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## THE PERCEPTIONS OF HIGH SCHOOL GRADUATES REGARDING THE EFFECTIVENESS OF THEIR 504 ACCOMMODATIONS

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THE PERCEPTIONS OF HIGH SCHOOL GRADUATES REGARDING THE  
EFFECTIVENESS OF THEIR 504 ACCOMMODATIONS

By

JACKIE ALVIN WYCHE, JR.

A doctoral dissertation submitted to the  
College of Education  
in partial fulfillment of the requirements  
for the degree Doctor of Education  
in Organizational Leadership

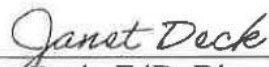
Southeastern University  
March, 2021

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Dissertation Approved:



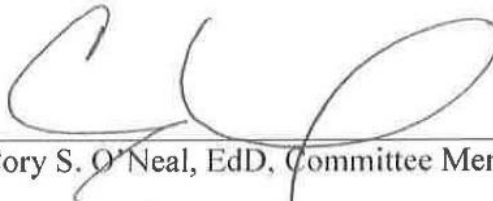
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## DEDICATION

I give glory to God in all that I do for getting me through the many long nights when I was tired and wanted to give up. I heard His voice telling me it would get better and to never give up. I could not have made this journey without God's help. I would like to dedicate this dissertation to my wife, LaTonya, who made endless sacrifices and provided consistent encouragement. She constantly motivated me to stay focused and kept me on track. I thank God for allowing her to be in my life and for her willingness to take part in this journey. I am so grateful she pushed me when I was tired and wanted to give up. Her endless love brings happiness and joy into my life. I would also like to give honor to my parents, the late Jackie Alvin Wyche Sr. and Nellie Johnson Smith. The new journey is just beginning.

## ACKNOWLEDGMENTS

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## **Abstract**

The purpose of this phenomenological study was to explore the perceptions of high school seniors diagnosed with mental or physical impairments regarding the effectiveness of their 504 academic accommodations. The approach of this qualitative study was transcendental phenomenology. Phenomenology is defined as the qualitative approach to research that encompasses the exploration of lived experiences of the participants. The participants for this research study were high school graduates who had 504 accommodations during high school. Participants for this study contributed by answering open-ended questions from an interview guide. In the course of the in-depth data analysis, the interviews were coded, and common themes were extracted. The analyzed data resulted in three themes: teacher/administration support, students overwhelmed by diagnosis, and grit. The results of the study may be useful to administrators, teachers, and parents regarding the effectiveness of 504 accommodations in the high school setting and using this information may allow schools to improve accommodations for students with mental and physical limitations to serve students more effectively.

*Keywords:* 504 accommodations, individuals with disabilities, physical or mental impairment

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## I. INTRODUCTION

Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against students based on their disability. The United States Department of Education has issued revisions to the Americans with Disabilities Act Amendments Act of 2008 with an emphasis on procedural safeguards and other protections that would prevent discrimination against individuals with disabilities. Section 504 is based on the principle that students with disabilities shall not be denied access to educational facilities, programs, and opportunities based on their disability (Individuals with Disabilities Education Act, 20 U.S.C. § 1400, 2004).

Section 504 regulations require a school district to provide a free appropriate public education (FAPE) to each qualified student with a disability who is in the school district's jurisdiction, regardless of the nature or severity of the disability. FAPE consists of education, related aids/services, and accommodations designed to meet the student's individual needs (Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, 2007). This study focused on high school graduates with 504 academic accommodations during their high school years. Four high school graduates with 504 accommodations were interviewed about the positive and negative outcomes regarding their 504 plans.

### **Background of the Study**

The Rehabilitation Act of 1973, sometimes referred to as “Section 504,” is a federal law. The law prohibits discrimination against students who have disabilities. Section 504 provides eligible students who are disabled with educational benefits and opportunities equal to those provided to non-disabled students (Befort, 2010).

Section 504 of the Rehabilitation Act of 1973 prohibits discrimination against students based on their disability. Americans with Disabilities Act Amendments Act of 2008 has issued revisions to the requirements of Section 504 with emphasis on procedural safeguards and other protections that would prevent discrimination against individuals with disabilities. Section 504 is based on the principle that students with disabilities shall not be denied access to educational facilities, programs, and opportunities based on their disability (U.S. Department of Education, 2015).

Section 504 covers qualified students with disabilities who attend schools receiving Federal financial assistance. To be protected under Section 504, a student must be determined to (1) have a physical or mental impairment that substantially limits one or more major life activities; or (2) have a record of such impairment; or (3) to be regarded as having such impairment (Individuals with Disabilities Education Act, 20 U.S.C. § 1400, 2004). Physical impairments include sensory, orthopedic, and other impairments not related to cognition. Students with these disabilities may face physical barriers to their education, such as access to learning materials and educational strategies designed for students with no physical limitations, and this may shape their preparation for and expectations of going to college (Carrol et al., 2018). Mental impairments include learning disabilities, emotional and depressive disorders, and other cognitive impairments (Carrol et al., 2018). The educational barriers for individuals with mental impairment are different than those with physical impairments. Students may need more time to process concepts and complete assignments and may require visual aids, written materials, extra instruction, or alternative assessments, in the case of learning disabilities, to be successful in high school and college (Carrol et al., 2018).

The school district is responsible to ensure 504 implementation qualifications are in place. For students to qualify for Section 504 accommodations, the school district uses a three-prong test (Befort, 2010). Initially, documentation must be provided for a student's physical or mental disability. Many students with 504 plans require special accommodations due to their physical and mental impairments. Some students' accommodations consist of extended time for class assignments, tests, and other academic classwork, and students may be allowed to have higher numbers of school absences due to their mitigating medical circumstances. Specific individual accommodations ensure that a student is protected due to their own individual circumstances. These safeguards allow students to complete their assignments without penalty and class failure; and it protects against truancy policies and procedures (Carrol et al., 2018).

Section 504 also protects students with a record of impairment from discrimination based on disability. Students can be considered disabled and receive services under Section 504, including regular or special education, including related aids and services, even if they do not qualify for or receive special education services under the Individuals with Disabilities Education Act (IDEA). Although IDEA protects students with disabilities in primary and secondary schools, inequalities may still exist in their academic preparation for college (Carrol et al., 2018). Students with disabilities who take advanced coursework in high school may not receive the academic support they need to benefit equally from advanced course work. Students with health impairments that receive the appropriate accommodations have higher grades, reading skills, motivation, and test scores than students with lower-level health impairments (Carrol et al., 2018).

Public schools must employ procedural safeguards regarding the identification, evaluation, or educational placement of persons who, because of disability, need or are believed

to need special instruction or related services. The determination of whether a student has a physical or mental impairment that substantially limits a major life activity must be made based on an individual inquiry (Carrol et al., 2018).

### **Theoretical Framework**

Students with disabilities are divided into two groups: (a) those with individualized education plans (IEPs) eligible under both the Individuals with Disabilities Education Act and Section 504 and (b) those with 504 plans eligible under Section 504 only (Zirkel & Weathers 2014). Students with 504 plans, who are eligible under Section 504 only with physical and psychological impairments, need special accommodations as a safeguard (Befort, 2010). Eligibility under Section 504 requires a mental or physical impairment that significantly limits one or more major life activities. This scope of eligibility is generally understood to be broader than the definition of disability under the IDEA (Zirkel & Weathers 2014).

Russian psychologist, Lev Vygotsky's (1978) Theory of Social Development is the primary basis for Constructivism. The theory of social constructivism supports and enhances language, intellectual, and social development through social interactions (Karahan & Roehri, 2015). Vygotsky (1978) described social constructivism in two phases, social and internal. First, learning awakens a variety of developmental processes that can only operate when the child interacts with others in his or her environment and collaboration with peers. These processes are then internalized and become part of the child's independent developmental achievement (Karahan & Roehri, 2015). Jiang and Perkins (2013) embraced the constructivism theory of teaching and learning as a part of the accountability process in schools. Radical constructivism is the idea that all learning must be constructed (Gash, 2014).

Constructivism, as a philosophy of learning, acknowledges the relations between the students' knowledge, purpose, and learning. A constructivist approach to learning is defined by three main principles. First, learners build knowledge of their previous knowledge. As such, learning is based on opportunities for learners to become critical thinkers, problem solvers, and decision-makers. Second, learning is a very active process. This effective method helps learners to understand the importance of previous interactions and to adapt new insight to genuine opportunities. Third, knowledge is socially built. To develop a deep, holistic, meaningful, well-connected understanding of content, learners become intentional and interactive participants in content among themselves (Neutzing et.al, 2020).

The learners develop knowledge based on their prior knowledge. As such, learning is found within learners' opportunities to become critical thinkers and decision-makers (Neutzing et.al, 2020). The constructivism theory was used to guide the present study, because learning is built by new knowledge on prior knowledge. Effective methods of instruction enable students with learning disabilities to succeed and achieve academically. Using the constructivism model with learners with disabilities provides the students with the best educational opportunities (Rose, 2019).

In a constructivist model, learning takes place when learners participate actively in a process of building context and understanding, as opposed to passively receiving information (Xi et.al, 2014). Xin et al. (2014) suggested, consistent with the conceptual comprehension orientation of the Common Core Standards, that constructivist-oriented learning theory encourages inquiry-based educational environments in which the learners take an active role in their efforts to make sense of learning materials. In meeting Common Core Standards,

educational strategies and approaches that benefit all students, particularly students with learning disabilities, need to be evaluated.

### **Problem Statement**

All public schools are mandated to evaluate students suspected of having a disability under the Individuals with Disabilities Education Act (IDEA, 2004) and Section 504 of the Rehabilitation Act (1973; Holzberg et.al, 2019). Student participation is key to the success of any learning initiative. Students who are motivated are more likely to participate in the intervention, as well as to make appropriate use of and benefit from it (Baker & Scanlon, 2012). Educational accommodations are minor changes in the delivery of instruction and the participation of a student, without substantially modifying school curriculum or expectations (Baker & Scanlon, 2012). Instructional accommodations should be used for a variety of classroom activities, including individual work, small groups, regular class instruction, and homework.

Furthermore, students who may have taken part in their 504/IEP meetings need to be cognizant of their accommodations and take ownership of them. Students also must take part more in the planning and evaluation of individualized education program (IEP) and 504 meetings. High school seniors who were responsible for their education eventually flourished in post-secondary school and became successful employees (Roye, 2017).

Furthermore, these students who felt more responsible for their education later succeeded in postsecondary education and were better employees (Gregg & Nelson, 2012). Self-advocacy strategies provided students with a set of tools to facilitate the transition and access to post-secondary accommodations. Knowledge of rights includes student's rights, community rights, educational rights, steps to change, and knowledge of resources (Holzberg et. al 2019).



According to Newman and Madaus (2015), students need to develop skills, such as problem-solving, disability learning, and self-management, to improve their academic standing and to stay in school. Educational accommodations are commonly used to provide access to instruction. These accommodations remove barriers that can prevent students from demonstrating their true knowledge and skills (Cawthon et al, 2015).

Data collection for this study consisted of in-depth interviews. Creswell (2013) pointed to Moustakas' transcendental phenomenology as "describing their own experiences with the phenomenon and bracketing out their views before proceeding with the experiences of others" (p.80). The interviewing process was useful for a better understanding of the expectations of the students about instructional accommodations (Baker & Scanlon, 2012). The interviewing process enabled participants to articulate their perceptions and the effectiveness of academic accommodation. This study, therefore, benefits all stakeholders on the effectiveness of academic accommodation in the preparation of college and career readiness for high school seniors.

### **Purpose Statement**

The purpose of this phenomenological study was to explore the perceptions of high school graduates diagnosed with mental or physical impairments regarding the effectiveness of their 504 academic accommodations. At this stage of the research, the mental or physical impairments are defined as a disability that substantially limits the ability of an individual to perform a major life activity as compared to most people (Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, 2007). ADA Section 504 is a civil rights law that determines a student who has an mental and/or physical impairment will receive reasonable accommodations in the educational setting.

