in college. He said,

I went and met with my interning teacher after that and she talked me down and told me all of the positive things that I could do. And those things are extremely important which is why social emotional intelligence needs to be taught in schools. That was extremely important for me-that I was able to work through that internal embarrassment and trauma. (Appendix E)

Simply having a person who is willing to sit alongside a student, empathize, and encourage them is huge.

A lot of socioemotional support ties into metacognition, which, put simply, is thinking about one's thinking (Chick, 2019). Andrew refers to this technique as a specific strategy that helped him throughout his childhood. He explained how his parents would assist him with this when he said, "They would help me think through my own situations in regard to what I was doing, which was very helpful. They encouraged me to be very reflective in certain situations. Those things were extremely helpful to me" (Appendix E).

Altogether, being able to provide a listening ear and helpful hand is sometimes the biggest help that one can provide. Andrew highlighted this when he stated, "I think sometimes we need to emphasize that if you don't know how to be a good teacher, then be a good person" (Appendix E). What a powerful statement that is. Looking at the results from the survey and interview, along with research in the literature review, we see that teachers, parents, and other forms of support can be and often are faulty. We can do our best to support students, and this can be incredibly effective, yet at the end of the day, the biggest form of support seems to be the support of students socioemotional wellness. Dyslexia is a vast disability, and we, as educators, should do our best to find solutions, including technology to help our students. Yet, before any of this, we should look to support them mentally and emotionally. We should seek to support

their metacognitive skills by helping them think through their emotions and thoughts. We should provide a safe space for them to come, just as Andrew's Spanish teacher in high school did.

When referencing her he says, "I actually took five years of Spanish in high school, and I did that because I was such a wonderful teacher. I knew that if something was going on or if I needed help, I knew that I could go and speak to her" (Appendix E). Being a source of support that students can come and talk to should be a main priority for someone who teaches as this will provide a strong platform for learning, growth, and success.

Limitations and suggestions for future research

While this was a pilot study, there were still many limitations that should be noted related to this study. First, the small number of participants does not allow for any generalization to a larger population beyond my participants, nor does it adequately explore the experiences of successful college students with dyslexia. The lack of participation could be for several reasons, including the lack of students who are actually diagnosed with dyslexia, along with the low number of college students with dyslexia. Nonetheless, in order to fully describe the stories of successful college graduates with dyslexia, I suggest casting a wider net to gain participants. I do however, believe my pilot study can inform future research, as I feel the interview questions were able to tease out Andrew's story. I do think that using a mixed-methods approach to this topic is important because while the survey provided some valuable descriptions, it was the interview that really allowed me to dive deeper into the experience of a successful college student with dyslexia. Related, another limitation of my pilot study is that I only had participants who had graduated from college, I did not have any current undergraduate students. At the end of my data collection I discovered two colleges that are for students with disabilities: Beacon College and Landmark College (which is a college specifically for students with dyslexia), thus I

would recommend reaching out to each of these colleges to increase participation. Another limitation could be my primary focus on the four types of support: peer, family, teachers, and programs and resources, which was based on the literature review. This focus could have resulted in the survey and interview leading the participants to respond in certain ways.

Conclusion

I chose to research the topic of dyslexia because I have seen that students with dyslexia can sometimes get lost in the midst of the school system and school culture. Without the proper help and support not only can their minds be crushed, but so can their hearts and souls.

Educational trauma is a real thing, something that affects a portion of students who are making their way through the education system. I sought to find the factors within the support of family, peers, teachers, programs and other resources that are provided that fully helped the now college-aged students get to where they are today. Support that helped them work past the probable educational trauma. As stated before, my goal with this research was to determine the perceived defining factors or supports that helped students thrive and move past their learning disability, specifically dyslexia. What I discovered is that, throughout a myriad of support, one thing seems to stand out. Looking at the data from the survey and interview, there were different forms of support that helped each student in their own way. Yet, the common denominator between them all was the emotional support provided to them, whether from peers, a teacher, or family.

