A PHENOMENOLOGICAL STUDY OF TEACHERS' LIVED EXPERIENCES PROVIDING

INTERVENTIONS FOR STUDENTS DIAGNOSED WITH ADHD

by

Timothy Michael Garner

Liberty University

A Dissertation Presented in Partial Fulfillment

Of the Requirements for the Degree

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ABSTRACT

The purpose of this phenomenological study was to examine the lived experiences in the public

school setting of teachers involved in providing interventions for students diagnosed with

ADHD. The theories guiding this study were Theory of Reasoned Action (Ajzen & Fishbein,

1980), Human Ecology or Bioecological Systems Theory (Bronfenbrenner, 2005), and theory of

self-efficacy (Zimmerman & Bandura, 1994; Zimmerman & Martinez-Pons, 1990; 1992). The

study followed the theory, concepts, and methods of the phenomenological research model that

allowed participants to provide a personal perspective and reflection on their experiences.   The

following four research questions guided the study: How do teachers perceive the experience of

providing interventions in the public school setting for ADHD students? How do interventions

for ADHD students affect the perceived relationship between the students and the teachers

providing the interventions for them? How does a teacher providing interventions for ADHD

students experience success or failure of those students? How are teachers' perceptions towards

ADHD students changed over time as a result of providing interventions for these students?

Interviews, focus groups, and journaling were used to gather perception data from participants,

which was transcribed, examined, coded, and broken down into themes that emerged throughout

the research process. These themes, which create the phenomenon that describes the lived

experiences of the teachers as intervention providers, formed the basis of the findings of the

study. Themes identified were: Teacher attitude and understanding of ADHD, flexibility and

creativity in interventions, and teacher self-reflection.

Keywords: *Attention Deficit Hyperactivity Disorder (ADHD), Self-efficacy, Support Systems,*
and Phenomenology

Dedication

I would like to dedicate this work to my beloved wife and best friend Reta. No partnership could rival the bond we have, and the love we share. Without her support and understanding during this period of my life, it would not have been possible to complete this work.

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List of Abbreviations

Attention Deficit Hyperactivity Disorder (ADHD)

Challenging Horizons Program (CHP)

Conduct Disorder (CD)

Emotional Behavior Disorder (EBD)

Institutional Review Board (IRB)

Learning Disabilities (LD)

Oppositional Defiant Disorder (ODD)

Positive Illusory Bias (PIB)

Self-Regulated Strategy Development (SRSD)

CHAPTER ONE: INTRODUCTION

Overview

This chapter exposes the need for the study, the problem that the study attempted to address, and the purpose of the research. The research questions that guided the study are included, as well as the significance of the study. A detailed plan that guided the study is complete with delimitations, limitations, and definitions of all pertinent terms. The researcher's own situation and interest in the study are discussed to provide the reader with an understanding of the relationship between the researcher and the study content.

Background

Education is crucial to an individual's success, but various obstacles that can make learning difficult often impede that success. For those educators providing interventions for students diagnosed with Attention Deficit Hyperactivity Disorder (ADHD), it can be frustrating to understand how to best reach them. This study gave insight into the experiences of these teachers providing the interventions to identify perceptions that affect the effectiveness of the interventions offered and the support given.

Attention Deficit Hyperactivity Disorder "is a neurobehavioral disorder that may impede a child's capacity to sustain attention and effort and to exercise age-appropriate inhibition in behavioral settings or on cognitive tasks" (Daly, Creed, Xanthopoulos, & Brown, 2007, p. 73). ADHD is one of the most common diagnoses among children. Approximately three to seven percent of all children will be diagnosed as having ADHD (Ray, Schottelkorb, & Tsai, 2007).

The core features of ADHD "…are inattention, impulsivity, and over activity" (Nietzel, Bernstein, Kramer, & Milich, 2003, p. 357). Inattention can be described as a person's inability to listen, no matter how interesting they find the material or conversation. Impulsivity is the

inability to plan for what will happen next, usually indicating a propensity to being disorganized. This trait can also be described as not thinking before one acts upon a behavior. Over activity is often described as hyperactivity. A typical example of over activity is a person who is not able to sit still. This characteristic can mean that the brain is moving faster than the body (Nietzel et al., 2003). Some of the typical symptoms that can be displayed by a person with this diagnosis may include:

> …inattention; failure to follow instructions; inability to organize oneself and school work; fidgeting with hands and feet; talking too much; difficulty staying on task; leaving projects, chores, and homework unfinished; and having trouble paying attention to and responding to details. (Daly et al., 2007, p. 73)

Classi, Milton, Ward, Sarsour, and Johnston (2012) found that a large majority of ADHD students experience anxiety symptoms that in turn affect school attendance. Teachers, when given proper training and information regarding ADHD symptoms and how to effectively deal with them in the classroom, are able to provide support for these students (Rush & Harrison, 2008). While there may be concern that teachers might reject students when made aware of an ADHD diagnosis, Ghanizadeh, Fallahi, and Akhondzadeh (2009) found that this was not the case. The teachers embraced the students and provided needed interventions as long as they were trained in strategies to address these students' symptoms. While ADHD students have obstacles that greatly affect their learning, teachers can address their needs and help them achieve a higher level of success with proper training.

There is some debate as to whether ADHD can be a result of a person's biological makeup. Papalia, Olds, and Feldman (2002) state, "ADHD has a substantial genetic basis, with heritability approaching 80 percent" (p. 338). However, a study in China that examined multiple

genetic inquiries into ADHD symptoms found that the data was inconclusive overall as to whether a definitive genetic relationship exists in individuals with ADHD (Gao, Liu, Qian, & Wang, 2014). There are also other environmental and emotional factors that could indicate a predisposition for an individual to manifest the symptoms of ADHD, such as ADHD symptoms in the mother and maternal hostility levels, even when the relationship is adoptive with not genetic relationship (Harold, Leve, Barrett, Elam, Neiderhiser, Natsuaki, Shaw, Reiss, & Thapar, 2013). Even in the absence of comorbid conduct disorder in childhood, ADHD increases the risk for developing antisocial and substance use disorders in adolescence, which, in turn, increases the risk for criminal behavior in adolescence and adulthood (Mannuzza, Klein, & Moulton, 2008).

Ek, Westerlund, Holmberg, and Fernell (2011) also indicated that adolescents with ADHD experienced overwhelming academic impairment in high school relative to non-ADHD peers, including lower overall and main academic subject grade point averages (GPA), lower levels of class placement (e.g. remedial vs. honors), and higher rates of course failure despite finding that the IQs of the ADHD student were comparable to those of non-ADHD peers. In addition, adolescents with ADHD completed and turned in a substantially lower percentage of assignments and were significantly less likely to be working up to their potential without appropriate interventions in place (Semrud-Clikeman, Nielsen, Clinton, Sylvester, Parle, & Connor, 1999). Adolescents with ADHD were also significantly more likely to be absent or tardy during the academic year, and they were over eight times more likely than adolescents without ADHD to drop out of high school. This demonstrates that children with ADHD continue to experience severe academic impairment into high school (Kent, Pelham, Molina, & Sibley, 2011). Students with ADHD could face a grim future if they do not receive the early

interventions as suggested by research. Students with ADHD have behavioral problems that many times put them at odds with classroom and school rules, which can lead to disassociation with peers, teachers, and even family members.   This can leave them few places to turn to when support is needed and desired.   Family support is the front line of help for these students, but the stresses of raising a child with ADHD can many times fracture those relationships, both with parents and siblings.

Educators are in need of deeper insights in order to help these students succeed in school. If connections can be made among students' support systems, interventions and strategies provided, and their abilities to cope and maintain behavioral norms, it is hoped that they can become successful students despite the obstacles caused by the inattention and hyperactivity often associated with ADHD. This study delved deeper into the concerns of the participants as it allowed them to expound on their lived experiences, both positive and negative, and provided interventions for these students.

Situation to Self

I am an emotional behavior disorder teacher who has been teaching for twelve years. Over those years, I have encountered many students diagnosed with ADHD, and I have experienced firsthand the devastating consequences of the behavioral traits of this type of student. I have seen a real disconnect between classic interventions and any real progress in the student's behaviors, which has made me curious about what motivates, inspires, and supports ADHD students' dreams and desires.

Mainly, this study was viewed through the lens of a constructivist paradigm. Constructivism is a theory used to explain how knowledge is constructed in the human being when information comes into contact with existing knowledge that had been developed by

experiences (Baerveldt, 2013). I added an axiological approach to help expose researcher bias and values. Axiology, also called theory of value, is the philosophical study of goodness, or value, in the widest sense of these terms. Axiology has expanded the meaning of the term "value" and has provided unification for the study of a variety of questions—economic, moral, aesthetic, and even logical—that had often been considered in relative isolation (Axiology, 2013).

Resulting from my experience as a teacher of ADHD students, I have preconceived ideas of how these students interact and learn. I believe that ADHD students are incapable of fully functioning in a classroom without behavioral interventions, such as redirection of off-task behavior and repetition of instructions. It was crucial for me to identify those thoughts as I worked through the study to prevent them from guiding my analysis of the data.

Problem Statement

The problem is that ADHD is the most commonly diagnosed mental illness in children in the United States today. While specific variables are not known, ADHD is correlated with disruptive behavior and disciplinary actions (Vitulano, Fite, Wimsatt, Rathert, & Hatmaker, 2012). "Prevalence of medicated ADHD increased by 28% from 2007 to 2011. Approximately 2 million more U.S. children/ adolescents aged 4 to 17 years had been diagnosed with ADHD in 2011, compared to 2000" (Visser, Danielson, Bitsko, Holbrook, Kogan, Ghandour, Perou & Blumberg, 2014, p. 34). As more students are being diagnosed with ADHD, their impact on the high school classroom has greatly increased. Over the last 10-15 years, ADHD diagnoses have reached epidemic proportions in the United States (Baughman, 2006; Breggin, 2002). In America during the 1950s, ADHD did not exist as a diagnosed ailment. In 1970, 2,000 American children (mostly boys) were diagnosed as hyperactive, and the standard method of

treatment was behavior modification. By 2006, approximately 8-10 million American children (again, the majority are boys) had been diagnosed with ADHD, and the vast majority of these children had been treated with daily doses of methylphenidate. What was once an unheard of psychiatric disorder is now commonplace in America (Stolzer, 2007; Visser et al, 2014). The effects of ADHD on schooling are profound for all age groups. In the elementary school, "Students with ADHD are more talkative, two times more likely to display off-task behaviors, and three times more likely to be oppositional than students without ADHD" (Schottelkorb, 2009, p. 16). Middle school students with ADHD typically struggle with organization and time management, resulting in lower grades as work does not get completed or is not submitted by deadlines (Langberg, Becker, Epstein, Vaughn, & Girio-Herrera, 2013). The findings of Kent et. al., (2011) indicated that children with ADHD grow up to have significant academic impairments in high school. Compared to adolescents without ADHD, high school students who were diagnosed with ADHD in childhood received lower grades, took fewer advanced level courses, failed significantly more academic courses, were rated by teachers as performing more poorly, had poorer school attendance, and were more likely to drop-out of school before graduation (Kent et al., 2011). Students with an ADHD diagnosis are also more likely to have an addiction to tobacco, alcohol, or drugs in their teenage years (Groenman, Oosterlaan, Rommelse, Franke, Roeyers, Oades, Sergeant, Buitelaar, & Faraone, 2013). Several studies have found that individuals with ADHD self-medicate their symptoms of hyperactivity by using tobacco, alcohol, or other substances (Groenman et al., 2013; Liebrenz, Frei, Fisher, Gamma, Buadze, & Eich, 2014; Kronenberg, Slager-Visscher, Goossens, Brink, & Achterberg, 2014). Higher numbers of doctor and emergency room visits for these students further result in an increased number of school days missed (Classi et al., 2012).

Purpose Statement

The purpose of this phenomenological study was to examine the lived experiences in the public school setting of teachers involved in providing interventions for students diagnosed with ADHD. Polkinghorne (2005) states, "A primary purpose of qualitative research is to describe and clarify experience as it is lived and constituted in awareness" (p. 138). This lived experience was described through emerging themes that became exposed throughout the study. At this stage in the research, the interactions of the ADHD students with the differing interventions were generally defined as the effect on the self-efficacy of the student. This was the perception of the adults (teachers) involved directly or indirectly in providing interventions and observing first hand the effects on students' self-efficacy.

Significance of the Study

This research may be groundbreaking as it exposed the deficits in the interventions from the viewpoint of those adults involved with the student diagnosed with ADHD from a qualitative point of view. The essence of this study was to explore and to analyze the issues, themes, and new teaching methods for students with ADHD that arose from the research. The researcher was striving to gain an understanding of the effect of the policies, procedures, and interventions of the school system that both the participants and the researcher experienced as providers of interventions for students diagnosed with ADHD. Another issue further investigated in the study was the positive or negative effects that the participants faced as a result of working with these students, and how these internalized interactions affected future actions.

By analyzing the themes that emerge from the study data, a new treatment or education method may emerge that might help those diagnosed with ADHD. By extracting these patterns, it may be easier to predict the future behavior of those with ADHD that might prove harmful to

themselves or others. The positive or negative life experience one has creates attitudes toward the self, which can be either favorable and develop positive feelings of self-worth, or can be unfavorable and develop negative feelings of self-worth (Olsen, Breckler, & Wiggins, 2008). By further understanding appropriate interventions for ADHD students, educators can be better prepared to help create positive experiences for these learners. Self-efficacy has four main sources described: Enactive mastery experience, vicarious experience, verbal persuasion, and physiological and affective states (Bandura, 1997), such as entering a gang or developing chemical dependency issues.

The participants' experiences may introduce new issues that could help create new teaching methods. The results painted a clearer picture of the struggles and successes experienced by these individuals as they provided interventions for ADHD students that can be helpful to other educators in making decisions about the kinds of support to provide and who will provide them.

Research Questions

1. How do teachers perceive the experience of providing interventions in the public school setting for ADHD students?

ADHD has been shown to be an obstacle for students academically from adolescence through adulthood. From inattentiveness to hyperactivity and impulsivity, these students can benefit from interventions to help them manage symptoms (Daley & Birchwood, 2010)

2. How do interventions for ADHD students affect the perceived relationship between the students and the teachers providing the interventions for them?

Because educational policies demand that all students be educated in the least restrictive environment, students with ADHD need a web of support to give them strategies and coping mechanisms to control their symptoms to achieve academic success (Vujnovic & Fabiano, 2011).

3. How does a teacher providing interventions for ADHD students experience success or failure of those students?

Because of the high failure rate of these students and the antisocial behaviors being displayed, this question led to deeper understanding of the connection these students had with the differing interventions. ADHD students often struggle with self-regulation, causing them to act impulsively and inappropriately at times. Without sufficient intervention, these students will continue to exhibit a lack of control that impedes the learning process (Gumpel, 2007).

4. How have teachers' perceptions toward ADHD students changed over time as a result of interventions provided for these students?

The purpose of this question was to examine the link between functioning interventions and the success of the student. DuPaul, Weyandt, and Janusis (2011) stress the importance of consistency in interventions at home and at school to promote optimal success. They recommend interventions that address the antecedent to the inappropriate behavior and the consequences of the behavior itself, allowing students to self-examine and anticipate situations in which they may exhibit more impulsive or inappropriate behavior.

Research Plan

The design and rationale for this study used a qualitative phenomenological approach. I sought the first person accounts of people who have experienced working with students with ADHD. Therefore, a phenomenological research design and methodology were chosen to guide the investigation. Ever increasing diagnoses in individuals from a wide array of cultural and

ethnic backgrounds and varying socioeconomic status' make this a diverse group of students that share common behavioral reactions to perceived adverse situations or stimuli. The phenomenological approach allows for common threads to be identified through data collection tools that lend itself to this type of heterogeneous group. Quantitative methods, which are grounded in data that is objective and definitive, cannot be used to study lived experiences, which are subjective and open to individual interpretation based on personal ideology (Moustakas, 1994). Bogdan and Taylor (1975) compared the quantitative approach with the phenomenologist approach that examines how the world is experienced. Since these two approaches seek different answers, it is necessary for them to be researched using differing methodologies. The quantitative is looking for facts and causes through demographic analysis, survey questions, and inventories, which allow for statistically proven relationships to be identified. The phenomenologist, on the other hand, seeks understanding through such qualitative methods as participant observation, open-ended interviewing, and personal documents. Methods like these allow descriptive data to be gathered, which yield information that allow the phenomenologist to see the world as the subjects see it (Moustakas, 1994).

The examination of phenomenology guided the study, as individuals gave personal accounts of their experiences to describe the phenomenon of providing interventions for individuals with ADHD. Edmund Husserl, considered the Father of Phenomenology, described it as peeling the layers of an onion to determine what is at the core. By removing layers of bias and other factors that can cloud an issue, the true heart of the matter can be revealed (Husserl, 1913). In this study, layers of educational bureaucracy, public opinion, and researcher bias were "peeled" away to reveal a description of the true phenomenon of the lived experiences of teachers providing interventions for students with ADHD.

Delimitations and Limitations

This research was confined to an inquiry of information gathered using a qualitative phenomenological method that worked with teachers in the field regarding students with ADHD. The qualitative investigation focused on factors of achievement and perceived expectations of teachers in the field regarding interventions for these learners.

There were limitations to this research that need to be addressed. The small sample size limited the amount of information gathered. There were only 12 participants in the study; therefore, the material could not be generalized as the research may not be completed to full saturation in the first round of interviews.

Another limitation was based on the research of the ADHD population. According to the research, many people diagnosed with ADHD have social skills deficits. The participants need to have a deeper relationship with the students with ADHD in order to better supply the support needed. However, due to the social skills deficits, that level of intimacy is impaired and may not allow the desired support to be acknowledged or recognized by the students.

Interview responses may not be completely open and honest, further limiting the study. Study participants may not feel comfortable disclosing experiences that were deemed by them to be unsuccessful or painful to retell. By including journal entries from each individual, a more personal and honest account should be provided to lessen the effect of mood, focus, reaction of an interviewer, and the stress of limited time to reflect before answering interview questions.

The final limitation was my personal experience with the topic, having taught students with ADHD for twelve years. Therefore, my personal experience may be incorporated into the study and influence the selection of major and minor themes. Throughout the review of data, I

attempted to lessen this limitation by bracketing my personal thoughts and opinions to ensure I was aware of them as I analyzed and coded the data.

Definitions

1. *Attention Deficit Hyperactivity Disorder (ADHD)* – a disorder that manifests itself by causing an individual to have difficulty focusing on tasks, completing activities, and often exhibiting hyperactive behavior (Able, Haynes, & Hong, 2014).

2. *Self-efficacy* - the feeling individuals possess when they believe they have the ability to achieve whatever task is at hand (Bandura, 1986).

3. *Support systems* – a group of individuals that provide interventions for a person who needs assistance (Fabiano, 2014).

4. *Phenomenology*- the search to define situations from a shared human perspective from multiple individuals that experienced the same perceived phenomenon (Moustakas, 1994).

Summary

Individuals with ADHD often struggle in many facets of life, and strong interventions can be beneficial in helping them learn to cope with and manage symptoms that at times can seem debilitating. Adults providing these interventions can provide great insight into issues faced, interventions that have had a positive or negative impact, and unique perspectives on the best practices in assisting these individuals. This study allowed these individuals to share their lived experience from their own perspective as providers of interventions for students with ADHD in an effort to provide better information to others attempting to provide these same types of interventions.

CHAPTER TWO: LITERATURE REVIEW

Overview

This chapter provides the theories that guided the study, data analysis, and interpretation. The body of literature that supports the study is discussed in-depth to provide a thorough description of the research that has already been completed on similar topics. This chapter serves the purpose of providing a rich understanding of the current research to give the reader context for the current study.