## **Overview of Methodology**

The purpose of this phenomenological study was to explore the perceptions of high school graduates diagnosed with mental or physical impairments concerning the efficacy of their 504 accommodations. This section includes information on the research design, population, sample, setting, instrumentation, data collection, and data analysis.

### **Research Questions**

What were the perceptions of high school graduates diagnosed with mental or physical impairments regarding the efficacy of their academic accommodations?

### **Research Design**

The approach of this qualitative study was transcendental phenomenology. According to Moustakas (1994), “the transcendental approach to phenomenology includes controlled and organized attempts to eliminate assumptions regarding the phenomena under investigation” (p. 22). In the transcendental process, the study is free from preconceptions, beliefs, and knowledge of the phenomenon from prior experience (Moustakas, 1994). The qualitative researcher sets aside assumptions or biases on a specific topic to enable an unbiased investigation (Padilla- Diaz, 2015). Creswell (2013) incorporated the idea of epoche (bracketing), in which the researcher sets aside personal perspectives to incorporate a fresh viewpoint on the phenomena under investigation. Epoche is a Greek word meaning “*to refrain from judgment, to abstain from, or to remain away from, everyday perception*” (Moustakas, 1994, p. 33). As an administrator, by organizing, analyzing, and synthesizing data from informal interviews, the focus of this study raised thought-provoking questions for high school graduates to obtain their perspectives on the effectiveness of their 504 accommodations.

## **Data Collection**

After receiving IRB permission from Southeastern University and the school district, a letter requesting permission to conduct an informal interview with graduates with 504 accommodations was given to the principal. After approval was received, a letter was emailed or mailed to the high school graduates requesting their participation in the study. All participants were over the age of 18, and none of the participants had diminished capacity. Before interviews were conducted, participants were given a consent to comply form to sign. Interviews were recorded using a recording and transcribing application on a technology device. The transcribed interviews were sent to the participants for validation

## **Procedures**

### ***Population and Sample***

The participants for this research study were high school graduates who had 504 accommodations during high school. The sample included 4 participants. The concept of purposeful sampling is used in qualitative research, which means that the researcher selects individuals and sites to be studied, because they can inform the study's understanding of the research problem and the central phenomenon (Creswell, 2013). For this study, the researcher used purposeful sampling in exploring the participants' perceptions of effectiveness of their 504 accommodations.

### ***Instrumentation***

In phenomenological research, the phenomenological interview involves an informal, interactive process and uses open-ended comments and questions (Moustakas, 1994). Creswell (2013) recommended the interview protocol and procedures for the researcher to conduct informal interviews. The researcher conducted an informal interview with the participants on

their perception of their academic accommodations and the effectiveness of those accommodations, using the attached interview guide (See Appendix A).

### **Overview of Analyses**

The researcher documented, transcribed, and analyzed each interview while coding open-ended interview questions. According to Moustakas (1994), interview transcripts, notes, poems, artworks, and personal documents may be collected and organized by the investigator into a sequence that tells the story of the research participants.

### **Data Analysis by Research Questions**

Interviews were recorded, transcribed, and validated by each participant. Transcripts were coded according to significant words and phrases. A codebook was created according to the significant words and phrases identified in the transcripts. Through further analysis, themes emerged from codes, as codes were collapsed across transcripts.

### **Limitations**

This study focused on the perceptions of 4 high school graduates with 504 accommodations during their high school years. Another limitation was that all of the participants were high school graduates; the study did not focus on students who did not graduate. Therefore, the findings of this research may not be generalized to all high school students with 504 accommodations.

### **Definition of Key Terms**

- **Accommodation-** An accommodation is an adjustment in the educational environment, resources, and/or methods that do not substantially alter the curriculum content or level of expectation for the success of a student but enables the student to access the educational curriculum (Alabama Schools Section 504, 2019)

- **Physical or mental impairment-** Any physiological disorder or disability, physical disfigurement, or one or more of the following body systems: some neurological or psychological deficiencies, including mental disability; cognitive or behavioral conditions; and mental illness (Alabama Schools Section 504, 2019).
- **The individual with a disability-** A person with a physical or mental disability that significantly restricts one or more of the main activities of life (Alabama Schools Section 504, 2019).
- **Major activities of life –** Means functionalities, including self-care, reading, concentrating, thinking, communicating, walking, seeing, hearing, speaking, breathing, learning, and working are all examples of manual tasks. (Alabama Schools Section 504, 2019).
- **Supplementary/Related Aids and Services-** Usually found in a student's Section 504 Plan. A change in the educational setting, materials, and/or strategies that does not significantly alter the content of the curriculum is referred to as an accommodation. Seating the student in the front of the room, allowing extra time for testing, and providing a student with a highlighted critical text are all examples of accommodations. (Alabama Schools Section 504, 2019).

### **Significance**

This study is important, because it explored the perceptions of high school graduates diagnosed with mental or physical impairments regarding the effectiveness of their 504 accommodations. The results of the study may be useful to administrators, teachers, and parents regarding the effectiveness of 504 accommodations in the high school setting. Using this

information may allow schools to improve accommodations for students with mental and physical limitations to serve students more effectively.

## II. REVIEW OF LITERATURE

### **Purpose Statement**

The purpose of this phenomenological study was to explore the perceptions of high school graduates diagnosed with mental or physical impairments regarding the effectiveness of their 504 academic accommodations. At this stage of the research, the mental or physical impairments are defined as a disability that substantially limits the ability of an individual to perform a major life activity as compared to most people (Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, 2007). ADA Section 504 is a civil rights law that states a student who has an mental and/or physical impairment will receive reasonable accommodations in the educational setting.

### **Eligibility Process**

#### **IDEA and Section 504**

In the United States, children with disabilities have the legal right to free adequate special education programs and related services. State and federal laws allow teachers and school administrators to work with parents to create personalized educational services that address the specific needs of children with disabilities. Federal law has, for nearly forty years, required public schools to provide special education services for all children with disabilities who are eligible to receive them (Individual with Disabilities Education Act 2004). As recent as the 1970s, it was legal to prevent students with disabilities from participating in school. The Virginia

Code (1973), for example, allowed the exclusion of students at school who had physical or mental disabilities. The history of education services for students with disabilities is filled with stories and examples of exclusion and legal denial. As a result of a series of legal decisions and criticism from parents, Congress started examining educational services for students with disabilities (Yell & Bateman, 2017). Also, Congress enacted, and President Gerald Ford signed, the Education for All Handicapped Children (EAHCA) Act. This law, also referred to as Public Law 94-142, is now recognized as IDEA (Yell & Bateman, 2017).

The Individuals with Disabilities Education Act gave rise to increased financial and educational responsibility placed on every public-school system in America (Howell, 2016). The IDEA's FAPE principle stated that, regardless of their mental or physical disabilities, every American student was entitled to a free appropriate public education (Howell, 2016).

The Individual with Disabilities Education Act 2004 mandated that school districts provide the following: *Special education and related services that (1) are provided at public expense, under public supervision and direction, and without charge; (2) meet the standards of the state educational agency; (3) include an appropriate preschool, elementary, or secondary school education in the state involved; and (4) are provided in conformity with the individualized education program.* (Individual with Disabilities Education Act 2004).

One purpose of the IDEA was to ensure that all children with disabilities have a free appropriate public education (FAPE) available to them, including special education and related services to meet students' specific and unique needs to prepare for continuing education, employment and work after school (Alabama Administrative Code, 2013). Therefore, each state must provide free appropriate public education for all children with disabilities between the ages of 3 and 21 and must grant a certain educational benefit to a child with a disability; if a child



with a disability is unable to receive an educational benefit at school, then out-of-school education must be provided (Howell, 2016). According to the 2004 Education Improvement Act for People with Disabilities, the purpose of the full and individual assessment was to determine whether a child is a "child with a disability." To be considered a child with a disability, the student must comply with the two-part eligibility standard (Schultz et al., 2017).

First, to be eligible for special education and related services under the IDEA, a child must be identified as having a disability. A child must meet the federal and state eligibility criteria for at least one of these 13 categories of disabilities:

1. Autism
2. Deaf-Blindness
3. Developmental Delay (young children ages 3-9)
4. Emotional Disability (formerly Emotional Disturbance)
5. Hearing Impairment (including deafness)
6. Mental Disability (formerly Mental Retardation)
7. Multiple Disabilities
8. Orthopedic Impairment
9. Other Health Impairment
10. Specific Learning Disability
11. Speech or Language Impairment
12. Traumatic Brain Injury
13. Visual Impairment (Individual with Disabilities Education Act 2004).

Secondly, the child must need special education because of this disability. Special education means "specially designed education to meet the unique needs of a child with a

disability, at no cost to parents" (Individuals with Disabilities Education Improvement Act 2004). Federal regulations require the services included in the IEPs for students to be based on needs (IDEA, 34. C.F.R. § 300.320). The term "need-based" refers to the recommendation that all of the goals and services included on an IEP be individualized to the needs of each child resulting from the disability of the child (Spiel et al., 2014). To demonstrate that IEPs are necessity-based, IEP teams must include statements of the current academic achievement and functional performance level of the student (Spiel et al., 2014).

As part of the specific learning disability eligibility process, the Individuals with Disabilities Education Improvement Act (2004) requires a pre-referral process by an educational staff before labeling a student as having a specific learning disability (Schultz et al., 2017.). The evaluation staff must verify that under-performance and lack of sufficient progress are not primarily a result of a visual hearing or motor disability, mental disability, emotional outburst, cultural factors, environmental or economic disadvantage, or lack of English skills or opportunities for education (Schultz et al., 2017).

The IEP's purpose is to ensure that each child who has a diagnosed disability has free appropriate access to public education focusing on special education (Alabama Administrative Code, 2013). The IEP describes the current level of academic achievement and functional performance of the student, identifies measurable annual objectives, and lists the types of frequencies and durations of educational services to be provided to meet the needs of the student (Alabama Administrative Code, 2013).

Unlike the IDEA, Section 504 and the ADA offer broader coverage as it applies to all individuals, not just students, who meet the relevant disability definitions of the statutes and because that definition itself is extensive (Raj, 2019). Section 504 was the first federal statute to

ban discrimination against the disabled (Raj, 2019). This segment of the Rehabilitation Act of 1973 reads : "No otherwise qualified handicapped individual...shall, solely by reason of his handicap, be excluded from the participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance" (Section 504 of the Rehabilitation Act of 1973 Regulations). Despite this broad language, Section 504 was largely unenforced and, therefore, proved ineffective in eradicating discrimination based on disability (Raj, 2019). In response, the ADA was enacted in 1990 to provide for a clear and comprehensive national mandate to eliminate discrimination against persons with disabilities (Raj, 2019).

Title II of the ADA was based, to a large extent, on Section 504, with Title II regulations modeled after Section 504 of the regulations. Both act as non-discrimination statutes and bar organizations from discriminating against persons with disabilities for reasons related to their disability (Raj, 2019). Moreover, both laws define disability as (1) "a physical or mental impairment that substantially limits one or more of the major life activities;" (2) having "a record of such impairment;" or (3) "being considered to have such impairment. To clarify and expand the law's definition of disability, Congress passed the 2008 ADA Amendments Act" (Raj, 2019, p. 1850). In practice, the ADA and Section 504 cover more individuals with disabilities than does the IDEA. Students eligible under the IDEA must have a disability that specifically causes them to require special educational services, whereas under the ADA and Section 504 the disability only needs to interfere with a major life activity (Bruce, 2018). In particular, Section 504 is widely used in schools to establish accommodation for Idea ineligible students through the development of "504 plans" (Bruce, 2018).

Unlike the IEP, a 504 plan adheres to the accommodation that the school to which the child attends develops so that the child receives FAPE. A 504 plan's requirements are not as stringent as the IEP, and need not necessarily be written down (Bruce, 2018). The qualification for implementing the 504 is up to the school district. As for the students who meet all the requirements for a Section 504, the school district is taking responsibility for qualification on a three-prong test. Initially, a student must have a record of a physical or mental disability; secondly, a weakness must affect a notable action in life; and thirdly, the hindrance should generously restrict the significant movement in life (Section 504 of the 1973 Rehabilitation Act, 29 U.S.C. 794, 2007).