I hope that the results of this pilot study will provide insight into the current conversation surrounding dyslexia and other learning disabilities that can so easily fog the modern day school system and the pivotal growing years that so many students have to work through. As a teacher, it may seem overwhelming when one thinks on the different difficulties that might arise for

students, yet Andrew reminds us, “I think sometimes we need to emphasize that if you don’t know how to be a good teacher, then be a good person” (Appendix E).

Appendix A:

Survey of Support Sources as Perceived by College Students or College Graduates with Dyslexia

14. What was the most important factor in your decision to go to college?
15. Would you be willing to be contacted to participate in a brief one on one interview (either in person or online) to provide more information on your experience with dyslexia?

_____ Yes (provide email or telephone number)

_____ No

If you would like to receive a copy of the research findings please email me, Jessica Doyle
at Jessica.doyle@knights.ucf.edu

Appendix B:
IRB Approval



UNIVERSITY OF CENTRAL FLORIDA

Institutional Review Board

FWA00000351
IRB00001138
Office of Research
12201 Research Parkway
Orlando, FL 32826-3246

EXEMPTION DETERMINATION

October 24, 2019

Dear Michelle Kelley:

On 10/24/2019, the IRB determined the following submission to be human subjects research that is exempt from regulation:

Type of Review:	Initial Study, Category 2
Title:	An Exploration of Perceived Factors that Contribute to the Success of College Students with Dyslexia
Investigator:	Michelle Kelley
IRB ID:	STUDY00001035
Funding:	None
Grant ID:	None

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made, and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request so that IRB records will be accurate.

If you have any questions, please contact the UCF IRB at 407-823-2901 or irb@ucf.edu. Please include your project title and IRB number in all correspondence with this office.

Sincerely,

Racine Jacques, Ph.D.
Designated Reviewer

Appendix C:
Recruitment Letter/Email

Appendix C

Hello!

My name is Jessica Doyle and I am a senior studying Elementary Education at the University of Central Florida. I am currently working on an Honors in the Major research project that is focused on exploring the perceived factors that contribute to the success of current or post-grad college students with Dyslexia. I have found that the topic of Dyslexia is a confusing one for many people, including teachers and politicians, and I would like to help bring more clarity to this disability, so that more children and adults with Dyslexia can be helped more effectively. I am looking to contact current or post-grad college students who struggle or struggled with Dyslexia. To help me on this journey, I am seeking voluntary participants that would complete an online survey which should take 10-20 minutes. This short survey asks them about the different kinds of support(s) they have received and their perceived effectiveness. If they choose to they can also let me know if they are willing to complete an interview to further inform my study. The interview would be at their convenience and take no more than 30 minutes. Would you be able to help me with this important study? Any assistance or suggestions would be greatly appreciated. My email is jessica.doyle@knights.ucf.edu. Feel free to contact me with any questions!

Thank you so much.

Jessica

Appendix D: Recruitment Flyer

Appendix D

Are a current college student or college grad who
Struggles/Struggled with Dyslexia?



Join a current research study being conducted by an Elementary Education Honors in Major student at the *University of Central Florida* exploring the perceived factors that contribute to the success of college/post-college students with Dyslexia. By simply taking a short 10-20 minute survey you will help us better understand the different types of support that helped YOU on your own personal learning journey. By sharing your experiences you will help educators better support students who also struggle with dyslexia. You can also participate in an interview to share your experiences. The interview will take no more than 30 minutes and be at your convenience.

Contact jessica.dovle@knights.ucf.edu to participate or for more information



UCF

Scan QR code for quick access to the survey!



Appendix E: Interview Transcript

Appendix E

Interview Transcript

Interviewer:

We are now recording. Thank you so much. Thank you for agreeing to be interviewed for this research study. To facilitate note-taking, I would like to audio record our conversations today. The audio recording will be destroyed after transcribed. In addition, you must sign a form devised to meet our human subject requirements. Essentially, this document states that all information will be held confidential, your participation is voluntary and you may stop at any time if you feel uncomfortable, and I do not intend to inflict any harm doing this research. I have planned this interview to last no longer than one hour. During this time, I have several questions that I would like to cover. If time runs short and you are willing, the interview may extend beyond an hour, but at any time, you may cut the interview short. Your participation is appreciated. You have been selected to speak with me today because you have been identified as a college student or former college student with dyslexia. This research project focuses on the self-reported factors that contributed to the success of college students (current or former) with dyslexia. Of particular interest is how you perceive supports success as peers, family, teachers, and programs and resources. However, this research study is not limited by these four factors. This research hopes to inform educators how to better support students with dyslexia and your insight will provide valuable information to guide these recommendations. My study does not aim to evaluate your experiences, rather I am trying to describe your experiences and inform other educators working with students with dyslexia.

