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Reading Teacher Perspectives on Classroom Behavior and Criteria Referral for ADHD Testing

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Walden University
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Abstract

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by

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MA, Walden University, 2015

BS, University of Central Florida, 2004

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

According to the Center for Disease Control and Prevention (CDC) and other researchers, the prevalence of Attention Deficit and Hyperactivity Disorder (ADHD) diagnoses among school-aged children has gained the attention of researchers. Due to the large amount of time children spend in the school context, researchers have found that teachers play a vital role as valuable resources to early identification of children needs of services. The purpose of this qualitative study was to expand knowledge about the in-depth experiences of third grade reading teachers when referring for behavioral health services. Bronfenbrenner's (1979) bioecological model the was theoretical framework for this study. In this framework, a child's development was viewed by the system of relationships that comprised of their environment. The research questions addressed were (a) How do elementary school, Title 1 third grade reading teachers in this FL elementary school experience student behaviors in the classroom and (b) how do they determine what behaviors lead to student referral for ADHD testing? To address the gap in literature, six participants who were third grade reading teachers or administrators were interviewed to discuss their experience of hyperactive behaviors and how they determine what behaviors led to student referral for ADHD testing. The data were hand coded to find emergent themes. Some findings of the study were the benefits of positive teacher-student relationship as well as the importance of flexibility in teaching styles. A recommendation from the study is the need for school systems to provide teachers with adequate training and education on ADHD and other mental health disparities so that assessments are filled based on expertise and not biases.

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Dedication

First, let me give God all the glory for the great things He has done and continues to do in my life. I dedicate this doctoral study to my family. Dad, despite having a third-grade education, you always stressed the importance of education. You often encouraged me to "go all the way" in my educational pursuits. There was no doubt in your mind I could achieve this doctoral degree. Also, mom, I want to thank you for always believing in my ability to succeed and supporting me in countless ways. To my husband, I would like to thank you for believing in me in moments when I didn't believe in myself. Thank you, husband, for not allowing me to give up. To my son, Jayden, I hope one day, when you are older, you realize that anything is possible with dedication, work, commitment, and a refusal to quit; I love you beyond words.

Acknowledgments

I would like to acknowledge my chair Dr. Kelly, I remember telling you that I don't see myself being able to complete this process. I remember how you made me feel. I felt encouraged, motivated, and I received a second-wind and believed that the completion of this degree was in reach. I am forever indebted and grateful to you. You showed grace at times that I needed grace and you pushed me in times when you knew I could do more. Thank you for not letting me slip between the cracks during this dissertation process. Thanks to all my family again. Lastly, thank you to all the research particpants for their time, you helped to make this study possible.

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Chapter 1: Introduction

Introduction

The prevalence of the ADHD diagnosis among school-aged children has gained the attention of researchers (CDC, 2017; Fulton et al., 2015; Graf et al., 2014; Stolzer, 2009). Due to the large amount of time children spend in the school context, teachers play an vital role as valuable resources to early identification of children needs of services (Coles et al., 2012; Hootman et al., 2003; Topkin et al., 2015). In this qualitative study, I explored in depth the experiences and thoughts of reading teachers in the classroom when referring for behavioral health services. There are important research implications for understanding the path to ADHD diagnoses and the role of first identifiers that teachers play. This study will increase the awareness and need for school systems to provide teachers with adequate training and education on ADHD and other mental health disparities, so that proper assessments are performed based on expertise and not biases.

In Chapter 1, I introduce the problem statement of the study, and the purpose statement. I focused on the experiences of reading teachers and their experiences that led to behavioral referrals. In the background portion of this chapter, I highlight articles that I used as the underpinning of the study. I used Bronfenbrenner's (1979) bioecological model as the theoretical framework for this study. Bronfenbrenner theorized a child's development is based upon the system of relationships that comprised their environment (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Lawrence et al., 2017). According to Lee (2014) and Sherman et al. (2008) there is a need for additional studies that depict

teachers' experiences of ADHD associated behaviors in the classroom to contribute to a standard of mental health services in the schools.

Background

Stolzer (2009) discussed the rise of ADHD diagnoses, highlighting how mass referrals for ADHD diagnosis amongst children are directly from the public school system. Stolzer discussed how children were inappropriately depicted as pathological if they did not adjust to a sedentary educational environment. Research shows that socioeconomic status and race are predictors of higher ADHD diagnosis rates (Lawson et al., 2017; Rowland, 2018).

Graham et al. (2011) explored teachers' views on student mental health, mental health education, involving teachers' ability to improve and support students' mental well-being in schools. The findings indicated a need to emphasize the confidence and attitude of teachers as it relates to the support provided for children's mental well-being. Hootman et al. (2003) provided support for a model that encourage health care providers and educators to learn more about the health conditions of students in school and communities and the impact of these conditions. The researchers emphasized the need for increase partnerships between healthcare providers and educators. More research is needed to explore teacher experiences in the classroom, as well as teacher solutions to working with children with mental health symptoms. Many teachers expressed uncertainty about the referral process and the need for information on how to better manage ADHD associated behaviors (Reinke et al., 2011).

Lawson et al. (2017) examined the teacher and parent rating, and the effects socio economic status SES has on what is reported. The researchers discussed social and cultural context that possibly effects the differences between informant reports of behavior. Rowland et al. (2018) examined not only the relationship between socioeconomic status (SES) but also predictors of ADHD diagnosis such as race and parental history of ADHD.

Problem Statement

The prevalence of the ADHD diagnoses among school-aged children has gained the recent attention of researchers and organizations (e.g., CDC, 2017; Fulton et al., 2015; Graf et al., 2014; Stolzer, 2009). ADHD has become one of the leading diagnoses of mental disorders among children in the United States (CDC, 2017; Fulton et al., 2015; Graf et al., 2014; Lawrence et al., 2017; Stolzer, 2009). The rate of ADHD diagnoses among children continues to increase, rising from 7.8%, in 2003, to 11% according to 2011–2012 CDC (2017) findings. The CDC (2017) reported that there is a 2:1 ratio of males being more likely than females to receive an ADHD diagnosis. Researchers indicate that an ADHD diagnosis is more common among those with a lower SES (Froehlich et al., 2007; Miller et al., 2018; Lawson et al., 2017; Rowland et al., 2018). Previous researchers have also provided evidence linking a child's SES and race to higher symptom ratings as reported by teachers (Lawson et al., 2017; De Los Reyes et al., 2015; Miller et al., 2018; Mitsis et al., 2000). It is a common understanding that ADHD differs by sex, ethnicity, and race (Martel, 2013; Merten et al., 2017).