Several differences exist between the laws of IDEA and Section 504. For example, IDEA's goal is to ensure free and appropriate public education for children with a disability that falls into one of the different categories of disability specified by law. In contrast, Section 504 is a specific civil rights law that requires individuals with disabilities to be given the ability to engage equally with their peers in any organization that receives federal funds. There are differences in the services to be provided in IDEA and Section 504. In addition, services provided by IDEA are primarily intended to include individual supplemental education services and supports. Section 504 requires school personnel to remove barriers that would prevent students from fully participating in the curriculum (Spiel et al., 2014).

Moreover, 504 Plans can contain similar sections, like the ones featured in IEPs, but all of the sections are not required by law. All 504 Plans may describe only the services to be made available to students. The purpose of the 504 plans, however, is to provide student-specific services and to allow children to participate with peers of the same age in public education.

Individualized needs-based targets and services are, therefore, an important aspect of an IEP and a 504 plan (Spiel et al., 2014).

The IDEA is the primary vehicle in schools to protect American children with disabilities, but it is not the only legislation that does so. Special education services are provided to 6.6 million students in the United States, or 13 percent of total public-school enrollment. States receiving federal funding under the IDEA are required to provide a FAPE for students with disabilities. The concept that students with disabilities deserve a quality education in the United States was not always the status quo (Bruce, 2018).

States receiving federal funding under the IDEA are required to provide a FAPE for students with disabilities. Before the IDEA, children with disabilities "were excluded entirely from the public school system and from being educated with their peers;" similarly, "undiagnosed disabilities prevented the children from having a successful educational experience," and "a lack of adequate resources within the public school system forced families to find services outside the public school system" (Bruce, 2018 p.989). These concerns have not completely been eliminated by the IDEA. At the very least, however, IDEA has created a special education system that better protects students with disabilities and, crucially, has provided a mechanism through which parents can demand that their children be adequately served by their public school system. Schools can and do, however, fail their most vulnerable students. The IDEA's procedural safeguards create a roadmap to vindicate the rights of their children with disabilities, parents, and families, but that road map does not lead straight to court. They must exhaust the administrative remedies available under the statute before a parent may file a complaint. Because of the addition of Section 1415 to the IDEA in 1990, claims under the Americans with Disabilities Act (ADA) and Section 504 of the Rehabilitation Act can proceed

without recourse to the IDEA's procedural safeguards. Importantly, under the ADA and the Rehabilitation Act, the kinds of relief available differ from those forms of relief available under the IDEA (Bruce, 2018). This section detailed the IDEA's history and protections, providing an overview of the related provisions and their connection to the IDEA. Also included was a discussion on how *Fry v. Napoleon Community Schools* changed the IDEA complaint assessment landscape.

The Individualized Education Program (IEP) is the core of the IDEA's education delivery framework for children with disabilities (Bruce, 2018). An IEP team, consisting of school and district officials, including the parents of the child, develops the IEP for a child. The team gives at least an annual decision on the necessary accommodations, modifications, and related services that the child needs to receive adequate public education. Services, such as a paraprofessional assistant; time with the school social worker, occupational therapist, physical therapist, or other service providers may include accommodations, modifications, and related services; preferential classroom settings; adaptive technology; and partial-or full-day classroom teaching can be provided. In a document that travels with the child from district to district, the IEP is bound to each school and implements the IEP by law as written (Bruce, 2018). Essentially, the IEP team structure is designed to ensure individualization, with the range of services available to the team being broad. However, certain limiting principles are bound by the team. In particular, the IEP must ensure that each child is in his or her "least restrictive environment" (Bruce, 2018 p.993). That is, with reasonable, appropriate support to the greatest extent possible, a child must be integrated into the general education environment (Bruce, 2018).

Similar functions apply to Title II of the ADA and Section 504 of the Rehabilitation Act. The relevant provision of the ADA provides that "no qualified person with a disability shall be

excluded from participating in, or denied the benefits of, the services, programs or activities of a public entity because of that disability or shall be discriminated against by any such entity” (Bruce, 2018 p.997). Section 504 states that no individual shall be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any program or activity receiving Federal financial assistance solely based on his or her disability. The ADA and Section 504, in practice, cover more individuals with disabilities than the IDEA does. Students eligible under the IDEA must have a disability that specifically causes them to require special education services, while the disability only needs to interfere with a major life activity under the ADA and Section 504, not necessarily educational services. Also, the ADA Amendments Act added the expansive qualifier "the definition of disability" to the ADA. As a result, students with IEPs may often be entitled to coverage under Section 504 and the ADA (Bruce, 2018)

Students with IEPs may also be entitled to coverage under Section 504 and the ADA. However, the reverse is true only if the needs of the student fit under the more confined definition of the IDEA. Consequently, under Section 504 and the ADA, students with IEPs can often be entitled to coverage (Bruce, 2018). Therefore, the reverse is true only if the needs of the student fit under the more confined definition of the IDEA. In particular, Section 504 is widely used in schools to establish accommodation for ineligible students by creating "504 plans" (Bruce, 2018 p.998). Unlike the IEP, the 504 plan commemorates the accommodation that the school of the child undertakes to provide for the child to receive the FAPE (Bruce, 2018). The 504 plan requirements are not as strict as the IEP and do not necessarily have to be in writing.

### **When a Student Does Not Qualify for Accommodations**

The objective of a study by Schultz, Stephens, and Lindt (2017) was to examine the issues faced by the assessment specialists and school psychologists when a student is evaluated

for special education and is identified as "does not qualify" (DNQ). The study explored some of the causes of DNQs. The conclusion provided recommendations for the prevention and response of DNQs when they occur.

When a student struggling to learn is referred for a full and individual assessment to consider special education, the referral is accompanied by an expectation that the student will be eligible for services so that the learning difficulties will be remedied. The student has typically received pre-referral interventions through an intense problem-solving process. Currently, Response to Intervention (RtI) consideration is used for all available support services.

The passage of the No Child Left Behind Act (NCLB) and the Individuals with Disabilities Education Improvement Act (IDEA) has led to significant changes in the way schools deliver education to all students. All schools are required to include students with disabilities in high-level testing, and their teachers are required to be highly qualified. Furthermore, most of the students referred for testing are identified with a disability and receive special education services. If a school has a high-quality special education program, and all parties agree during an individualized education program meeting, the assessment specialist can feel confident about the evaluation (Schultz et al., 2017).

According to Schultz, Stevens, and Lindt (2017), there are three factors identifying common explanations for students who are not eligible for special education. Students may struggle to learn from a variety of factors, but one of the factors could be inadequate instruction. Where the assessment shows that appropriate instruction was provided to the student, then the student is not qualified by statute. No Child Left Behind and individuals with Disabilities Education Improvement Act mandate the use of scientific-based instruction and evidence-based practices. Appropriate instruction may mean systematic, explicit instructional



strategies for students who struggle in mathematics and reading, providing greater opportunities to respond, and being delivered in small groups (Schultz et al., 2017).

Another possible reason for a DNQ is a student's lack of motivation in their courses. Although low student scores may inform teachers of the low ability of a student, the problem may in fact be attributed to the effort required to make adequate progress in the course, rather than a disability. Low motivation in students who exhibit characteristics of learning disabilities is often mistaken for laziness. Reasons that a student may not be motivated to make the effort required is that the course is uninteresting and/or irrelevant to the student. In addition, low motivation could be the learner's conviction that the student's chances of success are unlikely. The low self-efficacy of a student in a specific subject or task influences motivation. In the classroom setting, observable behavior is mistaken for a student who avoids work due to a disability when the reason is actually a motivational issue (Schultz et al., 2017).

The criteria set out in the Individuals with Disabilities Education Improvement Act (2004) require educational staff to consider a set of exclusionary factors before referring to or labeling an individual with a specific nature. As part of the Specific Learning Disability Eligibility Process, the Individuals with Disabilities Education Improvement Act (2004) required that, prior to referral by educational staff or labeling a student as having a specific learning disability, the assessment staff must verify that there is a lack of progress. Parents should have a complete understanding of the process, and school district staff should provide special education services to families. Parents retain the right to an independent education assessment if they disagree with the school assessment (Individuals with Disabilities Education Improvement Act, 2004). Regardless of whether a student is eligible for special education, the full and individual

assessment process should result in a greater understanding of the inherent and external factors that explain performance.

### ***Testing Accommodations for Students with Disabilities***

All students are required to participate in state tests in English language arts (ELA), mathematics, and science in some grades, including students with disabilities. Most students with disabilities participate in state assessments based on the IEP of each student, with or without accommodation. An alternative assessment based on alternate achievement standards (AA-AAS) involves a small number of students with the most severe or profound mental disabilities. The AA-MAS aimed to enhance the accessibility of state tests for students with persistent academic difficulties who showed difficulties in accessing and demonstrating their knowledge, skills, and abilities with grade-level content standards. Strategies for improving access included a change in the test and item specifications, as well as a change in the performance standards. The AA-MAS's design varied from one state to the next. Some of the more common differences between the standard state accountability tests and the AA-MAS included additional graphics, the lack of a distractor response option. Also, the three response choices instead of four, fewer overall or fewer items per page, shorter passages, simplified language, and visual emphasis on keywords (Jamgochian & Ketterlin-Geller, 2015).

The appropriateness of this assessment process has raised concerns. The former United States Education Secretary Arne Duncan argued that "allowing students with disabilities to gauge their achievements in line with changing performance standards will prevent them from achieving all their potential and prevent them from using that potential for our country " (Jamgochian & Ketterlin-Geller, 2015, p.29). Since students who have previously participated in the AA-MAS are now required to take non-modified state assessments aligned with the standards

of college and career readiness, other means are needed to improve the accessibility of state tests (Jamgochian & Ketterlin-Geller, 2015). Research evidence is accumulating that supports the use of test accommodations for students with disabilities to improve the accessibility of state evaluations.

The purpose of test accommodation is the same as the AA-MAS, to provide relevant inferences on the information, qualifications, and skills of students through the enhancement of the usability of tests. Test accommodations are adjustments to the way information is presented, the way students respond, the setting of the administration of the test, or the timing of implementation, but do not alter the expectations of content or performance. Instead of changing the significance or interpretation of the test scores, test accommodations should lessen the impact of characteristics of tests that are non-relevant to the construction and act as access barriers. The objective of test accommodation is the same as the objective of the AA-MAS, to make valid conclusions about the knowledge and skills of students through improved accessibility of the tests (Jamgochian & Ketterlin-Geller, 2015).

In test circumstances, access barriers include material or environment characteristics that effectively prohibit students from displaying their expertise, abilities, and skills without any relation to the construct being tested. Examples of access barriers may include (a) insufficient visual clarity (low contrast, image quality, and font size/style), (b) lack of audio support or poor audio quality, (c) unreasonably complex language, (d) inadequate or non-physical support, and (e) anxiety and fatigue testing. When proper accommodations are assigned, student access to the tests should increase, and student scores should be improved. To see a differing boost, there are two expectation outcomes: a) the test scores for students with disabilities are higher when the accommodation is provided, than if they are not provided, and b) their peers with disabilities do

not receive increased test scores (Jamgochian & Ketterlin-Geller, 2015). Observing both results provides evidence that the accommodation reduced the barrier to access and did not provide an unfair benefit, but instead, created a level playing field for students with disabilities.

As accommodations' research methods become better and more rigorous, more conclusions about the efficacy of accommodations can be produced. Until then, IEP team members need to integrate the existing research evidence and available resources into their professional knowledge, such as state testing guidelines for accommodation and IEP computer-based programs to provide accommodations for students with continuing academic difficulties. To support the efforts of IEP teams identifying accommodations that will increase the accessibility of state tests, there needs to be a process for the utilization of accommodations. A clear understanding of the state accommodation policies features of the test and test situation and the personal characteristics of the student are important to the process of allocating accommodations. By considering how these three components interact, IEP teams can determine which accommodation is allowable to mediate negative interactions between the individual features and characteristics of testing, which creates obstacles to precise measurement (Jamgochian & Ketterlin-Geller, 2015).