Participant: Okay!

Interviewer: I am looking for you to tell me what helped and what didn't it does not have to be too technical. So the first thing, when did you first discover that you were dyslexic and who helped you reach that conclusion?

Participant: I actually did not find out that I was dyslexic until I was in undergraduate. It was my second semester, however the state of XXXX does not acknowledge dyslexia as a diagnosis for specific learning disabilities.

Interviewer: That sounds like a problem.

Participant: Yes, I agree. So in Elementary School I was labeled as having a reading specific learning disability and a writing specific learning disability, so through that I received the services, I was actually in special education from third through fifth grade. So within elementary, it was my mom that really started to pick it up because I wasn't necessarily that far behind, but I definitely wasn't at the level that my peers were at so she reached out to my teacher at the time who happened to be a close family friend. At that point I was referred for testing, and through that testing is when we acknowledged that I had a specific learning disability. In fifth grade I tested out of needed modifications and accommodations. This was before RTI or MTSS, so when I went into middle school I did not have any supports. In a lot of that I was able to be successful and get to where I am now because I had really strong family support. Neither one of them were college graduates, but it was more like emotional support more than anything else. My mom really tried with the academic things but as soon as we went to college they did not know how to provide any more supports. But I never knew that I wasn't going to go to college. That wasn't an option for me and that was really instilled very early on. My parents were from rural farmland so they didn't have an option to go to college so they wanted to make sure that we were going to go to college. I never had a different option. But getting through that it helped in the sense that I had teachers that knew that I needed extra supports and they provided a lot of those more than a specific IEP. I had an IEP as a child and that sticks with you, but I had tested out of the services. But I grew up in a small town so everybody knew, which in a sense helped. My dad was always really big about the fact that "you're always going to be this way" so you have to learn how to deal with it. Dyslexia is hereditary so I'm pretty sure that he's dyslexic, so a lot of things that he went through he didn't want to have to see me go through as well. I really struggled on the ACT, I actually got an 18 which is insane, and a lot of that was because I can't read fast enough. Dyslexia is almost like a spectrum, in a sense that when you meet any two dyslexic people both of them are different.

Interviewer: Which makes it harder to diagnose.

Participant: Yes! So mine, I specifically skip lines or passages without even realizing it. In elementary school I had eye tracking therapy. However a lot of that has been disproven so it's not a great practice but it's all we had at the time. I'm not sure if it actually helped or anything but it's something we did. When I got to college I was able to have extra time on assessments and I had a program that read my textbooks to me. I stopped using those supports about my junior year just because I have never known anything differently. So while I need the supports I don't necessarily use the supports. Now within education I don't. I don't have any accommodations now.

Interviewer: You have said that you are on and off with supports, or that you don't use any. Is it because you have figured out your own methods to what helps?

Participant: I think I don't use the formal supports. The education I received K-12 was very rural, we didn't recognize dyslexia or realize that it was a thing. I didn't even know dyslexia existed until I was in high school. So I spent the majority of my life self accommodating more than having someone else tell me specifically what I need. I think I'm now at the point where I don't know anything different. A lot of it is because I don't have formal tests any more. But when I was getting my undergraduate, it was the teachers. I don't think we talk about it enough but good teaching helps all students. So if you're teaching well it doesn't really matter what you're addressing because you accommodate and modify in the moment. So I had a lot of undergraduate teachers who helped in that aspect. The way that it worked in my undergraduate you had to go up to the professor and say that you had dyslexia. I stopped doing that in my junior year, mostly because I had friends in my classes so if I needed notes I could get someone else's notes. For me with having dyslexia, you learn to use the things that you can. So I retain things through listening more easily, and I read for 75% right now. A lot of people with dyslexia they do go on to be very successful in things and I think that a lot of that is because they learn enough about themselves. So, myself going through a special education degree was really helpful because I was able to note those things. And then when I was teaching it was wonderful to be empathetic.