Theoretical Framework

The theory of reasoned action (Ajzen & Fishbein, 1980), the human ecology theory or bioecological systems theory (Bronfenbrenner, 2005), and the social cognitive theory (Zimmerman & Bandura, 1994; Zimmerman & Martinez-Pons, 1990, 1992) are all associated with better grades and higher scores on measures of academic achievement and are what guided this study.

Theory of Reasoned Action

Developed in 1975, the theory of reasoned action was used to examine the relationship between behaviors and attitudes. It assumes that people will usually act upon their intentions (Azjen & Fishbein, 1980). Azjen and Fishbein stated that theory of reasoned action could provide explanations and predictions of the behaviors it involves. The three components of this theory include attitude, subjective norm, and behavioral intentions.

- Attitude relates to an individual's personal beliefs about the positive or negative significance connected with a behavior and its results (Montano & Kaspryzk, 2008).

- Subjective norm refers to an individual's positive or negative value connected

with a behavior depending on whether or not the behavior is accepted by important

referent individuals and their motivation to comply with those referents (Montano &

Kaspryzk, 2008).

- Behavioral intentions are the result of subjective norms considering social influences

    connected with the attitudes toward the intended behavior (Azjen & Fishbein, 1980).

Theory of reasoned action provides a conceptual framework to examine behaviors of students

with ADHD in relation to their attitudes. By understanding the motivation behind these

behaviors and attitudes, those providing interventions for students with ADHD can better tailor

those interventions to address the root causes for the lack of success.

Ecological Systems Theory

The ecological systems theory, also known as the human ecology theory or bioecological

systems theory (Bronfenbrenner, 2005), offers a new perspective within developmental

psychology, providing that the child's environment and aspects within the person affect the

child's development. The focus becomes the interactions among environmental factors and the

person. The term bioecological emphasizes that the biology of an individual works as a primary

environment in the individual's system; however, the system is interactive and subject to change

(Bronfenbrenner, 2005). Bronfenbrenner (1977, 1979, 1986) suggested that an individual

develops within a specific context or ecology. Bronfenbrenner posits that it was not only a

child's family that influenced a child's learning, but also that immediate surroundings,

community networks, and cultural systems influenced both the child's and the family's

development. He suggested that individual systems work within a larger framework that is both

interactive and bidirectional.

Bronfenbrenner's theoretical model has four levels: The microsystem, the mesosystem, the exosystem, and the macrosystem. The most immediate system for the individual is the microsystem, made up of personal influences such as school, religion, and family. The intermediate system is the mesosystem, which involves the relationships between the influences in the microsystem. The exosystem is the larger social system that the individual does not deal with directly, such as the community as a whole. The most removed system is the macro-system, which is more global and deals with influences that form culture as a whole (Bronfenbrenner, 1994). These systems each influence the development of the individual and are interactive and bidirectional. The microsystem includes the earliest relationships to the individual, specifically, the family, along with local neighborhood or community institutions, such as the school, religious institutions, and peer groups. This is the layer closest to the child, and the structures in this system are connected directly to the child. The microsystem encompasses the relationships a child has with the immediate surroundings and consists of activity, interpersonal relationships, and roles experienced within those immediate surroundings (Bronfenbrenner, 1977). For example, while a child's parents may affect his or her beliefs and behavior, the child also affects the behavior and beliefs of the parents (Thomas, Chess, & Birch, 1968). Interaction is the strongest influencer within the micro-system and demonstrates the largest impact on the individual.

The intermediate system influencing the individual is the mesosystem. According to Bronfenbrenner (1977), the mesosystem reflects influences such as social institutions involved in activities for example transportation, entertainment, and news organizations. The exosystem consists of factors that affect the individual in an indirect manner, for example changes to laws or changes to home dynamics, such as an increase or decrease in family income. These can alter

a person's lifestyle but in a less direct way that systems that are more intimate, such as the mesosystem or microsystem. The mesosystem constituents are filtered through the microsystem institutions, and then, the exosystem is filtered through both the mesosystem and microsystem. Finally, the most removed system from the individual, the macrosystem, includes institutional influences as well as international, regional, or global changes or possibly more abstract aspects of culture. For example, the influences of global economy are a widespread sway on the way societies, communities, and families operate. Macrosystem influences are filtered through the previous systems.

The ecological systems theory posits that changes or disruptions in an individual's environment not only affect the level or system in which it occurs, but also ripple through other layers and components in those systems (Bronfenbrenner, 1986). The question for research is, given this mode, what kind of change is needed and how will this change affect the individual? According to this theory, those studying an individual's development must not only look at the child and the immediate environment but must include the larger systems (Bronfenbrenner, 1986). This study is designed to look at various factors across systems to identify the corresponding relationship to the individual's overall academic performance. The question at the heart of Bronfenbrenner's theory is this: How does the individual's surrounding environment hinder or enhance development in conjunction with the individual's internal systems? Answering that question must be done in a systematic and qualitative way, such as using a phenomenological approach to allow the participants to express their perceptions of family environment and intra-psychic strengths (Creswell, 2007). The next step is to systematically study the cumulative effects of strengths or weaknesses and how they directly and indirectly affect academic outcomes.

Social Cognitive Theory

Bandura's social cognitive theory addresses the relationship between behavioral, environmental, and personal factors. At the heart of this theory is the idea of self-efficacy, in which individuals believe they are capable of achieving goals (Bandura, 1993). As young people enter and acclimate to their adolescent years, they face greater independence in combination with the responsibility of meeting increased academic expectations for their own learning (Zimmerman & Cleary, 2006), it becomes clear that a strong sense of self-efficacy for education is especially important with regard to the increased difficulty and content of academic work at this level (Wigfield, Eccles, & Pintrich, 1996). Youth are expected to handle multiple courses and assignments, complete work at home, meet deadlines, and seek help on their own. Note-taking, reading, essay-writing, studying, and test-taking are among the compulsory developmental skills necessary for continued academic success (Zimmerman, Bonner, & Kovach, 1996). In addition to these diverse academic challenges, youth must simultaneously focus on maintaining positive peer relationships, deal with a number of physiological changes, and prepare for adulthood. Self-efficacy theorists posit that the beliefs that young people hold about their own academic capabilities are powerful determinants of their ability to self-regulate their learning effectively amidst the assorted trials associated with this developmental stage (Bandura, 2006; Zimmerman, 2000; Zimmerman & Cleary, 2006). Simply stated, if youth do not feel capable of exercising critical self-regulatory skills and approaches when they are faced with an obstacle towards learning, then they are unlikely to continue academic pursuits with interest and dedication (Pajares & Urdan, 2006).

It is no surprise that youth often experience a decrease in their self-confidence, self-esteem, and motivation during this time, given the many challenges that are associated with the transition from childhood to adolescence (Anderman & Maehr, 1994; Eccles & Midgley, 1989; Pajares & Valiante, 2002; Vecchio, Gerbino, Pastorelli, Del Bove, & Caprara, 2007). Additionally, with adolescence comes increased awareness of the opinions and relative abilities of peer groups (Richman, Hope, & Mihalas, 2010). Consequently, by adolescence, students may hold more realistic self-appraisals of their academic capabilities than previously thought (Harter, 1999; Stipek, 1998). Indeed, Pajares and Valiante (2002) found that students felt less confident in their ability to self-regulate learning as they proceeded from elementary school to high school. These outcomes were corroborated in a recent longitudinal study by Caprara, Fida, Vecchione, Del Bove, Vecchio, Barbaranelli, and Bandura (2008) that also demonstrated that youth experience a progressive and definitive decline in their self-efficacy for learning from junior to senior high school. In addition, they found that after scheming for socioeconomic status, those students more likely to achieve higher goals academically experienced less of a decrease in their ability to maintain self-efficacy for learning. While it has been shown that both girls' and boys' self-efficacy for learning beliefs decrease over time (Caprara et al., 2008), girls show less of a decline than boys (Vecchio et al., 2007). Overall, the above outcomes suggest that the adolescent period of youth represents a decline in student feelings of confidence in their abilities to self-regulate. Unfortunately, this lack of confidence occurs during a pivotal time when academic achievement is crucial to future academic and vocational opportunities that are available. Facilitating an optimistic sense of personal efficacy for developing youth can ultimately play a key role in their academic and career success (Bandura, 2006; Pajares & Urdan, 2006). The significance of self-efficacy may be particularly salient for youth with ADHD, who

are at a greater risk for poor academic and vocational outcomes compared to typically developing youth (Barkley, Fischer, Smallish, & Fletcher, 2006; Frazier, Youngstrom, Glutting, & Watkins, 2007; Hinshaw, Carte, Fan, Jassy, & Owens, 2007; Lee, Lahey, Owens, & Hinshaw, 2008; Mannuzza & Klein, 2000).

Researchers have reported that higher self-efficacy beliefs are associated with better grades and higher scores on measures of academic achievement (Zimmerman & Bandura, 1994; Zimmerman & Martinez-Pons, 1990, 1992). Due to the correlational nature of these studies, however, it is plausible that the relationship may also exist in the opposite direction: Higher academic abilities may lead to more optimistic self-efficacy beliefs. In his social cognitive theory, Albert Bandura (1986) asserts that previous academic successes are one of the most powerful sources of academic self-efficacy beliefs. Specifically, Bandura noted that when students have completed an academic task, they inherently interpreted their performance in the form of results and incorporate their judgments into self-perceptions that shape efficacy. Furthermore, Bandura (1989) suggested the notion of reciprocal determinism to define the reciprocal interactions among personal, environmental, and behavioral factors. More specifically, the way people interpret and process the outcomes of their performance informs and alters their phenomenological environment, creating and maintaining cognitive belief structures about their value, which in turn, influences future actions. From this perspective, the correlation between previous academic performance and self-efficacy beliefs structured from previous academic successes can be described as reciprocal. Previous successes enhance self-efficacy beliefs, and higher self-efficacy beliefs enrich future academic performance.

Based on Bandura's view that past academic performance can inform self-efficacy perceptions, students with poorer academic abilities may have lower self-efficacy for learning

because they do not have the necessary academic skills (e.g., reading, writing, math) to successfully complete many common academic tasks, such as note-taking, essay-writing, and reading comprehension. They are also more likely to experience repeated academic failure. Students with learning disabilities (LD) report fewer experiences of academic success compared to their typically developing peers, and this in turn is related to their lower self-efficacy for learning beliefs. For example, Hampton and Mason (2003) examined the role of the LD status and various sources of self-efficacy, including previous academic accomplishments and internalizing difficulties, in the self-efficacy beliefs of youth with LD. Structural equation modeling revealed that the LD status had indirect effects on self-efficacy through the various sources (e.g., previous academic successes, encouragement from others, internalizing difficulties), and the various sources of self-efficacy had a direct effect on self-efficacy beliefs.

Like students with LD, lower academic achievement in ADHD may lead to lower self-efficacy for learning beliefs because these students do not have many of the academic skills necessary to successfully manage their learning environment. In addition, due to their academic difficulties, youth with ADHD may more commonly encounter repeated academic failure. Bandura (1993) theorized that repeated failures lower self-efficacy beliefs; therefore, over time, youth with ADHD may begin to internalize their experiences with failure. This may weaken their beliefs about their academic abilities and lower their expectations for future success. Lowered perceptions of confidence may alter their willingness to attempt similar tasks in the future and may also result in less effort and persistence in the face of difficulty. This vicious cycle, once begun, continues to replicate itself, with lower self-efficacy resulting in even lower academic achievement and more repeated failures. This may result in even lower self-efficacy (Bandura, 1993). Therefore, given the widespread academic impairments in youth with ADHD

and the cycle that appears to be in place, it is important to consider academic abilities as a predictor of self-efficacy for learning in youth with ADHD. Academic skills may play an important role in the development of an adequate sense of confidence in self-regulating one's learning environment (Metofe, Gardiner, Walker, & Wedlow, 2014).

Related Literature

The diverse group of students diagnosed with Attention Deficit Hyperactivity Disorder (ADHD) has many associated risk factors with negative outcomes that affect their social and academic performance. They are more inclined to experience social risk factors than those without ADHD, and are much more likely to experience academic failure. These students' interaction with their various interventions is yielding less than desired success. The review of literature is replete with studies showing the various interactions from a quantitative point of view (Miller & Lee, 2013; Van Hulst, de Zeeuw, & Durston, 2015; Ilot, Saudino, Wood, & Asherson, 2010) but little showing the viewpoint of the teachers and parents providing the interventions and how the adults perceive those interactions.

The process of education, therapy, medication, family, teachers and friends as support, and using effective interventions are all pertinent factors in creating a successful approach to living with ADHD (Classi et al.,, 2012). Ultimately, the diagnosed ADHD person will struggle in the educational system and need to contend with low self-esteem and challenging social situations (Wei, Yu, & Shaver, 2014; Classi et al.,, 2012; Evans, Schultz, & DeMars, 2014). These individuals need to develop appropriate skills to manage their own social situations, improve their self-identity, and build effective support systems to strengthen self-esteem and self-efficacy. Conclusively, constructive interventions can provide an appropriate means of

helping a student with ADHD accomplish their goals and remain positive about having been diagnosed with ADHD.

ADHD is a widespread affliction that is commonly diagnosed worldwide. It can affect an individual's life in multiple facets. Without proper interventions, these individuals face a very difficult future that is often riddled with social issues, drug use, and comorbid mental problems. The literature is abundant with risk factors for students and adults with ADHD, but provides very little information from the perspective of those who are providing the interventions.

ADHD in Adolescence

Adolescents (14 to 18 years old) with ADHD struggle simultaneously with the challenges of high school and the impairments associated with the disorder (Barkley, 1997; Pennington & Ozonoff, 1996). There is strong empirical data to support the association between childhood ADHD and poor outcomes in adolescence to include unsuccessful and often negative peer relationships and higher rates of comorbid and psychiatric conditions that can attribute to deficits in neuropsychological and executive function (Hinshaw et al., 2007; Lee et al., 2008; Mannuzza & Klein, 2000). Studies in youth with ADHD have confirmed poor academic outcomes and demonstrated that these students are more likely to have lower standardized test scores, inferior grades, more disciplinary infractions, and are less likely to complete high school curriculum requirements for graduation or pursue post-secondary education (Barkley et al., 2006; Frazier et al., 2007). Indicating that inattention may be a unique risk factor for high school dropout, many samples of child communities demonstrate that students with attention problems are in greater jeopardy of prematurely leaving school than those without attention-related difficulties (Pagani, Vitraro, Tremblay, McDuff, Japel, & Larose, 2008). Academic underachievement is a challenge for many students with ADHD, and some studies have shown that up to 70% of students with

ADHD also struggle with a comorbid learning disability (Mayes, Calhoun, & Crowell, 2000).

Of students with ADHD who do choose to enter college or post-secondary education programs,

many continue to struggle with low academic achievement and motivation in combination with

continued poor self-regulation well into their college careers and beyond (Frazier et al., 2007;

Gropper & Tannock, 2009; Owens, Hinshaw, Lee, & Lahey, 2009; Reaser, Prevatt, Petscher, &

Proctor, 2007). While enrolled in college programs, students struggling with ADHD have

demonstrated greater learning impairments than their non-ADHD contemporaries in the areas of

test taking, outlining, summarizing, studying, and note-taking abilities. Such skills remain

essential for academic success at a level where students maintain their own abilities to learn and

acquire academic proficiency independent of teacher supervision and control (Reaser et al.,

2007; Zwart & Kallemeyn, 2001).

Symptoms of ADHD tend to manifest themselves differently once children enter

adolescence. Mick, Faraone, Biederman, and Spencer (2004) noted in their review that

symptoms of hyperactivity-impulsivity tend to diminish in adolescence, whereas symptoms of

inattention remain constant. Moreover, executive functioning deficits are thought to become

particularly prominent during the adolescent years, as youth are faced with increased

independence and are required to meet the demands of school, home, and work life (Toplack,

Bucciarelli, Jain, & Tannock, 2009; Wasserstein, 2005). Indeed, several researchers have

demonstrated that male and female youth with ADHD show inferior performance when

compared to youth without ADHD on measures of executive functioning, including response

inhibition, delay of gratification, planning, self-control, dividing and focusing attention, and set-

shifting (Martel, Nikolas, & Nigg, 2007; Toplack et al., 2009; Wasserstein, 2005). Furthermore,

executive function deficits in ADHD may be more closely related to inattentive symptoms than

hyperactive-impulsive symptoms (Stavro, Ettenhofer, & Nigg, 2007). Given the salience of inattention and executive functioning difficulties in adolescents with ADHD, students can struggle with using self-regulatory strategies such as self-monitoring, goal setting, organizing, and planning to manage their learning environment. If youth with ADHD struggle with self-regulation, it is reasonable to assume that they may express lower self-efficacy for learning beliefs than their non-ADHD peers. However, very few studies to date have examined the self-efficacy beliefs of youth with ADHD. More is known about self-efficacy beliefs in community samples of youth with symptoms of ADHD as well as more general self-perceptions such as self-concept and self-esteem in children and youth with the disorder.

Groenman (2013) stated that with an ADHD diagnosis in adolescence, students are 1.8 times more likely than non-ADHD peers to become addicted to drugs or alcohol, and 8.6 times more likely to become dependent on nicotine. A comorbid diagnosis of oppositional defiant disorder (ODD) or conduct disorder (CD) increased this risk exponentially (Groenman et al., 2013). While a relationship has been found, there is no clear evidence to suggest that ADHD is the cause of substance abuse. However, there is a strong enough connection worthy of additional study.

Impulsive behaviors in adolescents with ADHD may be partially attributed to the differences in delay aversion, being the desire to avoid delay. Antrop, Stock, Verte, Wiersema, Baeyens, and Roeyers (2006) conducted a study on delay aversion that compared ADHD students, high-functioning autistic students, and a control group that did not have an ADHD or autistic diagnosis. They found that students with ADHD had a much higher rate of delay aversion than the autistic and control groups when presented with options to include immediate small rewards versus delayed larger rewards. When additional stimuli were added, the students

with ADHD were more likely to willingly delay the small reward to wait for the larger reward, to the extent that there was no longer a gap between the groups. They concluded that students with ADHD could more easily shift their focus away from the need for immediate gratification if presented with stimuli on which to focus while awaiting the larger reward. This raised the question of whether or not students with ADHD have issues with impulsivity or delay aversion (Antrop et al., 2006). More in-depth study of delay aversion versus impulsivity in ADHD students could have a profound effect on the manner in which symptoms of ADHD are controlled or managed. If delay aversion is the issue and not impulsivity, and that delay aversion can be counteracted with additional stimuli, this could potentially change how these students are reached in the educational environment.

Similar to their peers, adolescents with ADHD must face the numerous challenges of high school, but with the added impairments that accompany ADHD (Barkley, 1997; Pennington & Ozonoff, 1996). There is strong empirical support that ADHD present in childhood is associated with poor outcomes in adolescence, including negative peer relations, high rates of comorbid and psychiatric difficulties, as well as neuropsychological and executive function deficits (Hinshaw et al., 2007; Lee et al., 2008; Mannuzza & Klein, 2000). Poor academic outcomes are well-documented in studies surrounding students with ADHD, and studies in youth have found that these students are more likely to have lower grades, lower scores on standardized achievement measures, and are less likely to complete high school and pursue post-secondary education (Barkley et al., 2006; Frazier et al., 2007). Students with attention problems are more likely to drop out of high school than students without attention problems, suggesting that inattention may be a unique risk factor for high school dropout (Pagani et al., 2008). A study by Classi et al. (2012) found that students with ADHD are more likely than their non-ADHD peers

to miss two or more weeks of school each year and have more physician and emergency room visits. While no causation can be provided for this, the lowered attendance rate in school could likely be a contributing factor in the lower academic achievement rates of these students on average. Many students with ADHD struggle with academic underachievement and up to 70 % of students with ADHD have a comorbid learning disability (Mayes et al., 2000). Of those youth with ADHD who enter post-secondary education, many continue to demonstrate academic underachievement, low motivation, and poor self-regulation well into college, university, and beyond (Gropper & Tannock, 2009; Frazier et al., 2007; Owens et al., 2009; Reaser et al., 2007). In college, students with ADHD have demonstrated greater impairments than their non-ADHD peers in the areas of test taking, summarizing, outlining, studying, and note-taking (Reaser et al., 2007; Zwart & Kallemeyn, 2001). These academic skills and strategies are necessary for success at the secondary and post-secondary level where students are responsible for managing their own learning and acquiring academic skills independently of teacher assistance. Support for students to learn these skills earlier in their education along with specific strategies for ADHD learners to complete these tasks within the parameters of the disorder could help to equalize the differences between the achievements of students with ADHD when compared with non-ADHD peers.