According to Baughman (2006) and Breggin (1999), most ADHD diagnosis referrals in the pediatric population come from the public school system. Most referrals to behavioral health services for an ADHD assessment are by the student's teacher (Bradshaw & Kamal, 2013; Coles et al., 2012; Hootman et al., 2003; Topkin et al., 2015). Because of the amount of time children spend in the school setting, school personnel (such as teachers) are valuable resources regarding early identification of children in need of referrals and services (Coles et al., 2012; Hootman et al., 2003; Topkin et al., 2015).

The Diagnostic and Statistical Manual of Mental Disorders (DSM-V) criteria for ADHD emphasizes cross-situational impairment that is required for diagnosis (American Psychiatric Association [APA], 2013); consequently, it often requires educators to complete necessary ratings scales with the aim of identifying children in need of services (Bradshaw & Kamal, 2013; Coles et al., 2012). Teacher training and education on ADHD is necessary to accurately assess the rating scales needed by mental health practitioners to give a proper ADHD diagnosis (Bradshaw & Kamal, 2013).

In most instances, a child's behavior in the classroom is the primary indicator that there is a developing issue (Awadalla et al., 2016; Bradshaw & Kamal, 2013; Coles et al., 2012; 2012; Guerra et al., 2017). While schools are the gateway to providing behavioral health services for children, there remains limited understanding of the referral process in the school environment for treatment (Bradshaw & Kamal, 2013; Coles, et al., 2012; Guerra et al., 2017; Lee, 2014). The problem is that teachers are often not properly trained and educated on the topic of ADHD, yet mass referrals are presented by teachers (Bradshaw & Kamal, 2013; Guerra et al., 2017; Reinke et al., 2011; Stolzer, 2009;

Topkin et al., 2015). In this study, I focused on understanding the experiences and perspectives of third grade, remedial teachers when making an ADHD referral.

Understanding teachers' experiences and views of ADHD symptoms in school, as well as their referral decision-making processes, remains an important and mostly unexplored research topic (Lee, 2014; Sherman et al., 2008). The results of further research can illustrate the need for proper training on mental health for educators and a need for a standardized referral process (Lee, 2014). In this study, I examined Title 1, third grade reading teachers' experiences when referring a student with overly hyperactive behaviors for counseling services.

Purpose of the Study

The purpose of this qualitative case study was to explore how Title 1 third grade reading teachers or administrators in elementary schools in one Eastern, FL district experience student behaviors in the classroom and how they determine what behaviors lead to student referral for ADHD testing. While my initial intention was to focus on one particular school, due to an initial poor response from potential participants, I expanded the study to more schools in the district with Institution Review Board (IRB) approval. The population for this study was third grade remedial reading teachers or administrators in the school. There were four participants who were all third grade reading teachers, one who was a principal, and the other an assistant principal in various schools but one district. Many of the schools in the study are in an area that is known not only as a low socioeconomic area but is also an area known for crime such as drugs related activities, shootings, and gang activities. My focus was on Title 1 third grade remedial reading

teachers who had at least 1 year of experience in submitting referrals for behavioral health services due to hyperactivity symptoms of students.

I used a qualitative methodology and a case study design for this study. I collected data through semi-structured interviews with participants, including standardized open-ended interview questions with the intent of taking each interviewee in sequential order. In a case study, researchers commonly use purposeful criterion sampling in which research participants meet the requirements mentioned (Meyer, 2001). I sampled participants based on criteria of (a) at least 1 year of teaching experience, (b) and a Title I third grade remedial reading teacher at this undisclosed Eastern FL elementary school. In addition, I used purposeful criterion sampling to choose qualified teachers from among the six at this school (Moser, 2018).

I used triangulation in this study. Researchers use triangulation to show readers that the findings are credible and trustworthy (Shenton, 2004), and is required in case study research. Triangulation can include the use of various methods, such as observation and interviews, that collectively make up the data collection process (Shenton, 2004). I requested school-wide compiled data that I used for analysis of trends without disclosing student personal information. The school district denied the request for the data due to potential breach of confidentiality. I wanted to use aggregated school-wide data of out-of-school and in-school suspension reports and expulsion data reports to support my interview data. Instead, I triangulated my data with publicly available statistics and information.

Research Question

How do Title 1 third grade reading teachers or administrators in elementary schools in one Eastern, FL district experience student behaviors in the classroom and how they determine what behaviors lead to student referral for ADHD testing?

Theoretical Framework

For this study, I used Bronfenbrenner's (1979) bioecological model as the theoretical framework. Bronfenbrenner (1979) theorized the importance of considering the complete ecological system in which development takes place to understand a child's development (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Lawrence et al., 2017; Tudge et al., 2009). In the bioecological model, a child's development is viewed through the system of relationships that comprise their environment (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Lawrence et al., 2017).

Bronfenbrenner (1979) described the ecological environment as a set of systems that are each nested inside the next system. Bronfenbrenner's ecological model consists of five layers, each influencing a child's development and mental health (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et al., 2009). The five layers defined in the bioecological model include: microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et al., 2009). The microsystem is the core of the model and is the layer that is closest to the child; it is the layer that includes the child development which can be the family or the school. The layer consists of the relationship and interactions a child displays in their immediate

settings (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Paquette & Ryan, 2001; Tudge et al., 2009).

The ability of a child to thrive in their immediate setting such as home or school is based upon the relationships between the school and other variables, such as the child's teacher or peers. The interrelationships at this level are the mesosystem (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Paquette & Ryan, 2001; Tudge et al., 2009). The exosystem is the third layer and it is the social environment in which the child is impacted by events and decisions that transpire at this level (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Paquette & Ryan, 2001; Tudge et al., 2009). The structures within the exosystem include a parent's work schedule or a teacher making an ADHD referral; the child is not an active participant but is still impacted (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Paquette & Ryan, 2001; Tudge et al., 2009). The macrosystem can be thought of as the outermost layer in the child's environment. This layer consists of customs, cultural values, and socioeconomic status (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et al., 2009). The presence of values present within this layer influences the interactions of the other layers, such as, a child growing with religious inclination (Ben-David & Nel, 2013; Bronfenbrenner, 1994).

