TEACHER PERCEPTION OF ADHD AND ITS INFLUENCES WHEN TEACHING READING TO ELEMENTARY MALES WITH ADHD

By

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ABSTRACT

BETH KELLER. Teacher perception of ADHD and its influences when teaching reading to elementary males with ADHD. (Under the direction of DR. CHRIS O'BRIEN)

The learning needs of students diagnosed with ADHD have been of interest of researchers over the last three decades. It is important to understand how best to support these learners in the classroom as they comprise about 10% of students in our nation's classrooms. This study analyzed the role teacher perception played in the instructional decisions teachers made when providing reading instruction to males with ADHD in elementary school classrooms. This study also questioned the role teachers' beliefs and attitudes play in providing this instruction. Conducted through a case study design, the goal of the study was to provide greater insight into the role teacher perception of ADHD plays in instructional decision making in an effort to identify patterns that could better support teachers of students with ADHD and the learners with ADHD themselves in the reading classroom.

DEDICATION

This dissertation is dedicated to my family: my husband J.T., my daughter, Isabella, and my parents, John and Judy Isenberg. Without their encouragement, support and inspiration this work would not have been possible.

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I would like to acknowledge my committee members, Dr. Kelly Anderson and Dr. Bruce Taylor, who gave their time and support throughout this process. Dr. Anderson's kind words and Dr. Taylor's expert theoretical scholar's advice were invaluable.

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CHAPTER 1: INTRODUCTION

Attention Deficit/Hyperactivity Disorder (ADHD) has garnered a great deal of media and medical attention over the past two decades, yet the learning needs of students with ADHD are often overlooked. This is particularly true in the general education setting. According to the Center for Disease Control (CDC), 11% or 6.4 million children in the United States have been diagnosed with ADHD. Additionally, the National Health Institute has documented a steady increase in diagnosis over the last 17 years, beginning with about 6% of school aged children in 1999 to just over 10% in 2015 (CDC, 2016).

ADHD and its Impact in the School Environment: An Overview

According to the DSM-V, ADHD is defined as "a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, has symptoms presenting in two or more settings, and negatively impacts directly on social, academic, or occupational functioning" (American Psychiatric Association, 2013, p. 59). Additionally, the individual must demonstrate clinically significant impairment in social, academic, and occupational environments, and several symptoms must be present before the age of 12 in order to receive an ADHD diagnosis. These symptoms must also persist for a minimum of six months prior to assessment and must not be better explained for by a separate mental disorder. Individuals with ADHD may present with inattention and hyperactivity/impulsivity as combined-type ADHD, though one symptom may be most prevalent (American Psychiatric Association, 2013).

There is a body of research that addresses learners with ADHD and their needs. In looking at school-based outcomes for students diagnosed with ADHD, there are

several areas of need. First, students diagnosed with ADHD are more likely to find themselves as a candidate for grade retention. Additionally, ADHD is often associated with below average grades, and poor reading and math standardized test scores. Looking at reading specifically, research notes that children with ADHD may also present with deficits in reading comprehension (Fienup, Reyes-Giordano, Woloski, Aghjayan, & Chacko, 2015; Miller et al., 2013). When examining the big picture, the literature supports the presence of some difficulties in the reading skills of children with ADHD in a variety of areas, suggesting a need for remediation (Fienup et al., 2015).

Much of the existing literature focuses on addressing medical treatments for children with ADHD and has worked toward identifying the core deficits associated with the disorder (issues related to inattention and impulsivity for instance) rather than working to improve academic difficulties (Jitendra, DuPaul, Someki, & Tresco, 2008). This research has resulted in empirical interventions designed to improve overall academic achievement for children with ADHD that include a focus on medication, psychosocial treatment, and general academic interventions (DuPaul & Stoner, 2003).

When reviewing academic achievement and/or instructional supports for students diagnosed with ADHD there is an important player who should not be overlooked—the teacher. Teachers play a critical role in the learning of students, particularly those with unique learning needs such as those presented in conjunction with ADHD.

In reviewing the literature on teachers and ADHD, the role teachers play in educating students diagnosed with ADHD has yielded some findings to date. A review of the literature suggests that teacher knowledge as related to ADHD is relatively low (Sciutto, Terjesen, Kučerová, Michalová, Schmiedeler, Antonopoulou,…Rossouw, 2016).

Similarly, research has demonstrated time and time again general education teachers demonstrate a lack of preparation in teaching and meeting the needs of diverse learners. This is notably true in regard to students with learning differences or disabilities (Ladson-Billings, 2000; NCES, 1999; Rushton, 2001). Specifically, when looking at the teachers of students with ADHD, preliminary findings by Sciutto, Terjesen, and Bender-Frank (2000) suggested a correlation between teacher self-efficacy and knowledge of ADHD.

Additionally, studies have also reviewed teacher perception of ADHD and how these perceptions can shape attitudes toward the diagnosis of ADHD in the classroom setting. Given the challenges presented by students diagnosed with ADHD and how these may manifest themselves in a classroom setting, it may not be surprising to learn that teachers may exhibit negative attitudes toward students diagnosed with ADHD. Due to the challenges that a child with ADHD may present, it is also not surprising that there are reports that teachers' attitudes toward children with ADHD may be negative (Batzle, Weyandt, Janusis, & DeVietti, 2010; Ohan, Visser, Strain, & Allen, 2011). Given the high degree of importance the socialization between teacher and student plays in the learning process, more in depth understanding is needed as to how teacher attitudes may impact instructional decision making for male, elementary aged learners diagnosed with ADHD. In addition to attitude, it is important to understand the role perception plays.

While there are a number of studies pertaining to ADHD and education on a variety of topics, fewer have focused on teacher perception or how teachers describe supporting students with ADHD in their classrooms through their own voice (Ohan, Cormier, Hepp, Visser, & Strain, 2008). As the educators who work with these students most often, teachers can provide invaluable perspectives regarding the supports they feel

have the highest degree of impact (Fabiano et al., 2013; Sciutto, Terjesen, & Bender-Frank, 2000). As a result, an educator's perception can greatly impact student achievement in many ways (Kern, Amod, Seabi, & Vorster, 2015).

In summary, there is a breadth of information on students diagnosed with ADHD in the school setting. However, there has been limited investigation into understanding how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence the reading instruction they provide to elementary aged male learners with ADHD. This understanding is critical given the significant role a teacher plays in aiding a child in learning how to read.

Problem Statement

Students with ADHD are more likely to experience academic and social challenges than students without ADHD. As previously noted, according to Loe & Feldman (2007), ADHD is associated with poor grades, low reading and math standardized test scores, and increased grade retention. When examining reading skills of students with ADHD as compared to non-disabled peers, there are notable variances from very young ages. For instance, children with ADHD symptoms show comparably lower scores on vocabulary tests at the ages of 3, 4, and 5 years. These differences in basic reading skills between children with and without ADHD seem to increase in children aged between 5 and 7 years as reading comprehension is hindered by low vocabulary, slow reading speed, and problems in decoding (Merrell & Tymes, 2001).

Much of the existing literature focuses on addressing treatments for children with ADHD and has sought to identify the core deficits associated with the disorder (e.g., inattention, impulsivity) rather than working to improve academic difficulties (Jitendra,

DuPaul, Someki, & Tresco, 2008). This research has resulted in empirical interventions designed to improve overall academic achievement for children with ADHD that include a focus on psychosocial treatment and general academic interventions (DuPaul & Stoner, 2003). However, there has been limited investigation into understanding how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence the reading instruction they provide to elementary aged male learners with ADHD.

That being said, research does identify that children with ADHD may also present with deficits in reading comprehension (Fienup et al., 2015; Miller et al., 2013). However, empirical studies examining reading comprehension abilities in children with ADHD have produced mixed findings. Several studies have reported reading comprehension difficulties in children with ADHD (Brock & Knapp, 1996; Cherkes-Julkowski, Stolzenberg, Hatzes, & Madaus, 1995; Miller et al., 2013), while there is at least one that has not (Ghelani, Sidhu, Jain, & Tannock, 2004). Those studies which identify difficulties in reading found reading comprehension was impacted for children with ADHD when the length of a reading passage was increased, as compared to children with a reading disability or typically developing children (Cherkes-Julkowski et al., 1995).

The greater body of evidence suggests children with ADHD also have lower reading comprehension scores and more difficulty reporting the central idea from a passage than those without ADHD (Brock & Knapp, 1996; Cherkes-Julkowski et. al., 1995; Ghelini et. al., 2004; Lam & Beale, 1991; Stern & Shalev, 2013; Tsal & Shalev, 2005). This difficulty may be due to the attentional demands of lengthy reading passages, requiring more effortful processing (Brock & Knapp, 1996). Additionally, children with

ADHD show deficits with recalling central information in a text passage, most likely as a result of working memory difficulties (Miller et al., 2013). As previously noted, the literature supports the difficulties in the reading skills of children with ADHD. These difficulties present themselves in several areas of reading and suggests a need for remediation (Fienup et al., 2015).

Teaching children to read fluently and comprehend a text is one of the main goals of education. This is the result of its primary aims and its corresponding ability to help students achieve goals, develop knowledge, and participate in society (OECD, 2013). Given the significance the ability to read holds as an indicator of future success, it is imperative that this area of schooling is fully understood for all learners, including those diagnosed with ADHD, and also includes the perspectives of the teachers that provide this instruction.

Purpose of the Study

Given the characteristics of the diagnosis, teachers often have difficulty navigating the dichotomy created between students with ADHD and classroom expectations that demand attention for long periods of time, such as participation in quite activities, waiting one's turn, etc. Given the lack of knowledge teachers have related to ADHD, the teacher may believe that the student is in control of his or her actions and would simply like the student to stop the distracting behavior and fall in line with peers. Given the deficits aligned with ADHD that is often not possible. When considering that around 10% of the student population is diagnosed with ADHD and that, according to the APA in 2013, males are three times more likely than females to receive an ADHD diagnosis, this is a vulnerable population that deserves attention.

Previous studies that reviewed learning for learners with ADHD have served to determine effective instructional interventions and practices for these students or have studied teacher perspectives regarding ADHD including perceptions, attitudes, and beliefs. There are very few who have attempted to look at how teacher perceptions, attitudes, and beliefs influence instructional decision making and interventions and practices when teaching reading. Even fewer have attempted to break this down by gender. As previously noted, there is little research that examines teacher perception as related to the teaching of elementary school males diagnosed with ADHD and even fewer studies have looked at how the attitudes and beliefs of teachers regarding ADHD may influence their instructional practices in reading.

This gap in the literature and subsequent need for understanding to better serve these students stands as the basis for this study. As a result, the purpose of the current research study is to understand how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence teaching elementary reading to male learners with ADHD.

Research Questions

This case study seeks to understand how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence teaching elementary reading to male learners with ADHD. As a result, the research is guided by the following questions:

- How does teacher perception of ADHD influence their instructional decisions when teaching reading to students diagnosed with ADHD?
- In what ways does being male and diagnosed with ADHD influence teacher beliefs and attitudes about effective reading instruction?

Significance of Study

This study is designed to understand how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence teaching elementary reading to male learners with ADHD. This study is significant because it investigates teachers' perceptions and as the individuals who hold a hefty weight of the responsibility for a child's classroom learning experience, it is beneficial to have a clear picture as to their experience. The available research is concerned primarily with determining the objective effectiveness of classroom intervention strategies without much personal feedback provided by the teacher to help see how their personal attitudes and beliefs regarding ADHD may influence their instructional decisions. This study is designed to add to the existing body of literature in an effort to best support learners with ADHD in elementary classrooms.

Definition of Terms

Attention-deficit/hyperactivity disorder (ADHD) is characterized as "a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development" (APA, 2013, p. 61). Symptoms include: inattention, disorganization, a dislike of tasks that require sustained mental effort, hyperactivity, and impulsivity (APA, 2013). ADHD was originally referred to as Attention Deficit Disorder (ADD) as a result of the shift to the renaming of hyperkinetic impulse disorder to Attention Deficit Disorder (ADD) in the DSM-III (APA, 1980). Over time the term changed several times until settling on ADHD in the 21st century.

Attitude is a settled way of thinking or feeling about something typically one that is reflected in the person's behavior.

Belief is an acceptance that a statement is true or that something exists.

Instructional Decision is a conclusion or resolution reached after consideration by a teacher in an effort to contribute to the purposeful direction and management of the learning process (Huitt, 2003; Stephani 2004-2005).

Instructional Intervention is a specific program or set of steps to help a child improve in an area of need. Instructional interventions are intentional in that they seek to strengthen a particular area of need. They are formal and specific and should be reviewed at set intervals. Finally, they are designed so that student progress can be monitored during the duration of the intervention (Lee, 2018).

Reading: Clay defines *reading* as a "message-getting, problem solving activity" that has a reciprocal relationship with writing, which Clay defines as a "message sending, problem-solving activity (Clay, 2005, p. 1). Clay (2005) also refers to reading as the

breaking down process. Individuals start with the whole written message, symbols, and proceed to break it down into symbols, letters, and phonemes, the smallest units of sounds. *Phonemic awareness* is necessary for reading, and reading in turn improves phonemic awareness (Ehri, 1985; Perfetti, 1985; Perfetti et al., 1981; Shaywitz, 2003; Wagner & Torgesen, 1987). *Reading fluency* is the ability to read a text accurately, quickly, and with expression (Neddenriep, 2011). *Reading comprehension* is the ability to create a personal mental representation of the meaning of text (Walpole & McKenna, 2004).

Summary

This study was exploratory in nature. The researcher found no research on teachers perception of ADHD and how it influences instructional decision making in reading for elementary aged male students diagnosed with ADHD. The intent of this study was to examine the supports, strategies, and tools that teachers with ADHD used and how the participants described the utility of these aids in fulfilling their job requirements. It is the hope of the researcher that this study adds to the body of research on teacher perception, beliefs, and attitudes and their impact on instructional decisions for male students diagnosed with ADHD.

The next chapter provides research pertinent to the study. The two broad sections are the literature on students with ADHD, and research as related to teachers and ADHD. Following this review of the literature, chapters three and four explain that specifics of this study's methodology and results. Finally, a discussion regarding these results and their implications is provided in closing.

CHAPTER 2: LITERATURE REVIEW

While there are numerous studies pertaining to ADHD and education, few have focused on the teacher's role in supporting learners with ADHD in the classroom. As these are the educators with the most direct school-based contact for students with ADHD, teachers can provide invaluable perspective when educating students diagnosed with ADHD. The chapter begins with an overview of the theoretical framework for this study. It then reviews the existing literature on learners with ADHD as related to characteristics, reading outcomes, and classroom supports. The chapter then concludes with a review of the existing literature as related to teachers of students with ADHD, specifically in relation to their knowledge, self-efficacy, attitudes, and perceptions.

As previously noted, progress is still needed to support the specialized learning needs of students diagnosed with ADHD in the classroom setting. This area of need is for students diagnosed with Attention Deficit/Hyperactivity Disorder (ADHD). Surveys conducted by the Center for Disease Control (CDC) in 2011 show that 11% or 6.4 million children in the United States have been diagnosed with ADHD (CDC, 2016). Additionally, the National Health Institute has documented a steady increase in diagnosis over the last 17 years, beginning with about 6% of school aged children in 1999 to just over 10% in 2015 (CDC, 2016). This is a population that is need of and deserving of time, attention, and support.

Theoretical Framework

The case study is a form of empirical inquiry that enables the in-depth examination of a particular phenomenon, issue or object in real life situations. A case study is "…the study of an issue explored through one or more cases within a bounded system…" (Creswell, 2007, p.73) Over time through a systematic collection and analysis (Berg, 2009). Case study "allows an investigation to retain the holistic and meaningful characteristics of real-life events" (Yin, 1994, p. 3).

This case study is based upon an exploratory-descriptive approach. This approach examines a relatively unknown phenomena and studies it by utilizing a unique approach in a manner that is best described as open-minded (Edwards, 1998). Eckstein (1975) referred to such works as configurative-idiographic in that the results were not mean to generalize beyond the study itself, nor is it designed to develop theory. Rather it provides a detailed description free of bias to serve as a foundation for later works. This work is conceptually demanding. In addition, the level of methodological rigor it requires should not be viewed in the usual manner of simply serving as a pilot study. Instead this labor-intensive process serves as a first step of research in a previously understudied area of research and provides a set of valid cases of the phenomena which did not previously exist (Safran, Greenberg, & Rice, 1988).