Interviewer: I didn't even think of that! So, the next question ties into that. What are some emotions that have been associated with your dyslexia and why?

Participant: I think initially the frustration is always there. And there are certain things that are always going to be more difficult such as attending to precision in writing and seeing how things line up. That can be very difficult. I still get anxious having to read aloud, which is crazy because I teach reading. So, there is still that anxiety there. I remember as a child, when we did class read-alouds, where we were assigned a section to read, and instead of listening to anyone else I would be practicing my section in my head to make sure that I was going to read it aloud correctly. So, there's a lot of anxiety that is involved. So now as a student who is at the level that I am at, I am still working through that and I have this kind of educational trauma that doesn't get mentioned enough. And dyslexia is different because it's an invisible disability so the majority of people will go forever without knowing it so it can be difficult to overcome. I still don't like to read aloud in class although I will, especially if I'm teaching, I have to. I think the teaching aspect of things has helped me work through a lot of that.

Interviewer: This is an interesting question, in regard to your peers, what kind of support did you or have you received from them? Did you have experiences that helped or hurt? Explain.

Participant: So, in high school I tried to hide my differences from my peers and I think a lot of that was me just not being comfortable with who I was. Then in college I got really close to several guys and they would support me in terms of, if we had a class together, they would help me with notes or give me a summary on reading that I just couldn't get through physically. But some of it's more of just a support group, just somebody to say "Look, this sucks".

Interviewer: Someone to empathize or sympathize?

Participant: Yes.

Interviewer: What about teachers? The question is, in regard to your teachers, what kind of support did you or have you received from them? Did you have experiences that helped or hurt? Explain.

Participant: So, I had several really good teachers, and I had some really poor teachers. I actually had a high school teacher pull me aside and tell

me that college was probably not the best thing for me. But on the other hand, I had some truly wonderful teachers. I actually took five years of Spanish in high school, and I did that because she was such a wonderful teacher. I knew that if something was going on or if I needed help, I knew that I could go and speak to her. Another experience was with a college professor. I had sent her an email and had misspelled several things, or had done something weird, and she called me into her office and said that I might want to consider a different career. And these things happen. And it was very interesting for me because I came out of college with a degree in K-6 and K-12 for special education and we had a lot of students who were on the RTI model. Because of this you had a lot of parents who were confused when you would move their child from tier to tier. I would be able to explain what it was from personal experience, that these are good things. I think that sometimes we give special education a bad rap, but for example, I tested out because I had good special education, so I didn't have those supports even though I probably could have still used them. So, in the classroom, it was very beneficial and I am very open about that. But it is very hard to get to that point. It's something that we typically hide.

Interviewer: So you spoke about this a little bit before, but in regards to your family the question is, in regard to your family, what kind of support did you or have you received from them? Did you have experiences that helped or hurt? Explain.

Participant: I talked about this in the emotional support a little bit, but my dad is not a good reader. He is extremely intelligent but not a good reader. So, through a lot of that my mom would literally read to me and type for me. Distinguishing and differentiating was very difficult for me. I don't sound words out, so I read based on memory. Which is something a lot of dyslexics do, which is why it is not smart to have them sound things out slowly. My mom would read a lot of Harry Potter to me which is why I think I can absorb more through conversation and listening. A big thing was that I knew that I was going to go to college, and I knew I was going to do something. It was in college that my dad helped me spin the whole dyslexia thing to being more of a support and more of a way of being relate to my students. That was really helpful. But going back to the college thing, I was never allowed not to. It sounds tough but it was through a very nurturing way. We talk about classroom culture, and my family