The chronosystem encompasses the dimension of time as it relates to a child's environments (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et al., 2009). Elements within this system can be either external, such as the timing of a parent's death, or a parent's loss of a job, also, internal changes, such as the physiological changes that occur with the aging of a child (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et

al., 2009). As children get older, they may react differently to changes within the chronosystem such as when a parent loses his or her job and lack the resources for the child to participate in extracurricular activities, such as learning an instrument which can contribute to the development of that child (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et al., 2009). The chronosystem encompasses the time factor in which time causes a temporary change in ecological systems or within a child's development such as a child getting older (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et al., 2009). Aging will alter a child's reaction to an environment (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et al., 2009). A sudden economic crisis or any other event changing a family's routine can have a life-long impact on a child's mental health and development (Ben-David & Nel, 2013; Bronfenbrenner, 1994). Bronfenbreener's bioecological model is used to provide a theoretical examination of a child's interaction and development within the all the layers (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et al., 2009).

Nature of the Study

In this study, I used a qualitative case study approach. A qualitative approach is the appropriate approach to use for social scientist to study human behavior (Heglar & Cuevas, 2017). A qualitative study is needed to explore and obtain the depth of experiences (Palinkas et al., 2015) of teachers when referring for behavioral health services.

In this research, I designed a case study based upon a *how* and *why* research question, which are suitable for a case study design (Palinkas et al., 2015). Not only was

the research question suitable for a case study design, but the events I researched were contemporary events, which met the conditions for a case study design (Palinkas et al., 2015).

I used semi-structured, open-ended interviews, which consisted of a set of questions designed with the intent of taking each interviewee to a sequential order. Qualitative researchers often use purposeful sampling. While there are variations of purposeful sampling strategies, criterion sampling is most used (Palinkas et al., 2015). The selection criteria for the research included being a Title 1 third grade remedial reading teacher who had at least 1 year of experience in submitting referrals for behavioral health services due to hyperactivity symptoms of students.

I considered numerous factors when determining how many interviews to conduct in this study. Saturation in qualitative research is when data gained through interviews begin to repeat the same themes. The repetition of the same themes, patterns, or ideas indicates data saturation has been achieved (Mason, 2010). Often the determination of qualitative samples sizes is when ideas, thoughts, or patterns have been exhausted and data saturation has been reached (Baker et al., 2012; Mason, 2010). Some researchers say the size of the sample should be enough to where no new perspectives can be obtained from the data and the same patterns and themes emerge (Mason, 2012). Seidman (2012) discussed the importance of qualitative researchers producing credible research due to the battle that exist within the quantitative community regarding the credibility of qualitative work which is a shared perspective by voice expert Howard S. Becker (Baker et al.,

2012) who emphasized the need to provide work that will convince the most critical critics.

Sample size in qualitative research is variable (Baker et al., 2012; Guest et al.,2006; Mason, 2010). Sometimes a researcher's sample size is based upon what they have access to and the resources available (Baker et al., 2012; Mason, 2010), as well as saturation. However, in a study on teachers' perspectives about children's mental health service needs, specifically in a Title I elementary school, Yates (2017) used a sample size of 12 Title 1 teachers.

My ideal sample size for this study was six Title I third grade reading teachers who teach at this elementary school in Eastern, FL. However, I expanded the sample size to other schools in the district as well as school administrators. Inclusion criteria for sample selection consisted of (a) minimum of 1-year teaching experience, (b) Title I remedial reading teacher, and (c) teacher at a disclosed eastern Florida elementary school.

The researcher in qualitative studies is an essential tool used to collect data (Baxter & Jack, 2008; Moser & Korstjens, 2017; Simon, n.d.). Because the researcher is a human instrument, it is essential for the researcher and readers of the study to know about researcher biases, presumptions, experiences, and expectations that affect their ability to properly conduct the research (Baxter & Jack, 2008; Moser & Korstjens, 2017; Simon, n.d.).

Case studies are ideal for exploring behaviors or systems in which researchers aim to obtain in-depth information (Baxter & Jack, 2008; Meyer, 2001). In qualitative data analysis, the researcher takes the written data collected in the study such as interviews

and field notes and translate that data into findings. There are various ways of conducting data analysis. In this study I used recordings of phone interviews that I transcribed and coded for emergent themes to address my research question. In addition, I reviewed and coded (as necessary) school-wide, nonidentifiable data on behaviors in the classroom.

Definition of Terms

There are several key concepts that need to be defined relative to this research:

Behavioral referral: A referral to a behavioral agency that offers counseling interventions to aid in the improvement and development of problematic behavior found in the classroom. Bradshaw and Kamal (2013) discussed the importance of teachers seeking assistance from agencies for children with ADHD symptoms.

Teacher's perspective: For this study, the definition of teacher's perspective is defined as the views and thoughts the teacher holds regarding a child displaying ADHD symptoms in the classroom. According to Lawrence (2017) there are various factors such as educational history, years of teaching experiences, and life experiences with ADHD that shapes the perspective of a study with ADHD symptoms.

Third grade reading teachers: Third grade reading teachers designated from a specific selected schools will be interviewed for the research study.

Assumptions

In this study, I made several assumptions. First, I assumed that ADHD is a valid and diagnosable disorder. I also assumed that those involved in the study answered the interview questions honestly and thoughtfully. I also assumed that there is a need for

training and educating teachers on ADHD symptoms found in the classroom and develop skills to better manage classroom behavior.

Limitations of Study

One of the limitations of my study was a small sample size. With a small sample size, it may be difficult to reach data saturation. The results may have been different if I had included the elementary school teachers K–5, assuming teachers met qualifications, increasing the sample size. All the research participants had 3 or more years of experience. Another limitation was that the interviews were based on the teacher's perspective; as a result, the teachers may not have been truthful about their views of the children and the services that they may or may not have needed. Furthermore, teachers may have lacked the necessary knowledge about mental health services to properly provide information about signs of mental health needs. Another limitation was the requirement of a Title 1 school, allowing the inclusion of non-Title 1 schools could have provided a broader data and a more in-depth response to the research question.

Significance

Proper training and education are crucial for teachers. There are important research implications for understanding the path to ADHD diagnoses and the role that teachers play as first identifiers of mental health and behavioral disorders. Further information and research is needed on how teachers make decisions about referrals. After referrals are provided to healthcare professionals, those same healthcare professionals need teachers to fill out assessments for further diagnosis of ADHD. Misdiagnosis of a

mental health disorder that is treated by psychotropic medication has life-long health ramifications (Sciutto & Eisenberg, 2007).