The ADHD Student

ADHD Definition and Characteristics

According to the DSM-V, ADHD is defined as "a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development, has

symptoms presenting in two or more settings, and negatively impacts directly on social, academic, or occupational functioning" (American Psychiatric Association, 2013, p. 59). Additionally, the individual must demonstrate clinically significant impairment in social, academic, and occupational environments, and several symptoms must be present before the age of 12 in order to receive an ADHD diagnosis. These symptoms must also persist for a minimum of six months prior to assessment and must not better explained for by a separate mental disorder. Individuals with ADHD may present with inattention and hyperactivity/impulsivity as combined-type ADHD, though one symptom may be most prevalent (American Psychiatric Association, 2013).

In reviewing the first form of presentation, inattention, it should be noted that this presentation is generally more challenging for others to see as it lacks the symptoms for hyperactivity that will be discussed below (Rief, 2016). Symptoms for this presentation include, but are not limited to: difficulty attending to details, difficulty maintaining focus on tasks or play activities, appears to not attend when being spoken to directly, struggling to follow through on instructions and related tasks, and difficulty organizing tasks and activities (American Psychiatric Association, 2013). Conversely, people with ADHD may be able to sustain focus and attention for longer time periods when the activity is highly stimulating in medium (such as a video game) or by personal interest. In fact, there may be the potential for hyperfocus to the exclusion of things around them and lead to a more difficult time in disengaging (Hupfield, Abagis, & Shah, 2018).

In reviewing the second form of presentation, hyperactivity/impulsivity, it should be noted that this presentation is generally a more recognizable form of ADHD (Rief, 2016). Symptoms for this presentation include: frequent fidgeting and other excessive

movement when not appropriate including difficulty sitting still when being seated is expected, difficulty participating in activities where low volume or quiet is expected, excessive talking, difficulty with turn taking, and initiating frequent interruptions (American Psychiatric Association, 2013). Hyperactive-impulsive presentation is often diagnosed in early childhood and may be reclassified later on as combined presentation as signs of inattentiveness emerge later and become more significant developmentally (Rowland, Skipper, Rabiner, Umbach, Stallone, Campbell,…,Sandler, 2008).

As the name suggests, the final presentation, combined type ADHD, includes symptoms from each of the previously noted presentations (American Psychiatric Association, 2013). Combined presentation is the most common of the three. Of note is the fact that almost two-thirds of those diagnosed with ADHD are also diagnosed with at least one other coexisting condition. This may take the form of learning disabilities, oppositional defiant disorder, depression, conduct disorder, or anxiety (MTA Cooperative Group, 1999; National Resource Center on AD/HD, 2015).

Given the unique learning needs that exist for each of these presentations, it is important that teachers demonstrate awareness of students' needs for those who hold this diagnosis. Research is vast in relation to treatment of ADHD particularly in the realm of medicine and psychology. For the purposes of this study, the focus will be centered on what can be done to support learners with ADHD by teachers in the classroom setting.

Gender Differences

Before delving into what the literature offers in regard to support, it is important to first review what it has to say regarding gender differences of students diagnosed with ADHD. Given the criteria for ADHD, both males and females with ADHD demonstrate

some common characteristics. For instance, students of both genders demonstrate significant difficulties regulating thoughts, behaviors, and emotions, which impact their ability to successfully manage tasks and subsequent outcomes (Barkley, Fischer, Smallish, & Fletcher, 2006). That being said, males are three times more likely than females to receive an ADHD diagnosis (APA, 2013).

Symptoms of ADHD are not gender specific and males and females with ADHD share more in common than they do differences. However, there are a few minor differences that have been attributed to gender. Upon adolescence, females with ADHD tend to demonstrate lower self-efficacy and are less adept with coping strategies than their male counterparts. Also, findings have been mixed in comparing rates of depression and anxiety but suggest they may be higher for females than males in adolescents. Additionally, findings are mixed but suggest that externalizing behaviors may be lower in females than they are in males; however, many of these studies contained small sample sizes, potential biases, and differences in diagnostic procedures that make it hard to prove these findings conclusive (Rucklidge, 2010).

Of additional note, males with ADHD typically demonstrate higher levels of hyperactivity, conduct issues, aggression, and other similar externalizing behaviors. Alternately, females with ADHD tend to demonstrate higher levels of inattentiveness, internalizing issues, and social impairment. As a result, the behaviors demonstrated by male students are generally perceived as disruptive by teachers thus resulting in identification and treatment in a more expedient manner than is the case for their female peers (Barkley et al., 2006).

Arnette, Pennington, Willcutt, Defried, and Olson (2015) set out to determine what may be the cause of gender differences for those diagnosed with ADHD. Their work was founded on the disagreement on whether males show more severe inattentive and comorbid neuropsychological symptoms among diagnosed individuals. Consequently, they sought to determine whether there was valid cause for differences. As a result of their work, they concluded higher ADHD symptom severity for males relative to females could be statistically proven (Arnett, Pennington, Willcutt, DeFries, & Olson, 2015).

Given the prevalence of diagnosed cases of ADHD among male learners, their learning needs serve as the basis of this study. This prevalence speaks to both the volume of learners diagnosed with ADHD who are male, and it also speaks to the fact that male students, to date, are likely more impacted as a result of their diagnoses than female students as noted in the current literature. Again, this is the result of the increased rate at which males are diagnosed with ADHD than their female peers.

Impact of ADHD on Reading Skills

In reviewing the research as related to reading skills and students diagnosed with ADHD there are several key ideas. First, there is much research as related to children who have both diagnoses of ADHD and a reading disorder; however, there is also literature that supports the idea that children with ADHD as the sole diagnosis appear susceptible to reading difficulties as well. This is supported through the use of standardized reading test scores on which students with ADHD achieve scores lower than peers without the diagnosis (Frazier, Youngstrom, Glutting, & Watkins, 2007; Loe and Feldman 2007; Miller, Nevado-Montenegro, & Hinshaw, 2012). Much of the existing

literature focused on reading achievement and learners with ADHD has centered on reading comprehension. These studies have also demonstrated lower reading comprehension scores for students with ADHD. With reading comprehension being just one factor in the process of learning to read, there have also been studies conducted that control for word identification, reading fluency, vocabulary and background knowledge. Even with these controls, students diagnosed with ADHD still obtain lower reading comprehension scores than their peers without the diagnosis (Brock & Knapp, 1996; Miller et al., 2013).

Another key idea demonstrated by the literature is the role executive function deficits play in learners with ADHD and how they may contribute to reading challenges. For instance, evidence is emerging linking higher levels of difficulty in attaining adequate word recognition with areas of executive dysfunction (Cutting, Materek, Cole, Levine, & Mahone, 2009; Locascio, Mahone, Eason, & Cutting, 2010; Sesma, Mahone, Levine, Eason, & Cutting, 2009*)*. Further, studies have demonstrated deficits in processing speed which may play a role in reading difficulties for learners with ADHD (Denckla & Cutting, 1999; Rucklidge & Tannock, 2002; Willcutt, Pennington, Olson, Chhabildas, & Hulslander, 2005). Specifically, this may negatively impact reading fluency which intern may hinder the development of more complex skills such as reading comprehension (Jacobson, Ryan, Martin, Ewen, Mostofsky, Denckla, & Mahone, 2011).

The final key idea from the literature is the reading difficulties experienced by students with ADHD can be multidimensional and intertwined. Students with ADHD may demonstrate deficits in word identification or decoding (McGrath, Pennington,

Shanahan, Santerre Lemmon, Barnard,...,& Willcutt, 2011; Shanahan, Pennington, Yerys, Scott, Boada,...& Willcutt, 2006; Willcutt, Betjemann, McGrath, Chhabildas, Olson, DeFries, & Pennington, 2010). Like reading fluency, deficits in decoding may negatively impact the ability for a student to comprehend accurately (Miller, Keenan, Betjemann, Willcutt, Pennington, & Olson, 2013). Another multidimensional issue is related to severity of symptoms demonstrated by the student. Students who present with more severe ADHD symptoms demonstrate lower reading performance than those students who present with symptoms who are considered less severe. (Ehm, Kerner, Gawrilow, Hasselhorn, & Schmiedek, 2016).

Teaching children to read fluently and comprehend a text is one of the main goals of education. This is the result of its primary aims and its corresponding ability to help students achieve goals, develop knowledge and participate in society (OECD, 2013). Given the significance the ability to read holds as an indicator of future success it is imperative that this area of schooling is fully understood for all learners including those diagnosed with ADHD.

Supporting Students with ADHD in the Classroom

Students demonstrating behavioral difficulties associated with ADHD was cited as a common concern of elementary teachers, parents, and school counselors (DuPaul & Stoner, 2003). In fact, ADHD has been identified as one of the most common childhood disorders (Woodward, 2006). However, few instructional interventions studies have been conducted with children with ADHD (DuPaul, 2007). In fact, much of the existing literature as related to elementary aged students with ADHD centers on reviewing effective classroom practices mostly centered on behavioral interventions (Schultz,

Storer, Watabe, Sadler, & Evans, 2011). Since the 1970s, 120 empirical studies have been conducted regarding school-based intervention related to ADHD; however, most have focused on short term intervention and few have studied long term effects or even effects beyond the conclusion of the original study (DuPaul, Eckert, & Vilardo, 2014). As a result, additional research is needed to better understand the needs of learners with ADHD; however, the following offers highlights of the current literature.

Much of the research literature focuses on school-based interventions for children with ADHD that centers largely around classroom management strategies, particularly those as related to behavior management (Schultz et al., 2011). Additional areas of potential intervention include academic intervention or intervention that includes both behavioral and academic components (DuPaul et al., 2014). When looking solely at behavioral intervention, popular strategies include: ignoring behaviors that are mildly negative, praising positive behaviors, providing precise directions, developing clear and explicit classroom rules and routines, and promoting behaviors and applying reprimands appropriately (Schultz et al., 2011). Fortunately, teachers generally find these strategies manageable to incorporate into their classroom practice and research finds them to be effective in reducing disruptive classroom behaviors (Pelham & Fabiano, 2008). Reducing disruptive behaviors can be beneficial to the teachers and peers of students with ADHD; however, additional review of the literature provides insight into practices that are of particular benefit to the diagnosed student.

When reviewing such instructional practices, the literature again focuses on behavior and is saturated with behavior contingency management strategies (Booster, DuPaul, Eiraldi, & Power, 2012; Fabiano et al., 2009; Fabiano et al., 2010; Pelham Jr. &

Fabiano, 2008). Behavior contingency strategies utilize positive and negative reinforcement in an attempt to modify behavior and takes place within the classroom setting generally by way of a token economy or response cost system (DuPaul, Weyandt, & Janusis, 2011). This intervention has demonstrated significant success for reducing externalizing behaviors such as aggression, impulsivity, and non-compliance (DuPaul & Stoner, 2003; Fabiano et al., 2010). It has also resulted in decreased verbal disruptions, increased on-task behaviors, and improved production of class work (DuPaul, Guevremont, & Barkley, 1992; Pfiffner et al., 2011). That said research offers little support for the effects of these interventions as related to academic achievement (Fabiano et al., 2010). However, there are a few notable works that have offered general best practices for teachers of students with ADHD as related to learning as well as interventions that may have impact on both behavior and academic outcomes.

Barkley (2013) recommended specific best practices to be utilized by teachers who had students diagnosed with ADHD in their classrooms. This included ensuring the teacher was matching academic tasks to the ability level of the student. It also included the incorporation of active engagement during learning blocks rather than passively listening for long periods of time. Additionally, Barkley suggested ensuring the length of assignment matched the length of capacity of the student's attention span. Barkley further suggested incorporating movement opportunities including exercises such as jumping jacks when possible. Finally, he recommends to the extent possible scheduling more challenging subjects in the morning in an effort to work with schedules of students who are medicated which would allow them to complete these more challenging tasks with the support of medication prior to it wearing off (Barkley, 2013).

Offering a different perspective as to how teachers can support students with ADHD, Sherman, Rasmussen, and Baydala (2006) identified several researchers who suggest when attempting to effectively manage the diagnosis in the classroom using the word "trait" rather than "disorder" can be of benefit. They felt this was the result of removing the bias that the term disorder evokes and that teachers were more likely to use strategies that reach multiple modalities if this bias was negated. Additionally, Rogers and Meek (2015) noted the significance a positive teacher relationship can have on improving both student behavior and academic motivation. This relationship should ensure the student is aware of the care and compassion the teacher holds for the student.

In looking at specific interventions, DuPaul, Eckert, and Vilerno (2012) conducted a meta-analysis that reviewed school-based interventions over the course of a 14-year timeline in which 42 of the 60 interventions took place in elementary school classrooms. They concluded that interventions that are based in schools rather than clinical settings have the potential to deliver moderate to large effects on both behavior and academic outcomes for students diagnosed with ADHD. They were quick to note that there is variance in the results as related to research design, intervention type, publication status, and school setting/educational placement. The results of their meta-analysis reinforced the effectiveness of contingency management interventions particularly when used for improving classroom behavior and increasing engagement in instructional activities. They further noted that proactively incorporating preventative strategies such as self-regulation and academic intervention should be considered as a means of stymieing behavioral difficulties before an issue arises. Although the research is limited, combined intervention approaches demonstrated effectiveness and allow for

more comprehensive intervention of addressing academic, behavioral and self-regulating deficits in learners with ADHD who may struggle in each of these areas (DuPaul, Eckert, & Vilerno, 2012).

Another route for addressing the learning needs of learners with ADHD is to look at interventions that target Executive Function when supporting learners with ADHD. Executive Function is an umbrella term which encompasses different cognitive processes implemented by the prefrontal areas of the brain's frontal lobe. These processes include: planning, working memory, attention, inhibition, self-monitoring, self-regulation, and initiation (Goldstein & Naglieri, 2014). Deficits in Executive Function have found to be rooted in attention issues evident in ADHD (Gioia, Isquith, Guy, & Kenworthy, 2000; Langberg, Dvorsky, & Evans, 2013). Specifically, Barkley (1997) demonstrated that deficits in Executive Function are central to ADHD and give rise to the more overt and observable behavioral symptoms presented in the DSM-5 diagnostic criteria (APA, 2013). As a result, the need to provide targeted supports and intervention for Executive Function deficits is critical for the success of learners with ADHD.

Two programs developed by researchers particularly for academic environments have shown success with teachers and students in general: The Drive to Thrive, and Success, Motivation, Resilience, Talents, and Strategies (SMARTS). These programs focus on academic success by implementing teacher training and peer mentoring. Teachers are trained to create a way to instill the use of strategies in students, promote metacognitive awareness, and embed executive function strategies in the curriculum and daily teaching practices (Meltzer & Basho, 2010; Meltzer et al., 2004; Meltzer, Sales-Pollica, & Brazillai, 2007).

Another example of classroom intervention targeting Executive Function skills delivered by teachers was studied by Etraverso, Eviterbori, and Eusai (2015). Their work examined the efficacy of a group-based intervention for five-year-old children that focuses on basic components of EF (working memory, inhibitory control, cognitive flexibility). Using a play-based approach to intervention, the same story and characters were utilized throughout the 12-week duration of the intervention. This intervention allowed children to enact roles during and across sessions to engage them and to maintain their motivation to collaborate. The children were asked to help the story characters by overcoming different challenges that require Executive Function skills. The results indicate that the children who attended the intervention outperformed controls in simple and more complex Executive Function tasks (Etraverso, Eviterbori, & Eusai, 2015).

While school-based intervention strategies have delivered efficacy across both group and single subject design studies, it is virtually unknown to what extent such practices are used in schools (DuPaul & Jimerson, 2014). Of additional note, included in DuPaul & Jimerson's work was reference to a guide for supporting learners with ADHD in the classroom provided by the United States Department of Education. This guide, entitled *Teaching Children with Attention Deficit Hyperactivity Disorder: Instructional Strategies and Practices,* was published in 2008 and has not received an update since its original release over ten years ago. Further, the references included for the guide span from 1984-2002 (U.S. Department of Education, 2008) which suggests that teachers in need of resources may stumble upon support that is almost 20 years out of date. This is one example of the limited nature of supports provided to teachers working with students with ADHD in classrooms. Much of the literature that exists is written from the

perspective of authors conducting the research from a more clinical perspective. As a result, it is of value to determine the perspective of supporting students with ADHD in classrooms from the teachers who serve them.

Teachers of Students with ADHD

Teacher Knowledge of ADHD

A review of the literature suggests that teacher knowledge as related to ADHD is relatively low. For instance, in a cross-national study of nine countries that included 2,307 teachers, researchers found that in all nine countries, teachers' knowledge of ADHD was low. Additionally, they uncovered misconceptions of the disorder were rampant. Of note is the dichotomy that teachers who scored high in knowledge were also likely score in the somewhat higher range for misconceptions. On a positive note, the United States, one of the countries included in the study, rated among the top half of countries in regard to knowledge pertaining to ADHD. That said their raw score still presents as a failing grade (Sciutto et al., 2016).