One area that seems to not be a hurdle for students with ADHD is in physical fitness measures. Colombo-Dougovito (2013) compared physical fitness performance tasks in elementary students between students diagnosed with ADHD and those with no ADHD diagnosis. He found that there was no significant difference in the performance of the two groups. Lee, Dunn, and Holt (2014) studied students with ADHD involved in youth sports and found that these students did report having difficulty with staying focused, controlling their thoughts and speech, and feeling inferior due to the disorder. However, these students also

reported benefits to include social aspects, the ability to de-stress, and positive relationships with coaches and teammates when active in youth sports (Lee et al., 2014).

Social Functioning

Students with ADHD are at risk for negative social outcomes related to their inattention, hyperactivity, and impulsiveness (Dumas, 1998; Stormont, 2001). These primary features of ADHD lend themselves to socially inappropriate behaviors, such as excessive talking, speaking out of turn, interrupting others, failing to notice social cues, speaking and acting without considering consequences, intruding unwelcomed into groups, and reacting to situations and problems aggressively (Greene, Biederman, Faraone, Ouellette, Penn, & Griffin, 1996; Stormont, 2001). One research group that found that students with ADHD showed more impairment in social functioning than students without ADHD on multiple measure, suggesting that youth with ADHD are at-risk for "social disabilities" (Greene, Biederman, Faraone, Ouellette, Penn, & Griffin, 1996). In a review of the literature on social characteristics associated with ADHD, it was concluded that those with ADHD might lack knowledge of appropriate social behavior, of their own social skills, and of the impact of their own behavior on others (Stormont, 2001). By exhibiting the behaviors described above and lacking knowledge related to social interaction, it is possible that adolescents with ADHD could annoy or alienate their peers. Indeed, male students with ADHD are more disliked than their non-ADHD peers (Hinshaw, Zupan, Simmel, Nigg, & Melrick, 1997) and are more likely to be victims of bullying (Unnever & Cornell, 2003). In Unnever and Cornell's (2003) study with 1,315 middle school students, 34% of adolescents with ADHD reported that they were bullied at least two to three times a month, compared to 22% of the other students. Similarly, young adults with ADHD have fewer friends than those without ADHD (Barkley et al., 2006). Overall, adolescents with ADHD

do not fare well socially and could benefit greatly from strategies to increase awareness of self and surroundings.

Self-Perceptions of Students Diagnosed with ADHD

Young, Heptinstall, Sonuga-Barke, Chadwick, and Taylor (2005) suggest that youth with ADHD may hold lower self-efficacy perceptions than their non-ADHD peers. Their study followed a community sample of girls showing pervasive hyperactivity and conduct problems across an 8-year span beginning from age 7. It is important to note, however, that the measure of hyperactivity used in their study also included items that measured symptoms of inattention, such as distractibility and sustaining attention. Nonetheless, they found that hyperactivity, not conduct problems, was a risk factor for low academic self-efficacy at age 15. In addition, girls who were more hyperactive as children were also less likely to plan for their future academic or career paths. In college students with higher levels of self-reported ADHD symptoms, including both inattention and hyperactivity, also felt less confident in their ability to effectively make decisions about, and plan for, their careers and education. Students with higher levels of ADHD symptoms also had lower grades, inferior social and academic functioning, and lower levels of study habits and skills (Norwalk, Norvilitis, & MacLean, 2009). These results were replicated in a sample of college students from China (Norvilitis, Sun, & Zhang, 2010).

Self-concept and self-esteem have been studied extensively in children with ADHD (Owens, Goldfine, Evangelista, Hoza, & Kaiser, 2007). Results from these studies suggest that regardless of their functional difficulties across numerous domains, children with ADHD will underreport the presence of these problems and actually overestimate their own competence to a greater degree than their typically developing peers. In a study that examined absolute self-evaluations, children with ADHD reported self-appraisals of competence and global self-worth

that are comparable to typically developing children (Hoza, Pelham, Milich, & Pillow, 1993). This overestimation of competence has been termed the Positive Illusory Bias (PIB), and it has been observed in other clinical populations to include children with learning disabilities (Heath & Glen, 2005; Stone & May, 2002). Whether or not students with ADHD continue to exhibit overly optimistic self-perceptions once they enter adolescence remains a question for future research; however, existing literature suggests that youth with ADHD hold lower absolute perceptions of competence than their peers without ADHD (Anderson, Williams, McGee, & Silva, 1989; Edbom, Granlund, Lichtenstien, & Larssonn, 2008; Hinshaw, Owens, Sami & Fargeon, 2006; Young et al., 2005). For example, Rucklidge and Tannock (2001) found that females with ADHD (predominately the inattentive and combined type) who were between the ages of 13 and 16, displayed levels of self-esteem that were significantly lower than females without ADHD. Similarly, Slomkowski, Klein, and Mannuzza (1995) found that after controlling for the presence of a current mental disorder, adolescents and young adults aged 16 to 23 who had ADHD symptoms in childhood displayed lower self-esteem than adolescents who did not have ADHD symptoms in childhood. Moreover, in the hyperactive and control groups, youth with higher self-esteem rated themselves as having fewer ADHD symptoms and were judged by clinicians to have better psychosocial functioning. In terms of gender differences, female youth with ADHD have been found to exhibit lower self-esteem as compared to male youth with ADHD, in addition to other psychosocial difficulties such as higher levels of anxiety and depression, increased feelings of distress, and deficient coping skills (Rucklidge & Tannock, 2001; Rucklidge, 2010; Young et al., 2005). Although self-esteem and self-concept are conceptually different from self-efficacy, the above findings from studies in adolescents, college

students, and young adults suggest that youth with ADHD may have more negative views of themselves and their abilities as compared to their non-ADHD peers.

An examination of the LD literature also provides hints towards the self-efficacy for learning beliefs of youth with ADHD, as both ADHD and LD are associated with deficits in academic functioning, motivation, self-regulation, and executive functions (Baird, Scott, Dearing, & Hamill, 2009; Harris, Reid, & Graham, 2004). Studies in youth with LD have found that lower self-efficacy for learning beliefs are common in this population as well (Baird et al., 2009; Harris et al., 2004; Hampton & Mason, 2003; Klassen, 2007, 2010). For instance, Klassen (2007) conducted three studies investigating the motivational beliefs of students with LD. Participants in the first two studies were in high school, whereas participants in the third study were undergraduate students. Klassen (2007) found that all students with LD, regardless of their age, expressed low confidence in their ability to self-regulate their learning compared to students without LD. In a more recent study, Klassen (2010) examined gender differences in self-efficacy for learning among youth with and without LD, and discovered that adolescent girls showed higher levels of confidence to regulate their learning, regardless of LD status. These results are consistent with gender differences found in the typically developing literature (Zimmerman & Martinez-Pons, 1990).

Thus, findings from research in youth with LD combined with results from emerging studies examining self-efficacy in community samples of students with symptoms of ADHD provide strong support for the contention that youth with ADHD may experience less optimistic beliefs about their ability to self-regulate their learning effectively, regardless of their actual achievement levels.

Conduct Problems

ADHD is frequently co-morbid with conduct disorders and aggression; hyperactivity may signal future conduct disorders (Gittelman, Mannuzza, Shenker, & Bonagura, 1985). In a review of ADHD co-morbidity studies with community-based samples, ADHD was found to most often be co-morbid with Conduct Disorder and Oppositional Defiant Disorder with rates ranging between 42-93% (Jensen, Martin, & Cantwell, 1997). One longitudinal study followed 85 children ages 7 to 11 years old for an average of 9.11 years into adolescence with participants' mean age being 18.23 at follow up (Harty, Miller, Newcorn, & Halperin, 2009). At the beginning of the study, the participants all met diagnostic criteria for ADHD and were divided into three groups based on the presence of co-morbid diagnoses: ADHD only (ADHD), ADHD co-morbid with Oppositional Defiant Disorder (ADHD+ODD), and ADHD co-morbid with Conduct Disorder (ADHD+CD). A comparison control group was also recruited. During the follow-up, all participants were administered a validated self-report aggression questionnaire that measured four factors of aggression (physical aggression, verbal aggression, anger, and hostility), and a second self-report questionnaire measuring state and trait experience of anger and expression and control of anger. Participants and their parents were also asked to independently report the presence and severity of ADHD symptoms via a validated Likert scale and a checklist featuring all DSM (Diagnostic and Statistical Manual for Mental Disorders) -IV ADHD symptoms. Results at follow-up showed that the ADHD groups all showed higher levels of ADHD symptoms than the control group, and that ADHD symptom persistence accounted for differences in verbal aggression and anger. The latter finding in particular led the study authors to suggest that emotional dysregulation may be an important factor in ADHD (Harty et al., 2009).

In another longitudinal study, participants (initially aged four to twelve years old) with ADHD showed poorer outcomes than a matched sample of non-ADHD students eight years later at follow-up (Barkley, Fischer, Edelbrock, & Smallish, 1990). At follow up, the adolescents with ADHD were three times more likely to have been suspended from school or to have failed a grade, and more than eight times more likely to have been expelled from school or have dropped out of schools than the control subjects. Young adults with ADHD also reported ADHD symptomatology and higher use of mental health services than control groups (Hansen, Weiss, & Last, 1999). In sum, the symptoms of ADHD continue to manifest themselves in inappropriate ways into, and past, adolescence.

In conclusion, adolescents with ADHD are a vulnerable population with a large variation of influencing factors. While ADHD is often considered a childhood disorder, research documents the persistence of symptoms into adolescence. Moreover, adolescents with ADHD face increased risks for both negative academic (e.g., likely to have lower grade point averages, fail a grade level) and social (e.g., likely to have few friends, be a victim of bullying, and be disliked by peers) outcomes. Given the increased academic and social demands experienced during adolescence, this time period is a particularly difficult one for adolescents with ADHD.

Perceptions of Mental Illness

One of the problems that may be affecting the positive interaction of the differing interventions for the student with ADHD may be the perception of the mental illness by both sides of the support system model (those receiving the support and those giving it). The social difficulties experienced by adolescents with ADHD also may be impacted by the attitudes associated with the disorder. Based on previous research, adults and children alike generally perceive mental illness in a negative light, with children developing negative attitudes toward

mental illness at young ages (Wahl, 2002). The Surgeon General has highlighted the danger of

stigma by identifying it as a primary barrier to people seeking treatment for their mental illness

(U.S. Department of Health and Human Services, 1999).

It is important to understand the development of stigma within adolescents, in order to

develop ways to prevent these attitudes and behaviors from developing and persisting. Also it

casted further light on the relationship between the student and the interventions they encounter

as they progress to adulthood. All participants in this study were queried in this area to see if any

common themes emerged.

Internalizing Difficulties

Many researchers have explored the association between emotional functioning and self-

efficacy perceptions, and have demonstrated that these two constructs relate in diverse areas of

functioning, to include education (Nelson & Knight, 2010), sports (Nicholls, Polman, & Levy,

2010), interpersonal relations (Thomasson & Psouni, 2010), and stress and illness (Roddenberry

& Renk, 2010). In general, outcomes from these studies suggest that higher levels of

internalizing symptoms such as anxiety and depression are related to lower levels of perceived

self-efficacy. According to Bandura (1986; 1993), adolescent students evaluate their emotional

and physiological states as they judge their sense of confidence; strong emotional responses can

send signals to students about expected success or failure. Thus, feelings of hopelessness,

anxiety, or despair are felt when faced with a particular task that may lead students to believe

that they are incapable of successfully performing that task. In contrast, a secure sense of

physical and emotional well being along with reduced negative emotional reinforcement can

strengthen feelings of confidence and ability (Bandura, 1986; 1993).   Bandura examined this

theory and discovered that decreased levels of academic self-efficacy beliefs contribute directly

to depression as well as negative influence on academic achievement. Bandura, Pastorelli, Barbaranelli, and Caprara (1999) found that students with lower self-efficacy beliefs were also likely to score lower in academic achievement evaluations, which in turn, led to feelings of academic inadequacy and depression. Similarly, McGee, Anderson, Williams, and Silva (1986) found that lower levels of self-esteem could be linked to depression and a negative view of one's academic ability in a group of 792 school-age children. These researchers concluded that depression might be more closely related to lower perceptions of competence than with actual task performance per se.

Youth with ADHD commonly experience emotional disturbances such as depression, anxiety, and low self-esteem (Barkley, 1998). For example, in a recent longitudinal study by Lee et al. (2008), researchers discovered that 37 % of youth who were diagnosed with ADHD in preschool internalized difficulties in adolescence, compared to 10% of youth in the comparison group. In addition, some researchers have linked higher levels of internalizing symptoms in ADHD with lower levels of self-esteem. Treuting and Hinshaw (2001) examined depression and self-esteem in a large sample of boys with ADHD aged 7 to 12 years and found that children with ADHD exhibited higher levels of depression and lower levels of self-esteem as compared to their typically functioning peers. In addition, depression and self-esteem were negatively related in both the ADHD and control groups. Furthermore, symptoms of inattention and hyperactivity have been linked with depression in community samples of children and youth (Herman, Lambert, Ialongo, & Ostrander, 2007). For example, MacPhee and Andrews (2006) explored those factors that lead to depression in a large community sample of pre-adolescent children. Although these researchers found that low self-esteem was the strongest predictor of later depression, symptoms of hyperactivity and inattention also significantly contributed to the

development of depressive symptoms in early adolescence. Taken together, the above research suggested that students with elevated levels of inattention and hyperactivity are more likely to experience symptoms of depression, and symptoms of depression have, in turn, been linked with lower levels of perceived competence and self-efficacy.

ADHD Effects on Adult Functioning

While ADHD is discussed most often in the context of adolescents, it can also have a profound effect on an adult's functioning. Able et al. (2014) report:

The results of the international web-based study of adults reporting a current diagnosis of ADHD revealed a significant impact of the disorder on a range of outcomes, including social, family, and work relationships; comorbidities and health status; health-related work productivity impairment; and health care resource use within select geographies in Europe and the US. (p. 30)

They surveyed a wide array of individuals who had diverse life and educational experiences and found that, overwhelmingly, adults with an ADHD diagnosis continue to struggle with difficulties caused by the disorder and benefit greatly from coping strategies.

A qualitative study conducted on adults with ADHD who also smoked tobacco concluded that many of the participants linked their smoking to dealing with their ADHD symptoms. They reported that "Subjects generally had a positive view of the effects of tobacco, describing a range of beneficial uses: Reducing tension, alleviating restlessness, relaxing in general, improving attention, regulating emotional distress, and relieving depressive symptoms" (Liebrenz et al., 2014, p. 152). Basically, tobacco was a method of self-medication that allowed these adults to calm down and focus to help better deal with ADHD symptoms. Kronenberg et al., (2014) studied the relationship between substance use disorder and ADHD, and found that participants

felt as though they needed to self-medicate themselves to deal with the constant flow of thoughts and emotions that made it difficult for them to think clearly. They also identified a lack of structure as the root cause for the substance abuse. When following a structured schedule and staying busy they felt as though they did not need to self-medicate as much to slow their thought process enough to think clearly.

Because these studies showed the lingering effects of ADHD symptoms into adulthood, it is crucial for students to be taught strategies throughout adolescence to cope with the disorder. Symptoms do not go away, but they can be tolerable when an individual understands ADHD and knows how to be successful in spite of the challenges that it causes.

Interventions and Coping Strategies for Individuals with ADHD

While ADHD at times can seem debilitating for students, they can learn to cope with symptoms in a manner that eases the burden of the disorder in their everyday life with proper support. Fabiano (2014) sums up the needs for ADHD students by stating:

Beyond a need for more studies of efficacy and effectiveness within high school-aged samples of youth with ADHD, there are a number of considerations that must also be addressed. This includes the need for a developmental model covering early childhood through adulthood, consideration of intervention intensity, the need to train teens and adults in adaptive functional skills, the need to reduce impairment in functional domains, and the inclusion of multiple adults within the teen's treatment plan. (p. 203)

One such treatment plan being used is the Challenging Horizons Program (CHP). This program involves training teachers to mentor the student with ADHD, following up often to assist wtih organizating the book bag and assignments along with various study skills. Students themselves and their parents take classes in how to successfully manage within the confounds of the

disorder, with the adults learning strategies to support and the students learning strategies to cope with and compensate for their symptoms.   A study of the CHP program using treatment and control groups found that the program was not successful in helping students' better deal with their symptoms, but the parents reported having greater understanding of how they could help their child (Evans et al., 2014).

Basically, ADHD is a disorder that presents itself in childhood and continues into adulthood. It is critical that treatment plans follow and adapt with developmental stages to be effective. The creation of a web of strategies for the individual and a support group of adults is necessary to help the individual with ADHD progress through each developmental stage from childhood to adulthood (Fabiano, 2014).

Medication is a popular solution for individuals with ADHD attempting to control and cope with symptoms. Methylphenidate is the most commonly prescribed medication for this purpose. It "raises alert levels in the central nervous system, causing increased production and recycling of neurotransmitters, resulting in improved concentration, coordination and impulse control in patients with ADHD" (Mariotti & Schlichting, 2014, p. 24). While it is widely used, it is considered quite dangerous, and is associated with increased likelihood of users abusing drugs, risk of heart issues, and psychiatric issues. Users and doctors should take caution and monitor use closely to ensure that the benefits continue to outweigh the risks (Mariotti & Schlichting, 2014).

Academically, students with ADHD can benefit from strategies that help them manage symptoms while completing tasks. Reid, Hagaman, and Graham (2014) studied the research on the writing process in students with ADHD and found that using the Self-Regulated Strategy Development (SRSD) greatly increased the quality and quantity of the students' writing. There

are multiple writing programs that use SRSD as their basis, and they all share one specific

characteristic: Organization of all ideas in a process. All of the research available supported the

use of an organizing strategy that allowed the learner with ADHD to arrange thoughts and make

sense of their ideas before attempting to write a cohesive paper.

Cognitive rehabilitation has been studied as a method of training the learner with ADHD

to improve attention and working memory by doing repetitive exercises over a period of time.

Results indicated a large increase in both attention and working memory when participants

completed exercises as assigned to retrain their thought process to be more organized and

focused (Tajik-Parvinchi, Wright, & Schachar, 2014).

Defining Attitudes

To clarify exactly what this study was looking for when investigating this area, the

inclusion of the following definitions of specific attitudes is prudent. When studying attitudes

toward persons with mental illnesses, the research literature typically focuses on stigma, defined

as "the prejudice and discrimination linked to individuals with mental illness" (Pescosolido,

2007, p. 611). More specifically, stigma researchers focused on the presence or absence of

negative attitudes (prejudice) and the tendency to engage in behaviors that are exclusionary in

nature (Martin, Pescosolido, Olafsdottir, & McLeod, 2007). An example of a prejudice would be

a belief that all children with ADHD are annoying, while excluding a peer from an activity

because they have Attention-Deficit/Hyperactivity would be an example of discrimination.