There are social change implications for this research. This study may increase the awareness and need for school systems to provide teachers with adequate training and education on ADHD and other mental health disparities, so that proper assessments will be filled based on expertise and not biases. Teachers may use this type of training to serve and protect children in the school system from misdiagnosis. Having additional studies that depict teachers' experiences of ADHD-associated behaviors in the classroom can contribute to a standard of mental health services in the schools (Lee, 2014; Sherman et al., 2008).

Summary

Chapter 1 included and overview of this study: the introduction, background, problem statement, purpose of the study, conceptual framework, and the nature and significance of the study. My goal for this study was to increase the awareness of the importance of mental health education for children who display ADHD symptoms so that proper assessments will be filled based on knowledge. My goals were to inform parents, school systems, and teachers of the classroom experiences of teachers that lead up to referrals for behavioral health services and to understand whether teachers receive enough training and education on ADHD in the classroom setting. Chapter 2 will include an exhaustive review of literature related to teachers when referring students for behavioral health services as well as their knowledge and attitude toward ADHD. I will

also discuss the method, design, participants, sample, and analysis procedures in more detail in Chapter 3.

Chapter 2: Literature Review

Introduction

The rate of children diagnosed with ADHD has caught the attention of some researchers (e.g., CDC, 2017; Fulton et al., 2015; Graf et al., 2014; Stolzer, 2009), and the rate of ADHD diagnosis among children continues to increase according to 2011-2012 CDC (2017) findings. There are some studies that suggest ADHD is over diagnosed among children (Merten et al., 2017; Sciutto & Eisenberg, 2007) while other studies imply ADHD is underdiagnosed and undertreated due to misidentified cases (Froehlich, 2007; Madsen et al., 2017). However, current evidence and data show that ADHD is one of the most diagnosed neurodevelopmental disorders among children in the United States (CDC, 2017; Fulton et al., 2015; Graf et al., 2014; Lawrence et al., 2017; Stolzer, 2009).

The public-school system is the main source for mass ADHD referrals in the pediatric population (Bernstein & Baroni, 2012; Bradshaw & Kamal, 2013; Topkin et al., 2015). Because schools serve as a gateway to children receiving services they need, it is critical that teachers and personnel receive ADHD training and education to provide accurate assessments (Bradshaw & Kamal, 2013). The problem is that teachers are often not properly trained and educated on the topic of ADHD, yet mass referrals are presented by teachers (Bradshaw & Kamal, 2013; Guerra et al., 2017; Reinke et al., 2011; Stolzer, 2009; Topkin et al., 2015). The need to explore teachers' perspectives and views of how they experience ADHD symptoms in the classroom and what behaviors lead to referral for mental health services is an unexplored research topic (Lee, 2014; Sherman et al., 2008). Further research on how teachers experience ADHD behaviors in the classroom

can demonstrate importance of providing education and training to educators as well as standardizing referral procedures (Lee, 2014). Therefore, the purpose of this study was to explore and obtain the depth of experiences (Palinkas et al., 2015) of teachers when referring for behavioral health services. This study examines Title 1 Florida, Eastern Schools, third grade reading teachers' and school administrators'' experiences in the classroom and how they determine what behaviors lead to ADHD referral.

In this review of the literature, I focus on general information regarding the definition and symptomology of ADHD, the prevalence of the disorder, the impact of ADHD on the family, classroom behavior, teacher's knowledge about ADHD, and the role of schools in ADHD. Splett et al. (2018) discussed the significance of mental health of children and the gap that exist between children in need of behavioral health resources and service receipt. In the second section of this chapter, I examined an overview of studies related to ADHD and teacher's education and knowledge on ADHD. Researchers used the findings in this literature study to address the following: teachers' perspectives and attitudes regarding the origin of ADHD, teachers' influence on classroom management and student performance, and insufficient education and its impact on possible misidentification of classroom behaviors and as a result, inaccurate ADHD assessments provided by teachers.

Literature Review Strategy

I conducted the literature search for this study through online databases searching for empirical, evidenced-based articles related to ADHD. I accessed search engines such as Google, ERIC and EBSCO through the Walden Library research database. Other

databases used also included PsycARTICLES, PsychINFO, SocINDEX with Full Text, Education Research Complete, Academic Search Complete, and Education: a SAGE Full Text. Several keywords and phrases I used included *attention deficit hyperactivity disorder*, *teachers* and *ADHD*, *children and ADHD*, and *ADHD in the classroom, teachers training* and *ADHD, classroom management,* and *teachers' attitudes*. The researcher attempted to present more recent published articles in the literature review study (articles/research published within the last 5-10 years) regarding teachers' training and experience of ADHD in the classroom.

Theoretical Foundation

For this study, I used Bronfenbrenner's (1979) bioecological model as the theoretical framework. Bronfenbrenner (1979) theorized the importance of considering the complete ecological system in which development takes place to understand a child's development (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et al., 2009). According to Bronfenbrenner's theory, children's development is influenced by the relationships they have with the teachers and other students in their classroom (Ben-David & Nel, 2013; Bronfenbrenner, 1994). Bronfenbrenner bioecological model consists of five layers that each impacts a child's development and mental health (Bronfenbrenner, 1979). In the first layer, the microsystem is composed of the closest systems to the child, such as family, peers, teachers, and caregivers. Relationships in the microsystem are bidirectional which makes the microsystem the most influential level of the ecological system (Bronfenbrenner, 1994). As a result, a child's interaction with his teacher and peers are factors that impact a child's development. The second layer is the

mesosystem which involves the relationship between the different elements that make up a child's microsystem (Bronfenbrenner, 1994). The interactions between the different parts that make up the microsystem have an indirect impact on a child's development (Bronfenbrenner, 1994). For example, the relationship between a parent and a teacher, and the role a parent may play in being a positive influence in the child's academic journey is an example of a positive indirect influence due to the interaction within the microsystem. If the elements within the microsystem were working against each other, it could cause an indirect, negative influence on the child's development (Bronfenbrenner, 1994). The third layer is the exosystem, where any decision made can affect the child such as a teacher making an ADHD referral. While the child is not an active participant, decisions made concerning the child can have a causal effect. The fourth layer in the ecological system is the macrosystem. The macrosystem includes a child's cultural environment and the other systems that affect a child, such as the economy, cultural values, and the political system. (Bronfenbrenner, 1994). The macrosystem can be considered a societal blueprint that becomes embedded in various institutions within society such as family, school, and forms of government. An example is the Every Student Succeeds Act (ESSA) that replaced the No Child Left Behind, which was a bipartisan congressional achievement that kept standardized testing requirements but shifted the decision-making to state, rather than a federal level.