The process of decision-making to identify suitable accommodations is as follows: first, identify the personal characteristics of the student, including strengths and areas of weakness; second, based on the student's characteristics and features of the tests and testing situations, identify possible access barriers; third, choose accommodations that mediate the adverse interaction between the personal characteristics of the student and the characteristics of the tests and testing situations (Jamgochian & Ketterlin-Geller, 2015). These accommodations should

promote the access of the student to the tested structure and lead to an accurate measurement of the knowledge, skills, and abilities of the student.

Finally, the effectiveness of accommodation is assessed by gathering and analyzing student performance data with and without accommodation. This practice allows IEP teams to recognize the accommodations that students with continuing academic problems can require for standardized tests. In this process, district and classroom tests should also be considered. The implications of this study demonstrated competence in grade-level content standards through the AA-MAS. Under the AA-MAS, students who have previously demonstrated competence in grade-level content standards through the AA-MAS under the "2% rule" of the Title I regulations will have to gain access to state tests through other means. Given these regulations, IEP teams are responsible for implementing suitable test accommodations that take into account the personal characteristics of students to effectively alleviate access barriers in evaluations. Accommodations also support student learning, when used during instruction, by increasing the accessibility of instruction and the learning environment (Jamgochian & Ketterlin-Geller, 2015).

The objective of the Jamgochian & Ketterlin-Geller (2015) research was to support IEP accommodation assignments by providing a structured process, (a) to identify personal characteristics of students, (b) to identify access barriers in the testing and testing situations in which the student will participate, and (c) to select an accommodation to mediate those access barriers. By following these steps, students should be able to demonstrate, with appropriate support, their knowledge, skills, and abilities on state, district, and classroom assessments and tests (Jamgochian & Ketterlin-Geller, 2015).

### **Other IEP and 504 Accommodations**

In a study evaluating the degree to which IEPs and 504 plans conformed to best practices and evidenced based services, Spiel, Evans, and Langberg (2014) examined IEPs and 504 plans for 97 middle school students diagnosed with ADHD. Of these 97 students, 61.9% had an IEP, and 38.1% had 504 accommodations. The IEPs and 504s were coded using the cut and sort technique, and labels of “present level of academic achievement and functional performance” (PLAAFP) and “measurable annual goals and objectives” (MAGO) were coded with each IEP (Spiel et al., 2014, p.456). The results of the coding included 10 areas of academic and behavioral deficits. These deficit areas included mathematics, off-task behavior, reading comprehension, written language, and assignment completion. Also included were organization, social skills with peers, compliance, reading fluency, verbal communication, and cumulative areas of academic and nonacademic deficits.

Accommodations and modifications from the IEPs, and services listed in the 504 plans, were also coded. Both academic and nonacademic concerns were calculated. Similarities and differences were analyzed using a one-way analysis of variance and chi-squared analysis. The results included 18 service categories identified in the literature and supported by the department of education. IEP coding results indicated that 90.0% of participants with IEPs had PLAAFPs with academic concerns, and 84.8% had PLAAFPs with nonacademic or behavior concerns. Most of the participants with IEPs had at least one goal to address academic functioning. The t-test and chi-squared analysis revealed that students with IEPs performed significantly worse on measures of ability in reading, mathematics, and overall cognition than students with 504 plans (Spiel et al., 2014).

The results of this study raise questions about the services and the adherence to research-based practices. For example, even though behavior was an area designated for needing

improvement for the majority of students, nearly half of the IEPs did not have goals for improving behaviors. The researchers suggested that academic and cognitive limitations determined most of the services students received. Another result reflected that 3 of the top 10 services (i.e., test aids, breaks, and study support) did not have a research-base for support. The authors concluded that policies and guidelines may need to be altered to reflect current practices (Spiel et al., 2014).

In the case of *Endrew vs. Douglas County Schools*, Endrew aka “Drew,” was diagnosed with autism and hyperactivity deficit attention disorder. In Douglas County, Colorado, Drew attended schools from preschool through fourth grade in Colorado and had an IEP that gave him accommodations consisting of positive behavioral intervention and services, as well as other strategies. He had a very difficult year in fourth grade. His parents rejected Drew's IEP, claiming that he had not made any significant progress, and that the IEP for fifth grade was essentially the same one offered to Drew in fourth grade. Drew’s parents decided it would be beneficial for Drew to be placed in the Firefly Autism House, a special school for students with autism. At his new school, Drew made academic, social, and behavioral progress. Drew's parents filed for a due process hearing, in which they argued that FAPE had not been provided by the Douglas County School District; thus, they requested reimbursement for tuition and related expenses for the placement of Drew's private school (Yell & Bateman, 2017).

The impartial hearing officer who presided over the due process hearing relied on the *Rowley* decision (1975), holding that only an IEP that provided a student with some educational benefit to confer FAPE needed to be developed and implemented by a school district (Yell & Bateman, 2017). The hearing officer found that Drew had received some academic benefit from the district and thus FAPE was founded. The district also pointed to a 1982 decision of the

Supreme Court, *Board of Education v. Rowley* (1975), which held that schools should only provide children with disabilities with some educational benefit. The school district complied with the law for as long as an IEP reasonably allowed the student to receive educational benefits. Therefore, the district argued, anything more than a trivial advantage was sufficient.

In reaction, the parents filed a suit in the U.S. The Appeals Court for the Tenth Circuit District Court, which upheld the decision of the hearing officer, found that Drew had made at least minimal progress while enrolled in public school, which was all IDEA required. Then Drew's parents appealed to the U.S. Court of Appeal for the Tenth Circuit. Drew's parents argued that the hearing officer and the district court had failed. According to Yell and Bateman (2017), Drew's parents and the school district, committed several procedural violations. The parents of Drew also claimed that the school district committed two substantive violations. First, the school district failed to Provide FAPE because all the recent IEPs for Drew were substantially the same, and he had not made any progress towards his objectives and goals. Second, Drew's parents claimed that the hearing officer and the district court had erred, because they had not considered that Drew's IEPs had not addressed his escalating behavioral issues. The court found Drew's IEPs gave some educational value and that both the hearing officer and the district court had proof that Drew made some improvement on previous IEPs to show that his IEP in 5th grade was satisfactory (Yell & Bateman, 2017).

The opinion of the circuit court noted that this case was a "close call, but we find there is reasonable evidence of Drew's past success to find that, under our prevailing norm, the IEP rejected by the parents were substantially adequate" (Yell & Bateman, 2017 p.11 ). In short, although Drew was thriving at the Firefly Autism House, the circuit court held that the Douglas County School District was not responsible for tuition reimbursement, because while he was in



the district, Drew had made some educational progress (Yell & Bateman, 2017). In response, the parents of Drew appealed to the United States Supreme Court. The question submitted to the Court was, "What is the level of educational benefit that school districts must give to children with disabilities to provide them with the Individuals with Disabilities Education Act free appropriate public education" (Yell & Bateman, 2017 p.11). On September 29, 2016, the Supreme Court announced it would hear the case.

In a unanimous decision of eight judges in favor of Endrew F., delivered by Chief Justice John Roberts, the Court held that a school must offer an IEP that is reasonably computed to enable the child to make appropriate progress in the circumstances of the child. The Endrew F. decision highlighted the central role of parents of students in the development of special education programming. Justice Roberts noted that the IEP process is informed not only by the expertise of the school staff, but also by the input of the parents of the student. The decision also confirmed that school staff and parents must work together on the development of the student's IEP and that judicial deference depended on the school staff providing the student's parents with input on issues, such as the required degree of progress that the student's IEP should pursue (Yell & Bateman, 2017).

The implications of Endrew vs. Douglas County included the following, (1) The IEP is the cornerstone of the student's education program and the blueprint for the FAPE; (2) School staff must adhere to IDEA procedures when developing IEPs for students; (3) parents play an important role in their child's education, are members of a vital team, and must be involved in meaningful learning in a way to develop the IEP of their child; (4) assessments must be relevant, meaningful, and addressed to all needs of the student; (5) the objectives of the annual IEP should be ambitious, challenging, measurable, and measured; (6) the programming of special education

must be designed to allow a student to make adequate progress in light of the circumstances of the student and must be specified in an IEP of a student; (7) school staff must monitor student progress in a systematic way and report student progress to their parents regularly; (8) involved parties must make educational changes when information indicates that a student is not advancing toward his or her goals; (9) it is the responsibility of the professionals to justify the decisions they make on the student's IEP regarding his or her progress (Yell & Bateman, 2017). These tenets of the law give all stakeholders a checklist for proper IEP construction. Therefore, the student is the beneficiary of FAPE.

### **Adverse Childhood Experiences and Accommodations**

Raj (2019) explored Adverse Childhood Experiences (ACEs) that children face outside the school, and the challenges of learning that they face in school due to these traumatic events. Advocates argue that children from impoverished and crime-ridden neighborhoods, because of where they live, have disabilities that entitle them to system-wide school remedies under federal law. First, advocates should use the school obligations of individual students impacted by ACEs to force schools to adopt more effective early identification processes. Schools should not assume that all children have a disability but should identify those who may have experienced ACEs. Second, federal and state legislation should provide targeted grants to schools serving a high percentage of students affected by ACEs. This approach would address the unmet needs of students while at the same time guarding against over-inclusion.

In public schools, there are three laws governing education for students with disabilities: IDEA (Individuals with Disabilities Education Act), Section 504 of the 1973 Rehabilitation Act, and Title II of the American Disability Act (ADA) (Raj, 2019). There are some differences, though the laws certainly interact with each other. The IDEA only applies to children and

provides students with disabilities the most affirmative rights in schools. In a variety of public environments and public schools, Section 504 and ADA are broader laws against discrimination, that protects all qualifying people with disabilities. Section 504 and the ADA are often seen as protecting negative rights, as they promise the right to be non-discriminatory, but they also contain important affirmative rights for students with disabilities, including, when necessary, access to accommodations and special education (Raj, 2019).

The IDEA functions much like a contract, where the federal government promises to fund schools that agree to comply with the law for the support for students with disabilities. A child must meet the statute of *child with disabilities* to qualify for IDEA services; that means a child must be categorized in one of the 13 disability classes delineated in IDEA. Disability must negatively impact the student's education, and the student must, therefore, need special education and related services to succeed (Raj, 2019).

The categories of disability of IDEA, rather than medical, are legal and not without controversial definitions. The IDEA has the goal of providing special education and related services to all children with disabilities designed to meet their 'unique' needs. Once a child fulfills the statutory definition for a *child with disabilities*, they have the right to a FAPE. For students who comply with the law's concept of *child with disabilities*, IDEA explicitly offers essential substantive and procedural protections, and the probability of a child with ACEs to fulfill this concept depends largely on the circumstances of the particular child (Raj, 2019)

Unlike the IDEA, Section 504 and the ADA covers all people, not only students who fulfill the definitions of disability, because the definitions of Section 504 and the ADA are expansive. The first federal statute to ban discrimination against people with disabilities was

Section 504. In response, in 1990, the ADA was enacted "to establish a clear and comprehensive national mandate to remove discrimination against disabled people" (Raj, 2019 p. 1850).

In 1991, Title II was enacted. Title II of the ADA was largely based on section 504, and the rules of Title II were based on ADA. The provision of Section 504 is limited to any program and/or activity receiving federal funds, with Title II extending that prohibition to all public organizations. Title II law pertains to all organizations, with the provisions on discrimination of persons with disabilities. Both statutes are, therefore, applicable to public schools. Also, both laws describe invalidity as: (1), "physical and mental impairment, significantly limiting one or more major life activities;" (2) "having a record of such impairment;" (3) "being regarded as having such an impairment" (Raj, 2019 p.1850). Congress passed the 2008 ADA Amendments Act to clarify and broaden the definition of disability in this legislation (Raj, 2019).

Therefore, under Section 504 and ADA, the definition of disability is significantly broader than under the IDEA and, therefore, a child eligible for IDEA services is normally qualified for services under either Section 504 of Title II of the ADA. Section 504 and the ADA both give students in public schools important affirmative rights. Like IDEA, they require schools to discover children with disabilities who need special education or related services, to ensure FAPE. Nevertheless, the obligations of both children and the FAPE differ from the ones set out in the IDEA. Section 504, for example, defines the FAPE as equal access to education. The IDEA's FAPE standard is not based on equal access but rather calibrated to the potential of each student, mandating individualized education programs (IEPs) designed to ensure progress towards highly individualized goals (Raj, 2019).