In addition, the body of research speaks to teachers' incomplete or inaccurate knowledge regarding ADHD as well as common gaps in understanding. These gaps include such notions as those related to rate of prevalence which has negative implications for a teacher's ability to effectively deliver service to these learners (Canu & Mancil, 2012). This lack of knowledge comes, at least in part, from lack of training. Martinussen, Tannock, and Chaban (2011) studied teacher training regarding ADHD for both general education and special education teachers. They found no teachers in their sample could report having extensive or in-depth preservice training about ADHD. Additionally, they reported a lack of correlation between years of teaching experience

and appropriate levels of targeted classroom practices for students presenting with symptoms of ADHD. They further proposed that specific training should be provided to teachers, regardless of years of experience, as a means of supporting students with ADHD symptoms in the classroom (Martinussen, Tannock, & Chaban, 2011)

Additional training would also provide increased confidence to teachers, which, as at least one study suggests, would yield positive results for learners with ADHD. A 2013 study of Saudi Arabian teachers found a statistically significant relationship between the level of teacher knowledge about ADHD and confidence when teaching children with the diagnosis. In other words, as knowledge increases, so does the level of confidence in teacher ability to provide instruction to learners diagnosed with ADHD (Alkahtani, 2013). Another 2013 study also focused on the relationship between knowledge and confidence—this time in Iran. This study, conducted by Badeleh (2013), suggests that teachers with minimal knowledge of ADHD and limited teaching experience also exhibit less confidence than peers with greater knowledge. Badeleh also found that these same teachers tended to hold more negative beliefs regarding students with ADHD as well (Badeleh, 2013). Such negative beliefs could potentially have a hand in shaping teacher attitudes. Additional information regarding the literature on teacher attitudes toward ADHD will be discussed below.

When looking at the need for training, research suggests that upwards of 90% of teachers are inadequately knowledgeable of how to instruct students with ADHD and that pre-service training and professional development or workshops are needed to increase awareness so that all students can succeed academically (Abed et al., 2014). To that end, Moldasvsky and Sayal (2013) found that misconceptions about ADHD persist in schools,

and educational interventions to improve the knowledge of teachers about ADHD appear to be effective. However, in order to provide training that meets teachers at their current level of understanding, it is critical to study teacher perspective. As a result, understanding teacher point of view and experience is imperative to ensuring students with ADHD have the support they need to be successful in the classroom.

Teacher Self-Efficacy when Serving Students Diagnosed with ADHD

Research has demonstrated time and time again general education teachers demonstrate a lack preparation in teaching and meeting the needs of diverse learners. This is notably true in regard to students with learning differences or disabilities (Ladson-Billings, 2000; NCES, 1999; Rushton, 2001). Not surprisingly, research has also shown that teachers with high levels of self-efficacy serve the special needs of their students with disabilities well (Haverback & Parault, 2008; Lee, Patterson, & Vega, 2011; Wolters & Daugherty, 2007*).* Specifically, there is a decrease in special education referrals among these teachers as they feel more equipped to handle the needs of such students in the general education setting (Haverbeck & Parault, 2008). Further, researchers noted a correlation between the perceived self-efficacy of teachers and their increased levels of encouragement for classroom performance of students with disabilities (Wolters & Daugherty, 2007). High levels of self-efficacy are also linked with teachers' embracing the work they do to support students with disabilities as they possess confidence in themselves that learning goals can be accomplished despite the challenges disabilities may present in the classroom (Gao & Mager, 2001; Lee et al., 2011; Wolters & Daugherty, 2007).

When looking at the teachers of students with ADHD specifically, preliminary findings by Sciutto, Terjesen, and Bender-Frank (2000) suggested a correlation between teacher self-efficacy and knowledge of ADHD. Legato (2011) supported this in her study which specifically addressed this as a research question for a group of primary school teacher participants. She discovered there was a positive correlation between knowledge of ADHD and self-efficacy. Further, she identified that teachers with high self-efficacy may be more likely to continue to seek knowledge that would benefit the instruction of students with ADHD (Legato, 2011). Raudenbush, Rowan, and Cheong (1992) purport that both knowledge and self-efficacy are necessary in order for effective teaching to take place. As such, teachers with higher levels of knowledge are better positioned to support learners with ADHD effectively. Conversely, teachers with low efficacy may be less likely to implement additional classroom strategies needed for student success (Alkahtani, 2013; Bradshaw & Kamal, 2013; Ohan, Cormier, Hepp, Visser, & Strain, 2008). While there is great value in this work, there remains a gap in understanding as to whether this holds true specific to male, elementary aged students diagnosed with ADHD and the what role beliefs, attitudes, and perception play in implementing such strategies.

Teacher Perception and Attitudes Toward ADHD

Studies have also reviewed the impact of attitude, both positive and negative, on children diagnosed with ADHD as related to their school experience. A study conducted by Mulholland, Cumming, and Jung (2015) delved into the topic. They designed a study which sought to identify predictors of teacher attitudes regarding beliefs about ADHD and its associated behaviors; amount of and desire for ADHD-specific knowledge and training; and teachers' feelings about teaching students who exhibit ADHD-type

behaviors. The data suggested that as the amount of experience a teacher has increases, the less tolerant they become of students who exhibit ADHD behaviors in the classroom. Additionally, increased knowledge of ADHD, as well as prior experience having taught students with ADHD diagnoses, resulted in teachers having a propensity to hold negative beliefs about children was demonstrated ADHD-like behaviors. As a part of its discussion, the authors suggest the need for potentially providing training on practical classroom interventions rather than facts about ADHD (Mulholland, Cumming, & Jung, 2015).

Additionally, Anderson, Watt, and Noble (2012) found that increased levels of teaching experience resulted in an increased prevalence of negative attitudes toward ADHD among the teacher participants in their study. Specifically, the authors of this study investigated global attitudes toward teaching children with ADHD, perceived knowledge of ADHD scale, objective knowledge of ADHD scale, and attitude for both pre-service and in-service teachers. Their findings suggested in-service teachers with knowledge and experience of students with ADHD identified themselves as having negative attitudes toward such students; however, they felt their behaviors remained professional and positive. Conversely, pre-service teachers in the study reported having positive attitudes toward teaching children with ADHD; however, the authors found their attitudes became less favorable over time as they gained experience (Anderson, Watt, & Noble, 2012).

Finally, while it purported to measure teacher bias rather than attitude, the research of Batzle, Weyandt, Janusis, and DeVietti (2010) sheds light on the topic of teacher attitude as well. They found that teachers tended to rate children labeled as

ADHD less favorably than a non-identified peer. This less favorable rating held true whether or not the child was also identified as taking medication. Results partially supported that teachers rated the child with an ADHD label significantly less favorably than the child with an ADHD with stimulant treatment label (Batzle. Weyandt, Janusis, & Devietti, 2010).

In light of all this research and given the high degree of importance the socialization between teacher and student plays in the learning process, a deeper understanding as to how teacher attitudes may impact instructional decision making for male, elementary aged learners diagnosed with ADHD is needed. Thus far, the literature focused upon teachers and ADHD has examined teacher knowledge, self-efficacy, and attitude. In addition to these relevant considerations when examining the role of the teacher in the learning process, it is also important to understand the role perception plays in the process.

As the preceding pages suggest, there is literature focused on teachers and ADHD; however, there is still work to be done related to teacher perception and how teachers autonomously describe supporting students with ADHD in their classrooms (Ohan et al., 2008). As the educators who work with these students most often, teachers can provide invaluable perspective regarding the supports they feel have the highest degree of impact (Sciutto et al., 2000; Fabiano et al., 2013). As a result, there is a need to broaden this area of research. That said, the following provides an overview of the literature that currently exists.

While teachers may be able to detect the characteristics in children with ADHD, there can be a knowledge gap as to how to best serve these learners in the classroom.

Unfortunately, as previously noted, many training programs for preservice teachers fail to equip these fledgling educators with necessary tools to implement an educational program conducive to all learners, specifically students with ADHD. Given the fact an educator's perception can greatly impact student achievement in many ways, it is of great importance to best understand this perception in an effort to better prepare them for serving the needs of learners with ADHD (Kern et al., 2015).

One way in which the worlds of teacher perception and student achievement collide is highlighted in the work conducted by Eisenberg and Schneider (2007). Their work focused on reading and math skills of children diagnosed with ADHD, and set out, among other things, to determine whether the diagnosis of ADHD in and of itself could impact perceptions of teachers. They concluded that students diagnosed with ADHD are perceived by their teachers to do less well academically than their peers in the areas of math and reading. The results of the study showed that students with an ADHD diagnosis are perceived by parents, teachers, and themselves to be doing less well than their peers. When reviewing the actual reading and math scores of the students with ADHD, the differences in the scores was determined to not be significant enough to account for the negative perception (Eisenberg & Schneider, 2007).

In reviewing teacher perception and how it relates to classroom instruction, Lawrence, Estrada, and McCormick (2017) examined teacher perceptions of students with ADHD in North and South Carolina. They found that teachers often develop ways of coping with learning needs as related to ADHD through a trial and error approach rather than through information gathered at a more formal training. Finally, in a study of teachers located in Italy, Frigerio, Montali, and Marzocchi (2014) found that teacher

perceptions of ADHD can influence the management of children in schools. Their findings also suggest that knowledge and cultural values should be considered when reviewing teacher perceptions (Frigerio, Montali, & Marzocchi, 2014).

Other studies related to teacher perception yielded results that reviewed supports for learners with ADHD that are beyond the locus of control of classroom teachers. For instance, Kern, Amod, Seabi, and Vorster (2015) found that teachers in South Africa in both public and private schools held limited understanding of ADHD and that the preferred method of intervention was through the use of medication. This was despite the fact that teachers demonstrated an understanding of alternative methods of intervention. Teacher perception of medication as intervention has been further explored with mixed findings. For instance, in a study conducted by Abed, Pearson, Clarke, and Chambers (2014), most Saudi Arabian teachers perceived that medication for students with ADHD would benefit the students by helping with concentration, decrease disruptive behaviors and distractions, and increase performance academically. Conversely, data collected by Ohan, Cormier, Hepp, Visser, and Strain (2008) revealed teachers' knowledge of ADHD affected the perception of students with the disorder and that teachers with both high and lower knowledge of ADHD perceived students would not benefit from taking medication to decrease symptoms of ADHD.

Given the important role teacher perception plays regarding students diagnosed with ADHD, it is imperative to understand how this perception impacts instructional decision making for these students. As previously noted, the role perception and attitude play, as defined above, has received little attention in regard to teaching reading to male

students with ADHD in the elementary school classroom. As a result, it is this gap in the research this study was designed to begin to fill.

Summary

The body of research referenced in this literature review suggests there is a need to consider the behavioral implications of ADHD in the creation of support programs for those with ADHD. These include supports in the reading classroom and for those students in the elementary school. There has been limited investigation into understanding how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence the reading instruction they provide to elementary aged male learners with ADHD. The investigations surveyed in this review indicated that further research is needed in the areas of teacher perception, supports for reading instruction, and supports for males with ADHD, all of which may be impacted by individual teacher beliefs and attitudes. Therefore, the purpose of this study is to understand how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence teaching elementary reading to male learners with ADHD. The research is guided by the following questions:

1. How does teacher perception of ADHD influence their instructional decisions when teaching reading to students diagnosed with ADHD?
2. In what ways does being male and diagnosed with ADHD influence beliefs and attitudes about effective reading instruction?

CHAPTER 3: METHODOLOGY

This chapter will explain the research design used for this study. It will also provide an overview of the research site, study participants, data collection methods, and data analysis techniques. Finally, the chapter will speak to trustworthiness and ethical considerations.

Research Design

Qualitative research is an umbrella term that encompasses several different strategies of research. While quantitative research views the world through numbers, qualitative research views it through words. The work of the qualitative researcher is to take personal accounts, and using a methodical approach, find the ways in which they intersect (Glesne & Peshkin, 1992). Qualitative research looks to answer complex questions framed from the participant's own experience. Qualitative researchers believe that there is more than one way to interpret an experience and that interactions with others impact these experiences. As a result, reality is socially constructed (Bogdan & Biklen, 1992).

Qualitative research data is collected through repeated contact with people in their natural settings. Through the use of participant observation and interview, the research views the world through the lens of the participant. The researcher utilizes thick, detailed description to capture what is seen and heard. Interviews are conducted on a continuum of highly structured to unstructured and responses are recorded and transcribed verbatim with as much additional detail as can be captured as related to nonverbal cues. The decision was made for this study to conduct semi-structured interviews which would allow for targeted discussion. It would also allow the discussion to follow the flow of the

participant's authentic story and experience. Additional data may be collected through artifacts such as documents and photographs (Bogdan & Biklen, 1992). The decision was made not to utilize existing artifacts, as the researcher was interested in the teachers' lived experience regarding a specific topic. As a result, the decision was made to further provide teachers the opportunity to document their lived experience through reflective journals.

Finally, observations were utilized to both gain further understanding of the teacher's experience as well as to triangulate the data in an effort to ensure trustworthiness, which will be described in more detail later in this chapter. Observations can be structured, semi-structured, or unstructured. Researchers often use a checklist to conduct structured observations as they are interested to study specific themes or explore specific issues. On the other hand, unstructured observations do not follow a checklist; they record all the data (O'Leary, 2014). This study utilized semi-structured observation which provided guiding questions; however, the researcher recorded all observed data in addition to answering the guiding questions.

Data is collected in qualitative research until the point of saturation has been reached, which means no new information is being presented. While this was a goal of this study, the point of saturation was not reached as the study was only able to recruit four participants. Follow up observations and interviews were planned with some participants in an effort toward saturation. While this was a goal of this study, the point of saturation was not reached as the study was only able to recruit four participants.

Qualitative research design can be used in studies such as this as it looks to interpret context or discover meaning through teachers sharing their thoughts, feelings,

and experiences (Ezzy, 2002). Peshkin (1993) claims that qualitative inquiries allow for new concepts to emerge, stories to be told, and problem solving to take place. Using inductive reasoning, methods and approaches for qualitative research include case studies, interviewing, observation, visual methods, and interpretive analysis (Lincoln & Denzin, 2005).

Yin (2011) proposed the purpose of a case study is to inquire about context, analyze the findings and organize the research. Given its attention to subjective experience, case study was best suited to serve as the methodology for this study as it focused on the beliefs and attitudes of teachers and how they influence elementary reading instruction for males diagnosed with ADHD (Yin, 2009). It is important to understand that teachers of male students diagnosed with ADHD may have unique experiences in their interactions with those with whom they come in contact on a daily basis including the students themselves. These teachers attach meaning to each experience and, as a result, construct their own reality based on current and past experiences with students, colleagues, and others. When utilizing a case study approach, the researcher is able to study the case in a contemporary, authentic setting, collecting data from multiple sources (Creswell, 2013).

Creswell went on to note several other key factors to case study design which lent themselves to the current study. The first of these was the case is bounded as was the case for this study in that it focused on intermediate elementary, reading teachers of male students diagnosed with ADHD. Next, the purpose of this case study was to gain in-depth understanding of teacher perception and utilized multiple data sources to do so: interviews, classroom observations, and teacher journals. Also, the case study asserts

findings specific to the participants of this study and may not be generalized to other teachers in other settings (Creswell, 2013). Finally, a case study allowed for concentration of each teacher's individual experience in the classroom. This aligns with the way in which qualitative studies approach their subjects through a comprehensive, descriptive analysis of a group or individual response. This process is critical to help better understand teacher perception of ADHD and how it influences instructional decision making by elementary, reading teachers for male students diagnosed with ADHD (Creswell, 2009).

Table 1: Flow of Research Design

Step 1	Enroll Study Participants
Step 2	Initial Classroom Observation
Step 3	Teacher Interview
Step 4	Follow Up Classroom Observation
Step 5	Possible Follow Up Interview and Final Classroom Observation
Step 6	Collect Teacher Reflection Journal

Research Context

Description of the Setting

This research took place at a public charter school in a large urban area in the southeastern United States. This public charter school currently serves students in kindergarten through eighth grade on two separate campuses—students in grades kindergarten through fourth grade on one campus and grades five through eight on another. It was the first campus on which this research took place. The average class size in grades three through five is 21 students. The overall school population is 698, and 57% of the student body is male. The student population is 75% White, 10% Black, 7%

Asian, 5% Hispanic, and 3% identify themselves as multiracial. There are 48 classroom teachers, which is larger than the state average of 32. Conversely, the number of fully licensed teachers at this school is 77.1% which is less than the state average of 88.9%. This research site was selected for several reasons. First, as a part of their charter, the school cites as a priority research-proven practices regarding effective education. Next, they express the goal of instruction to be planned in an effort to address the variety of learning styles present in every classroom in an attempt to ensure student success. Finally, their charter speaks directly to a commitment to reading instruction. Specifically, they note literacy as the most essential curricular goal. Given the focus of the current study in reviewing elementary teachers' perception and instructional decision making in reading for the unique learning needs of students with ADHD, the goals of the school set a stage that would align with the goals of this study.