The final level is the chronosystem, which is the role of time in a child's development (Bronfenbrenner, 1994). For example, a child growing up in an era of technology can impact a child's development, learning style, and social skill. When a

change in one of the ecological systems occurs, it has a possibility of impacting the other systems (Bronfenbrenner, 1979).

ADHD

Historical Overview of ADHD

The earliest medical reference of ADHD like symptoms such as hyperactivity, inattentiveness, and distractibility were described in publishing written by German physician Dr. Melchior Weikard and Scottish physician and author Sir Alexander Crichton during the latter part of the 18th century (Badìa & Ragia. 2015). In one of the chapters of his 1775 medical book, German physician Melchior Weikard described various attention disorders now known as ADHD. Melichior Wekiard (2013) described a person with an inability to focus as one who is not only able to focus for a short period of time but also displays an inability to spend the necessary time needed to properly understand a concept. Weikard further described a person with an inattentive disability as one who often misinterprets information. Weikard descriptions of an inattentive type described a person as inconsistent and careless (Weikard, 2013).

Around the same time of Weikard's publishing, Scottish physician Alexander Chrichton in 1798 wrote a more scientific, detailed description of what can be considered an inattentive disorder. Chrichton described an inattentive disorder as the inability to concentrate on one subject for a long period of time that is likely caused by a defect of the nervous system. Chrichton also suggested that the inattentive disorder can be genetic, inherited at conception, or the condition of an unknown cause, termed "accidental disease" (as cited in Lange et al., 2010). While the earliest records of Dr. Melchior

Weikard and Dr. Alexander Chrichton described what can be considered today as ADHD symptoms, the first clinical description of children with ADHD is credited to Dr. George Still, termed the Father of British Pediatrics.

In 1902, George Still described ADHD as an "abnormal defect of moral control in children." (Still 1902, p. 1009). His studies depicted some children with trouble managing their behavior. (Barkley, 1998; Rafalovich, 2001). There have been many other prominent physicians that have influenced the evolution of is known as ADHD today. The etiology of ADHD has undergone various changes in its diagnostical name such as: minimal brain dysfunction, hyperactive syndrome, hyperactive disorder of childhood, and hyperkinetic impulse isorder (Lange et al., 2010).

In 1968, the APA introduced the concept of ADHD in its second edition of the Diagnostic and Statistical Manual of Mental Disorders as "hyperkinetic reaction of childhood" and was described as "overactivity, restlessness, distractibility, and short attention span, especially in young children; the behavior usually diminishes by adolescence" (APA 1968 p. 50, cited by Barkley 2006a, p. 9). In the 1970s, an influential psychologist, Dr. Virginia Douglas, who became the president of the Canadian Psychological Association conducted research that highlighted the need to emphasize attentive issues and impulse control as criteria rather than hyperactivity alone. Future researchers developed a transformed conceptualization of Hyperkinetic Reaction of Childhood because of Dr. Douglas' studies. (Lange, 2010; Douglas, 1972). In 1980, the APA changed the diagnosis from hyperkinetic reaction of childhood to attention deficit disorder (ADD) with or without hyperactivity; (Barkley, 2006). In the DSM III

hyperactivity is no longer a main indicator and the diagnosis is classified into two categories: with or without hyperactivity (Conners, 2000). The DSM III revision of the DSM in 1987 omitted the two classification of the subtypes and renamed the ADD disorder as what we now call attention deficit hyperactivity disorder. Researchers conducted a large field study before the fourth edition of the DSM and in that study three subtypes were derived: inattentive type, hyperactive-impulsive hype, and combined type (Lahey et al., 1994).

Based on the findings of this field study, the DSM-IV has undergone many changes. Attention deficit and hyperactivity are reintroduced in the study as two distinct features, and as a result a reintroduction of a sole diagnosis of an inattentive disorder was made possible again. The field study conducted to support the empirical validation of ADHD in the DSM 4 has been deemed the most empirically supported and researched in the history of the diagnosis. (Barkely, 2006). The newest edition of the DSM is the fifth edition, the DSM-V. The changes made in the fifth edition affected the adult diagnosis for ADHD in which fewer symptoms are now needed to meet the criteria. In the DSM-5 the requirement of ADHD age of onset went from seven to 12, as for childhood ADHD the criteria have remained unchanged (Rigler, 2016).

Definition and ADHD Diagnosis

The Diagnostic and Statistical Manual of Mental Disorders Fifth Edition defines ADHD as a "persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development…" (APA, 2013, p. 59). ADHD behaviors are often demonstrated by an inability to concentrate, remain seated for a period of time,

fidgeting, hyperactivity, impulsivity, excessive talking, and difficulty with organization. ADHD is considered by mental health practitioners as a mental health disorder that can cause impairment in one's functioning. Considered as a neurodevelopmental disorder, ADHD is categorized by three subtypes: inattentive, hyperactive-impulsive and combined (APA, 2013). Inattentive is also known as ADD which means difficulty to remain focus or concentrate. ADD is exemplified by an individual that has difficulty focusing on an assignment and completing a task. Hyperactive-impulsive (without inattentive symptoms) is exemplified by the inability to sit still often resulting in impulsive behaviors. Combined is inclusive of hyperactive and inattentive symptoms (APA, 2013). Children that display ADD symptoms often display difficulty following instructions, losing important school items, having poor organization, and avoidance of assignments that involves concentration. Children with the combined subtype exhibit both hyperactivity and inattentive symptoms.

The effects of having an ADHD disorder can negatively impact a child's well-being socially, academically, and psychologically (Madsen et al., 2018).

Currently, there are various forms of practitioners that are a part of the process of ADHD diagnosis such as primary care and family practice physicians, school psychologists, mental health practitioners, pediatricians, and nurse practitioners (Brahmbhatt, 2016). Primary care providers inclusive of health-care practitioners are constantly screening and providing services for ADHD treatment (Brahmbatt, 2016). There are researchers that discussed concerns regarding PCP's lack of education to

properly diagnose and treat ADHD due to limited training on the topic (Brahmbatt et al., 2016).