Similarly, Gottlieb and Gottlieb (1977) have conceptualized attitudes as embodying two

components, a cognitive attitude and a behavioral intention. The cognitive attitude embodies

statements reflecting perceptions, beliefs, and stereotypes, such as "children with ADHD are

fun" or "children with ADHD are annoying". Behavioral intentions are statements regarding

intention to interact with another, such as "I would go to a birthday party with a child with Attention-Deficit/Hyperactivity Disorder", or "I would not go to a movie with a child with Attention-Deficit/Hyperactivity Disorder." Behavioral intentions are relevant to discrimination while cognitive attitudes are pertinent to prejudice.

Teacher Perceptions of ADHD

Teaching students who have ADHD symptoms is a challenge, and a study was conducted to determine if the knowledge of an ADHD diagnosis in a student would cause the teacher to act differently towards the student. Using vignettes and teacher feedback, the study concluded that teachers behaved the same towards the students whether they were identified as having ADHD or not. Teachers maintained the same level of professionalism and care for both sets of students and worked to find solutions to better teach all students (Ghanizadeh et al., 2009).

In a nationwide study of teachers and the students with ADHD that they teach, Fabiano, Pelham, Majumdar, Evans, Manos, Caserta, Girio-Herrera, Pisecco, Hannah and Carter (2013) found that several factors were correlated that had significance for these teachers. In the elementary school, the percentage of students suspected of having ADHD but not diagnosed was higher than the reported percentage of students with a diagnosis. Students with ADHD in elementary and middle school who were economically disadvantaged (received free or reduced-price school lunch) were less likely to be medicated than ADHD peers who are not economically disadvantaged. Also interesting was the finding that class size affected the rate of medication for students with ADHD in middle school: The higher the student-teacher ratio, there was a smaller likelihood of the ADHD students being medicated (Fabiano, et. al., 2013). While there is no causation suggested for any of these factors, they do expose areas in which more research is

needed to provide better support for students in lower economic situations and in schools with larger class sizes.

Bell, Long, Garvan, and Bussing studied the stigma perceptions of teachers based on whether or not they hold teaching certification in special education. They found that the special education certified teachers were more in tune to the feelings and experiences of the students with ADHD. While the cause of that cannot be definitively stated, it does appear that the training teachers receive, to become certified in special education, also properly prepares them to teach students with ADHD (Bell, Long, Garvan, & Bussing, 2010).

Rush and Harrison (2008) developed a concept map using themes related to teaching students with ADHD that were sorted by study participants (100 teachers). Several themes emerged as areas of concern, but the central factor identified by the participants was the need for training. This need affected all other theme groupings. The results of this study showed that teachers could manage classroom discipline and could cope with their own discomfort and need for resources if they felt as though they had been trained with the skills appropriate to be able to teach these students.

ADHD Effects on Family

ADHD symptoms affect adolescents in all aspects of their lives, often including interactions with family members in the home. Wymbs, Pelham, Molina, and Gnagy (2008) examined the relationship dynamics between mothers and their children diagnosed with ADHD to determine the additional level of discord purported to exist in the home. Their findings showed that relationships in the family when a child has ADHD and a comorbid conduct disorder diagnosis tend to be more negative, with increased aggression and a lack of resolve in conflicts. Surprisingly, the families with only an ADHD diagnosis in the child did not indicate

additional difficulty in parenting. A Hong Kong study supports this finding when examining quality of life in the home. While parents reported lower quality of life when raising a child diagnosed with ADHD, the study participants also reported the severity of their child's symptoms to be higher than typical norms. The study states:

> Although the poorer quality of life experienced by this group of parents is expected, it is interesting that it is not so much the ADHD symptoms, but the presence of emotional and hyperactivity/inattention symptoms in the children that is significantly correlated with the parents' quality of life. (Xiang, Luk, & Lai, 2009, p. 735)

Graziano, McNamara, Geffken, and Reid (2011) compared the severity of ADHD symptoms in children with the stress level of their parents. They found that only hyperactivity symptoms were associated with higher stress levels, and that there was no difference in stress levels when children did not have the hyperactivity symptoms. Hyperactivity symptoms for the purpose of the study included: Impulsivity, aggression, executive functioning, and emotional instability. The child's ability to self-regulate these symptoms helped relieve the stress level of their parents (Graziano et al., 2011).

A study measuring the compliance of parents in following through with clinical recommendations for their child with ADHD revealed that 70% of parents do closely follow the advice and programs created to assist these children (Dreyer, O'Laughlin, Moore, & Milam, 2010). Those who reported adherence to recommendations also reported more improved behavior in their child than those parents who reported that they did not strictly follow the recommendations. The number of parents cooperating with follow-up exercises and activities was higher than anticipated by the researchers, causing them to question the validity of the findings. They questioned whether parents were truly following clinical recommendations or

whether they were not willing to admit that they were neglecting the treatment plan (Dreyer et al., 2010). If the study holds true, it would be advisable for parents to closely follow treatment plans set forth by clinicians to help their children deal with the difficult symptoms of their ADHD.

Summary

There are many associated risk factors with negative outcomes that affect the diverse group of individuals diagnosed with ADHD. People diagnosed with ADHD are more likely to experience social risk factors, have problems with substance abuse, and struggle academically than those that do not have ADHD. The process of education, therapy, medication (under the strict care and oversight of a physician well-versed in the adverse effects of such), family, teachers and friends as support, and using effective interventions are all pertinent factors in creating a successful approach to living with ADHD. Ultimately, the diagnosed ADHD person will struggle in the school system and will need to contend with their low self-esteem and challenging social situations; however, teachers appear to be willing and accepting of these students. Students with ADHD need to develop appropriate skills to manage their own social situations and self-identity and build effective support systems of interventions to strengthen self-efficacy. Conclusively, positive interventions can provide an appropriate means of helping a student with ADHD accomplish their goals and remain positive about the diagnosis.

CHAPTER THREE: METHODS

Overview

The purpose of this phenomenological study was to examine the lived experiences in the public school setting of teachers involved in providing interventions for students diagnosed with ADHD and to look for common themes as they related to the differing interventions available to them in the public school setting. A phenomenological design with use of triangulation strategies was used. This chapter contains the rationale for utilizing a qualitative research design, along with the sample, recruiting strategies, and procedures for data collection and management. Also included are the approaches to data analysis and interpretations used, including techniques to establish validity and trustworthiness of the data collected.

Design

This was a qualitative phenomenological study. A heuristic approach was originally considered in which the researcher was seeking deeper meaning in a topic with which he is fully involved and is searching within himself for answers (Moustakas, 1994). This approach was abandoned due to the desire to collect perspectives and experiences from adults who function in varying capacities in providing ADHD interventions. As an educator, the heuristic approach could be very useful to the researcher if the only focus of the study was the experience of educators within the same school. The heuristic approach, with its strong focus on researcher reflection, would have provided a bias in the results and potentially weakened the description of the experience of these teachers. By not using a heuristic approach, the researcher could function as an outsider looking into the lives of these educators that are working with very unique individuals in unique situations. The use of a phenomenological method allows the researcher to bring forth into consciousness preconceived ideas about the phenomenon and then

set them aside (Moustakas, 1994). Using this method allowed each statement to have equal value and allowed the researcher to bracket the phenomenon so that the focus of the research was clear. Gaining meaning from the statements and developing insights as a result of the reduction process were enhanced through this process (Moustakas, 1994).

Interviewing the participants was the primary data source, but the information also included focus groups to gain further evidence in different environments. Journals were maintained by each participant to include reflection on their daily experiences in working with students with ADHD. This allowed the use of a greater information base for the research purpose and assisted in formulating theories about the phenomena being studied (Hatch, 2002).

In order to gather more information on this population group, the phenomenological design allowed participants to discuss their perceptions of working with a student with ADHD and the perceptions they developed throughout their lives/careers as they interacted with the students through roles in providing differing interventions. The researcher's curiosity about students' experience of coping with ADHD added to the personal growth of the researcher and to the understanding of the ADHD phenomenon.

Research Questions

1. How do teachers perceive the experience of providing interventions in the public school setting for ADHD students?

2. How do interventions for ADHD students affect the perceived relationship between the students and the teachers providing the interventions for them?

3. How does a teacher providing interventions for ADHD students experience success or failure of those students?

4. How are teachers' perceptions toward ADHD students changed over time as a result of providing interventions for these students?

Setting

Hall county was chosen for the study and contains one of the larger school systems in the state of Georgia. Most of the county remains extremely rural, with many residents residing in unincorporated areas, accounting for more than half of the county's population, while the remainder of the population resides in the urban city center and densely populated suburban towns directly surrounding it. The selection of a county this size is necessary in order to insure an appropriate number of qualified participants. Counties smaller than this may not have the number of teachers with ADHD impaired students needed to reach data saturation.

The school system, which serves approximately 28,000 students is somewhat diverse, with students representing the following ethnicities: 1% Asian/Pacific Islander, 5% black, 38% Hispanic, 2% multi-racial, and 54% white. Of the school system student population, 62% are considered economically disadvantaged, 20% are limited English proficiency, and 10% are students with disabilities. A wide array of possible participants adds to the relevancy of the findings.

Innovation abounds in this school system, and leaders are proactive in providing learning experiences for students that are meaningful and effective. The district granted charter status to several of its schools, which allows for freedom from many of the state-imposed mandates that typically dictate how education is delivered to students (class sizes, teacher qualifications, programs of study, course sequencing, etc.). Through the charter, the schools were all able to focus on a specific area (such as fine arts, world languages, or career/technical fields), and parents/students are able to choose which school to attend.

The school system has progressive leadership and is representative of the various medium to larger school systems in the state. Graduation rates are comparatively high, with the state graduating 72.5% of students and this system graduating 75.2% of its students (College and Career Ready Performance Index, 2014). The special education programs in this county include co-taught (regular classroom), resource (pull out classroom), direct instruction (separate classroom), and an alternative learning center (separate school).

Participants

There were 12 participants in the study who were teachers performing in and filling support roles for this subgroup of students. Data saturation was the primary objective. Initially, 14 participants were chosen with an initial group of two participants serving as a pilot study to help enhance questions and techniques and to uncover any unforeseen problems. Then, the remaining 12 entered the study. All participants were teachers involved on a daily basis with students diagnosed with ADHD.

The participant pool included teachers of students in a specific school system that provided interventions for students diagnosed with ADHD. A letter explaining the study was sent via e-mail to prospective participants with follow-up phone calls to encourage timely response (Appendix B). From the individuals that responded to the email, 14 participants were chosen based on the responses to a survey.

Criterion sampling involves selecting cases that meet some predetermined criterion of importance (Patton, 2001) and can be useful for identifying and understanding cases that are information rich. Criterion sampling can provide an important qualitative component to quantitative data and can be useful for identifying cases from a standardized questionnaire that might be useful for follow-up (Patton, 2001). The participants fell under the criterion sample

because they fit the inclusion criteria in the survey. According to the phenomenological view, these individuals were considered the experts on the issues examined due to their direct experiences with these issues (Creswell, 2007). Criteria used were daily interaction with students with ADHD, responsibility for the learning and/or growth of these students, and willingness to participate in the study.

Procedures

The participants in the study were found through the school system special education director, who works with principals of the schools with programs for students with ADHD. The special education director at the central office assisted with locating participants for this study and included at least one teacher from each of the system's seven high schools. A request was emailed to the system special education director detailing the criterion of desired participants (mix of male and female and daily work supporting ADHD students). The special education director then communicated directly with school principals to select participants. A short survey was used to ensure that the participants selected had exposure to the students with ADHD and were a part of one of the identified support groups. All of the participants were adults. There were 14 initial participants who were contacted through email and phone calls. During the phone call or email, information about the study was given. All of the participants were asked to sign an informed consent form (Appendix A) to participate in the research study, as well as a consent form that allowed the researcher to audiotape the interview and use a professional transcriptionist. All of the individual interviews were conducted in person, and group sessions occurred in person or conference call. The consent forms were given to the participant prior to any interview. The interview was conducted after the researcher received the signed consent form. The participants were informed about their right to voluntarily withdraw from the study at

any time without fear of consequences, their right to confidentiality, and any possible risks, such as experiencing uncomfortable feelings that might occur while discussing the participant's experiences with ADHD (Appendix A).

Prior to the interview, the adult participants gave consent and answered a short survey to determine if the participant was part of the defined support groups. The participants then were given a semi-structured interview in person. Individual interviews lasted for approximately 30 to 60 minutes and were audio recorded and transcribed by a professional transcriptionist hired from the local university. The pilot group of two interviews took place in person. The purpose of the pilot was to ensure that the interview questions were clear and elicited the type of information the researcher intended to gather for the study. Pilot participants' answers provided the researcher with a general idea about whether the questions were worded appropriately before questions were asked of the actual study participants. No changes were made to the interview questions based on the pilot. Throughout the study, the participants' identities were kept confidential, and no personal information was released with regards to this study.

Interviews were scheduled at a mutually agreed upon time. At the beginning of the interview, time was spent developing a limited rapport and establishing a nonjudgmental atmosphere. The researcher spent time talking to the participants before starting the semi-structured interview to make them feel more comfortable. After some rapport building, the researcher asked the participant demographic questions including the participants' background in education and years of experience with ADHD. After demographic information was obtained, the researcher then began the interview. The participants were asked a series of questions in a semi-structured interview (Appendices C, D, and E). There was a digital recorder to record the interview process, and a professional transcriptionist transcribed it. Confidentiality was an

important aspect of this study. No names were used directly or indirectly, and each participant had his/her name coded to ensure confidentiality. Only the researcher had access to the participants' names.

A professional transcriptionist transcribed each of the recorded interviews. For this study the "aha" moment that Moustakas (1994) mentioned came after the interviews were completed and transcribed. The transcriptions were read to search for any relevant themes to be extracted from the dialogue. Once the interviews were transcribed and bracketed, data analysis was completed.

All recorded interviews were secured and treated with the same respect as clinical records. Transcriptions were coded and secured in a locked cabinet in this researcher's possession. Audio recordings, transcriptions, and any data collected from participants will be destroyed three years after the study has been completed, in compliance with federal law.

The Researcher's Role

I am an emotional behavior disorder (EBD) teacher with 13 years of teaching experience. Over those years, I have encountered many students diagnosed with ADHD and have experienced first-hand the devastating consequences of the behavioral traits of these students. I have seen a real disconnect between classic interventions and any real progress in the students' behaviors, which has made me curious about what motivates, inspires, and supports these students' dreams and desires. My role as a researcher was to identify participants by described parameters, and through consent, to enter them into the study. I have years of experience of working as an EBD teacher containing a high percentage of students with ADHD. However, to fully describe how participants view the phenomenon, I bracketed out my own experience (Creswell, 2007). Merriam and associates (2003) described bracketing as the process that allows

the experience as an explanation in terms of its own intrinsic system of meaning, not one imposed on it from without. Hatch (2002) described bracketing as a strategy for separating impressions, feelings, and early interpretations from descriptions during qualitative data collection. I used the bracketing strategy to not impose my personal experiences as a self-contained EBD teacher.

Data Collection

Each participant was given a consent form, which provided information for an audio-recorded interview (Appendices C-E). Participants were given a code, such as Teacher 1, Teacher 2, etc., to protect the identities of the participants from the interviews. An audio tape recorder was used to record the interviews, which lasted from approximately 30 minutes to one hour. The time and location of the interviews was convenient for the researcher and the participants. An interview guide (Appendix C) was used to assure that important information was covered, and the purpose of the questions was to draw from the participant a comprehensive description of their lived experiences in interacting with students with ADHD. The interview guide was used as a way to allow the participants to respond to questions that were pertinent to this research; however, some responses not anticipated by the researcher prompted additional questions. All interviews were audio taped and transcribed by a professional transcriptionist to ensure accuracy of manuscripts used for analysis. After the interviews were transcribed, a copy was given to the participants to check for accuracy and validation. This member checking allowed the participants to review the transcripts and clarify or reword any statements that were misinterpreted or misunderstood in the interview process (Creswell & Miller, 2000).

Participants then took part in focus groups of four to gather further information and generate discussion about support systems for students with ADHD (Morgan, 1997). Each group

consisted of four teachers. Questions (Appendix E) were open-ended to allow for discussion between participants that should provide multiple viewpoints and a wide array of perspectives. This added richness to the data that could not be achieved with only individual interviews. Focus group discussions were also recorded, transcribed, coded, and reviewed for pertinent themes.

To provide triangulation of data, and to ensure the reliability of the collected information by examining multiple sources of data for consistency (Denzin, 1970), participants were asked to keep a journal for two weeks, or ten consecutive school days. During that time, they were to write each day about their experiences dealing with students with ADHD, including the participant's own reflection of beliefs about these students as learners and individuals. The journals were fully reviewed by the researcher and coded for various ideas. Themes were determined within each individual's journal, and shared themes across all participants' journals were identified.

The focus group interviews, combined with the individual participant interviews and journal entries, provided a clear description of interventions necessary for students with ADHD and the difficulties these teachers face on a daily basis. The information gleaned was studied, reflected upon, coded, and split into common themes. This was done for the purpose of drawing conclusions about common experiences to suggest phenomenology reflected in a rich description of the human experience as providers of interventions for students with ADHD (Moustakas, 1994).

Data Analysis

Creswell (2007) stated in the data analysis stage of a phenomenological study, that the personal experiences of the participants are in the form of a description. This stage is a

systematic search for meaning. Hatch (2002) stated in a qualitative study, that data analysis

means organizing and interrogating data in ways that allow researchers to see patterns, identify

themes, discover relationships, develop explanations, generate theories, and make interpretations.

Interviews were transcribed verbatim. The first review of the interviews and focus group

discussions was used to identify statements that related directly to the lived experiences of

students with ADHD and the teachers who provided interventions. Creswell (2003) suggested

that meanings are formulated from the statements of the participants. A second review of the

transcripts resulted in identification of themes addressed by participants. The formulated

meanings included categorized themes common to all of the participants. To identify these

themes, the researcher read the transcripts of the interviews multiple times and reflected on the

statements made and how they related to each other. This may help provide an understanding of

the phenomenon of ADHD student interaction with available support systems. Journal entries

were each reviewed and coded, noting emerging themes within each individual journal first, and

then between journal entries of multiple individuals. Coding was used to categorize the themes.

A structural description included a description of how the phenomenon was experienced by the

research participants, using the thoughts and words of the participants as much as possible.

The researcher utilized the constant comparative method that is described by Maykut and

Morehouse (1994) to analyze the data collected from the qualitative interviews, focus group

discussions, and journal entries. In this process, categorization and integration of participants'

responses took place through the researcher's noting of common words and themes that emerged,

toward an understanding of participants' experiences (Bernard, 2000; Creswell, 2005; Miles &

Huberman, 1994). Those common themes form the basis of the findings that show the

phenomenon associated with educating students with ADHD, and with support systems to help them achieve success.

Trustworthiness

The researcher worked to maintain objectivity throughout participant interviews and hired an independent auditor to transcribe the recorded interviews from digital recordings, which were peer reviewed for analysis. Transcriptions, notes, and tapes were kept in a secure facility for privacy purposes. Member checks were used to give participants the opportunity to check what they have said and correct any mistakes or misstatements. Triangulation of the data gives it credibility, along with clarifying researcher bias; clearly identifying background and connection to the participants, if any exists. Peer reviews (colleagues of the researcher) were used to double check data and give additional input into the data analysis.

Ethical Considerations

The researcher gained Institutional Review Board (IRB) approval and informed consent from each subject being interviewed. Approval was also established with the site location authority and the individuals within the facility. The researcher protected the institutions and participants in the study through the use of pseudonyms and destruction of secured data three years after the end of the study. The study consisted of adults who gave consent to participate in the study by signing a consent form that clearly articulated the requirements of participation in the study. The participants were informed of the confidentiality and the protection of their identity in the consent form, as well as at the beginning of the interview process. Confidentiality means that the researcher withheld identifying information about the participants to ensure that the participants could not be identified. The participants were informed of the limits of confidentiality before the start of the interview. The limits of confidentiality included the

following: Child abuse, if the perpetrator has access to children, if the participant is in imminent danger to themselves or to another person, elderly abuse, or if they are gravely disabled. The participants were informed of their right to withdraw from the study at any time before the beginning of the interview. The interviews were audio recorded and transcribed. Each of the participants were informed that the recording would be destroyed when the information had been transcribed. The researcher took all precautions to ensure the confidentiality of the participants at all times during the study.