Participants

Although there is no total agreement on the sample size for a qualitative study, there are several guidelines that can be followed. For this study it was the recommendation by Creswell (2003) that was best suited to ensure an in-depth view of teacher experience. Specifically, he recommends that three to five participants be used for case study research. He further recommends additional sources of data, which for this study was classroom observation conducted by the researcher (Creswell, 2003).

Given the specificity required by the design of the study, participants were identified using criterion sampling; therefore, selected criteria were utilized in order to sample the target population for this study (Patton, 2002). The criteria for the sample included the teacher serving as a regular education elementary school teacher in the

intermediate grades (grades three and four) and provided reading instruction to at least one male student diagnosed with ADHD with the goal of including teachers of students whose diagnoses fall in varying degrees (from mild to moderate to severe). Teachers who did not meet these criteria were ineligible to participate in this study.

Recruitment took place via email to teachers (using a standard script) from the school principal after school and principal permission had been obtained. The email included information regarding the purpose of the study; the role that the participants would play in the study; each activity required of the participants, along with the time required to complete each activity; and the risks and advantages of taking part in the study. The email also advised eligible participants of expected confidentiality (Yin, 2014). Signed consent was then obtained from each teacher who agreed to participate upon expressing interest in participating upon receipt of their email. Once signed consent had been provided by the teacher, parental consent was obtained through forms sent home to the parents by the teacher and returned to the researcher. Finally, minor assent was obtained in person prior to the initial classroom observation.

Four teachers expressed interest in participating in this research study. All four teacher participants remained a part of the study for its duration as did the student participants in each of their classes. Each of these four teachers identified a male student in their classroom diagnosed with ADHD as a student participant for the study. Parents of all four students consented for their son to participate in the study. All four boys also assented to their participation in the study as well. Additional details regarding each of the participants may be found below.

All names used are pseudonyms.

Anna

Anna is a third grade teacher with 16 years of teaching experience in grades pre-K through five. Anna is responsible for teaching reading, writing, math, science and social studies to her students. Anna is a White, middle aged female who has spent her adult life teaching elementary aged students, developing curriculum for elementary and pre-kindergarten schools and staying at home with her young children including a daughter diagnosed with ADHD. Anna's student participant, Aaron, is a White male enrolled in the third grade. In addition to a diagnosis of ADHD, Aaron is also served with an IEP for learning disabilities, so his reading instruction is shared between Anna and a special education teacher. When asked to rate the severity of Aaron's ADHD (one being the least severe and five being the most), Anna explained she felt Aaron fell between "Three or three to four, maybe closer to four." Aaron is one of several students diagnosed with ADHD in Anna's class—all of whom are male.

Bonnie

Bonnie is also a third grade teacher but is currently in her third year of teaching. She is responsible for teaching reading, writing, math, science and social studies to her students. Last year Bonnie taught third grade and was responsible for teaching writing for the grade level, so this is her first year teaching third grade reading. Prior to last year it had been almost two decades since Bonnie completed her first year of teaching as a kindergarten teacher. Bonnie is a White, middle aged female who has spent her adult life teaching, serving as a teaching assistant, and staying at home with her three children. Bonnie's student participant, Benjamin, is a White male currently enrolled in the third grade. Benjamin is the only student with ADHD Bonnie ever recalls teaching. When

asked to rate the severity of Benjamin's ADHD, Bonnie replied, "I would probably say a four." Benjamin has been assigned a 504 plan to support his learning needs in the classroom.

Carla

Carla is also a third grade teacher but is currently in her second year of teaching. She is responsible for teaching reading, writing, math, science and social studies to her students. This is also her first year teaching third grade. Last year Carla served as the school's 8th grade English Language Arts teacher for half of the school year. Unlike her fellow participants Carla's degree is not in education, but rather her background is mostly in non-profit organizations. She is working toward a Lateral Entry Teaching Degree. Carla is a White, middle aged female who has spent her adult life working in nonprofit management and managing volunteer programs; serving as a substitute teacher and then teaching assistant; and staying at home with her young children. Carla's student participant, Cole, is a White male currently enrolled in the third grade. He is currently the only student diagnosed with ADHD in Carla's class.

Diane

Diane is a fourth grade teacher with 22 years of teaching experience in grades two through four. She is responsible for teaching reading, writing, math, science and social studies to her students. Diane is a White, middle aged female who has spent her adult life teaching elementary aged students and staying at home with her young children. Diane's student participant, David, is a Black male currently enrolled in the fourth grade. When asked to rate the severity of David's ADHD, Diane explained she felt "We're saying that five is the most severe? Yeah, I would say he's good at a four." This is Diane's second

year as David's teacher as the school follows a model where teachers remain with their classes for two consecutive years in a practice known commonly as looping. Diane noted she felt David's ADHD symptoms have become more apparent over the time she has served as his teacher. David has been assigned a 504 plan to support his learning needs in the classroom and is one of at least six students diagnosed with ADHD in Diane's class.

Data Collection

Data collection took place over the course of three months. The need for three months resulted from the desire to remain as flexible as possible to work on the teacher's requested time line rather than that of the researcher. The purpose of such flexibility was in an effort to help ensure both teacher participants' continuation with the study as well as working to ensure the data was being collected in the most authentic manner possible, meaning removing pressure or stress by insisting data collected take place within a rigid time frame. Data was collected from three sources: observations, interviews, and journal reflections (See Appendices A-C).

The first method of data collection was through multiple classroom observations. The initial observations were brief (15-30 minute) and served to provide context for the classroom environment. Field notes were taken first in jot note form. An observation guide (see appendix A) was used as a means of ensuring certain areas of the observation were included; however, the researcher further attempted to capture all data she saw and heard during the observation. Then within 24 hours an expanded narrative was recorded utilizing thick, rich description. The initial observation was then followed up by teacher interviews, the purpose of which was to gain insight into the teacher's interaction and

instruction when teaching male students with ADHD in reading.

Yin (2003) notes that employing one-to-one interviews is considered an "essential source of case study information" (p. 89) as they allow the participant's true feelings to surface. Additionally, such interviews provide insights through the participant's individual inferences and explanations (Yin, 2003). Finally, these interviews provided valuable insight into teacher perceptions and contribute to a full and rich collection of data (Creswell, 2015).

These interviews were semi-structured utilizing the questions provided in Appendix B as the base. This set of questions, as well as additional questions posed in the interview, served as probes to encourage teachers to reflect on their perceptions in teaching reading to students with ADHD and their experiences with ADHD. These questions also attempted to uncover what influences their feelings regarding instructional decision making in their classroom, as well as instructional decisions specifically related to teacher male students diagnosed with ADHD. Interviews took place in person, over the phone, and virtually through the use of FaceTime. The decision for the platform utilized was left to the teacher which echoed the previously noted desire to remain as flexible as possible in meeting teacher participant's individual needs. Interviews ranged from 25-35 minutes in length. These interviews were recorded and then transcribed. Transcriptions were very detailed and attempted to capture features of talk such as emphasis, speed, tone of voice, timing, and pauses.

A second, more direct observation lasting 30 minutes then took place for each participant. These observations served as a means of gleaning further insight into teacher's beliefs, attitudes and instructional practices for their male student diagnosed

with ADHD. Again, field notes were taken first in jot note form. Then within 24 hours an expanded narrative was recorded utilizing thick, rich description.

After this second observation, follow up interviews were scheduled for two of the four classroom teachers: Anna and Bonnie. In both cases, additional understanding of their experience with ADHD was needed to gain better understanding of their perception. Specifically, there was a need to probe further as to their understanding of the diagnosis of ADHD. Also, for Bonnie, clarification was needed for some of the instructional practices observed with her student participant. Each of these interviews lasted no longer than 20 minutes, the questions for which stemmed from the previous interview and observations. After this second interview with Bonnie, a third classroom observation was secured. This was the result of observing limited interactions between herself and the student participant during the first two observations. She was very amenable and so a third 30-minute observation took place. Again, field notes were taken first in jot note form. Then within 24 hours an expanded narrative was recorded utilizing thick, rich description.

Additional understanding was gained through the use of teacher journal entries. Journal prompts (see Appendix C) were provided to gain additional insight into thoughts, feelings, experiences, and instructional practices specific to male students with ADHD. Teachers were provided a weekly journal prompt via electronic journal to which they were be asked to respond via a Google document housed on the UNCC Google Drive. The intention of the prompts was that they were specific but not leading as to allow the participant to freely share their progression of thoughts. Only Anna completed all four journal responses. Bonnie and Carla each responded to two prompts. Diane expressed

being overwhelmed and did not feel she was able to complete the prompts. Attempts were made to gain insight into these questions through her interview.

Data Analysis Methods

Given the qualitative nature of the study, data collection and analysis occurred simultaneously (Merriam, 2009). This analysis can best be described as thematic analysis using the constant comparative method. The following will review the process used for analysis in more detail.

Thematic analysis as an independent qualitative descriptive approach is mainly described as "a method for identifying, analysing and reporting patterns (themes) within data" (Braun & Clarke, 2006, p.79). It has been suggested that thematic analysis, as a flexible and useful research tool, provides a rich and detailed yet complex account of the data (Braun & Clarke, 2006). Clearly, thematic analysis involves the search for and identification of common threads that extend across an entire interview or set of interviews (DeSantis & Noel Ugarriza, 2000). As such, thematic analysis served as an important tool for understanding the data secured by this study.

The goal of thematic analysis is to develop themes that surface from the data. It is inductive in nature, as such the specific themes are not predetermined and the categories are "induced" from the data (Ezzy, 2002*)*. Concentrated and systematic efforts were utilized to find connections, weave patterns, and reflect upon data collected in this study. To ensure the data was thoroughly understood constant comparison was utilized. This method provided that every part of the data from codes to categories were continuously compared to other parts of the data to investigate variations, similarities, and differences (Chamaz, 2014).

It was the decision of the researcher to code by hand the data for this study rather than utilize a computer software program. This approach is supported in Johnny Saldaña's work as he speaks to "manipulating data on paper and writing codes in pencil that gives you more control and ownership of the work (Saldaña, 2009, p.22). The method of coding used for this analysis could best be described as descriptive coding as it is a suggested approach for novice researchers and provides a foundation that provides the researchers with an organizational grasp of the study (Miles & Huberman, 1994, Saldaña, 2003; Wolcott, 1994).

The first step of this analysis process involved reading and re-reading the interview transcripts, extended observation field notes, and reflection journal responses per participant until a level of comfortable familiarity was reached. Next, the data was read and words, phrases, and sentences that addressed the research questions were highlighted. This highlighted information was boiled down to a single word or phrase and noted in the margin. The researcher then developed codes that reflected the patterns that emerged from these keywords and phrases. The researcher then used the codes to review the initial notes in the margins. Beside each of the keywords or phrases, the researcher indicated which code or codes best described each keyword or phrase. These codes were then notated in a spreadsheet that listed the code at the top of a column and beneath were the correlated keywords and phrases from the data. This process of coding was repeated for each participant, each on a separate page of the spreadsheet. These codes identified features of the data that the researcher considered pertinent to the research question. These codes included: male characteristics, positive attributes,

negative attributes, acceptance, ADHD as barrier, ADHD training, experience with ADHD, kinesthetic support, auditory support, and visual support.

Furthermore, as is intrinsic to the method, the whole data set was given equal attention so that full consideration could be given to repeated patterns within the data. The next stage involved collapsing similar codes under larger categories. These categories included: prior experience, perception, intervention, self-efficacy, busy boys and attitudes. The final stage included developing themes. These themes explained larger sections of the data by relating like categories that may have been very similar or may have been considered the same aspect within the data. The themes for this data set were stereotypes and awareness. This process took place over the course of several days at various intervals depending upon the data that had been collected to that point to allow time for digesting this data and coming back to the table with clear thinking for a possible new perspective on the data.

Next the researcher reviewed the codes and data to determine overarching patterns that emerged from the data across the four participants. These patterns were developed from the codes and the relationships between them. Then categories were developed based upon these patterns. Again, this process took place over the course of several days at varying intervals to allow time for digesting this data and coming back to the table with clear thinking for a possible new perspective on the data. As such it allowed patterns to emerge that were not initially recognized.

Finally, the researcher analyzed the categories looking for similarities, in order to create themes based on those common properties. The researcher organized the categories into groups to assist in creating themes. A concept-map was then developed for each

research question which demonstrates the links between codes to categories to themes as well as their relationship to each of the research questions. This concept map will be shared and discussed in Chapter 4.

Risks, Benefits, and Ethical Considerations

The risks involved in this study were expected to be rare. Asking the teacher participants to member check as a part of the data analysis helped ensure that their own words would not cause them embarrassment or emotional distress, which would occur only if they felt their words were taken out of context and were attributed to them, which again was highly improbable due to the steps that were taken to maintain confidentiality. These steps included:

- Study codes were used on data documents instead of recording identifying information with a separate document linking the study code to subjects' identifying information saved in a separate location with restricted access to this document on the UNCC Google Drive.
- Identifiable data was encrypted and pseudonyms were used for all participants
- Study data/documents were properly disposed of, destroyed, or deleted
- Upon completion of the participant's review of transcript the audio files were permanently deleted.

Additional means of minimizing risk was through first obtaining consent from both teacher and parents of student participants as well as assent from the students themselves, it provided the opportunity to ensure an understanding of what the study entailed to help ensure participants were prepared and had a level of comfort of what was

being asked of them.

The benefits of this study appear to outweigh these potential, but very limited, risks. Given the purpose of the current research study was to understand how teacher beliefs and attitudes regarding ADHD influence teaching elementary reading to male learners with ADHD, the benefit to society is a deeper understanding as to what influences instructional decisions which may then be utilized by other teachers of students with ADHD. The impact could then result in an improved educational experience for such students providing them with a firmer foundation for their role in society as productive citizens. As teachers, the benefits to these participants, in addition to what has been noted, may further result in an increased level of their own understanding for supporting male learners with ADHD in their reading classrooms.

Trustworthiness

Glesne (2011) noted in qualitative research the researcher fills the role of research instrument. As such, his or her personal and professional experiences cannot be avoided during the course of the research process (Creswell, 2013). This collection of experiences is also referred to as subjectivity and a statement regarding the experiences of the researcher for this study may be found below. Given this unavoidable entanglement between researcher and data, issues of trustworthiness may emerge particularly during the analysis of the collected data. That said, qualitative researchers have the opportunity to take proper measures that increase the quality and trustworthiness of their work which can provide valuable and credible results (Creswell, 2013). With this in mind, the researcher of this study took the following steps to ensure trustworthiness of research results for the current study.

First, member checking was utilized as a means of reinforcing trustworthiness. During the interviews, the researcher attempted to restate or summarize information and then question the participant to determine accuracy. Member checks were also included to provide participants the opportunity to review the interview transcript to ensure accuracy. This allowed participants to critically analyze the data and comment on it. The participants either affirmed that this information reflected their views, feelings, and experiences, or that they did not reflect these experiences. If the participants affirm the accuracy and completeness, then the study is said to have credibility.

Additionally, when considering trustworthiness Shenton (2004) provides key criteria that demonstrate trustworthiness of this study. Through converging the above-mentioned primary data sources, data triangulation was used to ensure reliability and validity in this study which speaks to Shenton's credibility. Given the number of sample criteria and data collection methods, Shenton's transferability was also satisfied. Dependability was satisfied in that the research design and implementation were clearly delineated. Additional operational detail and evidence of reflection were also shared. Finally, confirmability was again satisfied through the data triangulation process.

Subjectivity Statement

The potential for subjectivity exists in anything created or viewed by people. Each person brings to the table his or her own experience and perspective. This is true in research as well. As a result, subjectivity statements are imperative for providing context for the reader to fully understand the research which has been conducted by way of the relevant lens through which the researcher's view lends to the topic at hand. Peshkin (1988) provides a vivid metaphor when he describes that an individual's subjectivity is

like an unremovable garment.