Prevalence of ADHD

ADHD is a prevalent diagnosis in the United States. ADHD is one of the most common diagnoses among children (CDC, 2017). Approximately 6.4 million, or 11% of children in America have received an ADHD diagnosis by a healthcare professional (Guerra et al., 2017; National Institute of Mental Health, 2014); however, the increase in the prevalence rate may be a direct result of the changes that were made in the current DSM-5. The prevalence rate prior to the changes made in the DSM-5 was originally 7.4% but now with the increase of the age of onset symptoms increasing from 7 to age 12 in the DSM-5 the prevalence rate increased to 10.8% (Vande et al., 2014). Also, the changes made in the new DSM-5 lowered the number of diagnostic criteria from 6 to 5 symptoms needed among adults being diagnosed with ADHD which also increased the prevalence rate among adults (Leahy, 2018).

With 11% of children diagnosed with ADHD, findings from the National Survey of Children's Health conducted in 2003 and 2007 deemed ADHD as a public health concern (Visser et al., 2013). During 2003 and 2011, there was a 42% increase of ADHD diagnosis of children from the ages of 4 years old to 17 years old. The yearly medical expense of children with ADHD are more than double with children without an ADHD diagnosis.

The approximate overall medical cost for pediatric and adults ADHD, in the United States, is estimated at minimum of $143 billion a year to as much as $226 billion

a year (Doshi et al., 2012). It is a common understanding that ADHD differs by sex, ethnicity, and race (Martel, 2013; Merten et al., 2017). The CDC (2017) reported that there is a 2:1 ratio of males being more likely than females to receive an ADHD diagnosis. Males are probably more likely to receive an ADHD diagnosis due to the more noticeable behaviors of hyperactivity and impulsivity (Lawrence et al., 2017).

Four national studies conducted reported prevalence rate among white children was higher than Hispanic children and equal to or higher than the rate for black children (Siegel et al., 2016). One of the four studies was the Early Childhood Longitudinal study that researched children from K-8. In the study parents reported if child received an ADHD diagnosis from a medical provider. The study results indicated that Hispanic ethnic group were 44% less likely than the African American group which were 64% less likely to have an ADHD diagnosis by the time they reached the 8th grade (Morgan et al., 2013). Another study conducted by the National Survey of Children's Health used by the CDC to obtain a national report of the prevalence rates of ADHD gained data from parents on whether child received an ADHD diagnosis from a medical service provider. The study reported that Whites at 9.8 and Blacks at 9.5 were both higher than Hispanic children at 5.8% (Danielson et al., 2018). Study three the National Health Interview Survey gathered data from 2004-2006, with a sample of children ranging from ages 6-17 years of ages in which parents reported ADHD diagnosis among Hispanics at 5.3% and African American children at 8.6% were lower than among non-Hispanic white children at 9.8% (Visser et al., 2014). The fourth national study conducted by Froechlich and colleagues gathered data from 2001-2004 from the National Health and Nutrition

Examination Survey reported rates of ADHD diagnosis among children ages ranged from 8-15 years old. A caregiver module was given to determine the presence of an ADHD based on DSM-4 criteria, also, a previous ADHD diagnoses by a medical provider and prescription of ADHD medication were also factors used to gathered data in survey. The findings of the study reported that 8.7% of the children met the requirements for an ADHD diagnosis; however, children from a low socioeconomic status were more probable to meet criteria for ADHD than children of a higher socioeconomic status. Among those that met ADHD criteria 47.9% had a previous ADHD diagnosis and 32% were receiving ongoing treatment with medication within the past year. Boys were more common to have a diagnosis than girls, and children of a higher socioeconomic status were more likely than lower socioeconomic class of children to receive ongoing ADHD medication treatment (Froehlich et al., 2007).

Majority of research indicates that ADHD diagnosis is more common among the those with a lower socioeconomic status (Froehlich et al., 2007; Lawson et al., 2017; Rowland et al., 2018). Researchers Lawson et al., (2017) examined the teacher and parent rating and the effects SES has on what is reported. Study discussed social and cultural context that possibly effects the differences between informant reports of behavior.

Researchers Rowland et al., (2018) study included the screening of all the students in grades 1-5 from a county in North Carolina. The study used teacher rating scale and parental interviews. The study examined not only the SES impact on ADHD diagnosis but also parental history of ADHD and how it effects and ADHD outcome.

Results in study not only indicated ADHD among low socioeconomic status but also the presence of parental history of ADHD had over 10x the odds of ADHD diagnosis (2018).

The prevalence of ADHD among American, school age children range from 3 to 5% (APA, 2013). In addition, epidemiological researchers have concluded that 3 to 7% of children in the United States will be diagnosed with ADHD (Guera & Brown, 2012). The common diagnosis among school aged children increases the chances of almost every classroom having at least one child with ADHD (APA 2013). When making a diagnosis the practitioner should include reports from parents, teachers, and/or mental health clinician (CDC, 2011). Proper identification, and evaluation is needed to provide proper treatment to children who are suffering from the symptoms of the disorder (ADHD: clinical practice guideline, 2011).

There are concerns among some researchers regarding the effects of insufficient training among primary care providers on the issue of diagnosing and treating ADHD and its impact on prevalence rate of ADHD among children; furthermore, there is a scientific debate on the question of whether ADHD is truly over or underdiagnosed (Brahmbhatt el al., 2016; Hinshaw & Scheffler, 2014). Researchers Ginsberg et al., (2014) and Young and Goodman (2016) argue that among adult ADHD diagnosis there is an undiagnosed and untreated issue. The researchers stated that the underdiagnosis among adults is present because of a lack of awareness, lack of access to ADHD services, and the use of diagnosis criteria before changes made to the DSM-5. Another contributed factor that can suggest an underdiagnosis of ADHD among adults is due to the ability of adults being able to mask and cope with ADHD symptoms (Young, 2005).

ADHD Treatment

ADHD treatment does more than address symptoms, but the universal objective is to aid in the improvement of function in effected settings and remove behavioral barriers which leads to improved symptoms (Leahy, 2018). It was only until the 1990s that ADHD was understood to have the ability to begin in childhood and extend itself into adulthood (Barkley, 2006). Adults with prior ADHD diagnosis in their childhood is stated to less likely to continue treatment needed or tend to minimize the severity of ADHD symptoms, and as a result, causing inaccurate diagnosis and improper treatment (Hamed et al., 2015). An ADHD diagnosis that persists into adulthood can increase risk of substance abuse, depression, anxiety, health problems, and educational problems (Owens et al., 2017). There is a wide array of evidence-based studies that suggest that there is a small percentage of adults that receive proper ADHD treatment (McGough, 2016). One study reported that only 10% of adults within the year received services to treat ADHD. In other words, it is suggested that almost 9 million adults with ADHD symptoms within a year did not receive services to treat their disorder (Culpepper & Mattingly, 2010).