However, children eligible to receive education under IDEA and Section 504 of the ADA can exercise their rights to guarantee their access to education. In the case of the IDEA, students

with disabilities have the right to a substantial level of education, which allows their skills to make reasonable progress. Section 504, and the ADA, grant students with disabilities the right, to equal education, in line with their non-disabled peers. Each law also enables students to invoke these safeguards through the appropriate procedures of the process. The law gives students with disabilities the right to challenge their eligibility, placement, services, or special education placement. (Raj, 2019).

Advocates should be commended for clarifying these inequities and trying to bring immediate remedies to students affected by ACEs. There is no doubt that the impacts of such disadvantages are significant for students impacted by poverty, community violence, instability, and other ACEs (Raj, 2019). While disability laws can protect students affected by the ACEs, class action cases seeking systemic solutions based on the theory that disability is more common in some areas, fail to recognize the limitations of legislation. While disability laws can protect students affected by ACEs, both the ADA and Section 504 require that schools provide meaningful access to education, but that obligation is inextricably linked to the ability of a student to gain access to statutory safeguards, establishing his status and disability-based needs as a qualified person with a disability (Raj, 2019).

Advocates should use the power of viable claims of universal screenings for ACEs by individual students to push schools to implement support. The screening will identify the children who have been affected by Adverse Childhood Experiences and will be the custodian for the services that these students so desperately need. Schools are obligated to target services to individual needs with their knowledge of disabilities. Advocates should also channel awareness among ACEs of the grassroots momentum for targeted funds in the federal and state lobbying bodies (Raj, 2019). These funds could be used to implement school-wide programs that do not

involve determining disability, preventing the potential for disability over-identification of students. Legislative reform is never easy, but it is undeniable that science is demonstrating the effects of ACEs.

### **Theoretical Framework**

Students with disabilities are divided into two groups: (a) those with individualized education plans (IEPs) who are eligible under both the Individuals with Disabilities Education Act and Section 504, and (b) those with 504 plans eligible under Section 504 only (Zirkel & Weathers 2014). Students with 504 plans, who are eligible under Section 504, with only physical and psychological impairments, need special accommodations as a safeguard (Befort, 2010). Eligibility under Section 504 requires a mental or physical impairment that significantly limits one or more major life activities. This scope of eligibility is generally understood to be broader than the definition of disability under the IDEA (Zirkel & Weathers 2014).

Russian psychologist, Lev Vygotsky's Theory of Social Development (1978) is the primary basis for Constructivism. The theory of social constructivism supports and enhances language, mental, and social development through social interactions. Vygotsky (1978) described social constructivism in two phases, social and internal. First, learning awakens a variety of developmental processes that can only operate when the child interacts with others in his or her environment and collaboration with peers. These processes are then internalized and become part of the child's independent developmental achievement (Karahana & Roehri, 2015). Jiang and Perkins (2013) embraced the constructivism theory of teaching and learning as a part of the accountability process in schools. Radical constructivism is the idea that all learning must be constructed (Gash, 2014).

Constructivism, as a philosophy of learning, acknowledges the relations between the students' knowledge, purpose, and learning. A constructivist approach to learning is defined by three main principles. First, learners build knowledge of their previous knowledge. As such, learning is based on opportunities for learners to become critical thinkers, problem solvers, and decision-makers. Second, learning is an active process. This effective method helps learners to understand the importance of previous interactions and to adapt new insight to genuine opportunities. Third, knowledge is socially built. To develop a deep, holistic, meaningful, well-connected understanding of content, learners become intentional and interactive participants in content among themselves (Neutzing et.al, 2020).

The learners develop knowledge based on their prior knowledge. As such, learning is found within learners' opportunities to become critical thinkers and decision-makers (Neutzing et.al, 2020). The constructivism theory was used to guide the present study, because learning is acquired by building new knowledge on prior knowledge. Effective methods of instruction enable students with learning disabilities to succeed and achieve academically. Using the constructivism model with learners with disabilities provides the students with the best educational opportunities (Rose, 2019).

In a constructivist model, learning takes place when learners participate actively in a process of building context and understanding, as opposed to passively receiving information (Xin et.al, 2014). Xin et al. (2014) suggested that constructivist-oriented learning theory encourages inquiry-based educational environments in which the learners take an active role in their efforts to make sense of learning materials. In meeting Common Core Standards, educational strategies and approaches that benefit all students, particularly students with learning disabilities need to be evaluated.

### III. METHODOLOGY

The purpose of this phenomenological study was to explore the perceptions of high school graduates diagnosed with mental or physical impairments regarding the effectiveness of their 504 academic accommodations. At this stage of the research, the mental or physical impairments were defined as a disability that substantially limits the ability of an individual to perform a major life activity as compared to most people (Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, 2007). ADA Section 504 is a civil rights law that states a student who has an mental and/or physical impairment will receive reasonable accommodations in the educational setting.

#### **Description of Research Design**

This study used the approach of transcendental phenomenology. According to Moustakas (1994), “The transcendental approach to phenomenology includes controlled and organized attempts to eliminate assumptions regarding the phenomena under investigation” (p. 22). In the transcendental process, the methodology study is free from preconceptions, beliefs, and knowledge of the phenomenon from prior experience (Moustakas, 1994). The qualitative researcher sets aside assumptions or biases on a specific topic to enable an unbiased investigation (Padilla- Diaz, 2015). Creswell (2013) stated the idea of epoche (bracketing) by Moustakas and Husserl is used by the investigator to set aside personal perspectives to incorporate a fresh viewpoint on the phenomena under investigation. “Epoche” is a Greek word meaning, “to *refrain*



*from judgment, to abstain from, or to remain away from, everyday perception”* (Moustakas, 1994, p. 33). As an administrator, by organizing, analyzing, and synthesizing data from informal interviews, the focus of this study raises thought-provoking questions for high school graduates individually to obtain their perspectives on the effectiveness of their 504 and/or IEP accommodations.

### **Participants**

The participants for this research study were four high school graduates with 504 accommodations. The concept of purposeful sampling is used in qualitative research, which means that the researcher selects individuals and sites to be studied, because they can inform the study's understanding of the research problem and the central phenomenon (Creswell, 2013). For this study, the researcher used the purposeful sampling approach in exploring the effectiveness and perceptions of their 504 accommodations. See the results below in Table 1.

**Table 1** *Participants*

Name	IEP/504	Diagnosis	Type of Diploma	Accommodations
Participant 1	504	Type 1 Diabetic	Regular	Extended time Excused absences
Participant 2	504	Type 1 Diabetic Stroke	Regular	Extended time Excused absences
Participants 3	504	Cardiomyolethopy	Regular	Extended time Unlimited excused absences Leave classes 5 minutes early
Participants 4	504	PTSD and Anxiety	Regular	Extended time Unlimited excused absences Quiet Testing Accommodations

## **Role of Researcher**

The researcher was an administrator in a public high school in the South. In his role as administrator, he served in an urban setting and in a rural setting. As an administrator, he served Title I populations in three different schools in one school district. The Title 1 designation provides additional funding for schools with economically disadvantaged students. His position at the time of the study was administrative, in which the school was not designated as Title I. The ESE population of the high school was approximately 5%. Within the role as administrator, the researcher was also the 504 accommodations plan liaison. Prior to serving in public school administration, the researcher taught middle school social studies in a Title I school.

Researchers implementing the transcendental approach to phenomenology need to ensure that their investigations are free from bias by using the epoche process (Moustakas, 1994). Further, Creswell (2018) described the process of epoche as bracketing, during which the researcher suspends their connections to the investigation to cultivate fresh engagement to the study. The researcher of this study bracketed experiences as the ESE liaison to limit the bias. However, having experiences with high school students with 504 accommodations had contributed to the inquisitive reflection which instigated the study.

## **Measures for Ethical Protection**

After Southeastern University's Institutional Review Board approved this study, the researcher received permission from the school district to proceed with the study. All participants consented to participate voluntarily (see Appendix A). This study did not have any potential risks to the participants. In addition, all participants were protected by using pseudonyms, ensuring that no personally identifiable information was included in the study. Further, all data is stored on

a password protected computer in a locked office. The data will be permanently deleted after three years.

### **Research Questions**

What are the perceptions of high school graduates diagnosed with mental or physical impairments concerning the efficacy of their 504 accommodations?

### **Data Collection**

#### **Instrument Used in Data Collection**

In phenomenological research, the phenomenological interview involves an informal, interactive process and uses open-ended comments and questions (Moustakas, 1994). Creswell (2018) recommended the interview protocol and procedures for the researcher to conduct were informal interviews. The researcher conducted informal interviews with the participants regarding their perception of their academic accommodations and the effectiveness of those accommodations, using the attached interview guide (See Appendix B).

#### **Procedures**

The procedures of data collection and analysis for this study followed the processes for a phenomenological study as explained by Moustakas (1994). In collaboration with the dissertation committee, the interview protocol (see Appendix B) was developed to reflect the purpose of the study and the research question. Upon approval from the University's Institutional Review Board, the district's Ethical Review Board also approved the study. After receiving both approvals, potential participants were contacted by email or telephone. Six potential participants responded to the request, and of the six respondents, four participants participated in interviews. All interviews were conducted face-to-face in a convenient location for the participants. At the start of each interview, the purpose of the study and the adult consent form (see Appendix A)

was presented, and all participants signed the consent form, demonstrating their willingness to participate in the study.

Each interview was recorded and transcribed using the application Otter AI. After reviewing the transcripts and revising for accuracy, the transcripts were sent to the participants for validation. After the transcripts were validated, the data were saved on a password protected computer in a locked office. All data will be permanently deleted after three years.

### **Methods to Address Assumptions of Generalizability**

The phenomenological framework to qualitative research includes a structured plan for collecting and analyzing. Phenomenological research focuses on understanding reality by identifying themes in the data based on the perceptions, emotions, and opinions of study participants to understand the phenomenon (Creswell & Poth, 2018). Therefore, the findings of some qualitative studies may not be generalizable to other populations.

### **Data Analysis**

#### **Research Question**

What are the perceptions of high school graduates diagnosed with physical or mental impairments regarding their academic accommodations?

According to Moustakas (1994), data analysis begins with the transcription of the interview, as the researcher begins becoming familiar with the data. As the researcher read and reread each transcript, coding significant words and phrases that reflected the lived experiences of students with 504 accommodations was the first step. To organize the data, the researcher created a codebook with all the highlighted words and phrases. Each code was assigned a name, reflecting the essence of the meaning. With each coding pass, codes collapsed into themes which were derivative of the lived experiences of the participants (Saldaña & Omasta, 2016).

## Summary

The transcendental phenomenological approach is less focused on the researcher's interpretations and more on describing the participants' experiences, according to Creswell (2013). Following a transcendental phenomenological approach, the researcher is engaged in a disciplined and systematic attempt to set aside prejudices about the phenomenon under investigation, known as the epoche process (Moustakas, 1994, p. 22). The concept of epoche is known as the bracketing process. The bracketing process is when, as much as possible, the investigator puts aside his or her experiences to take a new perspective on the phenomenon under review (Creswell, 2013). The epoche perspective launches the study as far as possible, free from previous experience and professional studies of preconceptions, beliefs, and knowledge of the phenomenon (Moustakas, 1994, p. 22). The researcher of this study adhered to the methodological process of the protocol in the transcendental phenomenological process of being fully open, receptive, and naive in listening to and actively hearing the participants of the researcher describe their experience of the phenomenon being investigated.

Participants for this study contributed to this study by answering open-ended questions from an interview guide. All participants validated their transcripts. The interview procedure was performed by the researcher in conjunction with the invited participants and followed an ethical protocol. In the course of the in-depth data analysis, the interviews were coded, and common themes were extracted. Chapter IV will discuss the analyses of the data.