Since subjectivity cannot be disregarded, it is better for it to be acknowledged and shared. However, the purpose of this sharing is not simply to make the reader aware of bias or to apologize for it. Rather it allows opportunity to share the ways in which the researcher's experiences may enhance his or her research. It also provides an important reflective exercise for the researcher

As noted by Lisa Merriweather, reflexivity provides opportunity for individuals to view themselves from their own perspective (2012). She likens this to looking at one's self in a mirror through another mirror. This is especially important in qualitative research given the narrative and personal nature of its work.

This research study sought to explore teacher perception of ADHD and how it influences instructional decision making for elementary school males with Attention Deficit Disorder in the literacy classroom. As a result, there are several areas from which the research had to consider personal experience that should be acknowledged. First, is her personal and professional experience with students with learning differences. The researcher's younger sister was diagnosed as Intellectually Disabled in kindergarten. Her experiences in school were markedly different from that of the researcher and viewing her school experiences from an outside perspective gave the researcher new understanding for what school could be like if your abilities were outside of the norm. Additionally, the researcher's nephew was diagnosed with Attention Deficit Disorder while in the 5th grade. This diagnosis provided he and his mother a doorway to various therapies both medicinal and cognitive that provided him the opportunity for his lackluster school experience and output to become much improved over time. Both of

these experiences helped the researcher to recognize the importance not just of labeling a child or diagnosing his or her learning differences, but rather using these diagnoses as a springboard to tailor instruction and the school experience to meet their needs.

Professionally, the researcher spent nine years as a third through fifth grade classroom teacher and seven years as a principal of an elementary school. Over this time, she worked closely with dozens of children with learning differences, including ADHD. While working in the classroom as the teacher, she was often frustrated by the lack of strategies and resources to assist these learners. With time, research has provided strategies, particularly as related to organization and completion of assignments, though there still seems to be a gap in regard to specifically teaching strategies that aid these students in engaging effectively in the literacy classroom. It is a hope of the researcher to fill this gap in the future.

Finally, it is of note to review the learning theory that serves as the underpinning of the researcher's view on teacher and student interaction given their prevalence in this study. Social Development Theory best describes this point of view. Lev Vygotsky, credited as the author of Social Development Theory, argues social interaction is necessary in that it precedes development. He further contends that consciousness and cognition can only occur as a direct result of social behavior and related socialization. Vygotsky describes the two-step process that encapsulates the way in which a child internalizes social experiences by explaining that every function related to development occurs on two levels. The first level is social and the second is psychological. This first level is external as it occurs between two people and the second

internal as it occurs within the child. He posited this process begins in infancy and continues through the duration of human life (Vygotsky, 1978).

In a classroom setting, Social Development Theory provides the basis that explains how young children construct knowledge through social interactions. This is the result of Vygotsky's belief that children learn behaviors and knowledge by observing peers or role models. These role models may include parents as well as teachers.

Vygotsky's theory relies on three main components: social interaction is needed for cognitive development, the need for there to be a more knowledgeable other (MKO), and that social interaction with the MKO occurs in the Zone of Proximal Development (ZPD) (Vygotsky, 1935). It is the first two components that are of interest in this study. Based upon Vygotsky's thinking, the social interaction in this study takes place between the classroom teacher and male students diagnosed with ADHD. Additionally, the teacher fills the role of the MKO in this dynamic.

In looking more closely at the concept of social interaction between student and teacher, Vygotsky noted in his Social Development Theory that the development of cognitive skills is rooted in the involvement of personal interaction. Specifically, he suggested that individuals learn from one another through collaborative dialogue. He went on to express that increased mental capacity and function in children resulted from increased engagement in what they do. Additionally, his work focused on supporting relative weaknesses of individuals though social learning opportunities that allowed them to learn from individuals who were more skilled (Vygotsky, 1978). For the purposes of this study the more skilled member of the dyad would be the teacher.

Limitations

Limitations of a study may include anything that may affect the study but are beyond the control of the researcher (Hancock & Algozzine, 2011). As with many studies, this study had several limitations including issues with the generalization of qualitative studies and the researcher's bias. There is also a delimitation which included aspects of its sample. Each is discussed briefly below.

One potential limitation was that interviews and reflection journal results were based on self-report. No attempt was made to verify the information provided through these sources beyond the researcher's own observations in each of the teacher's classrooms. Also, the data collected reflect participants' responses at one point in time. It is possible that, if the respondents were interviewed over time, the results may have been different. These limitations are inherent in the kind of research conducted.

Additionally, this study had a single interviewer and observer who conducted all of the interviews and classroom observations and collected all of the journal reflections. This sole researcher also conducted all of the data analysis and coding. It is possible that had there been another individual collecting and reviewing data and coding transcripts that alternative perspectives and themes could have emerged.

Finally, a noted delimitation of the study was the sample. The sample was limited to four third and fourth grade teachers at a public charter school in the southeast region of the United States. Therefore, the results of this study are not meant to generalized and are specific to the study's sample. While the results from this sample may not be generalizable, this sample was drawn from a population that has not been widely studied yet is affected by ADHD.

Summary

As previously noted, there has been limited investigation into understanding how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence the reading instruction they provide to elementary aged male learners with ADHD. This qualitative case study sought to understand how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence teaching elementary reading to male learners with ADHD. This chapter reviewed that this research took take place at a public charter school in a southeastern state with participants affiliated with the third and fourth grades.

It also acknowledged the study took place primarily in the authentic setting of the school environment and included classroom observation in order to observe how the student(s) and teacher interact in the natural classroom setting as well as teacher interviews and reflection journals as a means of triangulating the data. It further provided more detail about how the data was analyzed and shared the analysis of the data was conducted using thematic analysis using the constant comparative method. Finally, ethical considerations, steps taken toward achieving standards of trustworthiness, and limitations were also reviewed in this chapter.

Chapter four provides additional insight into the analysis, specifically reviewing the results of the study. This chapter is followed by chapter five which shares discussion as related to these findings.

CHAPTER 4: RESEARCH FINDINGS

This study examined how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence teaching elementary reading to male learners with ADHD. The perceptions of teachers in regard to ADHD as well as their beliefs and attitudes were interpreted through a qualitative analysis of data that was collected through teacher interviews, class observations, and reflection journals maintained by the teachers. Thematic analysis using the constant comparison method was utilized in analyzing this data. This chapter begins with descriptions of reading instruction used by the study's participants and provides context for the reading classroom experience the researcher encountered during classroom observations. The purpose of this section is to provide context for interactions shared within the results. Next, is an overview of the themes that emerged and their links to the research questions of this study. This section also contains a concept map which links the codes and categories to each theme. The chapter then goes on to discuss each of them in greater detail using representative segments selected from the data. Each of these sections is organized with the theme serving as the heading in bold and the corresponding categories then serve as italicized subheadings. The chapter concludes with a summary of the overall research findings.

The Reading Classrooms

Each of the four teachers in this study utilized the school's newly adopted curriculum as the basis of their reading instruction. This curriculum came from out of state and was based upon Common Core English Language Arts standards. The teachers were provided scripted lessons which they reviewed as a grade level team and served as the basis of their individual classroom instruction. These lessons generally served as a

lesson or mini-lesson that opened each reading class. After the lesson, students engaged individually or in collaborative groups to complete reading tasks assigned by the teacher as a result of the lesson while teachers provided support and instruction to small groups or individual students. Teachers also had the freedom and flexibility to incorporate guided reading groups and book clubs in addition to the prescribed lessons if they elected to do so. These options were exercised in three of the four classrooms observed. The following describes individual reading classrooms for each of the four participants:

Anna

The classroom was rectangular in shape and without windows. The floor of the classroom was tile and covered in five area rugs of various sizes. On the floor also sat four student tables: two were built into hexagons with two trapezoid tables each. The others are built by rectangular tables. Each grouping sat six students. The chairs at each of the student tables had chair pockets hanging on the back. On the table tops rested plastic pencil cases for supplies such as pencils, scissors and coloring materials. There were also two additional tables in the classroom: one on the wall with the coat hooks and the other against the first wall described above. Half of the overhead lights were turned off. Additional light was provided by multiple lamps that are seen around the room. There was evidence of technology by way of laptop, tablet devices and an LCD projector. The only observed use of classroom technology was by the classroom teacher using the LCD projector and laptop to show directions, lesson notes, or visual aids to students in whole or small group.

At the start of each observation the class of students were seated on the carpet facing the teacher. The teacher would stand at the projector and provide a brief lesson

followed by directions for the students as to the day's reading tasks. For each of the observations the teacher was leading a guided reading group with the student participant. These lessons took place at a kidney shaped table to a group of seven students who sat on stools. The lessons were heavily scaffolded by the teacher though she would call on various students within the group to read text allow and respond to questions. These questions came from both packets the students had in their possession during the lesson as well as from the teacher herself. Teacher led questions appeared to be posed to model reading strategies and provide clarity of the text to the students.

Bonnie

The classroom was rectangular in shape with large picture windows along the wall opposite the door. The floor of the classroom had a large multi-colored area rug positioned in front of the white board. On the floor also sat four student tables: three of the tables are rectangular with six chairs while the fourth is kidney shaped and holds five chairs. In the middle of each table was a brightly colored plastic basket which contains supplies such as scissors and pencils. In addition to the sun shining in, the fluorescent lights above were all turned on. Similar to Anna's class, the students in Bonnie's class began each reading lesson by sitting on the carpet facing the board onto was either posted information related to the days lesson on chart paper of projected via LCD projector. This use of LCD projector was the sole use of technology observed during any of the three classroom observations.

The length of these opening lessons ranged anywhere from 10-25 minutes and included both direct reading instruction as well as directions as to what students were expected to do after the whole group session. At the close of each whole group session

students sat in collaborative groups which the teacher described to be book clubs. At various intervals groups were engaged in independent reading and completion of questions provided in a packet or group discussion. The classroom teacher checked in with groups throughout the classroom observations and, at times, would sit and engage in more direct instruction with individual students utilizing the book club materials.

Carla

The classroom was rectangular in shape with no windows. In the middle of the classroom were two rectangular student desks and two hexagon shaped tables all of which had six chairs positioned around them. There are chair pockets resting on the back of each seat and a brightly colored basket with supplies sat in the middle of each table. Centered within the student tables was a cart that contains a laptop and LCD projector though technology was not utilized during either of the two classroom observations.

During the first classroom observation, the teacher was provided guided reading instruction to a small group on the carpet in front of the classroom. While she was instructing this group, the other students sat in various places around the room (chairs at student tables, on the floor or in the classroom library) working independently. The students not in the group were assigned the following tasks as noted on the board: Text Feature Scavenger Hunt, Word Tracker and Fact/Hunt Flag. The only permitted discussion appeared to be that of the teacher and the members of her small group. The second classroom observation was comprised of a whole group lesson which lasted about 15 minutes. During the lesson students began sitting on the carpet in the front of the classroom but then were asked to return to their seats so they could access the materials needed for the rest of the lesson. During the remaining times students worked in small

groups also referred to as book clubs as the teacher circulated around the room to assist individual and small groups of students as needed.

Diane

The classroom was rectangular in shape with windows on the wall directly opposite the door. The floor of the classroom was tile and covered with a multi-colored square area rug in the center of the classroom floor. On the floor also sat four student tables all of which are rectangular in shape. Each grouping sat six students. Each student table had a round center basket for supplies such as markers and a potted plant that contained table names such as "Table Brilliant" and "Table Sensational". On the back of each chair was a chair pocket and student name tag. The room was lit with the ceiling fluorescent lights, lamps placed at various locations around the classroom and the sun from the windows. There was evidence of technology in the classroom. There were at least eight individual laptops and an LCD projector which displayed directions for students.

During each of the observed lessons, the teacher was working with small groups referred to as book clubs at a table opposite the projection of directions. During each of these sessions the teacher provided directions, modeling and posed questions as related to the assignment at hand. The students not working with the teacher were working around the classroom in partnerships or independently. These student groupings had permission to talk in low voices.

Overview of Themes

Data was collected through teacher interviews, classroom observation, and teacher reflection journals. Given the experiences (both past and current) of this

particular sample of teachers, the experience of the participants in regard to interacting with individuals diagnosed with ADHD has been predominantly with male students. For instance, one participant has only had a single experience with teaching a student with ADHD and that is her current male student. A second participant has only previously interacted with one female student diagnosed with ADHD. The third participant has a larger breadth of experience teaching both males and females with ADHD, but many of her responses centered around the experiences involving her current, mostly male learners with ADHD. Finally, the fourth participant also noted prior experience with both male and female learners with ADHD, but she currently only has male students diagnosed with ADHD on her roster. Additionally, the experiences she shared primarily related to current instructional decisions as related to their needs. As a result, the ability to differentiate between teaching all students with ADHD and teaching male students with ADHD for this sample is limited. Two themes that emerged in the study reflect both research questions:

- How does teacher perception of ADHD influence their instructional decisions when teaching reading to students diagnosed with ADHD?
- In what ways does being male and diagnosed with ADHD influence teacher beliefs and attitudes about effective reading instruction?

In reviewing the results in light of these questions, two themes emerged: **stereotypes** and **awareness.** The following pages discuss these themes in greater detail.

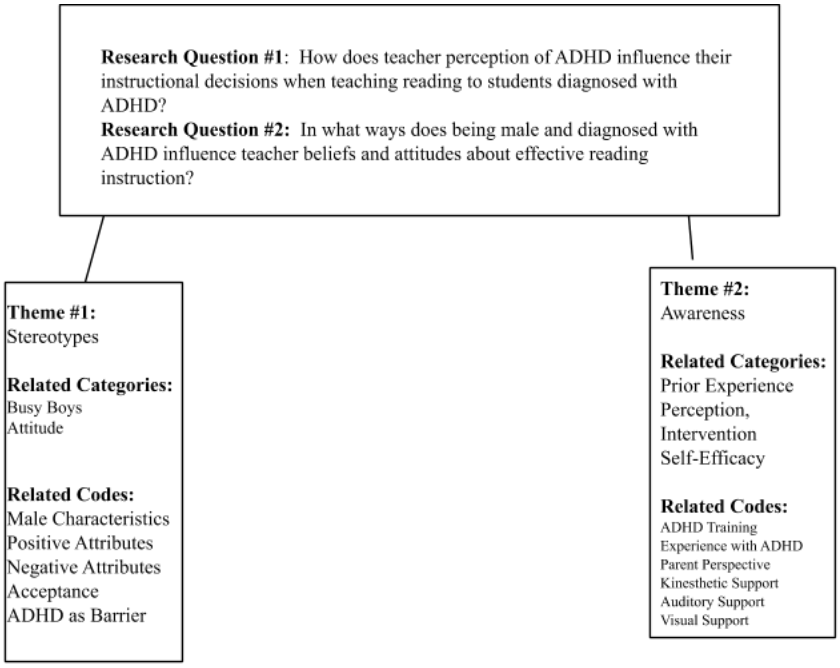

Figure 1

Teacher Perception of ADHD and its Influence when Teaching Reading to Elementary Males with ADHD

Theme One: Stereotypes

The first theme, **stereotypes**, speaks to teacher beliefs and attitudes that reinforced or contradicted commonly held, but oversimplified, beliefs about boys and ADHD. For the purposes of this study stereotype is defined as a widely held but fixed and oversimplified image or idea of a particular type of person or thing. In this study two primary stereotypes emerged. These stereotypes are related to being a boy and stereotypes as related to being diagnosed with ADHD.

Busy Boys

Specifically, one stereotype regarding ADHD is the belief that all people with ADHD are unable to sit still or concentrate for any length of time. What makes this a

stereotype is that individuals diagnosed with ADHD can concentrate for extended periods of time; however, their ability to focus is dependent upon on their level of their engagement with a task. Of additional note from the data is the time-honored stereotype related to the notions of "boys will be boys". One image that often results from this expression is that of a rambunctious boy who is in constant motion. However, this too is contingent upon only one facet of the individual—his gender. As a result, it too is a stereotype as it oversimplifies who these boys are as individuals. Each of these stereotypes was interwoven into the words of three of this study's participants.

While acknowledging ADHD presents itself in both internal and external ways, when asked about male students with ADHD, Bonnie was quick to note examples of the way in which ADHD manifests externally. She explained, "If I were to just give them adjectives? Um, distracted, um, uh, I would say a busy, uh, moving around a lot. So active, um, you know, just all over the place." Similarly, Diane was quick to note external cues and activity levels of ADHD as well when discussing David and some of the other boys with ADHD she has taught. For instance, in response to how she would describe male learners with ADHD she noted, "I would say...athletic and sporty...that's where they shine...cause they're able to get out there and just let it all out on whatever sport they're doing."

External cues of ADHD were also noted by Carla for a female student she had encountered previously who had been diagnosed with ADHD, though Carla felt this student more resembled male peers with the same diagnosis noting she was a "tomboy." She shared: "it's funny because the one girl that I know with ADHD is such a tomboy.