There are a variety of ADHD treatments for children that can minimize the impact of the disorder (Schultz et al., 2017). For preschoolers, the standard care consists of behavioral therapies because of possible side effects (Agency for Health Care Research and Quality, 2011), while pharmacological interventions are a standard treatment for school-age children and adults (Leahy, 2018). In the treatment of children, the ideal standard of care should include assessments and observations of parents, teachers, and client regarding symptoms, functioning, academic performance, and options for treatment

(Leahy, 2018). The standard care for ADHD treatment is a multi-tiered approach that consists of behavioral interventions, medication interventions, and psycho education (Leahy, 2018).

Cognitive Behavioral Interventions (CBT) for ADHD

Researchers over the past 20 years have studied the efficacy of various nonmedication interventions to treat ADHD (Knouse et al., 2017). CBT has been found as one of the most effective, empirically based treatment for a wide range of mental health disorders for adults and children and is supported by the American Psychological Association's Task Force on Promotion and Dissemination of Psychological Procedures (Chambless et al. 1998). Psychosocial interventions such as CBT are effective interventions for various mental health disorders such as ADHD and aid in providing treatment for individuals who do not respond well or prefer not to utilize pharmacological treatments (Wang, 2016).

Behavioral interventions for ages 0-4 are considered the best form of treatment until they reach school-age and adulthood (Leahy, 2018). Levine and Anshel (2011) presented a case study of an 8-yr old child diagnosed with ADHD. The researchers in the case study utilized a collaboration approach to treat Alex that involved the school psychologist and the parents, along with CBT strategies. Alex referred by his classroom teacher due to disruption in the classroom and non-participation in classroom assignments. Teacher reported numerous occasions of having to remove student outside of the classroom to do one-on-one work with the teacher's assistant. Upon referral the student was then evaluated by the school psychologist. The evaluation showed Alex's

impairment in the academic, social, and home-based functioning domains. The evaluation also included observations from teacher, parent, and student. The psychologist utilized standardized testing, classroom observations, and school records. The school psychologist treatment plan involved both the teacher and parent learning behavioral interventions to treat ADHD, and Alex going to CBT based counseling sessions. Another intervention the psychologist implemented was a reward token system to aid in the motivation of Alex. Both teacher and parent were instructed on how to use the reward system for both short term and long-term initiative. In review of the progress and efficacy of the treatment plan, both parent and teacher were asked to give their assessment after two months of the treatment. Both parent and teacher reported that Alex had improved behavior and while he still met diagnostic criteria, the symptoms were mild range. The teacher reported that the change in her classroom strategies has helped in Alex being able to complete assignments and become less distracted. Levine and Anshel (2011) published a case study that demonstrated the essential role that CBT can have between a collaboration of the school and home environment.

At times Adult ADHD is considered a complex issue due to increase comorbidity rates such as anxiety disorder, substance abuse and mood disorders (Ramsay, 2016; Young & Goodman, 2016). Adults with ADHD symptoms often go untreated and undiagnosed for various reasons such as: no access to proper care, or lack of education of ADHD awareness (Young & Goodman, 2016). On average 60% of children diagnosed with ADHD will continue that diagnosis on to their adulthood (Barbaresi et al., 2013; Klein et al., 2012). CBT as well as psychostimulants are considered primary evidence-

based approach for the treatment of ADHD (Ramsay, 2016). Behavioral interventions for adults concentrate on improving social and functional impairment on an individual and group level (Leahy, 2018). According to Kessler et al., (2016) approximately 4.4 of adults in American has an ADHD diagnosis. In a case study, Ramsay (2016) presented a 25-year-old college girl who has an ADHD diagnosis, who also lives with her parents after displaying difficulty in successfully completing college and needing more than six years to graduate. The case presented by Ramsay highlights that the young woman living at home has been demonstrating difficulty organizing her life, displays procrastination and a lack of motivation in her life. At the insistence of her parents both the young woman and the parents were at the initial evaluation to discuss presenting concerns. Evaluation covered parents' observation and assessment from childhood all the way to college experiences, where the young woman discussed the difficulties and challenges that she faced during her college experience. The assessment during the evaluation period uncovered a classic case of ADHD. The treatment recommended was a combined treatment of medication and therapy in which the young woman stated she did not have time for therapy sessions; however, it was agreed that if after three months sufficient progress was not made, she would begin therapy sessions. The study shows that with the 3 months of medication there were some positive changes but not enough to forfeit therapy and as a result the young woman began CBT therapy sessions along with her medication treatment.

The CBT treatment in the case study consisted of psychoeducation in which the young woman was educated on the disease of ADHD and its impact on lives. Also, the

treatment addressed and identified automatic negative thoughts to help design and implement realistic expectations and task. The task implementation had a behavioral component to it in which a larger task was divided into smaller and easy to do steps. The 6- month follow-up of the case compared the initial evaluation to the current progress made and the young woman achieved progress in all the subscales that were initially assessed prior to treatment. However, some of the scores remained in the range in which clinical treatment was still needed. The case study highlighted the effects of CBT for adult ADHD and the importance of clinicians to be able to provide evidence based psychosocial interventions.

Pharmacological Interventions For ADHD

The discovery of stimulant medication for treatment of behavioral disorders began in the 1930s at Bradley Hospital, in which Dr. Charles Bradley, the medical director of the hospital, expressed positive results with the use of stimulant treatment for children with behavioral disturbances (Baumeister et al., 2012). Stimulant medication such as methylphenidate (MPH) is deemed as first-line treatment for individuals with ADHD, many individuals diagnosed with ADHD cannot or will not accept pharmacological interventions, while others may not response well to medication treatment (Knouse et al., 2017; Wang. 2016). The use of medication has yielded positive results in advancing the progress of students with an ADHD diagnosis (Powers et al., 2008). Researchers Powers et al., conducted a study to determine the use of stimulants and its long-term impact on student academics during the adolescence phase. The study started with a recruitment of 169 adolescents; however, 90 adolescents with a childhood diagnosis of ADHD were

selected out of the 169. Also, from the pool of 169 participants, 18 did not want to participate, 1 died, 7 were jailed, and 53 did not follow-up. From 1990-1997 researchers conducted a study that included participants age ranging from 16-22. The 90-sample group with a childhood diagnosis of ADHD was compared to another group of 80 control participants who were also adolescents with no history of ADHD and similar socioeconomic and ethnic background. The two groups in the study are identified as ADHD-U (Unmedicated group) and ADHD-M (medicated group). There were various tests used during different time periods to establish a baseline for the participants such as: the Wechsler Intelligence Scale for Children-Revised, the Wechsler Intelligence Scale for Children-Third Edition, or the Wide Range Achievement Test Revised or the Wechsler Individual Achievement Test. The findings of the study suggested that the ADHD-M group differed significantly in which ADHD symptoms severity were improved with medicated group. Also, those receiving psychostimulant treatment performed higher academic scores than the unmedicated group. The study is a classic example of the possible positive results medication can have on ADHD symptoms.