culture was “you’re going to do it”. I have an older sister who is about 10 years older than I am and I believe that she struggles with dyslexia as well. Both of my parents were very young as she was going through school so because of that and the repercussions that came, they tried to catch it early with me. And it helped that my second grade teacher was a family friend so my mom could just pick up the phone and ask for help. So in kindergarten they began to pick up on these things. One of the things that’s not often talked about is the social aspect to dyslexia. So, because of this, I did not have any friends until the third grade, which is something that they picked up on too. Back in those days they still did kindergarten and first grade together, so it wasn’t until 2nd grade that we had the family friend who decided to look at why I wasn’t making developmental milestones. So, going back to your question, I didn’t necessarily always have academic support at home. I always had somebody that would help, but they were both very clear from early on that they did not go to college and that the stuff we were learning in school was more advanced than what they knew so it was very much of an emotional support. My dad was always saying that you are never not going to be like this, so you have to work through it. And that’s easier for me to say because I am a white male, but through that it really did establish that you can go and do it, which is how I find myself here.

Interviewer: It sounds like they had high expectations for you.

Participant: Definitely.

Interviewer: So, the last category of support that I am looking at is a bit broader. The question is, were there any specific strategies or resources that helped you with your dyslexia? What were they? Why do you think they helped you?

Participant: In college it was very helpful with my first textbooks to have them read to me. If nothing else, one of the things that people with dyslexia in general need is organization. All of my textbooks were in one area, so I knew where to go. Organization can still be an issue, but I have learned what works for me. Looking back, at the time I didn’t even know what it was, but it was metacognition, and my parents did a lot of that with me. They would help me think through my own situations in regard to what I was doing, which was very helpful. They encouraged me to be very reflective in certain situations. Those

things were extremely helpful to me. I can't remember any specific strategy, like printing stuff on yellow pages, I think a lot of that is not actually very helpful. For me it was about understanding my own struggles. It was understanding exactly what I would have difficulties with and then learning how to work through it. Sounding things out, tracking on different pages. Typically, when I would finish a line, I would go down to what I would perceive to be the next line, when in reality I would have skipped a line. Or, for instance, the way that you process a word is that you look at the first and last letter and your brain fills in the middle, but my brain would fill in a different middle or see different letters at the end and create a whole new word. Often times I would get halfway down a page and realize that what I was reading didn't make any sense. So, because of that I became very good at main ideas and what generally is happening. I can remember early on, moving an index card down the page so I could track on the specific lines. My mom came up with that idea. But now it's more about just knowing the things that I do struggle with and some of it is just letting some of it go. Another big part of it is making sure that I have good supports. My partner is really good about reading through papers for me so if I miss certain words, she is able to point them out and help me. But some of it is just being hyper aware. I know that when I finish a paper, I will have missed words, I will have put the wrong verb tense, I will have thought that I put a word in there that I didn't actually put in there. I have to be very careful. I learned very early on that I have to read a sentence and then think back on the sentence to see what it means too. A lot of that is that I feel like I was supported, and I had the time to figure it out, whereas not everybody has those experiences.

Interviewer: This next question is reflecting on all four of those types of support. Looking back on your childhood, what or who helped you out the most and gave you the confidence to move forward in regard to your dyslexia?

Participant: Definitely my dad. He essentially established most of what I would do. I would say that my mom supported me more on the in the moment academics that I needed, but my dad was always like "you're going to do it". That was a big thing because he went through a lot of that, he actually dropped out and went to a trade school because he hated school so much and he didn't want that for me. I think that's what the most meaningful thing there as far as them

really pushing me to want to be more than a specific label. It was difficult, we label kids way too often. I think that was the hardest part, I kept a lot of that a secret because I was embarrassed. But my parents never let me feel embarrassed by it. So, through that I was able to work through a lot of that. I also had good teachers. They weren't great, but they were good people which I think sometimes we need to emphasize that if you don't know how to be a good teacher, then be a good person. That was extremely helpful where the culture within it has to be accepting. A lot of embarrassment came from when they would differentiate, because I was different. So, because of that I often didn't show what I might have needed which resulted in poor ACT scores and a horrible GRE score. Which I've come to realize that that is not my expertise. I think that is extremely important.

Interviewer: On the opposite end, looking back, would you say that there is anything in particular that discouraged you?