Hard to like even tell the difference [between male students and this female student]. There's a lot of movement...she's a mover and a shaker...a lot of physical attributes there."

While Bonnie has never taught a female student with ADHD, her preferred method of intervention for Benjamin also speaks to the way in which ADHD manifests itself physically. She also alluded to a stereotype of boys being more active in general when she explained, "I like a lot of movement for everybody because I know this class is very boy heavy so just making sure that they are moving and especially everybody is moving but especially during ELA [English Language Arts-Reading] because there's a lot of sitting lots of times and I know that that's hard for him." Like other teachers in the sample, she implied to the need for movement not just for males with ADHD but for males in general which corresponds to external manifestations of ADHD.

Attitude

Next, a second stereotype regarding individuals diagnosed with ADHD is they just need to try harder. Specifically, some people assume that since most people find they have trouble concentrating or focusing from time to time, children with ADHD are similar, but just not trying hard enough. However, while effort is important in working through areas of weakness caused by ADHD, increased effort and motivation alone will not do the trick. This theme speaks to these stereotypes and the way in which the teachers in the sample held beliefs or conveyed attitudes that reinforced or disputed stereotypes related to boys and ADHD.

While attitude speaks to a way of thinking or feeling about someone or something, it is also reflected in a person's behavior including what they say and do. In regard to what teachers had to say regarding male students with ADHD there was

commonality in the way in which these teachers with limited experience with ADHD expressed their thoughts of the male student participants from the classrooms. While each of these teachers noted positive attributes in regard to the character traits of their male student diagnosed with ADHD, they were also quick to note deficits as related to the completion of assignments. Bonnie, who had no prior student experience with students diagnosed with ADHD noted that Benjamin is "sweet" and "thoughtful"; however, she also expressed that when it came to class work "He does...minimal." This is despite the fact that in she also feels "he can do the work and he reads well." Rather than building in additional interventions that might enhance his ability to stay on task, she appears to blame his lack of effort in completing his assignments.

She described the struggle by explaining "if he's assigned with a task and...staring off into space whether...he's supposed to be reading, he's supposed to be writing...he's talking or off task." Referring back to her definition of ADHD and how it is "just hard for the student to really basically just focus to concentrate" as demonstrated by the data it appears she attributes the shortcomings in his classwork with his struggle to focus.

This feeling that the completion of class assignments as a struggle as a result of ADHD was reflected in the commentary provided by Carla who also proclaimed several positive character traits exhibited by her student diagnosed with ADHD including the fact he is "...kind, sweet, loving caring, imaginative, creative [and] sincere." She also describes individuals with ADHD as people who are "...usually just highly intelligent." However, when it came to Cole's work habits in the reading classroom, she described him as "frequently off task during our independent reading time." Referring back to her

definition of ADHD and how it is "a lack of ability to focus," it could be inferred that she too attributes the shortcomings in his classwork with his struggle to focus.

Like Bonnie, rather than incorporating additional interventions, Carla seems to place the source of the issue of a perceived lack of effort at the feet of the student. This was evident when she spoke of how she perceived Cole's level of effort towards his assignments. Specifically, she noted, "Like he's not terribly concerned about the quality of his work…you know, just not necessarily invested in the quality of his work. I guess.". The only evidence she had to support his lack of concern was when she explained, "…he will rush through text dependent question assignments, often producing work below his ability level. There was once this week that I accepted from him less than his best." So rather than digging deeper and determining the potential root cause, Carla seemingly fell into the stereotype that learners with ADHD simply do not put forth the necessary effort to complete tasks in a satisfactory way. Without determining the root cause or finding ways of helping him overcome this impulsivity she also lowered her expectations which can serve as reinforcement for future issues of producing unsatisfactory work.

In contrast one of the teachers spoke in ways that actively contested this stereotype. Rather than displaying an attitude that may lead to students feeling like ADHD is a barrier to be overcome, Diane expresses the need to celebrate the strengths of these learners. In general, Diane wants to ensure that when she is working with her students diagnosed with ADHD, she doesn't want them to "ever feel less than who they are because they're wonderful children." Additionally, she shared primarily positive attributes of her male students with ADHD both inside and outside of the classroom. As previously noted, she explained that when asked for characteristics of these learners "I

would say...athletic and sporty...that's where they shine...cause they're able to get out there and just let it all out on whatever sport they're doing." Regarding David's classroom performance she explained:

> He's extremely intelligent, very intelligent, young man. He's in both AIG for reading and math...he's the only fourth grader in AIG [Academically/Intellectually Gifted] reading. So, I mean he's, he's, yeah, he's got really wonderful smarts about him...so I have them doing that extension activity instead of going to the review group with my TA [teaching assistant].

To review, this first theme, **stereotypes**, speaks to teacher beliefs and attitudes that reinforced or contradicted commonly held, but oversimplified, beliefs about boys and ADHD. While no one is immune to this tendency recognizing, such overcomplication can be of benefit in reflection of instructional practice. This is particularly important given the influence this position holds when providing instruction to male learners diagnosed with ADHD.

Theme Two: Awareness

The second theme—**awareness**—speaks directly to how a teacher's prior experience with ADHD shapes their perception of ADHD which, in turn, influences their instructional decisions when teaching reading to students diagnosed with ADHD. For the purpose of this study awareness speaks to concern about and demonstrating well-informed interest in teaching students diagnosed with ADHD. When reviewing the data, a relationship began to emerge when reviewing four categories that related to awareness: prior experience, perception, self-efficacy and interventions. In reviewing the data from

these four categories parallels emerged. These parallels will be discussed within the individual categories they represent.

Prior Experience

In this sample, teachers who demonstrated a higher degree of awareness also shared a wider range of experiences working directly with children diagnosed with ADHD. Additionally, they had participated in more professional development experiences geared toward supporting learners with ADHD than the participants who demonstrated less awareness. Conversely, teachers who demonstrated less awareness had fewer experiences working with learners with ADHD and fewer opportunities for professional development as related to learners with ADHD.

Diane has more than two decades of elementary classroom teaching experience to her credit. Her current roster also includes students with ADHD of whom she is currently charged with at least six students who hold the diagnosis. As she explained, “Well, I have quite a few in there. This year I've got David...I'd have to count...six or seven.”. During the span of her career she expressed working with a broad range of students diagnosed with ADHD. She has taught students with ADHD who were “boys and girls and all different levels. Where one is—they literally don’t sit still, to one that you’re like there’s something going on there but it’s more casual.” The instruction she provides for these students undoubtedly demonstrates influences from previous experiences working with prior students. Additionally, her level of awareness and instructional decision making has been influenced by past professional development on working with students diagnosed with ADHD.

Specifically, when reviewing prior training, Diane discussed several different ways in which she has received training for working with students with ADHD course of her teaching career. She spoke of formal training provided by a previous district for which she had worked. Specifically, she shared, “I mean, [local district name] did [hold trainings on ADHD] when I was there.” She went on to describe more recent trainings through the use of webinars by explaining, “It's online...we're supposed to watch; I think it's 10 videos a year... So, I have watched some videos on there [about ADHD] too.” She also spoke of training she received as a part of staff meetings offered by the school guidance counselor: “We do [discuss ADHD] in our staff meetings that are also professional development and our guidance counselor...has absolutely come in and a couple times and said, here's what ADHD looks like, here's where it does it, here's what you could do” Finally, she spoke of informal training on the topic: “it's been my own reading and my own research [on ADHD] and my own experiences, you know, of kind of knowing what works and doesn't work.”

These trainings likely deepened her awareness of ADHD on several levels. First it provided her a broader understanding of how ADHD manifests in students. It also provided her with knowledge as to how ADHD impacts students. Finally, it provided her with suggested ways of supporting these learners in the classroom.

Similarly, Anna, a veteran of 16 years, shared of a broad scope of experience in working with children diagnosed with ADHD. Like Diane, much of this experience stems from her work as a classroom teacher. However, in addition to this teacher experience, Anna also has experience with ADHD from another unique perspective. She is also the parent of a now adult daughter who was diagnosed with ADHD. These dual

lenses developed into a deeper awareness of ADHD over the course of her career and led to an evolution of thought in regard to ADHD. She first recalled a time early in her career: “I think when I first started, I was so young [I] probably didn't know a lot about ADHD or ADD. I think there was either one or the other at that point...I'm sure I had kids with it. I don't ever really remember...being necessarily told [about it] and [it wasn’t] highlighted.”.

Conversely, of her current experience she explained:

> here for sure we have meetings...we know exactly...we have to read all of...the files and the data on the child and we have a conference at the beginning of the year with the families to kind of review their 504 plan or their IEP...So I think I...definitely know more in the setting who has ADHD or who, if the parents are concerned about it...before my students even came this year, I was already armed to put, you know, the kids I did know that were coming with ADHD in close proximity to me.

In addition to these real time experiences she also developed a deeper awareness of ADHD through professional development. When reviewing any prior training Anna may have received regarding students with ADHD, she discussed several different ways in which she has received training over the course of her teaching career:

> So being a parent and going through it with your own child definitely makes you more aware...more sensitive...personal things really tie in and wanting to help out kids to an understanding of the bit better….we have...a program now and ...we can go and take a 30 minute classes. Probably before that though, I probably did have some training here and there.

On the other hand, Carla, a novice teacher, described more limited experience with ADHD than her aforementioned peers. Previously, through her non-profit work, she recalls working with a doctor with the diagnosis. On a student level she also noted interactions with students diagnosed with ADHD through her work over the course of four years as an elementary teaching assistant and during her half a year of teaching English Language Arts to eighth grade students. Given the capacity of these assignments (based on Carla's descriptions) these interactions were limited to relatively brief exchanges during specified lessons or class periods. However, of her previous experiences working with learners with ADHD in school, she explained, "...coming into schools, and assisting you get an idea of, of who has a diagnosis and who doesn't...some are medicated in summer, unmedicated...we do the best we can with whatever we're given and address the individual child as much as possible."

When reviewing any prior training Carla may have received regarding students with ADHD, it became clear that she had virtual no formal training or professional development prior to the current school year, though she did note, " just last...spring I took a...special ed class over at Queen's College. It was the exceptional children's class over at Queen's College." Carla recalled this class may have touched upon ADHD.

Of the four teachers in this sample, Bonnie was the most limited in prior experience with ADHD. She is a novice teacher whose prior experience with ADHD rested solely in her working relationship with an adult (female) colleague. From this experience she noted "…I worked as a TA [teaching assistant] for a teacher who actually had ADHD and kinda through her [it helped in my] understanding a little bit more even

though she was an adult about how children may feel." Benjamin is the first student Bonnie recalls teaching who has been diagnosed with ADHD.

When reviewing any prior training Bonnie may have received regarding students with ADHD, it became clear that she had received no formal training or professional development prior to the current school year. As she explained:

> I really don't have that much experience with that [ADHD]...this is my first year I really experienced it and I know the particular child [Benjamin's] parents came in and just really wanted to make sure I was educated and...had me to read some things which was very helpful as well to some things we could do in the classroom for him.

When asked to share more about the resources they provided to her she explained:

> I actually kept the articles just so I could refer back to and stuff. I'm just...trying to really understand it and understand him...but it...kind of broke it down into kind of like an iceberg...kind of some of the things that you see on the surface to where there are some things you don't really see under the surface that are kind of happening too. So just laying that out in, in a lot of it, just what I could do, what are some things I could do in the classroom to help him.

The varied level of experiences in this sample provided unique insight into how prior experience may have a hand in shaping awareness. This awareness then plays a role in several other key areas when working with students with ADHD: perceptions, self-efficacy, and intervention. These areas will be discussed in more detail below.

*Perception*s

For the purposes of this study, perception is a way of regarding, understanding or interpreting something. In this case is taking a closer look at how teacher regard, understand and interpret a diagnosis of ADHD. For the participants in this study to the depth to which ADHD was understood seemed to relate to their level of prior experience with ADHD. In this sample, teachers with greater awareness of ADHD shared perceptions of ADHD that were "multi-dimensional". Conversely teachers who demonstrated less awareness as related to ADHD shared perceptions that were more "limited".

When asked how she would define ADHD Diane spoke to multiple facets of the diagnosis. She did not seem to view it as one dimensional in the way her novice peers have done. Rather when defining ADHD, she explained:

> It can be all over the gamut...it can be one who can't sit still and absolutely needs a movement break every 30 minutes to one who is pretty calm. But you can just see them fidgeting in their chair but not [in an] overexaggerated [way] and...can't pay attention more than five minutes or 10 minutes because they've lost their own focus for whatever reason.

Diane also noted how her experience with learners with ADHD has led to an increased level of discernment. Specifically, she explained, "I've become hyper aware I think, but also just my, you know, experience and just kind of being able to pick up and notice and then, and then knowing what they need and trying to give them what they need." This increased ability to discern the broad scope of ADHD characteristics and their impact on learning also allows her to more effectively tailor instruction to the needs of these learners. This includes allowances for student behaviors that may be regarded as

off-task or problematic to teachers with limited understanding of the diagnosis. In regard to the student participant in this study Diane notes:

> I mean he's kind of all over, but he's working. So yeah, he's on task the whole time. But when I look up, he's here when I looked back up, but I know he's working so it doesn't bother me, you know, cause I know I don't need him to stay in a little, you know, box. As long as he's working.

Similarly, Anna spoke to an increased level of discernment based on her previous experience. As she explained, "So being a parent and going through it with your own child definitely makes you more aware, the more sensitive, um, so that, you know, those, you know, personal things really tie in and wanting to help out kids to understand better." This increased ability to discern the broad scope of ADHD characteristics and the fact that the resulting behaviors are not something the child is willfully choosing also provides her a lens to view her role in supporting their individual learning needs. She explained:

> I have lots of checklists here of making sure that they've turned in assignments. You can say lots of checklists of this. We have reading groups all over, so I just want to make sure that I have checklists to that say this child is done with this chapter and can move on. So I think it comes to me, honestly, I think me being organized, overly organized helps them to succeed.

Further, while her expectations remain the same for her all of her students, her increased discernment tailors the path by which each student achieves them. Specifically, she shared:

> I really try to keep in mind that they have ADHD, but I, I try to keep the expectations the same. I feel like, um, If I can, I feel like they should be held the same way. It's just a matter of figuring out that puzzle of where to put them. You know, a lot of that falls on the teacher's shoulders. Like, whereas this placement, where should he sit? Where should I sit? How can I support him so that he's successful? Who's he sitting by? You know, those types of things fall on me to give them that best learning atmosphere and not just dismiss that he has ADHD and not expect, you know, equally the same

Finally, Anna noted the struggles learners with ADHD encounter: "they may have a hard time even if they are not hyper," and "their mind is working at hyper speed to...take in all of the information and sometimes it's too much." However, like Diane, Anna recognized and acknowledge the multidimensional nature of ADHD. Specifically she explained "All students with ADHD are different," "ADHD runs the gamut...you can struggle internally or externally," and "...you can see the external signs of not paying attention or sometimes it's...hidden so you have to recognize that sign as well."

In Anna's review of her prior experience she noted that early in her career her awareness of ADHD and her capacity to discern what these learners needed was low; however, both awareness and discernment evolved over time. This evolution of awareness has potential for the next two participants, Carla and Bonnie; however, at this time the awareness level they demonstrated as related to students with ADHD was low. In comparison to the two participants just reviewed, teachers with greater awareness of ADHD shared perceptions of ADHD, that we're multidimensional in this case multi-dimensional speaks to a more individualistic look at students with ADHD as

demonstrated in the literature earlier in this study, ADHD does not have one cookie cutter profile.

There are three subcategories of ADHD, one of which combined the first two categories. As result, ADHD may manifest itself very differently in different students. In this sample the perception of the teachers with a higher sense of awareness acknowledged the fact that ADHD does not fit one particular profile when defining ADHD. They acknowledged both sides of the ADHD spectrum, both the fact that it can demonstrate itself externally through increased activity, impulsivity and other visual cues. They also acknowledge that ADHD may manifest itself almost entirely internally and that a teacher has to demonstrate a high level of awareness in order to discern the needs of such students. Conversely, teachers who demonstrated a lower sense of awareness in this particular study, shared perceptions that were more limited in scope. These teachers tended to focus more on a single dynamic or a single component of ADHD this led to a narrower view of what ADHD looks like for students in their classroom.