Summary

This transcendental phenomenological study gathered participant perceptions about their experiences as providers of ADHD interventions for students through individual interviews, focus group discussions, and journaling. The data was reviewed, reflected upon, coded, and sorted into themes shared throughout the group of participants. The culmination of this information was a detailed description of the human experience as perceived by the individuals involved.

CHAPTER FOUR: FINDINGS

Overview

The purpose of this phenomenological study was to examine the lived experiences in the public school setting of teachers involved in providing interventions for students diagnosed with ADHD and to look for common themes as they related to the differing interventions available to them in the public school setting. This chapter includes a rich description of each participant and a thorough discussion of the data gleaned from their interactions throughout the course of data gathering. Results are then discussed and research questions answered based on codes and themes identified from the data analysis.

Participants

A total of 12 participants were chosen for the study using purposeful sampling of a pool of volunteers from various schools across the district. They were asked to share their ideas and experiences with the hope that they would be able to provide enough information to allow for description of the phenomena. The participants, using pseudonyms to maintain confidentiality, are each discussed below.

Janet

Janet is an eighth grade science teacher. She is 33 years old, has been married for seven years, and has a two-year-old son. She grew up in a rural town close to where she now works. To experience the world, she went to a college across the country and completed a study abroad program out of the country while in college. Her highest degree completed was a Bachelor of Science degree in Geography. She has been involved directly with students with ADHD for four years. When asked to describe ADHD, she was very succinct in stating that it is "a condition where children exhibit hyperactive and impulsive behaviors."

Janet wields a thorough understanding of the learner with ADHD and greatly appreciates his individuality and value as a class member. She sees all of her students as unique and uses strategies with any learner who needs additional assistance without categorizing them by disorder or disability. She is an intuitive and reflective teacher who is always taking cues from her students' behavior in the classroom and changing instruction as needed to fit their needs.

Cadie

Cadie is 44 years old and currently is a special education math teacher in a middle school. She holds a specialist degree in special education. She has worked directly with students with ADHD for 21 years. She was a bit more descriptive in her view of ADHD when she described it as,

> A disorder where students have problems focusing and staying on the task at hand. Some are very hyper and cannot control their actions. Depending on the degree of ADHD, some require medication to be able to control their hyperness and to be able to focus and pay attention to be successful.

> While Cadie's description of ADHD makes the statement that these learners "cannot control their actions," her responses to interview questions did not reflect this. She spoke of feeling that her learners with ADHD use their disorder as an excuse to underachieve. When she discussed a lack of success for these students, the blame was placed with the student. She did not assume personal responsibility for their learning and did not experience the self-reflection on her methods and strategies that could help her grow professionally. Her resolve was simply to start over the next day and give the student another chance.

Julie

Julie is 48 years old and in her 6th year teaching eighth grade language arts to special

education students. She holds a Bachelor of Science degree and a Masters degree in special education. She has two children and one grandchild. Her son is currently in college. In her spare time, she volunteers for a local program that provides athletic activities for local individuals with disabilities.

Julie has worked directly with students with ADHD for all of her six years of teaching. She described her view of ADHD:

> A student affected by ADHD often times is easily distracted, fidgets in their seat, finds it difficult to remain seated and focused on a task. Often struggles with finishing a task or assignment. Students with ADHD often struggle with organization, listening to directions or lessons. These students often are impulsive, blurting out answers, and have difficulty waiting for their turn or to be called on during a discussion.

Overall, Julie tackles teaching with excitement and a desire to reach all learners. She does, however, admit that she has students that choose to not be successful, and, according to her, that is their choice to do so. She does not feel a sense of responsibility to continue to provide interventions for these students if it appears as though they are not working as hard as they can.

Gina

Gina is 51 years old. She is a National Board Certified teacher and currently teaches business education in a middle school. She has been in the same teaching position for 14 years. Her highest degree is a Masters in occupational studies.

Gina has worked directly with students with ADHD for 15 years, all of her years in her current position and one year as a student teacher in college. Her feelings on ADHD are described below:

I would describe ADHD as the inability to focus on tasks in order to be successful in personal and school activities. I always think of a person with ADHD as someone that has brain activity speeding in many different directions. And, because there is so much going on, it is hard to catch the line and hang on. ADHD disrupts the child's family and school environments to the point of frustration in all settings. It is my experience that ability and intelligence do not go along with ADHD. A student with a very high IQ and ADHD has as many issues as a student with a lower IQ and ADHD. It disrupts their ability to learn, communicate in social and academic settings, and follow generally accepted behavioral rules and procedures. The ADHD student does not set out to be disruptive or non-attentive, but that is what I would describe as the most apt description of the results.

She sees her role in the classroom as a facilitator of learning and believes it is her mission for all students to be successful. She completely understands ADHD and works daily to help her learners with ADHD find success despite their obstacles.

Brooke

Brooke is 33 years old and currently teaches seventh grade life science. She holds a Bachelors Degree in middle grades education in math and science. She has been teaching for nine years and was a paraprofessional in an elementary school for a year prior to becoming a teacher. She is married and enjoys hiking with her family in her free time.

Brooke has been working directly with students with ADHD for all of the ten years she has worked in education. She gave a very academic description to ADHD by saying, "Attention Deficit Hyperactivity Disorder is a disorder in which the person has difficulty focusing, shows impulsive behaviors, and has difficulty controlling behavior and paying attention."

She is a very energetic, excited teacher. Students with ADHD in her classroom provide variety and a challenge she willingly accepts. Not only is she self-reflective and constantly looking for ways to improve, she also empowers her students to take responsibility for their learning. She involves them in decisions about interventions and solicits feedback from her students to determine if a particular strategy or intervention is productive.

Maggie

Maggie is a 30-year-old Hispanic female. She teaches science and holds a master's degree in science and a specialist degree in curriculum and instruction. She has taught in her current position for three years and prior to that taught one year in another country.

Maggie has worked directly with students with ADHD for all of the three years that she has been in her current position. When asked to describe ADHD, she responded, "A disorder that causes both children and adults to have difficulty settling down to perform a task. ADHD is usually marked by abnormally high levels of impulsive behavior and distractibility that lead to low levels of learning." She values each learner as unique and works daily to find ways to help them achieve success. Soliciting ideas and information from previous teachers, parents, and the student helps her develop interventions she can use from the first day of school.

Ashley

Ashley is 37 years old and teaches high school English. She holds a doctorate degree. She has worked directly with students with ADHD for 12 years. She simply described ADHD as, "when people cannot pay attention, stay still, or concentrate on activities they are not passionate about." She works to make sure she provides as many hands-on learning experiences for her student as possible. Active learning in her classroom has lead to success with many of

her students, including her learners with ADHD. She is innovative and is always reflecting on her practices to ensure they are the most appropriate to reach her specific students.

Krista

Krista is 36 years old and is the lead special education teacher in a middle school. She co-teaches language arts and social studies classes. This is her tenth year at her current school. She holds a bachelor's degree in political science and criminology, a master's degree in special education, and a specialist degree in teaching and learning. She is married and has three children, two in elementary school and one in daycare.

Krista has worked directly with students with ADHD for nine years. She described ADHD as, "A student's inability to focus in class for an extended period of time. Also, an inability to control impulsive behaviors in and out of the classroom." She believes a structured, predictable classroom is helpful for her learners with ADHD. Within the structured classroom, she tries to provide as much variety in teaching methods as possible to hold the students' interest and allow movement. She works to find a delicate balance between the need to have a predictable schedule with anticipated transitions and providing learning experiences that are innovative and hold the students' attention.

Chris

Chris is a 35-year-old male who is in his eighth year of teaching seventh grade social studies. Prior to this position, he taught four years of high school geography in another school system and served for one year as an in-school suspension teacher. He currently coaches a middle school athletic team. His education is extensive, with his Bachelors and Masters degrees in broad field social science secondary education, his specialist degree in teacher leadership, and a leadership certificate added on to his specialist degree.

Chris has worked directly with students with ADHD for 12 years. Simply stated, he said, "ADHD is a disorder that includes impulsive behaviors, hyperactivity, and problems with attention." He finds that involving multiple stakeholders (parents, previous teachers, counselors, etc.) in making decisions on appropriate interventions and strategies for his students is helpful. Through teaching learners with ADHD, he has become more flexible in his teaching style and more willing to attempt new strategies with any learner who struggles.

Mary

Mary is 51 years old and is currently a special education reading teacher in a middle school. She holds a masters degree in special education. Mary has been directly involved with students with ADHD for 19 years. Her view of ADHD takes a different approach than the other participants who focused on the student's inability to focus. She stated,

> To me, ADHD is not the inability to pay attention. It is more paying attention to everything that creates difficulty in focusing on a particular task at hand. Being still and quiet for long periods of time are challenging for children with ADHD. Because everything is a stimulant, responding to the stimulants is only natural. However, in a classroom where skills are often very meticulous, ADHD students struggle to maintain their focus to master many of those skills.

Mary's teaching strategies are refined, and she uses a wide variety of interventions for her students. She is an experienced teacher who has developed many helpful strategies through her years in the classroom. One of her strategies from the first day of school is to develop a good rapport with her students and to really know them as individuals. This helps her customize their learning experience and give her an idea of how to accommodate needs for each of her learners.

Greg

Greg is a 51-year-old male who is a middle school teacher, coach, and parent of a student with ADHD. He holds a specialist degree in educational administration and supervision. He is in his 23rd year in his current position teaching PE and health, and he previously taught for two years in another school system.

Greg has worked directly with students with ADHD for 25 years. He described ADHD as, "The physical and mental condition of having difficulty of focus, controlling actions, sustaining attention, and the physical need to move." He admits that he did not have a full understanding of the needs of ADHD learners until he had a son of his own who struggled with the disorder. He is much more patient with his students since he has experienced parenting a child who is greatly affected daily by ADHD symptoms.

Becky

Becky is 54 years old and teaches high school science to special education students and regular education students. She holds a masters degree. Becky has worked directly with ADHD students for 19 years. ADHD, in her opinion, is when,

> Students lack the ability to focus on tasks long enough to process information well and complete tasks with retention of material. Students will exhibit extra mobility and fidgeting in the classroom and, if suppressed, will usually have either more anxiety, anger, or shut down and fall asleep.

She fully understands ADHD and works to provide appropriate interventions for all learners who need them. She enjoys the challenge of teaching students with ADHD and tries to find ways to harness their energy in the classroom and direct it into the task at hand.

Results

A thorough review of the data provided an extensive list of codes that were used to
categorize comments and responses that were later formulated into overarching themes that are
representative of the collective ideas and experiences of the participants. The following section
contains a detailed description of the participants' experiences, often using their own words, to
define and describe the phenomena being studied.

Codes Identified from Data Analysis

Several over-arching ideas were identified from the data with many codes that helped
further define the concept or idea discussed. Table I gives a brief picture of the frequency of
those codes within the data review. This frequency is not to be used for statistical analysis, but
rather for giving the reader insight into the importance of specific ideas that continued to recur
throughout the data review.

Table 1

Codes Identified from Data Analysis of Participant Responses and Frequency of
Occurrences of Each Code

Topic of Questions: Teacher Relationship with ADHD Students	
Code Identified in Data Analysis	Number of Appearances
Overall Relationship	
Negative	20
Positive	37
Dependent on Individual Student/Behaviors	2
Challenging/Exhausting	5
Teacher Role as Facilitator of Learning/Behavior	2
Enjoyable	1

Topic of Questions: Accommodations/Support Systems for ADHD Learners	
Code Identified in Data Analysis	Number of Appearances
Flexible Seating Arrangement	8
Positive Reinforcement for Desired Behaviors	8
Close Proximity to Teacher/Away from Distractions	7
Group or Pair with Peer Tutors/Role Models	7
Contact with Parents	6
Variety in Teaching/Activities	5

Additional Structure/Clear Expectations for Transitions   5
Redirection When Distracted or Not Working   4
Break Tasks into Smaller Segments   4
Give Student Responsibility for Classroom Tasks   4
Hands-On Activities   3
Keep Engaged   3
Time-Outs, as Needed   3
Repeated/Explained Directions   3
Checking for Understanding at Frequent Intervals   3
Student Completed Checklists   3
Behavior Contracts   2
Help with Organization   2
Review Previous Accommodations/Issues/Successes   2
Use of Technology   2
Very Little Down Time   1
Help with Note-Taking (Slotted Notes)   1
Listen to Music While Working   1
Additional Time to Complete Tasks   1

_____

Topic of Questions: Affect of ADHD on Relationship Between Student and Teacher__
Code Identified in Data Analysis   Number of Appearances
Challenging/Frustrating   7
Collaboratively Identify Needs/Formulate Strategies   6
Makes Teacher More Self-Reflective   5
Require More Structure/Clear Expectations from Teacher   5
Have to Start Fresh Each Day   3
Closer Because of Increased Amount of Communication   2
Must Change Amount of Structure in Class   1
Requires Additional Differentiation/Variety in Instruction   1

Topic of Questions: Evolution of Teacher Understanding of ADHD Due to Experiences
Code Identified in Data Analysis   Number of Appearances
Developed More/Better Techniques for Teaching   6
Realization that All Individuals Have Unique Needs   4
Made More Flexible in Teaching Strategies   4
Empathy for ADHD Students and Their Needs   4
Recognized the Benefit of Positive Reinforcement   2
No Change at All   2

From these codes, several key themes emerged that were reflected by many of the

participants. They are briefly mentioned here in relation to the codes in Table 1 and described

more fully in the following section on emerging themes.

One of the themes was teacher attitude and understanding of ADHD. Codes from Table 1 that contributed to this theme were overall relationship as positive or negative that throughout the data review mirrored the attitude and thus, feelings of success for the participants. Also, the variety of strategies employed by participants, particularly those who felt positive about working with these students; and the professional growth from the participants as they worked with learners with ADHD.

Flexibility and creativity in interventions emerged as an important theme. This was reflected in the codes by the number of participants referring to the experience of teaching these students as challenging and exhausting. The number and variety of interventions used with these students echoed the idea expressed by multiple participants that learners with ADHD are unique individuals who each require a specific set of interventions tailored for them and their needs.

The final theme that emerged was that of teacher self-reflection. As a result of teaching learners with ADHD, study participants became more reflective of their own practices, actions, and relationships with their students. They were forced to become more innovative and use a variety of strategies and interventions to experience success with these learners. The experience of working with these challenging learners helped them allow their practices to evolve to better meet the needs of all of their learners.

Emerging Themes

Review and analysis of all data resulted in several themes that resounded throughout the participant responses. These themes were: Teacher attitude and understanding of ADHD, flexibility and creativity in interventions, and teacher self-reflection. A detailed explanation of each, along with participants' thoughts and words, is included in this section.

Theme One: Teacher Attitude and Understanding of ADHD

This theme resounded throughout the data review. The teachers who did not fully understand the lack of control learners with ADHD have over symptoms and the difficulty it can cause for students expressed very negative views of their learners with ADHD. Those who understood the disorder fully showed a level of empathy for their students that resulted in a never-ending search for better ways to reach them.

When asked to share experiences dealing with students with ADHD and give overall impressions of their relationships, participants responded in a positive manner 37 times, versus 20 negative responses. Two of the participants stated that the relationship with these students was based solely on the individual and that they could not give an overall feeling for their collective group of students with ADHD. Several participants gave specific descriptions of their relationships with these students. Janet said,

> I have had ADHD students in almost every class I've ever had. I find them to be
>
> imaginative, excitable, easily distracted, and enjoyable to have in the classroom. They
>
> can be exhausting but mean well. I enjoy having them with me in the classroom.

In her view, the students add to the dynamics of the class in a meaningful way despite the additional energy required to keep them focused. Mary also felt positively about her ADHD students when she shared,

> I teach in the area of special needs. I teach reading. I have 50 students a day, and many
>
> of them are ADHD. For me, they are just students with the need to learn like everyone
>
> else. That means adjusting and adapting in the most effective way so the student can
>
> learn just like I do for an autistic child or a child that has a hearing deficit or a specific
>
> learning disability. My relationship with my ADHD students is often close as I work

diligently to make their learning experience in my classroom the most effective that it can be.

Becky, while not negative in her response, did not express the same level of excitement about teaching students with ADHD. She said,

My job is to keep the students from irritating each other and still move forward in the curriculum and improve their social skills. While I teach the curriculum, we focus whenever possible on adult living skills and job skills they will need.

While it is appropriate to keep the students from irritating each other, my bracketed thoughts (as the researcher) on this statement were that social skills, adult living skills, and job skills require interpersonal interactions and to simply not annoy is not enough training in communication necessary for real life. If she is truly teaching interpersonal communication skills, she should not feel as though her job is to just keep the students from irritating one another, but to teach them how to properly communicate in a professional, productive manner.

Julie described her role as a teacher of students with ADHD:

My role is director, orchestrating the best way to assist the students' learning, redirecting them when off task or struggling to focus on an assignment, grabbing their attention when it appears they are not listening or are in their own world and not in the classroom, helping with organization, finding ways to assist with the need to move to be able to remain attentive to the lesson or assignment.

Julie is not simply delivering curriculum and attempting to maintain order. She is studying her students and facilitating their learning while providing necessary changes to activities based on the individual student or class' needs.

Greg shared his personal experience with ADHD in his own home in relation to the

students he teaches at school. He said,

> My relationships with the ADHD students that I have are good because I understand them and their needs. My son has ADHD, therefore, I have more patience and understanding of this condition. I try to keep these kids busy in physical education class by getting them to help me with setting up drills and coach, which is a great way for them to use the energy they have. I also try to keep my son busy at home by getting him to help around the house with different things. This gives us time together. It is much more difficult at home with my own son than with students. It does tend to wear you. Trying to keep up with him and remember his condition is a challenge.

Those participants who responded positively about their relationship with their learners with ADHD expressed a level of empathy for the students and the challenges they face as a result of their disorder. They work diligently to help the students cope and find ways to harness their energy in a productive manner, preparing them for an adult life outside of the classroom.

Julie expressed negative sentiments towards her learners with ADHD and all of her students in general when she said,

> I have to remember that not all students want to be helped or assisted. Not all students really want to learn. Some would just prefer to be noticed, not in a good way, instead of blending in with the rest of the student population. Not all parents are supportive of their student and their teachers. There are no consequences for your actions.

When asked how ADHD symptoms affect the relationship she has with students, she continued by stating,

> Sometimes whatever accommodation we have put in place does not work. At this time, the student has become very frustrated and angry. Usually the one that is trying to help

them the most ends up on the receiving end of this anger and frustration. Sometimes it is

better to just walk away for a little while. There are times when the student does not

want any help, essentially refusing and disrupting the classroom environment. It is

difficult to be that understanding, supportive teacher.

Julie, though her view of the relationship with learners with ADHD is strained due to their

symptoms, showed a strong motivation to reach these learners. Her description of the

relationship with her current learners with ADHD was very positive:

It is a supportive, understanding, caring relationship. I ask the student to share what

affects their learning the most, such as fidgeting, impulse, focus, or lack of organization.

I ask them to share what works and what doesn't help them. Together we discuss ways

that I can assist them in the classroom…I let them know I am there to support and help

them in any way possible, such as coming in early to finish an assignment or study for a

test. I let the students know I care about them and their education and how much I want

them to succeed in school as well as in life.

Julie provided a rich description of the strategies she uses to reach all learners. Her negative

description seemed to be aimed at a small percentage of learners that she has not yet been able to

reach. When asked how she has altered her support system of students as a result of working

with learners with ADHD, she continued to share about the ones that did not experience success

when she said,

I did not change anything. Just had the realization that this student was not open to any

suggestions or assistance. It was his way only. I continue to provide the same support,

understanding, and caring for my other students and know when it is time to step back for

others and just let them know that I am there when they feel they are ready to take control

of their education.