## IV. RESULTS

The purpose of this phenomenological study was to explore the perceptions of high school graduates diagnosed with mental or physical impairments regarding the effectiveness of their 504 academic accommodations. At this stage of the research, the mental or physical impairments are defined as a disability that substantially limits the ability of an individual to perform a major life activity as compared to most people (Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, 2007). ADA Section 504 is a civil rights law that states a student who has a mental and/or physical impairment will receive reasonable accommodations in the educational setting.

### **Methods of Data Collection**

In phenomenological research, the phenomenological interview involves an informal, interactive process, which uses open-ended comments and questions (Moustakas, 1994). Creswell (2018) recommended the interview protocol and procedures for the researcher to conduct informal interviews. The researcher conducted informal interviews with the participants regarding their perception of their academic accommodations and the effectiveness of those accommodations using the attached interview guide (See Appendix B).

The procedures of data collection and analysis for this study followed the processes for a phenomenological study as explained by Moustakas (1994). In collaboration with the dissertation committee, the interview protocol (see Appendix B) was developed to reflect the purpose of the

study and the research question. Upon approval from the University's Institutional Review Board, the district's Ethical Review Board also approved the study. After receiving both approvals, potential participants were contacted by email or telephone. Six potential participants responded to the request, and of the six respondents, four participants completed the interviews. All interviews were conducted face-to-face in a convenient location for the participants. At the start of each interview, the consent form describing the purpose of the student and the adult (see Appendix A) was presented, and all participants signed the consent form, demonstrating their willingness to participate in the study.

## **Participants**

### **Participant 1**

Participant 1's personal character was as impressive as her academic and athletic achievements. This participant was not only a born leader and a hard worker, but also a kind-hearted and sympathetic student. Moreover, she strives to make a positive impact on the world around her. Participant 1 refused to allow her diabetes diagnosis to deter her from becoming a successful student academically and athletically. This student's unwavering enthusiasm and empathic personality were a joy for her teachers and fellow students alike.

Participant 1 was grateful that her 504 accommodations allowed her to have extra time to complete her assignments. Because Participant 1 was constantly checking her blood sugar level to see if her blood sugar was within the normal desired range, every time she left her classroom to visit the school nurse, valuable instruction time was lost for her. Participant 1's accommodations allowed her to make-up work and to have extra time for class assignments. The 504 extended time accommodation fostered a sense of comfort for her to remove the stress of incomplete work from her class assignments. Participant 1's diabetes diagnosis did not allow her

to feel sorry for herself. However, her character proved to exhibit resilience, positivity, and humbleness.

### **Participant 2**

Participant 2 was a young man who was very energetic, kind, and humble in high school. Participant 2 was a capable young man who, when he set his mind to a task, excelled beyond expectation. He was an honor student who also exhibited strong characteristics of citizenship and leadership. Participant 2 made exceptional contributions to the school community. He was involved in the JROTC and Project Lead Way Program, part of the Science, Technology, Engineering, and Mathematics program at the school. Participant 2 planned to study constructional engineering in college. He wanted to construct and build skyscrapers. In his junior high school year, Participant 2 experienced a life-threatening stroke. Through these challenging situations, Participant 2 demonstrated strength and resilience. The difficulties this student faced made him a diligent, insightful, and humble student.

Furthermore, Participant 2 strongly believed that his 504 accommodations benefited him despite his diagnosis of diabetes and life-threatening stroke. Instructional and extended class assignments were an integral part of his 504 accommodations. The extended time allowed Participant 2 to complete all his assignments. The 504 Committee, Byron's parents, teachers, and the Assistant Principal all unanimously decided to give him unlimited time to complete all his assignments without any penalty for fear of academic failure. Additionally, Participant 2 was a goal-driven and dedicated to completing all of his academics.

### **Participant 3**

Participant 3 was a 2019 high school graduate. Participant 3 was a well-behaved and respectful young man who interacted well with peers and adults. He had a good sense of ethics



and tenacity in adhering to his high standards when dealing with friends. Participant 3 was a vocalist and saxophonist. He also served on the praise teams of his church. Additionally, Participant 3 loved the outdoors, walking with his dogs, playing with his sisters, and visiting his grandparents. This participant was always humble and happy, and he greeted everyone with an infectious smile. Participant 3 forgave others who were not always at their best.

Participant 3 was diagnosed with hypertrophic cardiomyopathy (HCM) when he was a child. This condition created a need for a 504. Participant 3 was subjected to an AICD (defibrillator) operation to protect him from abnormal heart rhythms. In addition, Participant 3's pediatric cardiologist said he could not participate in PE activities or other competitive or leisure activities in which he could suffer trauma to the defibrillator. He was, however, cleared to join the marching band. As a result, several relevant accommodations were observed and noted in his 504 plan. First, Participant 3 needed to remain well-hydrated to avoid dehydration which might worsen his condition. In addition, during the school day, Participant 3 could take the water bottle to class, if needed. Five minutes before the student bell transition and/or five minutes after the transition bell, Participant 3 was permitted to leave class. In addition, this student had unlimited absences at school for illness and visits to the doctor. In addition, all of Participant 3's assignments were to be completed within two days of the due date for an extended time agreed by the 504 committee.

Participant 3 was a young man with strong leadership skills; he was also skilled in self-advocacy. In addition, Participant 3 was firmly committed to his learning and promoted academic excellence. He further believed that the stress, anxiety, and depression he suffered were addressed because of his 504 accommodations. Participant 3 did not consider his 504 as a way

out of not fulfilling his class tasks promptly. He was, however, grateful for the empathy from his teachers in regard to his academic, emotional, and physiological needs.

#### **Participant 4**

Participant 4 was the daughter of missionaries and grew up in Johannesburg from the age of 4. When she was 7 years old, she was with her family when they experienced an attempted kidnapping at gunpoint. Neither Participant 4 nor her siblings were physically harmed, but six weeks after the attempted kidnapping, she was diagnosed with Post-Traumatic Stress Disorder (PTSD) and anxiety. Subsequently, Participant 4 experienced recurrent nightmares for approximately 10 years, which impeded her ability to sleep for fear of reliving the traumatic event.

Participant 4 and her family came back to the United States shortly after the traumatic event, and she was enrolled in school. Seemingly adjusting to her new culture, Participant 4 excelled in academics and athletics. In 10<sup>th</sup> grade, Participant 4 had a volleyball coach whose personality was aggressive during games. Her symptoms of PTSD were exacerbated during this time, and her parents met with the school's guidance counselor. With the appropriate documentation, a 504 plan with accommodations was developed. Participant 4 had extra time for assignments, and she was allowed to take tests in a quiet room. In addition, when symptoms were severe, Participant 4 was allowed to miss first period, going home after fourth period. Participant 4 was considered "hospital homebound" for two semesters of high school.

Participant 4's 504 plan gave her the ability to complete her high school diploma. She has subsequently earned a Bachelor of Science degree in criminal justice. Participant 4 participated in this study to speak out on behalf of students struggling with mental illness.

## Findings by Research Question

### Research Question

What were the perceptions of high school graduates diagnosed with mental or physical impairments regarding the efficacy of their academic accommodations?

#### *Participant 1*

Participant 1 had a medical diagnosis of Type 1 diabetes and had 504 plan accommodations all four years of high school. Participant 1's accommodations allowed her to have extended time for missed assignments, unlimited missed school days to accommodate her medical appointments, unlimited check-ins and check-outs due to numerous doctor's appointments; further, Participant 1 was allowed to leave class to see the school nurse to check blood sugar levels. Participant 1 said, "Well, I knew that at any time if I were to miss school because of a doctor's appointment, it will never count against me because of course, they know where I'm at. If I know I'm feeling low, I know I can always tell the teacher and she'll give me time to take my medicine." Participant 1 was grateful that her teachers, school administration, and school nurse supported her accommodations that facilitated her academic success. Participant 1's 504 plan accommodations assisted her in becoming a scholar-athlete.

#### *Participant 2*

Despite his diagnosis of diabetes and life-threatening stroke, Participant 2 firmly believed his 504 accommodations helped him. Of his 504 accommodations, instructional and extended class assignments were a primary part of his 504 accommodations. The extended time allowed all his assignments to be completed. Participant 2 said:

I've had a bunch of doctor's appointments, multiple ones in a week or multiple ones just throughout a first semester or second semester that you know if there's a project due or a

project coming up or we're working on it in class, maybe I have to go to my doctor's appointments. And it was mainly, all the doctor's appointments that I've had just trying to catch back up from remain and all honors classes may have a bunch of doctor's appointments, it's a lot of work to catch back up on.

On his statewide high stakes test, Participant 2 was allowed to have an extended time.

Participant 2 said, "My teachers and school administration encouraged me not to give up on myself and academics," and that, "The teachers were willing to come before school and after school to help me." Participant 2 believed that he was able to successfully graduate high school because of his academic accommodations.

### ***Participant 3***

Participant 3 was diagnosed with hypertrophic cardiomyopathy (HCM) and received 504 plan accommodations all four years of high school. Participant 3 was permitted to take a water bottle to class to stay hydrated. Participant 3 was permitted to leave class five minutes before the transition bell and/or five minutes after the transition bell to allow for his protection from accidental bumping through crowded hallways. Additionally, for doctor's appointments Participant 3 had unlimited check-ins and outs, including unlimited school absences. Regarding Participant 3's accommodations, he said, "Most of them helped me" to be academically successful. Participant 3 further indicated that the accommodations were successful because of the effective implementation by his teachers and administration. Participant 3 said, "The way that every teacher here is so passionate about what they do. And that they're always there for their students, even when they're having a bad day. I think that kind of sums up." Participant 3 was grateful for his teachers' compassion concerning his educational, emotional, and physiological needs.

#### ***Participant 4***

Post-Traumatic Stress Disorder (PTSD) and anxiety were diagnosed in Participant 4. Participant 4 was permitted to miss her first period, and she went home after the fourth period. Participant 4 said, "Some of my teachers understood that I was too sick to get out of bed, and they were very kind. Knowing they weren't judging me for my illness was helpful." Participant 4 had additional time for assignments and could take tests in a quiet room. Participant 4 said, "But it was more about the understanding of the teachers and administration to support my accommodations." For two high school semesters, Participant 4 was considered to be "hospital homebound." Participant 4 said, "At first I was on hospital homebound, and teachers would come to my house." Participant 4 was grateful and appreciative for her teachers that showed her empathy and concern for her academically and personally. Participant 4 said, "It is really important for teachers and administrators to support accommodations. When my accommodations were supported, it was much easier to do school." Participant 4 graduated high school with honors and graduated college with honors. Participant 4 continued to receive accommodations throughout her collegiate courses.

Accommodations are effective when they are properly implemented by the teacher and supported by the school administration. The student must also be actively engaged and willing for accommodations to be truly effective. Parents must also engage for the process to be its most effective. For the effectiveness of most academic interventions, student engagement is vital. Several factors affect participation. Motivated students with physical and mental disabilities are more likely to participate, use, and benefit from accommodations and interventions in an educational setting. The same goes for understanding and appreciation of the intervention. Students need to know how to participate to be successful. The best teachers' instructional

practices promote the accommodation for the student without changing the curriculum and the expectations substantially. Accommodations are also provided more often if they are easily administered to a range of students, as opposed to being specific to the needs of an individual student. Teachers, however, were found to be more likely to provide an individual with accommodations if they perceived a significant academic need, and if students were willing to take part in classroom accommodations (Baker & Scanlon 2017).

The parents of students with disabilities must be full and equal partners with school personnel throughout the special education process, from referral through IEP development and implementation. Moreover, students' special education teachers are required to periodically inform the students' parents of their progress toward the annual goals in the IEP. Also, it is important for the school district officials, who are qualified for IEP/504, to monitor, facilitate, and guide students with disabilities in their unique needs. Furthermore, the district representative should be knowledgeable about the general education curriculum and the resources available to the school district. School staff should take steps to ensure that one or both parents are or can participate in the IEP process (Ruppar et al., 2017).

### **Cross-Case Analysis and Themes**

This phenomenological study involved four high school graduates who were medical illnesses for which the students needed 504 accommodations in order to be successful in their academics. These four high school graduates brought different perceptions to this study regarding the effectiveness of their accommodations. Because each graduate had a different diagnosis, the best way to analyze this interview data was to compare and contrast these individual cases. The interview data was categorized into codes grouped by categories (see Table 1).