Participant: I mentioned a couple people who really tried to push me away from doing something. Actually, the one in college was when I was in my internship. And I went and met with my interning teacher after that and she talked me down and told me all of the positive things that I could do. And those things are extremely important which is why social emotional intelligence needs to be taught in schools. That was extremely important for me-that I was able to work through that internal embarrassment and trauma. I thought that I learned that I shouldn't be doing something. I didn't take any advanced placement courses or honors classes because I had self-identified with that and I had to work through that.

Interviewer: The educational realm can be tough. Okay, last two questions. First one, what advice can you give to someone who is dyslexic?

Participant: I think that the important part is just to know themselves. To know the struggles that they might face but to also know that you can do it, as cliché as it sounds. That was the best thing that I was able to tell parents. I told them that this was not the end. We don't talk about that enough. I think that letting them know that a diagnosis does not define them and that because of that there are a lot of positive things. Very good humanistic things. Abstract thinking. We need to highlight the positive things within certain diagnosis. Altogether, keep going. This is always going to be you, so let's work through it.

Interviewer: On the same note, what would you say to the family of someone who has dyslexia?

Participant: The important part is to not let them feel like they are failing. Through that feeling is how we develop identity. Within it, the people that you surround yourself with make more of a difference than anything else. Having those supports. What was great for me throughout elementary school is that my parents made it a point to get to know every teacher. And then as I went into middle and high school, they knew at least one teacher from every grouping, and they made sure that I had a support. That was important. Somebody there that I knew would have my back. I would definitely tell parents to get to know your child's teachers. To try different things. Everybody who has dyslexia is different. A lot of dyslexia is working through your own mental concerns. The important thing is just to stay on them. Organization is really tough, so think of different ways to help and making sure that they have the support and resources like planners and schedules. Just like teaching, a good parent goes a long way.

Interviewer: So true. Well, that's it! Thank you so much, that was awesome.

References

- Academy of Orton-Gillingham Practitioners and Educators. (2018). *What Is the Orton-Gillingham Approach?* Retrieved from, www.ortonacademy.org/resources/what-is-the-orton-gillingham-approach/
- Act 1268 of 2015, A.C.A. § 6-41-601, Title 6, Subtitle 3, (2015).
- Act 1294 of 2013, A.C. A. § 6-41-601, Title 6, Subtitle 3, (2013)
- Benefits of Inclusive Education. (2010). Retrieved October 28 2019, from <http://www.kidstogether.org/inclusion/benefitsofinclusion.htm>.
- Berninger, V. W., & Wolf, B. J. (2009). *Teaching students with dyslexia and dysgraphia: lessons from teaching and science*. Baltimore: Paul H. Brookes Publishing Co.
- Batt, Christine. (2011) Parent Involvement in 3rd Grade Special Education. Retrieved from: <https://eric.ed.gov/?id=ED52523>
- California Dyslexia Guidelines - California Department of ... (2017). Retrieved October 30, 2019, from <http://www.cde.ca.gov/sp/se/ac/documents/cadyslexiaguidelines.pdf>.
- Carawan, L., Nalavany, B. A., Sauber, S., (2013). Adults with Dyslexia, an Invisible Disability: The Mediation Role of Concealment on Perceived Family Support and Self-Esteem. *British Journal of Social Work*, 45(2), 568–586., doi:10.1093/bjsw/bct152.
- Casserly, A., M. (2013). The Socio-Emotional Needs of Children with Dyslexia in Different Educational Settings in Ireland. *Journal of Research in Special Educational Needs*,13

(1),79–91., doi:10.1111/j.1471-3802.2011.01227.x.

Cekison, M., Leseayne, M., Makgato, M., Mandende, P., (2018). Dyslexic Learners' Experiences with Their Peers and Teachers in Special and Mainstream Primary Schools in North-West Province. *African Journal of Disability*, 7, doi:10.4102/ajod.v7i0.363.

Center for Collaborative Classroom. (2019). *Dyslexia: What Is It, And Why Are We Hearing So Much About It?* Retrieved from www.collaborativeclassroom.org/blog/dyslexia-what-is-it-and-why-are-we-hearing-so-much-about-it

Chick, N. (2019, November 6). Metacognition. Retrieved from <https://cft.vanderbilt.edu/guides-sub-pages/metacognition/>.