Janet was able to see all of her learners as unique and having individual needs, which

seemed to make it easier to provide accommodations for them without seeing the disorder or

disability as a hindrance. She said, "Working with students with ADHD is difficult, but really, it

is not any more difficult than working with any other kid. Everyone has difficulties." She stated

that her first year teaching, "gave me insight into how different students can be and how different

they can be from day to day. I learned that sometimes, you just have to roll with the punches and

work with what you have."

Ashley, in direct contrast to Janet, did not see her role as a teacher in the regular

education classroom as a support role. Her description of ADHD was, "when people cannot pay

attention, stay still, or concentrate on activities they are not passionate about." She implied in

this definition that students with ADHD, if passionate about something, experience symptoms

and have issues to a lesser extent. Her thoughts shared with the researcher showed a belief that

students with ADHD could control their symptoms but usually choose to not to. When asked

how a memorable experience altered her perception of students with ADHD, she responded, "It

made me think ADHD kids should work to overcome difficulties instead of expecting the

environment around them to work harder." Her strategy for dealing with learners with ADHD is

to ignore the behaviors and hope that they will stop. She shared in the focus group discussion:

It seems that these students, their parents' support is going to make or break them.

Parents are the ones sending emails and wanting to follow through because the students

are not keeping up with an agenda or a folder or a book bag. Everything is typically

disorganized. That is one way I communicate. Also in the classroom I would say

sometimes an ADHD student will make a lot of comments to me thinking that it's on task

or maybe even socially unacceptable, and my communication is to say nothing. I don't

engage in any conversation. I don't encourage it or bring attention to it. I just move on.

Ashley also feels as though students who have parent advocates will be better accommodated,

placing the responsibility to request help on the shoulders of the parents rather than the teacher.

She said,

> I think that the parental input may be the most important factor for an ADHD kid. I can
>
> see a parent being overly concerned and overly involved with emails and
>
> communications. I can see modifications being given more generously and I can see also
>
> the opposite side where ADHD parents or parents of these students are not involved and
>
> so maybe they are even assumed to be bad parents or whatever. Fill in the blank. And
>
> then that student may not receive as much generosity with interpreting of the
>
> modifications.

She continued to state that she, as a regular education teacher, should not be providing

interventions for her students when she said,

> I feel lost. I cannot say that I feel supported. I feel that honestly there is a lot of
>
> confusion about the role of the teacher in the classroom. But as far as to improve, that is
>
> a really difficult question because I feel like I need to be a brain expert to assess how
>
> someone's brain works and how I can treat them better. Really all I know to do is try to
>
> modify things or remind them or answer emails I get from parents. Usually the emails I
>
> get from another teacher are not proactive, but reactive. You know, it is the end of the
>
> year, so-and-so is failing, is there anything he can do?

She further showed a lack of understanding of the disorder by stating,

If I had all the power and all the money, I wish I could sit down with parents and the

student and just help the student see, this is what you act like. If we could record them

and be like, do you see how you act and is there anything that you can do about it? And

have their parents see how they act. I would love to do that. Because they are different

at home than they are at school. Their parents could have no clue how they are acting in

the classroom. If you are able to just record them and say what do you think? What are

your thoughts on this? Please help us work together to do something.

Her lack of empathy and understanding continued when asked how ADHD symptoms affect the

relationship between teacher and student:

I become somewhat frustrated with the student once I have asked multiple times for them

not to blurt out in class. Their attitude sometimes seems to change according to how their

day has been, and they resist to behave because of an accident that happened earlier in the

day. Their lack of motivation to want to learn about the subject really frustrates me, but I

have learned that certain students will not like certain subjects.

As a result of teaching learners with ADHD, how has the support system she provides changed?

She responded, "No effect. One student should not disrupt an entire class of 22-plus kids." And

finally, how has her understanding of the disorder evolved through the experience of working

with these students? "Zero. I feel powerless."

The level of understanding of the disorder and its symptoms mirrored the participants'

attitudes towards their students and the interventions that they were willing to implement. Those

who understood the lack of control of learners with ADHD have over their actions and the

difficulties it caused for their students were more likely to view teaching them in a positive

manner, and were more likely to provide appropriate learning experiences for them. Those who

did not fully understand the disorder expressed discontentment at teaching these students and did not take responsibility for their lack of success.

Theme Two: Flexibility and Creativity in Interventions

Participants shared that learners with ADHD are unique, and because of this uniqueness, they require an array of accommodations based on the specific symptoms that are problematic for them as individuals. Maggie understood the varying needs of learners and the value of using multiple resources to solicit ideas on how to best serve them. She said,

I have enjoyed working with a variety of students throughout my years in education. I work to develop a plan or system with students with ADHD within the first few days of having the student in the classroom. If the student has accommodations through a 504 or IEP, I start with the given accommodations. I have found though, that there are many other strategies that may have worked with the student in the past in addition to the given accommodations. I ask the parent and the student what has been effective and incorporate other strategies as well, such as working standing up or on a stool, using alternate ways to assess, independent learning with a computer, incentives, or working with a partner or independently.

She continued this sentiment by stating,

It is important to develop a good rapport with all students. Students with ADHD require a level of understanding that comes with a respectful teacher-student relationship. I always end up with a strong relationship with students with ADHD, as each day can be different as to what will be the best option for the student academically. Working with students with ADHD does require a teacher to be flexible with learning styles and

delivery methods, so that you can differentiate the lesson to meet the student's needs according to each day.

Cadie stated that, as a result of working on a daily basis with students with ADHD, "I have developed more techniques that work more effectively over time and have learned that not all works with each individual child. You have to try many different strategies to see which one is effective with them." Julie shared,

I try to do more research to find other accommodations to assist the students. Not always the same accommodations work all of the time for a student. The more modifications you have to assist the students, the more successful they can be in the classroom.

Chris stated,

After working with this student, I felt that I had to carefully select the appropriate strategies with all of my students. There was not a strict list of rules that applied to all students with ADHD. Instead, there were various techniques that could be used, and all stakeholders needed to be involved in finding the correct ones to use.

Becky agreed that flexibility is critical in working with ADHD learners:

Students need both space and strategies to help them with their varying levels of hyperactivity and frustration. They need help focusing and using strategies to help with retention as well as mastering classroom skills and interpersonal skills. This can vary from time out, working in isolation, rewarding even very small accomplishments, constant progress monitoring that teaches them to self-monitor. I encourage them making small teams to support each other.

Chris shared that he works with families to help determine the best strategies and accommodations to use with his ADHD learners. He said,

I find what has worked and hasn't worked in the past in terms of interventions and what

works at home. Then talking with that student at school and looking at our classroom as

sort of a home environment and see what works at home and how can we simulate that in

the classroom. So if it is getting up and walking around, then have a seat in the back of

the room where you can freely get up and walk around. Whether it is holding something

in your hand or being able to sketch.

Teachers are charged with educating any student in their classroom, regardless of disability or

disorder. They have to be creative at times to accommodate the needs of individual learners,

since each student has a unique background, personality, and learning style. Gina said, "As an

educator, my overarching goal is for each student who walks through my classroom door to be

given the same opportunity to learn as each other student in the class." Participants were able to

identify many accommodations they use to provide a support system for their learners with

ADHD. Those strategies that appeared three or more times in the data analysis were discussed in

depth, while the other strategies discussed only one or two times were briefly identified but not

described in detail.

Flexible seating arrangement. Due to the hyperactive nature of many students with

ADHD, several participants discussed the need to be flexible in where and how the students are

allowed to sit. Julie said, "Some students that struggle with sitting are allowed to stand at their

seats during instruction and work sessions." Ashley stated, "Specifically for students with

ADHD, I provide different settings that the student may choose to sit in (working at a table with

peers, sitting at a table independently in the back, working at a counter, sitting on a stool or the

floor, etc.)" The same strategy is used by Krista, with a slight variation, "I have provided seating

arrangements in which the student was allowed to work on a desk that could be moved around

the classroom." This need to move can be a hindrance for a student in the classroom, but when a teacher provides accommodation to allow that movement while learning, this obstacle can be cleared, or at least eased.

Close proximity to teacher or seated away from distractions. While seating students in a flexible manner that allows them to move is helpful for many students with ADHD, many others, particularly those that are not hyperactive, need a seat that is quiet and away from very active students. This allows for them to focus more easily on the task at hand and not constantly be tempted to shift focus to other areas of the classroom. In her classes, Mary uses "preferential seating, away from distractions to make sure that the student is successful." The same accommodation was given by Julie, "seating the student close to the teacher, at the front of the classroom, away from distractions." Cadie shared her strategy of "seating away from distractions and close proximity to help focus."

Positive reinforcement for desired behaviors. Multiple participants found that, in working with learners with ADHD, rewarding positive decisions and actions results in much better behavior than disciplining negative behaviors. Students do not feel defeated at being constantly told that they are doing something incorrectly. Instead, they are encouraged to repeat behaviors that are conducive to learning and productive in the classroom setting. Julie said that an accommodation she provided for her students with ADHD was, "Reward them with items that motivate them, like extra reading time, extra computer time, or sit with friends for one day instead of in the usual seat." She found that these rewards encouraged her students with ADHD to better cope with their symptoms, as they served as a motivator to help them remember to stay focused and continue working. Maggie shared a specific experience that was frustrating for her as a teacher:

This student was labeled ADHD and was currently going through a change in medication. This student was a real challenge to me, as all of the strategies that I tried using were not working. I became frustrated after two months of trying everything and seeing no progress made. This student did not seem to listen when spoken directly to, had difficulty engaging in leisure activities, and would not speak when spoken to. The student seemed not to care to be in school and really seemed to be in another world. Everything that I had tried seemed not to work.

Maggie discovered that the student enjoyed playing games on the iPad, and she began finding ways to teach using interactive technology more and then offering use of the iPad as a reward for when the student completed the required assignments for the day. The student began to work and showed an interest in learning. Regarding the experience, Maggie stated, "The experience did help to emphasize the importance of using positive reinforcement for students with ADHD and differentiating delivery when needed."

Group or pair with peer tutors or role models. By placing students with ADHD in groups, or to pair with students who are not disruptive and stay on task, allows the students with ADHD to work in a setting that provides less distraction and has the benefit of peer pressure to encourage positive behaviors. Gina shared her strategy:

I discuss my expectations related to behavior and work. I consistently pair an ADHD student with one or two other students that I know will stay on task. It really helps to give students an expectation and an example of other students performing and behaving in a non-disruptive way.

Gina continued with this idea later when asked how she has changed her practices based on her experience with learners with ADHD by stating, "I began pairing an ADHD student with a

student that would not be swayed by disruptive or non compliant behavior. Many times, I will place the student between two positive peers."

Contact with parents. Throughout the teacher comments, participants spoke of parent relationships and the effect they have on the student in the classroom. Several spoke of parents who supported their efforts in the classroom and helped problem solve strategies that may have helped the student become more successful. Others stated that parents were not helpful in some cases, since they had given up hope of being able to help their own child. They were depending on the schools and teachers to find a way to help them and their child. Chris expressed frustration with parents when he stated,

> It is possible that some students appear impervious to interventions. From my experience, it occurs when there is little parental involvement. The parents have surrendered, and they feel that they can do nothing to help their kids who are diagnosed with ADHD.

Mary expressed a similar situation with a student but was able to overcome:

> One of the most difficult times I had was working with an ADHD student that was not only ADHD, but he was a child from parents that simply had given up on trying to help him manage his situation. The child was disruptive, rude to other students, destroyed the work of others, and refused to do as instructed by me or his parents. When I first talked to the parents, the response was, we don't know what to do. They basically had decided to allow the 11-year-old child to do as he pleased. This was not working for them at home, and it certainly did not work in the classroom. I was not sure I would make it three years with him. Yet, the parents were willing to try suggestions I had made. With all of us on the same page, we did manage to come up with a plan with which the child

did succeed. It took patience, consistency, additional paperwork, and accountability, but

in the end he made tremendous growth in his academics across the board.

Brooke also shared her belief that the parents are an important part of the ADHD student's

support system. She said,

I believe that the home and school environments working together play a crucial role in

the academic and social success of a student with ADHD. If the structure and coping

skills are not evident and practiced, a student will have a very difficult time meeting the

challenges that they face.

A strategy shared by Cadie for future educators in providing a support system for ADHD

learners was, "Maintain positive interaction with parents so you can gain their trust." Gina also

advised that they should "set forth a positive relationship with the parent or guardian, if

possible."

Variety in teaching strategies and activities. By varying teaching strategies and

activities, teachers are able to hold the students' attention and help them focus more easily. By

transitioning to another activity often, students who cannot maintain focus for a long period of

time are able to jump to another activity and have a break from the previous one. Hands-on

learning keeps the students moving, satisfying the need to release energy.

Maggie shared,

As an educator, my role is to facilitate learning for all students. For individuals with

ADHD, I need to find ways to allow for a very active role in the learning process with

variety to help with focus and attention.

Krista said of her teaching, "I present information in many formats; for example, I provide visual

aids, provide the student with outlines, and give instructions multiple times." Mary shared,

I have utilized a variety of strategies, such as: Parental involvement, organization, peer

coaching, checklists, individual or small group work, use of technology, use of active

learning with stationary bikes, games, differentiated instruction and curriculum,

redirecting signals, additional time to complete something when appropriate, charts,

graphs, and more.

When working with a particularly difficult student with ADHD, Ashley said, "I learned that I

had to provide structure for that student, my stations had to be short, I had to integrate hands-on

activities, and develop a plan for the student within my classroom." Brooke stated,

I would recommend that all individuals working with students with ADHD be willing to

expand strategies for helping students with focus. Also, the individual should be flexible

in how information and directions are delivered to the student with ADHD. Directions

may need to be shortened or repeated. When teaching students with ADHD, I would

encourage any educator to include many unique hands-on experiences, variety in

classroom setting and delivery, and opportunities for outdoor experiences when possible.

Additional structure and clear expectations for transitions. Some students with

ADHD benefit from a predictable schedule and given warnings that transitions are about to

happen. This allows them to prepare for the change and focus on the new task. By having clear

procedures for transitions, students are not having to rely on their own scattered minds to make

decisions about where to go, what materials are needed, etc. They have a routine that is trusted

and consistent to allow some order to their day. This appears to be an intervention used on an

individual basis, based on the student's needs. Krista said, "I provide structure in the classroom

for the students that need it. I have a planned out classroom routine in which students are

encouraged to follow. Brooke shared,

The structure of my class environment can be a bit of a challenge to the ADHD student. It is a bit more relaxed than, for example, a math classroom. The behaviors of an ADHD student will create a situation in which I must be more structured with them than that of the class as a whole, more specific in my choice of tasks, more constricted in allowing creativity because the symptoms do not allow for the student to be able to stay on task to completion of the project or day's work.

Gina advised, "Be structured as it relates to the student."

Redirection when distracted or not working. It can be as simple as Julie, who would walk by an unfocused student and "tap their desk to regain their focus or to return to the task at hand." Mary mentions using predetermined nonverbal cues with students to remind them to focus without distracting anyone in the classroom by drawing attention to the student. Janet shared that she uses her student with ADHD's ability to focus as a signal of when to change tasks. She said,

Working with this student, it made me think of better ways to teach my lessons. If I saw the "focused light" dim in his eyes, I knew I had talked too much and it was time for hands on work. If when doing this hands on work, he became distracted and started acting out, I knew that it was either too difficult a task or I hadn't explained the directions well enough.

Break tasks into smaller segments and check for understanding at frequent intervals. By giving smaller segments of work and checking for completeness or understanding periodically, the teacher can monitor the student with ADHD's progress while also allowing them a quick break between segments of work, breaking up the total work time so any one task does not require too much time to be focused. Maggie shared,

One of my students with severe ADHD was also one of the most creative students I have taught. This student was successful because we were able to break the parts of the task into smaller chunks. I transitioned the student at least two times, and sometimes three times, during the class period. I learned some very important lessons in teaching this student. The student worked hard during the work session because they saw a beginning and an end. I would set a timer for him so that he could keep up with the transitions. It worked so well that I use this as a strategy with other students, as well.

Gina said,

ADHD students do not want to lose focus. It is a symptom of the ADHD. They will work diligently as long as they can focus. When they need to refocus, it is okay to refocus to another task. ADHD students want to be recognized for the work they do get done, especially if they can complete a task completely. I have found that it makes them want to succeed because they have succeeded on a task or the part assigned.

Keep engaged. It is important to hold a student's focus throughout class, and one of the most effective ways to do this is to provide engaging content and activities in which one is interested. If one is enjoying learning, it will be much easier to stay focused for a longer period of time. Greg said, "I give these students more reminders and give them jobs. Mainly I try to let them know that I understand." Brooke stated that, as a result of teaching ADHD learners,

I have learned to be more flexible in my teaching delivery and become better at differentiation through my experience with students with ADHD. Oftentimes I am invigorated by the energy and excitement that comes from teaching students with ADHD, as these students tend to be full of questions and new approaches as we work together to find ways to tackle challenging concepts that require greater attention and focus.

Julie shared her strategy to help learners with ADHD drown out classroom distractions to remain engaged and focused by saying, "During work sessions, students may listen to music. Other times just putting in their headphones is enough to block out the sounds in a classroom that may distract some." Greg added his perspective:

As a PE teacher, it is easier to accommodate. I will repeat instructions, read any tests that we have, and get them to lead stretches to keep them busy. They help with setting up and breaking down drills and handing out materials to the class.

Repeated or explained directions. Because learners with ADHD have a difficult time remaining focused, multi-step directions may be difficult to follow without reminders at each step. Mary suggested that throughout the class period, the teacher should be "checking for understanding to make sure that a student followed all of the directions given by the teacher in order to be successful on the task."

Other accommodations discussed. There are many accommodations teachers make in the classroom on a daily basis help specific students be successful. Janet said regarding practices in her classroom,

I have given them options on where to sit, their activity level in the class, keeping activities moving quickly with little down time between activities, notes presented in concise forms with slotted notes, lots of hands on activities to keep them engaged, and anything else they might need to stay focused on the task at hand.

Ashley also uses a variety of strategies to reach all of her learners:

I use many accommodations in my lessons and classroom to help meet the needs of students with ADHD. In every subject I have taught, I have focused on the need for many students to have hands-on experiences that are engaging. I have found that

incorporating as many of these experiences into lessons as I can makes a successful impact on students with ADHD. Also, incorporating variety into the class period and throughout a unit. For example, in a class period, students may be required to move around to different stations that range from laptops to hands-on to video notes. During many units, I find lessons that will be more engaging outside. I also incorporate timers, preferential seating, clear directions and rules, repeating directions at transitional times, and incentives or rewards when needed.

Ashley found that sometimes teachers have to be creative and make new strategies for specific students. She shared,

One experience that stands out from my role as a teacher of a student with ADHD is one with a student who was very open about whether or not the student had taken medication for ADHD on each day. The student said they would not be able to focus because the student had not taken medication and then proceeded to take out a personal iPad and play on it. After I found an engaging website on the same content we were working with in class, the student said they wanted to play. The student was very engaged in the interactive lesson. At the end of the class period, the student successfully answered the questions on the ticket out the door and had even said that tomorrow the student would work with a partner on the next day on the task we were doing. The next day, the iPad wasn't even brought out. The experience helped me to see the importance of meeting students where they are, while still holding students to a high expectation.

There is no specific list of accommodations that will work for all students with ADHD. Each student is unique, and a variety of strategies are necessary to help one to be successful in the classroom. What one needs depends on the experienced symptoms of the disorder and whether

or not coping skills have been developed to manage those symptoms.