In discussing ADHD Bonnie focused on the difficulty, or in her own words how "hard" the learning process is for Benjamin. That descriptor "hard" was interwoven throughout her dialogue multiple times. For example, in her journal she reflected upon an exchange she had with the student while offering him support with an assignment in which she shared with him, "I know it's harder for you." In further reflection in an interview she expressed "...it's just hard to focus so it's [his mind] is going everywhere." This difficulty found its way into her personal definition of the term: "I define it [ADHD] as just hard for the student to really basically just focus to concentrate...to just still their minds and to keep their minds still and be able to know what they need to do."

Like Bonnie, Carla too spoke to the root of ADHD in terms of struggle for students. She described the ongoing struggle students with ADHD have with their own cognitive processes. She explained, “I feel like people with ADHD, their brains work faster than the rest of their bodies, so...their bodies are trying to catch up to where their brain is all the time.” Also, of the specific student she has in her class diagnosed with ADHD, Cole, she noted, “I feel like he’s almost exhausted by how fast his brain moves.” In her own words she defined ADHD by summarizing it as “a lack of ability” to focus.

Self-Efficacy

Additionally, teachers with a higher degree of awareness expressed a higher level of confidence in their self-efficacy, or ability to provide instruction for learners with ADHD. It is not surprising that teachers who are more aware of what ADHD looks like, how ADHD manifests and the needs of learners with ADHD have a stronger self confidence in their ability to provide instruction for such learners.

When offering her opinion of her ability to provide instruction for students diagnosed with ADHD, Diane felt this was a task of which she was quite capable. This speaks to her level of self-efficacy for serving students diagnosed with ADHD. In her own words she noted, “Pretty much since I can think back, it was, oh, Diane, can handle it, you know, whatever it might have, whatever the situation might have been.”

Also, like Diane, Anna had multiple students diagnosed with ADHD on her roster and she felt this is a direct acknowledgement of her capacity to serve these students. She explained, “I've got a pretty strong structure to my classroom, so I'm sure they put some thought to that when maybe putting some of the kids [with ADHD] with me.” She also noted increased awareness as the result of her daughter’s diagnosis by explaining “going

though it with your own child makes you more aware," and "being more aware and more sensitive to it because my daughter wanted to be a good student." She went on to explain, "after my daughter was diagnosed with ADHD it most definitely changed my instructional practices as I don't think I realized that ADHD could be internal.". This higher level of understanding of ADHD and the needs of ADHD learners likely contributes to her increased sense of self-efficacy.

In this sample, teachers with less awareness felt less capable and possessed fewer tools in their pedagogical toolbox for meeting the needs of learners with ADHD. This was most prominently demonstrated in Bonnie's interview. In regard to her ability to serve students with ADHD, Bonnie provided some insight in reflection of her feelings regarding self-efficacy. Specifically, she noted, "I still feel like I'm kind of on a learning curve with it myself too." She went on to explain how she felt the parents of her current student were an important part of her ability to serve her student:

> I think that he's been a good one to learn because his parents are huge advocate and very well educated in it… I was a new teacher and [they were not sure] what I understand and know. I felt like they have helped and continued to be a help. It's definitely a communication that we do keep up, but they are very big advocates and really helped me.

Interventions

Each of the participants in this study demonstrated at least a baseline level of understanding of the needs of learners with ADHD through the methods of intervention they employed. Instructional intervention is a specific program or set of steps to help a child improve in an area of need. Instructional interventions are intentional in that they

seek to strengthen a particular area of need (Lee, 2018). The participants demonstrated awareness in two key areas: the need for movement and the need for increased attention.

Movement

As previously noted in Chapter 2 higher levels of hyperactivity and other externalizing behaviors are associated with males diagnosed with ADHD (Barkely et. al., 2006). Each of the teachers in this study demonstrated a need for physical outlet for their ADHD learners. First, teachers provided time space and outlet for physical activity often displayed by students diagnosed with ADHD. Considering the external ways in which most teachers in the sample feel ADHD manifests itself for male students, they incorporated outlets for this as a part of their reading instruction. For instance, Anna, Bonnie, and Diane each utilized different outlets for movement as a part of their reading instruction for their student participant.

For example, when planning for book clubs Anna explained it is a priority to make the "...club personal and making it interactive where they can feel free to talk about their ideas, that's what I wanted to create." Additionally, she explained, "our room is...up and moving. You never know—you're down on the floor, then up and then on to different groups. So, I feel like if you have an active room that kind of takes care of that [the need for movement]." In reflecting upon providing reading instruction to her students diagnosed with ADHD over the course of the past month and any changes she had seen in her instructional practices and what might have been the source of these changes, she expressed in her journal that "I made sure to involve movement in lessons." This was observed in classroom observation when Anna tasked the students to sit cross-legged on their stools in response to what is being read by a student reader. She then asked Aaron

to demonstrate what bowing from the waist and brushing a hand on the carpet looked like in response to another sentence read from the text.

Movement was also a noted priority for Benjamin during reading instruction as previously noted by Bonnie. This was also observed during the second classroom observation as the only noted exchange directly between the two. Within the last minute of the observation, Bonnie approached Benjamin and whispered in his ear. He then got up and left the room. Unfortunately, this also marked thirty minutes since the beginning of the observation, so the observation officially ended. Upon leaving the classroom, however, the researcher did see the student in the hall out of view of his classmates doing jumping jacks. In a follow up interview with Bonnie the researcher asked about the exchange. She explained, "He has a 504 [plan]. On the 504 it says he gets a lot of breaks. We do a lot of movement throughout the day, but it's just that ELA [English Language Arts/Reading] time then we go to read-to-self-time, so we try and have him move every thirty minutes. So that's what I went and whispered to him to go take a movement break." As she explained it, "The movement breaks...really helped him every 30 minutes." There were times when she utilized movement breaks for the entire class which count as a part of this requirement. As she explained:

> It just kinda helps refocus him that they've gotten up and they've been able to move even though it might just be for a couple minutes, but at least that they moved and it's like, oh, okay, you know, kind of look at it [the assignment] with fresh eyes I guess when they come back.

Regarding his personal movement breaks, she shared Benjamin has a list of options from which he may choose. However, there are times when she provides support

in making these selections. In her own words she noted, “But there have been...times when I’ve been like ‘Whatcha going to do?’ He said, ‘I'm going to do jumping jacks’, ‘ok you go ahead,’ or I say, ‘okay, let's do 10 burpees.’”

While Bonnie demonstrated understanding of movement as a need for ADHD learners, movement breaks were the only intervention she articulated for Benjamin. Specifically, when Bonnie was asked, “What factors influence your instructional decisions with ADHD learners in mind?” she responded, “Not really anything different.”. This demonstrates a limited view of the Benjamin’s learning needs as an ADHD learner.

. Conversely, movement breaks are just one of the interventions Diane uses to support students diagnosed with ADHD. In response to the question regarding how the needs of her students with ADHD influence her instructional decisions in reading, Diane spoke of movement breaks, sharing, “Normally what I would have my TA [teaching assistant] do, or I'll do it myself, do the movement breaks in the hall. The crab crawls or walks or the bear crawls or the wall sits or whatever. But there's so many [students with ADHD] that I just...do more movement breaks this year than I've ever done before.” Additionally, she explained, how she uses a movement and mindfulness App called GoNoodle which is designed specifically for children and provides two to three-minute workouts. In addition to movement breaks she also provided other opportunities for movement. These included an elastic band at the base of his chair which allows him resistance movements that are silent and not disruptive to his peers. She also allows students to chew gum which again provides motor stimulation in a way that allows for movement while they work without disruption to their peers.

Increased Attention

Next, teachers in this sample demonstrated awareness of the need to incorporate intervention that increased the level of attention students with ADHD could offer. They did this through several approaches. These approaches included the use of proximity, one on one instruction, and intentional limiting of distractions through the use of headphones and dividers.

The use of proximity during instruction was a strategy noted by Anna. Specifically, she explained, "I remember watching a couple [of online classes] on ADHD because I knew I had a classroom with it...so what I learned from that was just...proximity and just kind of keeping them close by and being ready to get to them before they could get distracted." She also shared that prior to students starting school in the fall she was prepared to keep her students diagnosed with ADHD in close proximity to her during various times of the day. This included their assigned seats as well as placement that allowed her to remain close to them during lesson presentations. Additionally, as previously noted in her reflection journal Anna discusses the use of proximity as an intervention strategy she finds to be effective. She explains, "Last week, in his small reading group of eight students, when I saw his attention drifting, I would usually pose a question to get his eye contact and then asked him to answer. This brought him back to the group and he didn't know I was using a strategy to get him to be engaged."

Bonnie also appears to utilize proximity during classroom instruction though did not directly note it as an instructional tool or influence during her interviews. During all

three classroom observations, Benjamin sat on the front row of the carpet while the teacher delivered whole group instruction. This appeared to be an assigned position as he sat there each time the class received whole class instruction while seated on the carpet. Bonnie spends the bulk of this time at the board less than a foot away from where Benjamin is seated. During the third observation, in addition to the one on one instruction Bonnie provided to Benjamin, she also appeared to utilize proximity on several occasions. First, she returned to Benjamin's table after working with some other student and watches him without speaking for a minute as he taps his neighbor's book with his pencil. After he noticed she was watching, he stopped and returned to his assignment. Another example was when Bonnie positioned herself between Benjamin and another group of students placing her body so that was facing all of these students. After Bonnie finished discussion with the group, she watched Benjamin as he wrote without speaking though after a few moments Benjamin explained what he was drawing without prompting.

One on one instruction was noted as the most effective intervention strategy by one teacher and was an observed instructional strategy in the other. These teachers recognized that lack of ability to focus is a hallmark of ADHD and used one on one instruction as an intervention strategy to assist their students in meeting reading goals This one on one instruction has the capacity to increase the level of attention demonstrated by the student as the teacher's presence has the potential to decrease outside distraction and provide cues that assist the student in staying on task. In fact, Carla felt "one on one" instruction was most effective intervention she provides to Cole because "it's just he and I...sitting together in a quieter place...less going on...he's better

able to focus." She went on to explain she felt this one on one instructional model helped to block out sound and visual noise that would potentially have proved as a distraction for this male student with ADHD. She further explained, "giving individual instruction is most helpful for him because I think he misses quite a bit on our mini lessons or even…in small group." She further noted, "because it's just, he and I, like we're usually sitting together in a quieter place...there's less going on...he's better able to focus I think."

When asked to explain what one on one instruction looks like for Cole she explained:

> we're lucky that we have an assistant in our classrooms and...you give the instruction and then you'll do small group or you give the instruction in small group and you sent students out to do their independent work and even independent work in the mornings...he gets there early enough in the mornings that when he's working on his independent work in the morning...I'm able to kind of talk to him and direct him.

When asked to describe what leads her to feel this intervention is most effective, her response spoke directly to what she previously expressed as her interpretation of the hallmark of ADHD— "a lack of ability to focus." She explained that she felt this "one on one" instruction was most effective because:

> It's just that there's less noise, you know, and, and I don't mean necessarily like sounds noise. I mean, when you're on the carpet and there's small instruction and there's like a mini lesson or even in a small group instruction, there's a lot of people and there's a lot of movement and there's a lot of just a lot going on. You know, the visual noise.

Specific to her student diagnosed with ADHD, Cole, Carla explained "giving individual instruction is most helpful for him because I think he misses quite a bit on our mini lessons or even…in small group." Despite her opinion that this method of instructional delivery is best, she noted, "unfortunately you don't always have the benefit of being able to do that [providing the one on one instruction]." The only other intervention she expressly incorporates in his instruction through her own admission or through classroom observation is the use of headphones. She further explained "when he works independently, he uses headphones that kind of shuts out some of the noise." This presumably would help offset the struggle with focus which could be waylaid by noise around the classroom.

Recalling a specific example of this one to one instruction in her reflection journal Carla shared:

> For example, during our morning work last week, he would sigh heavily while I would guide him through correcting his work errors. This week, he was more attentive, would follow along, and make corrections. I feel like the one on one discussion we had about mistakes, how they are helpful, and a necessary part of learning helped us.

While not noted as an instructional strategy in Bonnie's interviews, one on one instruction did appear both in her third classroom observation and her journal as a method of instruction she provided to Benjamin. During the observation it was noted that the teacher returned to the empty seat next to Benjamin as she did a number of times during this observation and asks what he has written. He responded and she looked between his book and his packet. Seemingly in reference to a question from the packet she said, "I

don't know that I agree with that one." Benjamin then appeared to erase what he had written. Bonnie then said, "Ok let's go back" and she proceeded to reread a page from the book to the student. After reading she said, "The wolf was more delighted. Why?" Benjamin provided a response to which the teacher enthusiastically replied "Yes!" So Bonnie used one on one instruction to bring attention to a response she felt needed correcting and provided assistance in leading the student to what she felt was the correct response.

Awareness of the distractibility of ADHD learners plays a role in selecting one on one instruction as an instructional intervention. By sitting with the student and gently probing the student's thinking, the teacher directly guides students thinking which helps them to focus their thoughts. The previous examples demonstrate how more focused thinking can increase accuracy in student work products.

Diane also addressed increasing attention for ADHD learners; however, rather than providing one on one instruction she incorporated tools for increasing attention. These tools help in decreasing external stimuli such as sound or visual distractions. Decreasing external distractions can result in increased focus for ADHD learners in completing learning tasks. Tools she offers include headphones and dividers that sit on student desks and provide a small cubicle like setting for them. Of these headphones and dividers she explicitly noted as tools, which address auditory and visual distractions respectively, she noted:

> The headphones seem to work really well for him to cancel out all the other things that are going on. I have dividers as well in the classroom...and that makes a huge difference for him because he also works really, really fast. It's really important

for him to be done ahead of everybody else...So that, I think the divider helps for him.

While all four teachers demonstrated awareness of the learning needs of learners with ADHD teachers with increased knowledge and understanding of the disorder offered a wider range of interventions for their students. Collectively Diane and Anna incorporated ten interventions intended to target the learning needs of their learners with ADHD. Conversely teachers who demonstrated less awareness as related to ADHD provided a narrower range of intervention.

Summary

This case study was developed to better understand how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence teaching elementary reading to male learners with ADHD. It was guided by two research questions:

- How does teacher perception of ADHD influence their instructional decisions when teaching reading to students diagnosed with ADHD?
- In what ways does being male and diagnosed with ADHD influence teacher beliefs and attitudes about effective reading instruction?

As previously discussed, the findings came from interviews, classroom observations, and journal entries written by each of the four teacher participants. Through the analysis of this data, two major themes and corresponding categories emerged from the data:

1) *Stereotypes* influence teacher beliefs and attitudes when teaching reading to male students diagnosed with ADHD as indicated by the categories of busy boys and attitude.

2) *Awareness* shaped by prior experience impacts teacher perception and instructional decisions, indicated by the categories of prior experience, perception, self-efficacy, and intervention.

Chapter 5 discusses the conclusions of the study and recommendations for future practice and further research in the area of teaching reading to elementary aged male students diagnosed with ADHD.

CHAPTER 5: DISCUSSION AND RECOMMENDATIONS

Chapter four explored the analysis of the data collected from participants via interviews, classroom observations, and teacher reflection journals. The themes identified were **stereotypes** and **awareness**. Chapter five begins with an overview of the study. Chapter five will also discuss the findings in light of the literature regarding students diagnosed with ADHD and the teachers charged with their instruction in school. This chapter will close with both recommendations for practice and for future research.

As previously noted, this case study sought to understand how teacher beliefs and attitudes regarding individuals diagnosed with ADHD influence teaching elementary reading to male learners with ADHD. As a result, the research is guided by the following questions:

- How does teacher perception of ADHD influence their instructional decisions when teaching reading to students diagnosed with ADHD?
- In what ways does being male and diagnosed with ADHD influence teacher beliefs and attitudes about effective reading instruction?

Discussion of the Findings

Theme One: Stereotypes

The first theme, **stereotypes**, speaks to teacher beliefs and attitudes that reinforced or contradicted commonly held but oversimplified belief about boys and ADHD. These stereotypes center around activity level, motivation, and effort. Specifically, one stereotype regarding ADHD is the belief that all people with ADHD are unable to sit still or concentrate for any length of time. However, as noted in Chapter 2 individuals diagnosed with ADHD can concentrate for extended periods of time,

depending on the level of their engagement with a task. As a result, some people assume that since most people find they have trouble concentrating or focusing from time to time, children with ADHD are similar, but just not trying hard enough.

In regard to stereotypes as related to increased movement, three of the four participants expressed external characteristics when asked about their male students with ADHD. The words they used included: busy, sporty, and active. As previously cited in the literature, males with ADHD typically demonstrate higher levels of hyperactivity, conduct issues, aggression, and other similar externalizing behaviors. As a result, the behaviors demonstrated by male students are generally perceived as disruptive by teachers, thus resulting in identification and treatment in a more expedient manner that is the case for their female peers (Barkley et al., 2006). While identification of students with ADHD was not incorporated with this study, these externalized behaviors were a notable subject among the teachers in this sample. While two of the previously mentioned teachers appeared to convey more negative attitudes towards these active students, the third teacher seemed to hold a more accepting view of his behaviors.