**Table 2** *Codes Grouped by Category*

Teacher/Administration Support	Students Overwhelmed by Diagnosis	Grit
Teacher/admin support/relationship	Diagnosis is stressful	Push through
Teacher relationship	Diagnosis and condition affect thinking	Never give up
Support/relationship	Life consumed by diagnosis	Get better
Teacher support	Grades drop due to focus on health	Build yourself up
Teacher kindness	Excessive absences stressful	Don't get frustrated
Teacher understanding	Sickness caused stress	
Lack of teacher support/understanding	Managing illness caused stress	
Teachers going beyond expectation	Diagnosis interfered with success	
Lack of support caused stress	Overwhelmed due to impairment	

Of the labels represented by Table 1, three predominate themes emerged (see Table 3).

**Table 3** *Theme Descriptions*

Theme	Description
Teacher/Administration Support	Students feel supported when teachers and administrators effectively implement 504 accommodations.
Students Overwhelmed by Diagnosis	Students feel overcome with medical diagnoses both internally, including anxiety and stress, and externally, including academics and college/career readiness.
Grit	Participants' resilience is demonstrated with academics despite their medical diagnoses.

### **Theme 1: Teacher/Administration Support**

Support from administrators and an educator at the building level has major impacts on all areas of Special Education and ADA Section 504. Supportive actions of principals and general educators influence the success and response of students. Administrators and teachers who clearly understand the needs of students with disabilities, understand IDEA, and understand the educational challenges faced by students are better prepared to provide appropriate support.

Participant 4 said, "It wasn't so much the actual services or accommodations, but it was more about the understanding of the teachers and administration to support my accommodations."

Likewise, Participant 1 shared, "Well, I knew that at any time if I were to miss school because of a doctor's appointment, it will never count against me because, of course, they know where I'm at such as in the class. If I know I'm feeling low, I know I can always tell the teacher and she'll give me now and take my medicine." Schools that have been recognized for the successful inclusion of students with disabilities have been identified as having strong administrative support.

Administrators in these schools have a vision of education that includes an emphasis on inclusion for students with severe disabilities and are actively engaged in promoting that vision (Ruppar et al., 2017). As part of the school culture and set of shared values, their active and engaged leadership helps to facilitate a school-wide commitment to inclusion and student success.

The teachers and administrative staff exhibited empathy, concern, and support to the participants and adhered to their educational and medical plans. Participant 3 shared, "The teachers were willing to stay after school and help me." Similarly, Participants 2 and 3 shared common experiences of teachers' extra-mile-efforts to assist them academically. For example, Participant 2 said, "Basically those resources are for better teachers to help you like after school, or before school tutoring." Participant 4 reflected, "Some of my teachers understood that I was too sick to get out of bed, and they were very kind. Knowing they weren't judging me for my illness was helpful." Furthermore, Participant 1 said, "The school nurses were so supportive, and they helped me."

In contrast with teacher and administrative support, the symptoms of depression, lack of motivation, and the presence of apathy may become exacerbated when accommodations are not supported. Participant 4 remarked that she went "to the office to take a test which was one of my



accommodations; the office people thought I was in trouble, and they treated me so poorly. They judged me and wouldn't look up my accommodations. Finally, I had to reschedule the test because my PTSD symptoms started appearing." Participant 4 further explained that, "I only struggled to manage my illness when teachers were unsupportive." Teacher empathy is the degree to which an instructor works to deeply understand the personal and social situations of students, to feel caring and concerned about the response to positive and negative emotions of students, and to respond compassionately without losing focus on student learning. Additionally, the concept of the teacher's empathy is communicated to students through the course policies, as well as the instructor's behavior towards students (Meyers et al., 2019).

### **Theme 2: Students Overwhelmed by Diagnosis**

High school students, in general, may be overwhelmed by their own unhappiness, stress, and feelings of inadequacy in life and learning. The pressures of high school, and life after high school, can be stressful and challenging. Therefore, the aspirations of students preparing for college and career readiness may increase depression, sadness, and self-esteem (Evans, Martin & Ivcevic, 2018). Moreover, students with special needs and 504's are faced with different dilemmas due to their diagnoses. These students who are struggling with their own uniqueness and being a teenager in this technological society can cause mental health problems that can lead to an overload of health and anxiety issues. Participant 4 was diagnosed with Post-Traumatic Stress Disorder (PTSD) and anxiety. Participant 4 said, "If my symptoms would flare up, sometimes I would not be able to get out of bed for several days, and I was not able to communicate with anyone. Those limitations made it very difficult for me to do school, regardless of the accommodations." With the appropriate documentation, a 504 plan with accommodations was set. Participant 4 had extra time for assignments and could take tests in a

quiet room. Furthermore, when symptoms were severe, Participant 4 could miss the first period, going home after the fourth period. Participant 4 was considered “hospital homebound” for two semesters of high school. The accommodations that were put in place for this participant facilitated the student’s success. Subsequently, Participant 4 graduated high school with the designation of cum laude.

In contrast, Participant 2 had a diagnosis of diabetes and suffered a life-threatening stroke. Instructional and extended class assignments were necessary for 504 accommodations. The extended time allowed Participant 2 to complete all his assignments. Participant 2 said, “I’ve had, I have a bunch of doctor’s appointments, multiple ones in a week or multiple ones just throughout a first semester or second semester that, you know, if there’s a project due, or a project coming up or we’re working on it in class, maybe in a type one diabetic I have to go to my doctor’s appointments. And it was mainly, all, all the doctor’s appointments that I’ve had just trying to catch back up from and remain and all honors classes may have a bunch of doctor’s appointments, it’s a lot of work to catch back up on.”

Furthermore, Participant 2 described a time when he was overcome with his illness, and Participant 2 said,

It was probably the homework and just maybe an Oh, my overwhelming myself. I maybe could have cut back on it, cut back on honors and regular classes but I mainly just overwhelmed myself, especially the beginning of high school my not that did great here is just overwhelming. Getting into a routine of high school and just, and you got to have the will to do things. I just want to add the right point. And the right state of mind to keep up with everything.

Participant 3 was diagnosed with hypertrophic cardiomyopathy (HCM), a disease in which the heart muscle becomes abnormally thick. The thickened heart muscle can make blood pumping more difficult for the heart. This condition created a need for a 504. Participant 3 was subjected to an AICD (defibrillator) operation to protect him from abnormal heart rhythms. Additionally, Participant 3's pediatric cardiologist said he could not participate in PE activities or other competitive or leisure activities in which he could suffer trauma to the defibrillator. He was, however, cleared to join the marching band. As a result, several relevant accommodations were observed and noted in his 504 plans. First, he should remain well hydrated because dehydration might worsen Participant 3's condition. Also, during the school day, Participant 3 was allowed to take the water bottle, if needed. Five minutes before the student bell transition and/or five minutes after the transition bell, he was permitted to leave class. Also, Participant 3 had unlimited absences at school for illness and visits to the doctor. All his assignments were being completed within two days for an extended time agreed by the 504 committee. Participant 3 shared, "What happens, too, is all the stress from the surgery is. It'll cloud your mind. Yeah, and you'll just be so stressed out that doing work is the least of your worries right now. And so I think at one point my grades began to drop a little bit." He explained passionately that, "My life was consumed with my diagnosis." Challenging circumstances that drive students to focus on schoolwork tend to lead to better school learning and success, and stressful circumstances that distract students from schoolwork can have adverse effects on learning and well-being (Evans, Martin & Ivcevic, 2018).

### **Theme 3: Grit**

As young adults, the participants showed the rare capacity to overcome their diagnoses and to graduate from high school with regular diplomas. Their tenacity, perseverance, and

consistency allowed them to remain committed to high school graduation, despite facing adversity and barriers due to their physical and mental disabilities. One participant graduated from college; the other three were attending college. All participants, however, were part of the workforce. Participant 1 said, “And so everything that I've learned from high school, I knew to take it with me and continue to push through college.” Participant 2 explained, “Always got to build up yourself and better yourself and always become better and you're always learning.” Likewise, Participant 4 described her challenges with her diagnosis and academics. Participant 4 said, “Academically I did not struggle with coursework. I only struggled to manage my illness when teachers were unsupportive.” All of these students exhibited grit in dealing with their individual situations and challenges. They did not give up: “The gritty individual approaches achievement as a marathon; his advantage is stamina. While disappointment or boredom may lead to a change in the trajectory of most people, the gritty individual stays the course” (Duckworth et al, 2007, p.1088). Furthermore, Participant 1 said, “Stay pushing through and never give up. No matter how hard it is. You just got to keep pushing through.”

### **Evidence of Quality**

Validity and reliability are essential for credible research (Creswell & Poth, 2018). Creswell and Poth (2018) recommended the implementation of a minimum of two strategies to validate qualitative research. In this study, all interview transcripts were validated by the participants. In addition, because the researcher was also a high school administrator with responsibilities that included the administration of 504 accommodations, bracketing was essential. Personal experiences with 504 accommodations were bracketed by using the method of epoché, the setting aside of personal beliefs and assumptions. Finally, the dissertation chair and methodologist were actively involved in the peer-review process for coding and analyses.

To ensure reliability, the interview guide (see Appendix B) was used with all participants. Each interview was recorded and transcribed using Otter AI, a recording and transcription application. The transcripts were edited for accuracy and validated by the participants.

### **Summary**

The effectiveness of the academic accommodations of high school graduates diagnosed with mental or physical impairments, qualifying for 504 services was discussed in the outcomes section of Chapter 4. During the interview process, participants shared their personal experiences, perceptions, and the outcomes of the services and accommodations they received. Consequently, the analysis of this data contributed to the findings of this phenomenological study. The findings, as well as the limitations of the study, will be presented in Chapter 5. Discussion of the analyses, future implications for practice, and recommendations for future research are presented in Chapter 5.

## V. DISCUSSION

The purpose of this phenomenological study was to explore the perceptions of high school graduates diagnosed with mental or physical impairments regarding the effectiveness of their 504 academic accommodations. At this stage of the research, the mental or physical impairments were defined as a disability that substantially limits the ability of an individual to perform a major life activity as compared to most people (Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, 2007). ADA Section 504 is a civil rights law that states a student who has a mental and/or physical impairment will receive reasonable accommodations in the educational setting.

### **Methods of Data Collection**

In phenomenological research, the phenomenological interview involves an informal, interactive process, using open-ended comments and questions (Moustakas, 1994). Creswell (2018) recommended the interview protocol and procedures for the researcher to conduct informal interviews. The researcher conducted informal interviews with the participants regarding their perception of their academic accommodations and the effectiveness of those accommodations using the attached interview guide (See Appendix B).

The procedures of data collection and analysis for this study followed the processes for a phenomenological study as explained by Moustakas (1994). In collaboration with the dissertation committee, the interview protocol (see Appendix B) was developed to reflect the purpose of the

study and the research question. Upon approval from the University's Institutional Review Board, the district's Ethical Review Board also approved the study. After receiving both approvals, potential participants were contacted by email or telephone. Six potential participants responded to the request, and of the six respondents, four participants participated in interviews. All interviews were conducted face-to-face in a convenient location for the participants. At the start of each interview, the purpose of the study, and the adult consent form, (see Appendix A) was presented. All participants signed the consent form, demonstrating their willingness to participate in the study.

## **Summary of Results**

### **Theme 1: Teacher/Administration Support**

The four high school graduates mental and/or physical impairment diagnoses impacted their life and learning. All areas of their education included 504 accommodations, allowing the students to become successful in the educational environment. In addition, teacher and student relationships were the center of educational processes and were repeatedly reported as having major impacts on the academic success, social competence, and personal well-being of students. Teachers and administration, in particular, play an important role in shaping the academic environment through their positive interaction with adolescents. Furthermore, positive collaboration between teachers and school administration fosters college and career readiness for students (Lavy & Bocker, 2018).