Theme Three: Teacher Self-Reflection

Although it was only specifically mentioned five times within the data, this theme resounded throughout the participants' responses. All of the participants reflected back upon their own actions as teachers as a result of experiencing success or failure with their learners with ADHD. Nearly all of those interviewed made comments about having to rethink the strategies previously used, as their students with ADHD were not making progress as well as they had expected. This professional reflection allowed for growth as a teacher and, in many cases, resulted in greater empathy for students and their needs.

Working with students with ADHD oftentimes allows teachers to be self-reflective of their practices and behaviors, stimulating a desire to better reach these learners. Janet stated,

> Sometimes, I get exasperated when their ADHD keeps them from focusing on work I'm
> trying to get them to complete. However, when I see them struggling or losing their
> focus, it makes me think about how I could better deliver the lesson.

Mary, through this self-reflection has found purpose in teaching these learners. She said,

> Over many years, my understanding has gone from dread to "how can I?" I first truly
> dreaded ADHD students that demanded so much time and attention. Now it just is what
> it is, and I look at these students as a challenge. It may be easy for some teachers to
> ignore and "get through." If I only had a student for nine weeks or a semester, I could
> probably tolerate and ignore more. But knowing that these students are mine for three or
> four years means I must find a solution. I am their last chance to become competent
> readers. Without the skill of reading, their chance in life becomes so much less.

Participants were asked about how they altered their support systems they provide for students as a result of working with their learners with ADHD. Janet said, "I realized that I need to listen more to the students' feedback. We teach them, so we need to listen to them."

Mary shared a situation in which she grew professionally as a result of reflecting on an experience with one of her students:

I once had a 13-year-old young man that was ADHD and LD. He stayed in trouble in many of his classes because sitting still, paying attention, and remaining on task were very difficult. He was a child that literally was a beginning reader and writer. However, he could think, and he could make me laugh. One day, we were discussing compound words. I asked him if Saturday was a compound word. He said yes it was. I asked what two words make up Saturday. He said, "Satur and day". When I told him that satur is not a word, he responded, "is, too. You drink it. Ya know…apple satur." As funny as that was, I realized that this was a student that truly had very little experience in literacy. Sitting still and reading and writing had not happened for him in seven years of school. I was determined to not allow him to go seven more years without the skill of reading and writing. I think back to this experience when I receive new students each year. I know I have to find a way to reach them no matter what level they come to me."

Develop more or better techniques for teaching. Because learners with ADHD require more accommodations than others, teachers are forced to expand their techniques and repertoire of tools based on specific needs of individual students. While this can be exhausting for the teacher, it can result in great professional growth and an increase in teacher effectiveness with all students. Gina, in sharing how her understanding of ADHD has evolved as a result of teaching the students, stated,

When I first began teaching, I really did not understand that the ADHD student will try to meet expectations. What I have grown to understand is that they cannot always meet them, but if I set boundaries and parameters, they will perform much better. I have also learned that positive reinforcement goes a great deal further than negative reinforcement of less than desired behavior. If I can move a student to a greater understanding of how they react to stimuli in the classroom and shape it to a more positive, less disruptive behavior, I have succeeded.

Realization that all individuals have unique needs. Learners with ADHD have varying levels of the disorder, a plethora of symptoms that not all have, and differing levels of intelligence and ability. Students respond differently to interventions making it difficult to find a common set of them to work with all students. They require learning experiences tailored to accommodate their individual needs for their symptoms and ability level. Julie shared, "Every experience with each student is defining. With every student, I learn something new. What works for one does not necessarily work for another." This also relates back to theme two that focused on the need for creativity in interventions to reach these very individual learners with specific needs that are often different than the other students in the classroom.

Empathy for ADHD students and their needs. Participants shared that they were more compassionate and better understood the needs of learners with ADHD after having worked with them in the classroom. They can see the level of frustration and the lack of focus that plagues these students on a daily basis, and they are more resolved to meet those students' needs in any way possible.

Janet shared her experience and how working with ADHD students altered her understanding and empathy of them and the difficulties they face. She said, "As this was my

first year teaching, it was an eye opening experience. It really drove home the difficulty these students can face in the classroom." She continued,

> Patience is key. You need to learn what your student needs to learn the best way possible, make accommodations as needed, go with the flow, and understand their difficulties. And always, make sure they know you care about them.

She shared an example of a specific student, and it is evident from her description that she truly cares about her students. She said,

> I had a student who would get so off track that he would need to walk around, preferably outside, in order to get himself back on track. He was very easily distracted, and when things got too difficult, he would hide underneath my desk. I would slide books under the desk for him to read, but unless he had calmed back down, he wouldn't come out.

The participants that spoke positively about both their students and the experience of teaching them developed a sense of appreciation for each learner and the strengths they possess. They viewed the ADHD symptoms as a challenging obstacle at times but not a roadblock to learning. They reflected on their practices and strategies and found ways to better intervene and reach these students to help them learn despite their disorder.

Research Questions

The participant responses were coded and analyzed, and three themes emerged. These themes relate back to the research questions that have guided this study. The research questions, as they relate to the participants' responses, are answered in this section.

Research question 1: How do teachers perceive the experience of providing interventions in the public school setting for ADHD students? Participants in this study work with students with a wide range of symptoms of ADHD that affect the classroom experience.

While three of the participants consistently provided negative comments about working with these students, the other nine seemed to enjoy the experience and viewed it as a professional challenge. Gina shared,

> There are days when, as a teacher, I am prepared for an ADHD student to interact in a certain way, and they behave in a totally different manner. The symptoms cause a challenge when others in the class, for example, need my attending, and the ADHD student is having a disruptive day. It is frustrating to have the student create disruptions that keep themselves or others from learning.

While this may seem to be a negative statement, it just describes the typical experience of serving these students. Gina, when asked what advice she would give to future educators about working with ADHD students, replied, "Let the student know that you care about their individual success…Understand that each day brings new challenges. Help the student learn to deal with those challenges…Be reasonable with accommodations and expectations." Though the work is difficult and unpredictable, Gina sees this as a professional challenge and meaningful work that impacts students' lives. Mary shared her advice as well:

> I would say that communication is the key. Communicate with the parents. Communicate with the student. Communicate with other teachers to see what they know. Research and try everything that you feel may work. Also, get to know that student and then think of ways to reach him. It can be done. It is exhausting and difficult, but when success happens, there is no better feeling.

Becky, who throughout the study expressed negative opinions, found meaning in working with her ADHD learners. She advised,

I hope you are patient, tolerant, and nurturing without being an enabler, or they will eat

you alive! These kids are lots of work and like riding wild horses, but they can also be so

rewarding and shine brighter than any other student. Energy like they have can't

necessarily be harnessed, but it can be directed.

Cadie stated of her experience,

Sometimes it caused me to look at them differently because at times I felt as if they were

"using" their ADHD to get away with behaving poorly and not completing their

assignments because they knew they would not receive any type of discipline from

administration.

She made this statement in reference to a very difficult experience teaching in a school in another

state where she felt as though she was not supported by administration and not trained to

appropriately provide interventions. Now that she is teaching in a situation in which she feels

comfortable and supported, she shared,

I have always had a great relationship with my students whether they have ADHD or just

a learning disability. Some of them I may "knock heads" with, but in the end they have

always realized what happened. We talk about the problem we had and mend our

relationship with most of the students realizing that they were really out of control. I

have had very few students removed from class, which has been those that require

medication to be able to function and did not get it that morning. The next day, when

they return, we go on like nothing has happened. I have lots of students who come to me

even when they do not have me in class just to talk or express problems they may be

having whether in school or at home.

The first theme discussed in this study was that of teacher attitude and understanding having an effect on the level of intervention provided for students. For those teachers who did not fully understand the lack of control students have with symptoms of the disorder, they typically viewed the student as in control of their behavior and able to choose whether or not to focus. Those who expressed a thorough understanding of ADHD searched for creative interventions to assist the student in finding ways to cope with the disorder. These teachers knew that the student's disorder did affect behavior, and that often, the student was not in control of those impulsive actions. No matter how the teachers understood the disorder or the level of interventions they provided, they all expressed that the experience was rewarding, despite the challenge. Greg summed up the feelings expressed by most of the participants:

Know that ADHD is a real condition! Don't be too quick to blame the kid or their parents. Be compassionate to the student and parents. Let the kid know that they are special. They get a lot of criticism and they need a lot of praise! Find ways to use the energy they have. Keep them busy! Find out what their interests are and use this to make a connection. If there are no supports, the teacher and the ADHD student will suffer.

Research question 2: How do interventions for ADHD students affect the perceived relationship between the students and the teachers providing the interventions for them?

Participants shared that they were able to make connections with these students as a result of their work of providing interventions to help them better cope with their ADHD symptoms. Brooke said,

Our daily class is based on a hands-on approach as it relates to computer literacy and business. I base my relationships with all of my students on fairness to them as an

individual. Yes, there are many times that I could spend the majority of my time dealing

with disruptions and behaviors, but I try to use a student-centered approach to learning. I

find that parameters without "singling out" is the best way to create an atmosphere of

trust and forgiveness.

She continued,

I try to view each relationship as unique. Students cope with challenges in many ways. I

try to forge my relationship based on trust and honesty. I try to understand that the

student may have had a family issue or an issue with another teacher or student.

Supporting the student means supporting the student even if you have to help them deal

with an issue that started before they came into class.

Ashley found that she was not able to truly identify the needs of one of her learners until she was

able to forge a relationship with him. She shared,

My relationship with this individual has been challenging as the student has discipline

problems both at home and school. I had to learn how to build a friendship with the

student and that was not easy, as I had to try many approaches. After building a

friendship with the student, I found out that the student would not focus because he had a

difficult time taking notes and paying attention. The student argued that their

handwriting was illegible. I started to provide the student with daily outlines of

classroom lectures.

Mary said,

I know about their families. I know their likes and dislikes. I work to know them in

order to find ways to reach them. I have a mutual respect with my students. I rarely have

discipline issues because they come to know that I always have their best interests at

heart, and I will work to give them what they need.

Greg also expressed empathy that resulted in a positive relationship. He shared, "My

relationship with the ADHD students is good. I believe it is good because I understand their

condition. Extra patience is always needed. Because I get them to help out in PE class, they feel

a connection with me." Chris expressed, "At specific times, the symptoms of ADHD can have

negative effects on the relationship. However, I use a high amount of patience and

understanding when dealing with the specific behavior associated with ADHD." Greg shared the

same feelings that maintaining the relationship is a challenge, but it is possible. He said,

It is definitely more of a challenge to maintain a good relationship. You have to work

harder to make it happen. ADHD can put an extra strain on a teacher and a parent.

Sometimes you just expect the ADHD kids to just listen, focus, and be still.

Becky shared that she is careful to separate the student from the behavior to ensure that the

student feels respected but knows that specific behaviors are not acceptable. She said,

As someone who struggles myself, I can empathize and understand their difficulties and

also provide an example that excuse is not permission. Their hyperactivity doesn't bother

me, and we tap it as extra energy and curiosity to explore tangents. I understand from a

parent's point of view also that these kids may not be the best students, but they have

potential and strong points. I encourage kids and parents to tap into these things and to

accept that not everyone fits the same mold. After having me for a few months, kids

learn I like and respect them but can still not like a behavior.

Mary shared a unique perspective on the relationship when she said,

I believe that the symptoms often bring us closer. Because communication is imperative with ADHD kids, we do it constantly. The open and honest relationship we have allows kids to let me know if something is frustrating them, if they didn't have medications on a particular day, or if they need a break during a long assignment. The symptoms help me to know where they are on a daily basis. The lack of symptoms also is an indicator for me.

A sense of empathy and understanding of the ADHD students and the effect that their symptoms can have on their daily functioning helped the participants to better connect with these students. By being understanding and developing a relationship with the students, the teachers open a line of communication that can allow the student to express their frustration level or need for more interventions.

Research question 3: How does a teacher providing interventions for ADHD students experience success or failure of those students? Study participants shared both positive and negative experiences, and all seemed to be very reflective of their own actions and the role they played in the success or failure of the student. These teachers internalized the outcome as directly related to their role in the classroom and to the effectiveness of their teaching. When the student was not successful, the teacher was frustrated and felt unsuccessful in providing for the student. When the student was successful, the teacher shared the same sense of elation and accomplishment as the student. Cadie shared an experience in which she felt frustrated at the lack of achievement from some of her ADHD learners, internalized that lack of success, but returned to school the next day with a new resolve to continue to work to make a difference. She said,

At times, when students cannot focus and do not try to control their symptoms, whether they did or did not have their medication that day, I have a hard time working with them. Of course, being human, most people take things as long as they can, and then it's time for an intervention, whether it is removing the student from the situation or having to remove them from class, which I seldom do…I may be at the end of my rope that day and really upset, but after a while, and especially the next day, I am ready to tackle them again.

Chris shared an experience he had in which he felt success with one of his students,

A few years ago, I had a student with ADHD who obtained historically low scores on previous CRCT's. During the course of the year, carefully utilizing my strategies, we were able to help the student progress to an exceptional achievement score in the class. Also, his social skills and organizational efforts improved.

Becky stated that her students' success in life is what drives her as a teacher. She shared her most defining moment by saying, "Seeing what my kids become. I have had so many check back with me later, and I am so proud of them. They become loving parents, successful on the job, and able to be responsible adults…it just takes time." She continued to share that her success is based on the students' future as she said,

My job is to facilitate their growth towards independence while providing a light touch of mentoring to get them to the point they don't need me. Most students either resent my level of expectation of them or rise to it and flourish. The successful ones eventually bring the rest along. It is hard for them if they do not want to take responsibility for their actions, and I try very hard to be impersonal and reflective when discussing their performance. It is all about their actions affecting their future. As a high school teacher,

I know this is the final hurdle before they go out on their own, and they may not have a

diploma, but they must have job success if they are going to have any kind of

independent life. It is my job to teach them that. No one will hold their hand in the job

world.

The data related to this question strongly supports the theme that addresses teacher self-reflection

as a result of working with ADHD learners. There are daily challenges in the classroom with

these students, but the teachers are determined to find ways to ensure success for all of them.

They reflect on their practice each day and on their careers as a whole.

Research question 4: How are teachers' perceptions toward ADHD students

changed over time as a result of providing interventions for these students? Participants

shared that most of them changed their support systems and classroom strategies based on the

needs of their ADHD learners. Gina, in reflecting on a particularly difficult student, said, "As a

result of my experiences with this student, I am careful to recognize the strengths and

weaknesses of each student, not just the class or group of students as a whole." She also shared,

The difficult situation taught me that my expectations may not be the same as a parent or

guardian's expectation. A student may have to reach a point in maturity that they decide,

many times with a caring teacher or mentor, that they will find it hard as they begin

careers and relationships if they do not learn some coping strategies.

Cadie also saw individual needs of a student when she said,

With this particular student, I learned to be more flexible and more understanding. I had

to be prepared to expect the unexpected from him. There was not any support from

home, so we just had to learn how to deal with him in the school setting.

Greg, who has an ADHD child of his own, stated,

Prior to me understanding ADHD, I would have thought that ADHD kids were rude, disrespectful, and I didn't want them in class. But now that I have a child with ADHD, I don't think of them as bad kids. I understand that it is difficult for them, so I have more compassion for them.

He continued to reflect by saying, "Prior to having an ADHD student I thought the ADHD student was a child that simply had no home training and was undisciplined. But my son taught me differently."

Krista did not find the same sense of empathy from working with her ADHD learners. She stated,

Sadly, we can only do so much for kids. We try to advocate for them, but parents don't always want to hear it. They think they know what's best. We also sometimes are treated as though we are doctors and should diagnose what is wrong with their kids.

While Krista's opinion showed a feeling of helplessness as a teacher, there were many other participants who felt as though their work mattered for their students. When reminiscing about a memorable experience with one of her ADHD learners, Mary said, "The experience did not alter perception, it really just encouraged me to always work to find a solution to whatever my student's issue was." Brooke also found her work meaningful when she said,

The honesty the student had about whether or not he could focus helped me to see that many students with ADHD have an understanding of what challenges they have in the traditional classroom. It also revealed how important it is to find ways to engage students with ADHD while still holding the students to the same high expectations set for all learners.

Mary shared how her difficult teaching experience altered her perception of ADHD students when she said,

> I don't think it altered my perception, but he is a student I do compare others to. I know that if I can be successful with a student like that, that I can help most any child to be successful.

This research question relates back to themes one, two, and three. Theme one addressed the level of understanding of ADHD and the difficulties its symptoms can cause for learners as it related to teacher attitude about teaching these students. Those who fully understood the disorder were more likely to have a positive attitude toward the learners and provide a variety of creative strategies and interventions, theme two, to address the needs of these learners. These teachers, through self-reflection on their teaching strategies and interventions, theme three, developed a higher level of empathy for their learners and viewed them in a more positive manner.

Summary

Overall, study participants who were classroom teachers working on a daily basis with ADHD learners, expressed the feeling that these learners are difficult to manage and require much more creativity and variety from the teacher. But in the end, they are able to be taught and experience success if given the chance. As a result of working with these students, the participants have become more reflective in their teaching practices and work daily to ensure they have appropriate accommodations for all of their learners. It was evident throughout the study that a thorough understanding of the disorder and the difficulty caused by the symptoms helped the teahers to feel a sense of empathy and purpose in helping their students overcome their issues and learn to cope with the disorder. Those who did not fully understand the lack of

control the disorder caused were not as empathetic and tended to blame the student for their own lack of success, rather than take that lack of success as an opportunity to self-reflect on how he can better serve that student to help him be successful. Those who understand and have a sense of empathy for their learners have shared great successes and view these learners not as a hindrance in the classroom but as a challenge to help them become better, more creative teachers.

CHAPTER FIVE: DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Overview

The purpose of this phenomenological study was to examine the lived experiences in the public school setting of teachers involved in providing interventions for students diagnosed with ADHD and to look for common themes as they relate to the differing interventions available to them in the public school setting. This chapter includes a summary of the findings of the study, along with a discussion of how those findings relate to the current body of research and implications for practice and for future research. Limitations of the study are identified, and recommendations for future research are made.

Summary of Findings

A thorough analysis of the experiences shared by the participants resulted in multiple codes relating to teaching strategies, relationships, and changes made in professional practice or understanding as a result of working with ADHD learners. From these codes, three major themes emerged: Teacher attitude and understanding of ADHD, flexibility and creativity in interventions, and teacher self-reflection.

The first theme exposed a connection between the teachers' level of understanding of the disorder and their level of empathy for the ADHD learner. The participants who expressed a strong understanding of ADHD and the symptoms with which it is associated felt as though their job was to provide interventions to help these students experience success. They were able to separate the behavior from the individual, and see a student worthy and capable of learning. Those who did not fully understand the lack of control the disorder or its symptoms cause were very negative in their view of ADHD students in the classroom. Several implied that it was not their job to accommodate these learners, particularly if they are disruptive in the classroom or are

difficult to keep focused. They made statements that revealed a belief that ADHD students are fully in control of their symptoms and can choose how to behave. Those who were empathetic and understood their learners shared stories of successes with their students, while those with little understanding of ADHD learners struggled to teach these students.

The second theme centered on the work of the teacher in the classroom providing interventions for ADHD learners. All of the participants gave extensive accounts of the interventions they provide for students, and nearly all of them stated that they have had to find creative solutions and interventions for their students with ADHD since they were all so unique. Each ADHD learner is different, and the strategies they typically used in the classroom were not always effective with these students. They shared stories of specific students who could not be reached until one specific strategy was tried that really made a difference. Each of these stories was as unique as the learners themselves, and the interventions that worked were custom created for the needs of each student.

The final theme was that of teacher self-reflection. Because of the unique nature of each ADHD learner, nearly all of the participants stated that they saw teaching them as a challenge in their professional lives. They became more reflective about their teaching strategies and worked to find new ways to reach their students. Through finding unique ways to teach their ADHD students, these teachers had become better at their craft, using more of a variety of teaching strategies and interventions to ensure all students were able to successfully understand the course content.