Creswell, J.W. (2014). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage Publishers.

Delany, Kerrie, The Experience of Parenting a Child With Dyslexia: An Australian perspective, *Journal of Student Engagement: Education Matters*, 7(1), 2017, 97-123. Retrieved from: <https://ro.uow.edu.au/jseem/vol7/iss1/6>

DeVries, BA. (2015). *Literacy assessment and intervention for the elementary school classroom*. 4th ed. Scottsdale, AZ: Holcomb Hathaway Publishers.

Dyscalculia. (2019) Retrieved from <https://ldaamerica.org/>

Dyslexia Help at the University of Michigan. (2019). Retrieved July 9, 2019, from <http://dyslexiahelp.umich.edu/>

- [Education Week]. (2019, May 1) *Parents of Students With Dyslexia Have Transformed Reading Instruction* [Video File]. Retrieved from: <https://www.youtube.com/watch?v=J6fyNvtp1r8>
- Freiberg, K. L., Otaiba, S. al, High, L., & Hudson, R. (2010). *Annual editions: educating children with exceptionalities 10/11*. New York: McGraw-Hill.
- Guardiola-Gayán, Javier. (2001). The evolution of research on dyslexia. *Anuario Psicología*. 32. 3-30.
- Gwernan-Jones, R., & Burden, R. L. (2010). Are they just lazy? Student teachers attitudes about dyslexia. *Dyslexia*, 16(1), 66–86. doi: 10.1002/dys.393
- Hamilton, L. S. (n.d.). Understanding Teachers' Impact on Student Achievement. Retrieved from <https://www.rand.org/education-and-labor/projects/measuring-teacher-effectiveness/teachers-matter.html>.
- Hartwig, L. J. (1984). Living with Dyslexia: One Parent's Experience. *Annals of Dyslexia*, 34 (1), 313–318., doi:10.1007/bf02663628.
- International Dyslexia Association (2019). *Definition of Dyslexia*. Retrieved from dyslexiaida.org/definition-of-dyslexia/
- Kuracki, K., & Dłużniewska, A. (2018). Emotional And Social Competences And Reading Practice Of Polish Adolescent Students With Dyslexia And Without Dyslexia. *EDULEARN18 Proceedings*, doi:10.21125/edulearn.2018.1243.
- Letchford, L. (2018). *Reversed: A memoir*. Place of publication not identified: Acorn Publishing.
- McLean, J., & Smith, A. (2017). *California Dyslexia Guidelines*. PDF. Sacramento.

McNulty, M. A. (2003). Dyslexia and the Life Course. *Journal of Learning Disabilities*, 36(4), 363–381., doi:10.1177/00222194030360040701.

Nalavany, B. A., & Carawan, L. W. (2011). Perceived Family Support and Self-Esteem: The Mediation Role of Emotional Experience in Adults with Dyslexia. *Dyslexia*, 18(1), 58–74. doi: 10.1002/dys.1433

Schools Progressing on Dyslexia Interventions, but Major Gaps Remain. (2016, June 1). *Arkansas Times*, Retrieved from arktimes.com/arkansas-blog/2016/06/01schools-progressing-on-dyslexia-interventions-but-major-gaps-remain.

Siegel, L. S. (2013). *Understanding dyslexia and other learning disabilities*. Vancouver, Canada: Pacific Educational Press.

Siegel, L. S., & Ryan, E. B. (1984). Reading Disability as a Language Disorder. *Remedial and Special Education*, 5(3), 28–33. doi: 10.1177/074193258400500308

Shaywitz, S. M. D. (2003). *Overcoming Dyslexia*. New York: Vintage Books.

Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage.

Title XLVII, Fla. Stat., § 1008.31-1008.46 (2019).

University of Florida Literacy Initiative. (2019). Retrieved from <https://education.ufl.edu/ufl/>

Understanding Teachers' Impact on Student Achievement. (n.d.). Retrieved from <https://www.rand.org/education-and-labor/projects/measuring-teacher-effectiveness/teachers-mat>

ter.html.

Yin, R. K. (2012). *Applications of case study research* (3rd ed.). Thousand Oaks, CA: Sage.