### **Theme 2: Students Overwhelmed by Diagnoses**

Depression and anxiety affect almost every part of the human body and can lead to many physical and mental disorders. Moreover, high levels of stress and anxiety during adolescence can influence the development and future functioning of the brain in adulthood (Lindsey et al.,

2018). Experiences that generate stress can, therefore, have a negative impact on students' mental, physical, academic, and social environments in the educational environment. The participants in this study had diagnoses that created overwhelming circumstances outside of school. Because of their diagnoses, each participant became overwhelmed as they navigated their life circumstances, in addition to maintaining success in school.

### **Theme 3: Grit**

Grit, which is defined as passion and persistence in pursuit of long-term goals, is a major factor for student engagement and academic success. Academic learning is an incremental method that includes an effort to persevere, especially in the face of difficulties and setbacks. Growth-minded students are more likely to perceive challenges and setbacks as learning opportunities. Therefore, in the face of obstacles, they tend to show persistence and pay more attention to coping with issues. In turn, this persistence and attention lead to academic success in school. Consequently, grit may act as a mediator between growth mindset and academic engagement and achievement (Xin et al., 2014). All the participants in this study indicated that grit was necessary for them to be successful in academics as they struggled to overcome the obstacles in their paths.

## **Discussion by Research Question**

### **Research Question**

What were the perceptions of high school graduates diagnosed with mental or physical impairments regarding the efficacy of their academic accommodations?

Often students qualifying for 504 accommodations feel overwhelmed by their situations. The participants in this phenomenological study indicated that their medical diagnoses consumed their lives, and navigating their diagnoses created conflict with their academic performances.



Falling behind in their schoolwork added to the stress of their individual medical situations. Knowing that 504 accommodations were in place helped the participants to be able to focus on regaining and maintaining their physical health.

Because the students in this study were trying to manage and take ownership of their learning, they often experienced the fight or flight instinct to survive in their academic environment. They internalized their medical concerns, and they were overloaded with daily academic assignments and formative assessments. In addition, two of the participants tried to continue participation in school sports, and all participants indicated trying to maintain their involvement in extracurricular activities. When the participants felt that teachers and administrators supported their academic accommodations, the participants were successful. On the other hand, when the participants had teachers and administrators that did not support the implementation of the 504 accommodations, the lack of support added to the stress and anxiety of navigating academics, thus making it more difficult to navigate their medical diagnoses.

All the participants discussed the empathy that they felt from their teachers and administrators. This empathy enabled the participants' learning, because the students felt safe in their learning environments, being empowered to take ownership of their academic success. Through teacher and administration support, the participants were motivated to succeed. This experience contributed to a positive school climate, and in some of the study participants, this sense of compassion and support became an academic lifeline.

The four study participants indicated that grit pushed them to overcome their physical and mental impairments. They displayed a resilience, dedication, and concentration that allowed them to push through difficult medical diagnoses. All the participants experienced distractions, negative environmental conditions, and overwhelming debilitating medical issues. Regardless of

these obstacles and challenges, all the participants found a way to accomplish their academic goals. The presence of grit cannot be measured, but grit was, nonetheless, present in all the participants.

Students with grit refuse to give up, and they create an opportunity to succeed, regardless of their medical diagnosis and disability. Students with grit are resilient and tenacious workers; their academic report card reflects their good grades, but it does not reflect their inner drive to succeed. Students with grit typically take on the spirit of excellence and dedication. They internalize the concept that failure is not an option, and they demonstrate the mindset to triumph over adversity. The participants in this study reflected their grit by taking ownership of their learning goals. In the educational environment, students who take ownership and responsibility for their own learning are more likely to become academically successful. Students with grit, therefore, understand the perspective of perseverance, resilience, and failure, which are important life lessons for students in the classroom and life after graduation.

### **Study Limitations**

This study focused on the perceptions of four high school graduates with 504 accommodations. The results of this research may not be generalized to all graduates of high school with 504 accommodations. The small sample of four students included one region in Alabama; therefore, wider studies would be beneficial. Furthermore, the global Covid-19 pandemic forcibly affected data collection for this study. A robust social distance measure was taken during the interview process. Maintaining a safe social distance prohibits some of the connectedness gathered during the interviews and may have limited some of the richness of the data.

## **Implications for Future Practice**

To ensure access to the general education curriculum, educators are mandated to deliver services, supporting students with disabilities. Also, educators are responsible for the progress of students towards grade-level academic standards. The most beneficial approach is to use evidence-based instructional practices to ensure access and increase the probability of students with disabilities mastering grade-level expectations (Peltiera, & Harrison, 2018). Educational accommodations describe interactions between students and teachers that define, acknowledge, and meet the needs and goals of individual learning. Educational accommodation is often used to provide access to education and to remove obstacles to students' demonstration of true knowledge and abilities (Cawthon, Leppo, Ge, et. al, 2015).

Likewise, parents of students with disabilities are particularly important in the education of their children. Academic achievement is enhanced when individualized education programs (IEPs) and ADA Section 504 plans are developed with parents as partners in the process. All stakeholders, including students, need to participate in setting expectations so that students can be held accountable to the best of their abilities (Sawyer, 2015). Moreover, student participation is crucial to the effectiveness of most academic interventions. Students who are motivated are more likely to participate in an intervention and to use and benefit from it appropriately. The same is true when they understand the intervention and value it (Baker & Scanlon, 2016). Students must also know how to participate in the academic environment for student accommodations to be effective. During academic activities, students with learning goals and the ability to act on those objectives are more likely to self-advocate (Baker & Scanlon, 2016).

## **Recommendations for Future Research**

The purpose of this study examined the experiences of four high school graduates who experienced debilitating mental and physical impairments. Recommendations for future research includes a further qualitative study focusing on students with mental disabilities. Only one participant represented students with mental impairments, so having a qualitative study focusing on students with 504 accommodations for mental impairments would increase depth of understanding for the needs of this population. In addition, a qualitative study gathering data from teachers of students with 504 accommodations would give a different perspective about the effectiveness of 504 accommodations. Because this study was regionally located, additional qualitative studies from other regions of the United States would demonstrate how consistent 504 accommodations are implemented with different perspectives from both students and teachers. More importantly, however, the involvement of students in the student accommodation process at 504/IEP meetings is imperative. In addition, the collaboration of teachers with special education teachers, parents, administrators, and students is essential for the successful implementation of the plans. Therefore, during 504 meetings, students must advocate openly and take ownership of their academic plans.

The annual ADA 504 and IEP meetings are set in place to review student information, discuss student progress, and set objectives for the year. According to Biegun et.al, (2020), students with disabilities are not required in some states to attend their 504 meetings until age 16. Therefore, the Individuals with Disabilities Education Act (IDEA, 2006) advises that students should "whenever appropriate" participate in their annual meetings. Despite this guidance, younger students often do not participate in their 504 and IEP meetings. A study by the Office of the Superintendents of State Education examined the time of IEP meetings and found that

students spoke only 3% of the time. This statistic is surprising compared with the time spent by other 504 participants during meetings: special educators 55%, general educators 19%, and family members 16% (Biegun et.al, 2020).

The 504 annual meeting processes revolve around the student's academic goals in which the student should advocate and take ownership of their learning and 504 plans (Biegun et.al, 2020). According to Birdwell et al. (2016), teachers believe more collaboration is necessary between general education and special education teachers regarding student individualized education plans (IEPs) and instructional planning for the inclusion process to be more effective. Collaboration is critical for the successful implementation of inclusion and should include all stakeholders: administration, general education teacher, special education teacher, counselor, social worker, related service providers, paraprofessionals, family, and students. Collaboration is an ongoing process, and all stakeholders must be open-minded participants for the development of a comprehensive plan (Birdwell et.al, 2016).

### **Conclusion**

This study identified the need to review academic accommodations and to analyze the effectiveness of the accommodations. Students are indeed encouraged to take part in the accommodation decision-making process for it to be truly effective. The researcher interviewed four high school graduates. The participants spoke candidly and passionately about their high school journey. Their physical and/or mental impairment was, at times, a barrier for them to complete their classroom assignments and often even to attend school. The common themes the four graduates identified were teacher and administration support, being overwhelmed by diagnosis, and grit.

The participants viewed support from teachers and administrators as essential in fostering academic success. The participants wanted the teachers to show compassion and empathy for them as they desperately tried to complete their assignments promptly. Additionally, the participants were overwhelmed by their diagnosis, combined with the facets of life, which included family, education, social media, college, and career readiness. Moreover, each one of the participants was affected and was impacted by the Covid-19 Pandemic. The participants all were experiencing anxiety and some forms of depression due to their diagnosis.

Furthermore, all the participants showed an inner strength or grit. Grit is perseverance and enthusiasm for long-term goals, particularly when facing barriers and challenges (Xiaoyu & Rendy, 2020). The participants had an inner drive and tenacity no matter the mental and/or physical discomfort they experienced in completing their class assignments. Their grit motivated the participants to keep pursuing their ultimate goal to graduate from high school. The evidence presented in this study found that professional development is essential for teachers and school administration to understand the needs of students with disabilities and their academic accommodations.

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## Appendices

## **Appendix A**

### **Informed Consent**

The Perceptions of High School Graduates Regarding the Effectiveness of their 504 Accommodations

#### **INVESTIGATORS**

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#### **PURPOSE**

The purpose of this phenomenological study is to explore the perceptions of high school graduates diagnosed with mental/and or physical impairments regarding the effectiveness of their 504 academic accommodations. At this stage of the research, the mental/and or physical impairments are defined as a disability that substantially limits the ability of an individual to perform a major life activity as compared to most people (Section 504 of the Rehabilitation Act of 1973, 29 U.S.C. 794, 2007). ADA Section 504 is a civil rights law that states a student who has a mental and/or physical impairment will receive reasonable accommodations in the educational setting

#### **PROCEDURES**

Once you give consent to participating in this study, I will contact you to schedule an interview. The interview may be conducted in person, digitally, or telephone. The interview will be audio recorded, and I will be taking notes. Any information that can specifically identify you will be kept confidential. I will use a pseudonym or code in place of your real name when I compile, analyze, and report the results of your interview. The purpose of the audio recording is to get an accurate account of our conversation for developing a transcript. This information will be kept in a secure area to which only I have access. The average amount of time that you will dedicate to this research process for the interview will be approximately 30 minutes.

#### **RISKS OF PARTICIPATION**

There are no known risks associated with this project which are greater than those ordinarily encountered in daily life.

#### **BENEFITS OF PARTICIPATION**

The study has the potential to influence the way that academic accommodations are written and implemented for students with mental and/or physical disabilities.

#### **CONFIDENTIALITY**

The records of this study will be kept private. Any written results will discuss group findings and will not include information that will identify you. Research records will be stored

on a password protected computer in a locked office and only researchers and individuals responsible for research oversight will have access to the records. Data will be destroyed three years after the study has been completed.

**COMPENSATION**

There is no compensation for participating in this study.

**CONTACTS**

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**PARTICIPANT RIGHTS**

I understand that my participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time, without penalty.

**CONSENT DOCUMENTATION**

I have been fully informed about the procedures listed here. I am aware of what I will be asked to do and of the benefits of my participation. I also understand the following statements:  
I affirm that I am 18 years of age or older.

I have read and fully understand this consent form. I sign it freely and voluntarily. A copy of this form will be given to me. I hereby give permission for my participation in this study.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

I certify that I have personally explained this document before requesting that the participant sign it.

\_\_\_\_\_  
Signature of Researcher

\_\_\_\_\_  
Date

## **Appendix B**

### **Interview Protocol**

Purpose Statement: The purpose of this phenomenological study is to explore the perceptions of high school graduates diagnosed with mental/and or physical impairments regarding the effectiveness of their 504 academic accommodations.

#### Interview Questions:

1. What kind of support or accommodation has helped you succeed in school? How were they helping you?
2. What kind of services helped you succeed in school?
3. What was the most difficult academic element for you in school?
4. In the past, what kind of resources have been offered by teachers or by you to help you excel in school (training, adapted facilities, physical accommodation, other services)?
5. How does your impairment impact your schoolwork and school events (such as grades, relationships, assignments, assignments, communications, testing time, extracurricular activities)?
6. How have your accommodations assisted your academic progress?
7. What else would you like to contribute to this study regarding your academic accommodations?