Four research questions guided the study.

1.   How do teachers perceive the experience of providing interventions in the public school setting for ADHD students?

The majority of participants found the experience of providing interventions for ADHD learners to be challenging to them professionally, but resulted in positive gains for the student. Not all felt this way. Three of the participants did not fully understand the lack of control the disorder caused and had far less patience with these learners and the difficulties they have presented. They expressed a level of frustration and negativity that was not shared by the participants who fully understood the disorder and the hurdles it presents for learners.

2. How do interventions for ADHD students affect the perceived relationship between the students and the teachers providing the interventions for them?

Most participants shared that they have involved the learner with ADHD in problem-solving issues related to the symptoms of the disorder, and together, they created a plan of interventions agreed upon by both the teacher and the student. Because of this increased communication, they stated that the relationship was improved because a sense of empathy was fostered from hearing the student speak of the difficulty faced on a daily basis resulting from ADHD. Getting to know the strengths and weaknesses of the learners allowed the teachers to fully understand the struggle of dealing with ADHD symptoms. This gave them the motivation to work tirelessly to find better ways of reaching these students.

3. How does a teacher providing interventions for ADHD students experience success or failure of those students?

Participants in the study spoke of self-reflection as a result of working with these learners, and they shared that they personally internalized the successes or failures of their students. When a student experienced failure, the teacher also felt as though he had failed. The teacher celebrated the student's success as his own, as well. When the student was not successful, the participants reflected on their professional practices and found alternate strategies

to reach the learner. This often meant collaborating with parents and other colleagues, reading research, and being creative with their methods. Though exhausting, most of the participants expressed that they were able to reach the majority of their learners, despite the effect of ADHD symptoms in the classroom.

4. How are teachers' perceptions toward ADHD students changed over time as a result of providing interventions for these students?

Participants grew professionally as a result of searching for new and creative ways to reach their ADHD learners. Those who had less experience with these students often did not fully understand the lack of control the disorder causes and had a negative perception of these students based on disruptive classroom behaviors or a perceived lack of motivation. Those who worked successfully with these students perceived them to be energetic, curious, and able to be taught despite the challenges they face in the classroom. Over time, these teachers have become more empathetic towards all learners as a result of working closely with ADHD students to help them find ways to cope with their strategies and become better focused students.

Discussion

The results of this study showed that teacher attitude and understanding of ADHD played an important role in how classroom instruction and interventions are provided to students. The results of this study added a unique perspective to the existing body of literature on ADHD learners by sharing the experience of teaching these students from the perspective of the teachers who provide interventions for them in the classroom. This section is meant to connect the previous research and theories with the findings of this study.

Theory of Reasoned Action

The theory of reasoned action states that a person's attitude towards a situation can predict how they will behave (Ajzen & Fishbein, 1980). This study supports that idea, in that, the teachers who spoke negatively about ADHD and ADHD learners did not empathize with those students and therefore, did not provide the accommodations at the same level as those who saw the learners in a positive manner. Participants were asked to define ADHD, and those who recognized the disorder as a true obstacle for their learners that can be overcome with appropriate strategies and interventions were able to reflect on their own practices and find creative ways to reach them. Those participants who defined ADHD as a set of behaviors the student chooses to exhibit were not able to own the responsibility of finding appropriate ways to teach these learners. They blamed a lack of parental support for the students' lack of success and did not participate in the same level of self-reflection and improvement in practice as those participants who fully understood the disorder and recognized it as more than a set of behaviors that can be controlled.

Human Ecology Theory

The human ecology theory (Bronfenbrenner, 2005) was also supported by the study results, as the teachers shared how the classroom environment they created and the supports they provided affected the students' attitude, work ethic, and classroom success. Success stories were shared by the teachers who understood their learners and custom-built an environment that was supportive and safe. Those teachers who did not provide the same secure setting for their learners shared negative stories in which the learners were not successful. This supports the idea that the student's environment affects his behavior and development. Those with more nurturing and empathetic approaches were able to better connect with their students and provide an

environment that was conducive to learning for ADHD learners along with a setting that embraced the learner as unique but capable. Students who feel supported and encouraged in addition to experiencing success are going to want to continue to improve. Classroom environments created by the teacher greatly affect the success of the learners within the setting.

Social Cognitive Theory

The social cognitive theory states that a person's belief in himself and his ability to be successful affects outcomes for that person (Zimmerman & Bandura, 1994). The human ecology theory shows that a student needs a safe, supportive, and encouraging environment, and this environment and attitude from the teacher helps the student to develop a sense of self-efficacy, supported by the social cognitive theory. Students in a supportive environment that experience success are going to be able to develop a better sense of self-efficacy. This environment can only be created by teachers who are empathetic of the learners and their unique attributes, and are willing to reflect on teaching practices and strategies to customize them for each individual student to experience success. Those study participants who felt this empathy for their ADHD learners became more reflective and were able to share success stories and a feeling of accomplishment from having taught these challenging learners. Self-efficacy seemed to improve for both teacher and student in these positive situations.

Interventions for ADHD Learners

Interventions provided by teachers for learners with ADHD must be appropriate for the individual learner, and this requires innovation and creativity on the part of the teacher to find strategies that work for each individual. For example, several teachers spoke of the need for them to give incremental feedback to the student throughout an activity and to break the work down into smaller chunks, enabling the student to experience success multiple times while

working. This supports the idea of the purpose of ADHD students' inattentiveness being related to a desire to avoid delay (Antrop et al., 2006). In the classroom, the teachers who shared positive experiences with ADHD learners found that delaying positive reinforcement and success was not beneficial to the student and hindered his ability to continue with an activity.

The study from Harty et al. (2009) found increased aggression and anger in students whose ADHD symptoms were persistent. Participants in this study who did not provide appropriate interventions for their learners described students who were often hostile and had negative attitudes. The findings of this study support previous research that focuses on the need for an appropriately supportive classroom environment provided by the teacher.

Multiple studies (Wei et al., 2014; Classi et al., 2012; Evans et al., 2014) have shown that students with ADHD will struggle with low self-esteem and challenging social situations that will make success in school more difficult for them in comparison to peers that do not have ADHD. They are more likely to drop out of school (Pagani et al., 2008) and typically have lower grades and lower standardized test scores (Barkleyet al., 2006; Frazier et al., 2007). The more supported and successful the teacher makes the student feel, the higher the level of self-efficacy and more positive attitude towards learning exhibited by the ADHD learner. The results of this study showed this to be true. Those teachers experiencing success with their ADHD students were the teachers who made it their mission to provide an equitable education for all of their learners despite any obstacles presented. They felt as though part of the job of a teacher was to help students experience success and thus develop a better sense of self-efficacy. With the potential negative outcomes for these learners, it is crucial that teachers provide appropriate support and interventions for these students to help overcome the obstacles caused by their ADHD.

Appropriate Training for Teachers Working with ADHD Learners

Previous research expressed a need for training to better prepare teachers to provide appropriate learning experiences and interventions for their ADHD learners (Fabiano et al., 2013; Bell et al., 2010; Rush & Harrison, 2008). This study supports previous findings. The study participants who fully understood ADHD and the difficulties its symptoms provide for learners were better able to provide for the needs of these students in the classroom. These teachers exhibited a higher level of empathy from the knowledge previously acquired about the effects of ADHD and were much more willing to provide interventions for their learners. Teacher training, according to the results of this study and the previous body of research on ADHD in the classroom, is a crucial factor in a positive relationship between teacher and student that can result in an environment and teaching strategies that are more conducive to student success in the classroom.

Ghanizadeh et al. (2009) conducted a study to determine if a teacher's knowledge of a student's ADHD caused the teacher to treat and teach the student differently than not having this knowledge. They found that the teachers showed the same level of professionalism and care for each individual whether or not they had knowledge of the disability. The results of this study, while not contrary to these findings, do not represent the same sentiment. While all participants in this study were aware of their students' diagnosis, they treated the students differently than student peers if the participant did not fully understand the disorder. Those participants who had complete understanding of the disorder were more likely to show a higher level of professionalism and care to all of their students than those who did not have a full understanding.

The perspective of the teacher participants in this study adds a unique view of the experience of providing appropriate learning environments for ADHD learners. The participants

shared that, because of the varied and difficult nature of student symptoms of ADHD, they, as teachers, were forced to become more reflective of their own thoughts and actions. This additional need for reflection helped them find more creative interventions to support these learners, therefore, making them stronger teachers with better relationships with their learners due to a higher sense of empathy and understanding. Those who did not fully understand the disorder and the symptoms it presents did not experience this same level of self-reflection and empathy, resulting in a more negative attitude towards teaching learners with ADHD and less success with helping these students cope with their symptoms to become better students. Teacher empathy is critical to be able to provide the level of self-reflection necessary to provide creative and varied interventions for ADHD learners.

Implications

The finding that teacher understanding of the disorder affects the level of empathy and the willingness to provide interventions for the ADHD learner has implications in the area of teacher training, The most important of which is that those who are responsible for teacher education and professional learning need to include in-depth training on ADHD. The symptoms that can be problematic in the classroom, appropriate interventions to use with these students, and resources where more information on interventions can be found for those unique learners that are not successful with typical interventions would be very important in teacher training.

Theoretically, teachers need to fully understand their learners and the manner in which ADHD affects them, create an environment conducive to learning for each student, and provide instruction and interventions that allow the student to experience success and develop a sense of self-efficacy. This is no simple task. It requires experience working with ADHD learners and trial and error of strategies until success is achieved. Education and training will help provide

the groundwork for understanding of the disorder and how it affects the learners, but there is no substitute for real-life experience with these unique learners. To aid in this growth, mentoring programs for new teachers can provide support and guidance for them as they navigate through the everyday difficulties experienced when attempting to reach the needs of multiple unique learners in the same classroom.

While teachers need to be empathetic towards their ADHD learners and help them find ways to be successful, the study results show that teachers could benefit from empathy and support from their administration. Nearly all of the participants spoke of how exhausting it is to find or create appropriate interventions for their students. Perhaps administrators could find ways to give these teachers some time with no other duties to collaboratively discuss student needs and collectively brainstorm ways to intervene that can be used by all. It would be beneficial to provide work days or days in which subs are hired to teach classes while teachers who work with students can meet as a collaborative group to share strategies. If one teacher finds a strategy that is helpful, he should share that with anyone else working with that student. The problem is that there is often little or no time for the teachers to gather and hold these conversations. School administrators need to make collaborative time to discuss student needs a priority several times during the school year. It would also be helpful for the teachers from the previous grade level to meet with the current grade level teachers prior to the first day of school to share strategies that have worked for these learners.

Participants spoke of checking for understanding incrementally within a lesson or activity to ensure that the learner with ADHD was on task and focused. This frequent formative feedback could be provided by teachers working with ADHD students to the school administration for evaluation. Frequent checking with the teacher to gauge his perception could

be invaluable for those making decisions about scheduling, personnel, resources, and professional learning. It is critical that training be provided for the teachers to improve and reach the needs of all learners, and it is equally important that the teachers provide feedback to the school administration about what is needed to successfully reach all of their students.

Limitations

As with any study involving human subjects, this one has limitations. The qualitative nature of the study involving the use of self-report data is likely to be influenced by factors unrelated to the study.

The sample size of the study was a limitation, as it only gave the perspective of 12 individuals. They all were teachers in the same school system, with the same demographic population of students. Any information gleaned from this study applies to the population of the county in which the study was conducted but cannot be transferred to populations that are not demographically similar. The participants themselves were all volunteers, which may be a limitation since they may feel more passionately about the subject than those who were not willing to volunteer.

The use of self-report data is a limitation since human subjects may be influenced by many factors outside the study. For example, a teacher who had a bad experience with an ADHD student that day may answer less favorably about his perception of teaching ADHD students than if he was asked on a day that all of his ADHD learners behaved. In the focus group discussion, anonymity is not possible since the individual participants are interacting with each other. The pressure of peers, even if they are strangers, may cause participants to downplay their feelings to avoid the scrutiny of others. Even though participants were told that their identities

would be protected throughout the study and in the subsequent report, they may also have had a sense of distrust and therefore be unwilling to share as honestly as they could.

As with any study, researcher bias is a concern. Throughout the data analysis, I bracketed my thoughts and opinions in the margins of the transcripts, so I would be aware of these biases while determining the results. In several places in the report, I shared my bracketed thoughts so the reader would be aware of my potential bias.

Recommendations for Future Research

Future research on the perception of teachers of students with ADHD would add to the growing body of literature on the topic. It would be interesting to know if the perceptions of the participants in this study are universal amongst all teachers, or if they are specific to this geographical area or the given demographic population.

Participants in the study, when sharing strategies that were successful with their ADHD students, spoke of having to be creative when finding interventions for these students. Perhaps more research on the specific interventions that aid the students in coping with specific symptoms would be helpful. Participants were confident about their ability to provide appropriate interventions, but they were often unsure where they could find those interventions.

This study only focused on teachers as a support system for students with ADHD. A follow-up study with other individuals or groups who provide support systems for these learners could provide additional information about interventions needed in other settings, such as the home, the workplace, or at social events. Parents probably use different strategies to get their ADHD child to clean his room than teachers use to get him to complete a math test. Finding out the similarities and differences could help provide even more information for the varying support groups to use and share across multiple settings.

Medication was mentioned several times throughout the data, but it was not prominent enough to present itself as a theme. When participants shared anecdotal information about their students, they sometimes mentioned whether the student was medicated or not. Research on teacher perception of teaching learners with ADHD who are not medicated versus those who are medicated would be interesting to give additional information on the coping strategies of ADHD students and the level of additional intervention required to assist them with or without medication as an intervention.

Summary

The role of the teacher in the classroom is critical to the success of the ADHD learner. It is necessary that these teachers fully understand the disorder and how it affects their students to be able to provide appropriate interventions to meet their needs. The participants who empathized with their learners and their difficulties were much more positive in their planning and teaching strategies, resulting in a more successful classroom experience for both teacher and student. Those teachers who internalized their students' success or failures were able to experience a deeper level of self-reflection and were able to produce more creative solutions for struggling learners. Teacher attitude affected the relationship in the classroom and level of interventions provided, and those teachers who viewed ADHD related behaviors as directly related to the classroom environment and support provided were able to have a positive classroom experience and grew professionally as a result of teaching these students.

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APPENDIX A

CONSENT FORM

A Phenomenological Study of an examination of teacher's lived experiences as part of a support system for students diagnosed with ADHD.

Timothy Michael Garner Liberty University Department of Education

You are invited to participate in a qualitative research study of the perceptions of teacher's lived experiences with students diagnosed with ADHD, and their experience within the support systems to which they belong. The aim of the study is to reveal the positive and negative interactions with these students and the coping styles they exhibit. An understanding of these interactions by the participants of the study could uncover ways of promoting healthy means of coping with the difficulties of an ADHD diagnosis and/or the negative coping styles that the participants developed over the years and how to teach others ways to avoid the unhealthy coping styles as they interact with their support systems.

This study is being conducted by: Timothy Michael Garner, Doctoral candidate, School of Education, Liberty University.

Background Information:

The purpose of this study is to examine the lived experiences of teachers involved in a support system for students diagnosed with ADHD.

Procedures:

If you agree to take part this study, we would ask you to do the following things: Participate in an individual question and answer session as well as a group question and answer session and maintain a daily journal for ten consecutive school days.

Risks and Benefits of Being in the Study:

The study has minimal risks which should not exceed more than what you would encounter in everyday life. Your identity and the identity of your facility and circumstances will be kept confidential.

The benefits to participation are the potential for improvement of support systems, early identification of negative coping styles, and a better understanding of the needs of the student diagnosed with ADHD.

Compensation:

Participation in this study is purely voluntary. No compensation will be paid for participation.

Confidentiality:

The records of this study will be kept confidential. In the event that this project is published, no information will be used to indicate the identity of the participants. Research records will be stored securely and only the researcher will have access to the records. All interviews and journals will be confidential, and no names will be reported. Printed interviews and journals will be kept in a locked location and shredded after three years. Interviews will be identified only by a numbering system.

Voluntary Nature of the Study:

Participation in this study is voluntary. Your decision whether or not to participate will not affect your current or future relations with the facility/system where you are employed. If you decide to participate, you are free to not answer any question or withdraw at any time without affecting those relationships.

Contacts and Questions:

The researcher conducting this study is Timothy Michael Garner. You may ask any questions you have now. If you have any questions or concerns regarding this study and would like to talk to someone other than the researcher, you are encouraged to contact the Institutional Review Board, Liberty University Attn. Institutional Review Board Green Hall, Suite 1837 1971 University Blvd. Lynchburg, VA 24515 Email: irb@liberty.edu Phone: 434-592-5530 Fax: 434-522-0506

You will be given a copy of this information to keep for your records.

Statement of Consent:

I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Signature: _____

Date: _____

Signature of Investigator: _____

Date: _____

APPENDIX B

Email sent out to potential participants:

Dear Colleagues,

My name is Tim Garner, and I am an Emotional Behavioral Disorder teacher in the system where the study takes place. Currently, I am in the graduate school of education at Liberty University, and I am working on the dissertation process. The title of my dissertation is: A phenomenological study of teacher's lived experiences providing a support system for students diagnosed with ADHD.

I need your help. I am looking for participants to interview individually for about an hour in person if possible (depending on where you live) and for another hour as part of a focus group. I am looking to interview 16 adults (two will serve as pilot interviews and 14 will participate in the actual study) consisting teachers directly involved with students with ADHD. Your identity will not be disclosed and will be disguised. This study will be conducted with approval from both the school systems you work in and the Internal Review Board (IRB) at Liberty University. I really appreciate your help and I will be interviewing the first people to email me at:

Thank you for your help,

Timothy M. Garner Ed.S
ED.D. Doctoral Candidate
Liberty University
School of Education

APPENDIX C

Survey:

Name_____

Age_____

Gender _____

Position:_____

Number of years involved directly with ADHD students (as their educator)_____

What is your highest grade level or degree completed in school? _____

For the purpose of research are you willing to talk about your experience with these students?

_____Yes _____No

APPENDIX D

Semi-Structured Interview Questions

The Lived Experiences of Teachers' Interactions with ADHD Students Interview Guide

1. Describe Attention Deficit Hyperactivity Disorder (ADHD).

2. Describe the relationship you have with ADHD individuals in your role as teacher.

3. In your role as educator, what accommodations, or support systems, have you put in place for your students with ADHD to help them cope with difficulties in the classroom?

4. Describe the relationship you have with the ADHD individuals you currently work with and provide support for on a daily basis.

5. How do the symptoms of ADHD affect the relationship between you and the student with ADHD?

6. Describe one of your most defining experiences as a teacher of a student with ADHD.

7. How did this memorable experience alter your perception of ADHD students?

8. As a result of this memorable experience, in what ways did you change the support system you provide for ADHD students?

9. Describe one of the most difficult times you have had in working with an individual with ADHD.

10. How did this difficult experience alter your perception of ADHD students?

11. As a result of this difficult experience, in what ways did you change the support system you provide for ADHD students?

12. In your day-to-day experience with ADHD individuals, how has your understanding of this disorder evolved?

13. What advice would you give to an individual who will be providing a support system for an ADHD student in the future?

APPENDIX E

Focus Group Questions

1. As members of a support group, how do you communicate to provide support for ADHD students at school?

2. How are parents involved in coordinating services for their ADHD student?

3. How do you integrate your group's efforts or directives with those of the other groups?

4. In your experience, what barriers make providing a support system for ADHD students more difficult?

5. What policies or procedures in your school system benefit ADHD students?

6. What supports do you receive as a provider of supports for these ADHD students?

7. What would you do to improve interventions for your ADHD students if you had the power and resources to make changes?

8. Do you have further comments you would like to add in relation to services and intervention supports for ADHD students?