The emphasis on externalized behaviors as related to ADHD has support in the literature as well. Specifically, a study conducted by sending case vignettes of 473 children who met and did not meet ADHD diagnosis criteria to child and adolescent psychotherapists and reviewed the diagnoses they had been assigned. This study saw boys case vignettes assigned an ADHD diagnoses twice as often as their female counterparts (Bruchmüller, Margraf & Schneider, 2012). This is likely due to the external way in which males are more likely to exhibit symptoms of the disorder (Gaub & Carlson, 1997).

Another stereotype regarding individuals diagnosed with ADHD is they just need to try harder. However, while effort is important in working through areas of weakness caused by ADHD, increased effort and motivation alone will not do the trick. This theme speaks to these stereotypes and the way in which the teachers in the sample held beliefs or conveyed attitudes that reinforced or disputed stereotypes related to boys and ADHD.

Returning to the topic of teacher attitude, the two novice teachers in this sample appeared to view the student's diagnosis of ADHD as a barrier of sorts. They conveyed feeling that school was more difficult for these students as well as feeling there was more of a need to correct related behaviors. Their veteran counterparts, on the other hand, shared accounts that acknowledged these learning differences using language that was more accepting of their unique learning needs that stem from their ADHD diagnosis. The dichotomy in these attitudes is supported by the literature. For instance, Badeleh (2013) in addition to suggesting a link between knowledge and confidence, also addressed attitude as these findings also noted a link between teachers with less knowledge of ADHD and attitude. This study also found that these same teachers with less knowledge of ADHD also had a tendency to hold more negative beliefs regarding students with ADHD as well. The same appeared true with the novice teacher participants in this sample.

Conversely, a finding in the literature as related to teacher attitude was not upheld by the very small sample of teachers in this study. Anderson, Watt, and Noble (2012) identified increased levels of experience was a contributing factor to increased prevalence of negative attitudes among teachers. In fact, their work found that over time, attitudes

that began as positive for pre-service teachers became less favorable as their levels of experiences increased. Interestingly, these findings were not corroborated within this small sample of teachers. Rather, the more experience the teachers had, the more favorably they spoke of their students diagnosed with ADHD. It is possible that given the very limited sample size of two experienced teachers versus two novice teachers in the study this is a primary factor in this disparity.

Theme Two: Awareness

This theme speaks to how the level of teacher previous experience/training and subsequent perception of ADHD as well as how this combination plays out in reading instruction through their instructional decisions in their elementary school classrooms for these students. The study participants were comprised of four middle aged females, two of whom were veteran teacher who expressed more extensive experience with both ADHD and increased time spent in trainings regarding ADHD. The remaining pair of teachers had limited experience working with individuals diagnosed with ADHD. Neither teacher has received training in working with students diagnosed with ADHD, though one of the teachers was provided some literature from parents of her student diagnosed with ADHD. When reviewing instructional decisions and instructional interventions employed by these teachers, despite a perception that students diagnosed with ADHD struggle, they offered limited classroom supports for learners with ADHD. In sharp contrast to the experience of these novice teachers, their veteran counterparts noted greater prior experience with students with ADHD. This additional prior experience seemed to contribute increased awareness including a broader view of

students with ADHD and provided a wider array of supports as a part of their instructional decision making.

In reviewing the literature, the body of research regarding teacher knowledge of ADHD and other related outcomes suggested teachers' incomplete or inaccurate knowledge regarding ADHD in conjunction with common gaps in understanding often yields negative implications for teachers' ability to effectively deliver instruction to learners with ADHD (Canu & Mancil, 2012). For the individuals included in this study, one such negative implication may be that the teachers who expressed less prior experience noted limited considerations in their instructional decision making when it came to their students with ADHD. One novice teacher provided movement breaks, while the other noted headphones as a tool for supporting learning needs for these students. Additionally, both teachers provided one on one instruction—one of whom noted this as an instructional support while the other did not. In contrast the more experienced teachers in this sample, both of whom expressed having more training and experience than their novice peers, provided greater acknowledgement of the learning needs of their learners with ADHD as well as a wider breadth of instructional supports and interventions.

While these teachers expressed having more training, the teachers in this study did not cite particular trainings as a source of instructional decision making. This supports Estrada and McCormick's 2017 findings when they examined teacher perceptions of students with ADHD in North and South Carolina and found that teachers often develop ways of coping with learning needs as related to ADHD through a trial and error approach rather than through information gathered at a more formal training. While

the veteran teachers did recall formal training, neither provided a link to their current practices in either the interviews or journal reflections.

While self-efficacy was not specifically noted as a research interest or was specifically questioned in this study, findings regard self-efficacy did emerge and reflects the role increased awareness may play. Novice teacher Bonnie spoke of feeling as though she was on a "learning curve," while her veteran colleagues both asserted their ability to serve students with ADHD. This speaks to Alkahtani (2013) who spoke to a link between teacher confidence in their own ability to serve learners with ADHD and their level of knowledge with the diagnosis. Another 2013 study conducted by Badeleh suggested that teachers with minimal knowledge of ADHD and limited teaching experience also exhibit less confidence than peers with greater knowledge. These studies harken back to the findings of Sciutto, Terjesen, and Bender-Frank in 2000 when they first noted a correlation between the knowledge a teacher possesses regarding ADHD and their level of self-efficacy.

Of additional note, Legato (2011) identified that teachers with high self-efficacy may be more likely to continue to seek knowledge that would benefit the instruction of students with ADHD. This appeared to be true within this sample of teachers, as well as the two teachers who expressed a strong level of capacity in serving learners with ADHD also noted self-selected readings and webinars as related to the topic to further build their level of understanding. While Bonnie noted she had done some reading on the topic, this was the result of the student's parents providing the text as opposed to Bonnie actively seeking the knowledge of her own accord.

Similarly, the literature notes that teachers with lower levels of efficacy may also be less likely to implement additional classroom strategies needed for student success. (Alkahtani, 2013; Bradshaw & Kamal, 2013; Ohan et al., 2008). These findings may speak to Bonnie's noted implementation of a single, consistent intervention-movement for her ADHD learner. Additional data would need to be collected in regard to Carla's feelings of self-efficacy before any similar link could potentially be explored.

Regardless of prior experience, the incorporation of movement was an intervention relied upon heavily within this sample of teachers. Barkley (2013) recommended specific best practices to be utilized by teachers who had students diagnosed with ADHD in their classrooms. This included the incorporation of active engagement during learning blocks rather than passively listening for long periods of time (Barkley, 2013). Providing opportunities for movement is an inclusive instructional strategy was recommended by the National Association for the Education of Young Children in 2014. Specifically, Murphy (2014) suggested movement breaks as a recommendation to teachers as a means of supporting executive function deficits. Murphy further explained incorporating movement breaks as a part of the daily routine as it provides productive means of releasing excess energy.

The use of tools, such as headphones, for reducing distraction has support in some of the literature. Specifically, Yehle and Wamblod (1998) suggested that teachers provide mellow background music as a way to filter out other auditory distracters or allow students to wear headphones. This recommendation was reiterated more recently in 2012 by Young and Braham as it may combat the ADHD learner's inability to attend to particular aspects of a changing, uncertain, or novel environment which may make it

difficult to navigate that environment effectively. The specifically suggest headphones for blocking out auditory distraction (Young & Braham, 2012).

Placing students with ADHD in close proximity to the teacher is a suggested intervention noted in a number of sources (Brock, Bethany, & Searls, 2010; Rief, 2016; U.S. Department of Education, 2008). That said little research has been conducted as to its effectiveness for learners with ADHD. One such study purported boys responded to teacher proximity (during independent activities) by a reduction in disengagement (Granger, Whalen, Henker, Cantwell, Granger, Whalen, C., … Cantwell, 1996). However, a search for additional or more recent research yielded no result.

In fact, when reviewing interventions used by the participants in this study, regardless of the level of teacher awareness a teacher exhibits, few demonstrate a base in the research literature. This inclusion of interventions not grounded in research is supported by the literature. While exact statistics do not appear to be available as to the utilization of evidence based- intervention, research consistently demonstrates that teachers prefer interventions that involve less time an complexity such as proximity over more time intensive and complex interventions such as individualized response cost programs(Blotnicky-Gallant, Martin, McConnell, & Corkum, 2014; Girio & Owens, 2009; Martinussen, Tannock, & Chaban, 2011). Among well-established interventions, only the daily report card strategy has been rated highly by teachers on a consistent basis across studies (Girio & Owens, 2009).

Implications for Practice

Implications for this research on educational practice centers around three key ideas. First, it is important to ensure that teachers, particularly novice teachers, receive opportunities to have training for supporting learners with ADHD. This training could take place during in-service educational opportunities or during professional development offered at the school. These sessions would be beneficial if they centered around an effort to provide comprehensive understanding of ADHD and the use of effective practices for serving them. To increase the level of effectiveness, it is recommended that these training sessions be conducted in a collaborative manner, over an extended time period, and provide opportunity for coaching and feedback for the teachers (Desimone, 2009; Leko & Brownell 2009; Penuel, Fishman, Yamaguchi, & Gallagher, 2007)

Such training does not have to be formal in nature. Looking specifically at the teachers in this study it evokes a model that could be replicated in other schools. This study included a sample of two veteran teachers and two novice teachers. The two veteran teachers held more understanding of ADHD then their novice counterparts. As a result, there could be informal mentoring opportunities among these teachers. In this particular example, there were several teachers on one grade level teaching with a colleague with more experience with children with ADHD and offering a wider support to her students. In their interviews these novice teachers discussed other ways times that they had observed this veteran teacher specific to the teaching of reading. One of these novice teachers specifically noted that when it came to professional development she felt " that's my most valuable resource...just really learning from my peers... having that community and learning from my peers." As such learning from colleagues is both a

welcome and utilized practice and also more targeted observations specific to students with ADHD along with follow up discussion from the teacher could help to fill the gap in teacher training. Little extra time or money would be required for such training to take place. One caveat of course would be if the novice teachers were learning from veteran teachers who demonstrated less awareness and acceptance than those in this sample.

Additional implications for practice include the need for continued targeted training for all teachers. While the two veteran teachers in this study noted that they had participated in training, neither cited particular training as methods for gaining new ideas for providing instruction to students. Also, neither teacher necessarily spoke to research as a way of determining best practices they use in their classroom. Each teacher tended to speak more to their previous teaching opportunities with students with ADHD as their means of determining strategies for their current instruction. As a result, there needs to be a way for research conducted for best practices in serving students with ADHD in ways that are applicable. This could be done through the development of professional development based upon the research findings that have identified practices that have strong results for students with ADHD.

Relationship building from a value-added perspective rather than a deficit perspective also presents a valuable way of improving social interactions between teachers and students diagnosed with ADHD. As suggested in the literature, something as simple as revising the nomenclature used when working with students with ADHD would be helpful. As was suggested by Sherman, Rasmussen, and Baydala (2006) utilizing the word traits in references to ADHD symptoms may remove bias and increase the use of multimodal strategies. Knowledge and application of such strategies may

further progress noted by Roger and Meek (2015) that speaks to improvement to both student behavior and academic motivation, as positive teacher-student relationships can provide awareness to the student that his teacher cares about him and feels compassion toward his circumstances without stigmatizing the child.

Implications for Future Research

Looking at research-based implications for this study, there continues to be holes and gaps in several areas. First, as was cited in the literature, there are no long term studies as related to students with ADHD and the classroom practices that are found to be the most beneficial. There have been studies done regarding short term interventions, but no long-term implications of these practices have been studied. As such, the strategies being utilized by the classroom teachers, be it in small number or in broader scope, should be more fully analyzed regarding their effect on student outcomes.

Qualitative research has been carried out predominantly through the use of surveys in ADHD research. That said, there are dissertations such as this particular study that have looked more closely at individual teacher and student experiences as related to ADHD. There is a need to continue to grow this body of research as it may be an avenue for speaking directly to teachers who have the greatest impact on student experiences. This is of additional importance when those students are identified with unique learning needs such as those diagnosed with ADHD.

Additionally, qualitative research findings may reach teachers in a way that quantitative results do not. There are teachers who feel their experience is the exception to the rule and what the numbers suggest is best practice simply will not work in their circumstances. As a result, the personal experiences of teachers may be a better tool for

assisting teachers getting a better understanding of supporting students with ADHD as they may be better able to relate to someone else's personal story. Additional research is needed to find ways to provide teachers better strategies for supporting learners with ADHD in the classroom, so more positive perceptions can be held, which would then be seen in their beliefs and attitudes, allowing for a more positive learning experience for the student.

Summary

Students with ADHD make up 10% of the student population across the United States. Given the fact that males are identified at a greater rate than females, there is a need to continue to look for the best ways of supporting these learners in the classroom. This study identified several areas that collaborated or corroborated what had been found in the body of research. What made this study a little bit different was that it looked specifically at the narratives provided by teachers about their experiences. Teacher experience is a valuable lens for understanding the role that the teacher plays in the learning process for students. This study hopefully serves as a foundation for future research to expand upon its findings or to expand upon the findings of teacher perception as related to instructional decision making for males with ADHD and the intermediate elementary school classroom.

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APPENDIX A: OBSERVATION GUIDE

Teacher Perception of ADHD and its Influence when Teaching Reading to Elementary Males with ADHD

Observation Guide

How would the observer best describe the layout of the classroom?

How would the observer best describe the instructional model(s) used by the teacher in the reading class (i.e. Reader's Workshop, Guided Reading, Basal Reading, etc.)?

How would the observer best describe the interaction between the teacher and the (student) with ADHD?

How would the observer best describe the student's response to these instructional practices?

These questions will not apply until observation #2:
How would the observer best describe the delivery of the instructional practices addressed in the interview?

What similarities does the observer note between what the participant shared in the interview and the practices that take place within the classroom?

What differences does the observer note between what the participant shared in the interview and the practices that take place within the classroom?

APPENDIX B: INTERVIEW GUIDE

Teacher Perception of ADHD and its Influence when Teaching Reading to Elementary Males with ADHD

Interview Guide

Introductory questions:

Tell me about your teaching background and experience.

(Possible follow up questions if not addressed in previous question)

- How long have you been teaching?
- What grades have you taught?
- What grade are you currently teaching?
- What subjects do you currently teacher?
- Tell me about your experience specific to teaching reading.
- Tell me about your experience specific to teaching males diagnosed with ADHD.

Probe questions:

When you make instructional decisions in the classroom, what factors influence these decisions?

What has been your prior experience with ADHD?

How would you personally define or describe ADHD?

What factors influence your instructional decisions specifically for students with ADHD?

What adjectives come to mind when describing your male students diagnosed with ADHD?

On a scale of 1-5 how would you rate the severity of ADHD normally exhibited by the observed student?

Tell me about a time you provided reading instruction to a male with ADHD. How has this differed from teaching females?

What are the most effective intervention strategies? What makes them effective for this population?

What are the most ineffective? What makes them ineffective?

When reflecting upon providing reading instruction to your student diagnosed with ADHD over the course of this past week tell me about an interaction that made you feel your instructional practice was successful.

When reflecting upon providing reading instruction to your student diagnosed with ADHD over the course of this past week tell me about an interaction that you would have handled differently if given the opportunity.

Closing

What else do you feel would be important for me to best understand your experience in instructing reading to male student diagnosed with ADHD?

APPENDIX C: JOURNAL GUIDE

Teacher Perception of ADHD and its Influence when Teaching Reading to Elementary Males with ADHD

Journal Guide

Week 1 Journal Prompt:	When reflecting upon providing reading instruction to your student/student(s) diagnosed with ADHD over the course of this past week, tell me about an interaction that made you feel your instructional practice(s) was/were successful.
Week 2 Journal Prompt:	When reflecting upon providing reading instruction to your student/student(s) diagnosed with ADHD over the course of this past week, tell me about an interaction that you would have handled differently if given the opportunity.
Week 3 Journal Prompt:	When reflecting upon providing reading instruction to your student/student(s) diagnosed with ADHD over the course of this past week, tell me about an interaction that made you feel your instructional practices were successful OR about an interaction you would have handled differently if given the opportunity.
Week 4 Journal Prompt:	When reflecting upon providing reading instruction to your student/student(s) diagnosed with ADHD over the course of the past month, tell me about any changes you have seen in your instructional practices and what might have been the source of these changes.