Teachers' Experiences with Classroom Behaviors

Teachers play a significant role in the identification and treatment provided for students with ADHD and are usually the first identifiers. Consequently, it is essential for teachers to possess the training and knowledge to teach students who display signs of ADHD and other behavioral disorders (Guerra et al., 2017). Teachers are faced with daily challenges with students who demonstrates behavioral disturbances and are constantly redirecting, managing disruptive behaviors while aiming to provide an optimal learning

environment (Ohan, Cormier, Hepp, Visser, Strain et al., 2008). Behavior therapy can provide skills to parents, aid teachers with strategies in the classroom environment, and help replace maladaptive behaviors with positive behaviors (CDC, 2019).

ADHD if left untreated, ADHD can have severe effects on children and their academics (Tamm et al., 2017). ADHD is one of the main contributing reasons that lead to poor school performance and behavioral disturbances (Guerra et al., 2017; Lawrence et al., 2017; Lee, 2014). Despite difficulties nationwide with research and monetary support, state and local communities aim in developing creative approaches to address the need for accessible behavioral health services to children (Splett et al., 2018; Swick & Powers, 2018). Given the severe impact ADHD can cause on the overall life experience of a child it is crucial for teacher to exhibit and demonstrate knowledge about this mental health disorder (Guerra et al., 2017; Lawrence et al., 2017). The training and knowledge of the signs of ADHD can have an adverse on teacher's experiences and the student's learning experience (Glass, 2001; Lawrence et al., 2017; Lee, 2014). Guerra and Brown concluded in their study of examining 173 teachers' knowledge, misconceptions and attitude towards ADHD they concluded that the teachers displayed a deficit in their knowledge of ADHD and did not have opportunity provided for educational development regarding mental health disorders (Guerra et al., 2017).

Numerous researchers have suggested that teachers lack formal education and training to deal with ADHD (Bradshaw & Kamal, 2013; Guerra & Brown, 2012; Lawrence et al., 2017). Due to the influence school reports has on diagnoses gives by pediatricians and mental health professionals it is essential for teachers to be properly

trained and knowledgeable of ADHD (Lawrence, 2017). Children spend most of their waking hours in a classroom and school setting during the most impressionable years of their lives and the experiences within these settings can influence a child's development (Cadima et al., 2016; Rucinski et al., 2018).

Summary

Much of the literature reviewed showed the impact that school has serving as a gateway to children receiving referrals for behavioral services and the importance of teachers being knowledge in providing accurate assessments to practitioners (Bradshaw & Kamal). Literature also reflected the lack of ADHD education and training teachers possess (Bradshaw & Kamal, 2013; Reinke, Stormont, Herman, Puri & Goel 2011; Guerra et al., 2017; Stolzer, 2009; Topkin et al., 2015). Research reflects ADHD and its impact in various ethnic groups showing that Hispanic ethnic group were 44% less likely than the African American group which were 64% less likely to have an ADHD diagnosis by the time they reached the 8th grade (Morgan, Staff, Hillemeier, Farkas & Maczuga, 2013).

Chapter 2 also discussed the evolution that ADHD has made over time. It was not until the 1990s that ADHD was realized that it can extend into adulthood (Barkley, 2006). Furthermore, there is a wide array of evidence-based studies that suggest that there is a small percentage of adults that receive proper ADHD treatment (Culpepper & Mattingly, 2010; McGough, 2016).

Medication and behavioral interventions are presented as preferred and first line of treatment options for ADHD. CBT as well as psychostimulants are considered

primary evidence-based approach for the treatment of ADHD (Chambless et al. 1998; Ramsay, 2016; Wang, 2016). Both forms of treatment yielded positive results in literature reviewed throughout chapter 2. In this chapter the literature reviewed related to this study included the history of ADHD, prevalence of ADHD, ADHD treatment, and teachers' experiences in the classroom.

Chapter 3: Research Method

Introduction

In Chapters 1 and 2, I discussed and research the prevalence of ADHD diagnosis amongst school aged children and teachers' experiences of this disorder in the classroom. In Chapter 3 the researcher used the methodology of conducting a case study to explore how Title 1 third grade reading teachers' experience student behaviors in the classroom and how do they determine what behaviors lead to student referral for ADHD testing?

The target population of this study was six elementary third-grade reading teachers. However, the researcher received participation from only four participants who were third grade reading teachers. The other two participants were a principal and an assistant principal. The schools were in Eastern FL. These school regions were located in an area that has a high presence of violence, drug activity, gang activity, single parent homes, and low socioeconomic status. One of the elementary schools in this research study is at the bottom 50% of all 3,633 schools in Florida, based on math and reading test scores recorded from 2017-2018 school year. The reading proficiency at one of the schools was 20%, compared the Florida state average of 55% for the 2017-2018 school year. One of the schools is made up of 73% Blacks, 22% Hispanics, 4% Whites, and 1% of two or more races. Ninety percent of the students are eligible for free lunch.

The researcher chose the third-grade level because of the significance of students being able to read by third grade. The Annie Foundation and The National Longitudinal Survey of Youth conducted a study with 4000 students. The findings suggested that students who are not proficient readers by third grade are 6x more likely to drop out of

school (Hernandez & Annie E. Casey Foundation, 2011). The study also showed the impact that poverty has on graduation rates; as a result, poor reading levels along with impoverished living states put these students in double jeopardy (Hernandez & Annie E. Casey Foundation, 2011). While poverty rates were proven to be a contributing factor, the findings also suggested that graduation rates fell behind for Black and Hispanic students in comparison to White students with the same reading level (Hernandez & Annie E. Casey Foundation, 2011).

The researcher analyzed data from open-ended interviews to determine how trained and educated third grade reading teachers were on ADHD symptoms. The data received from the study add to current literature on understanding the path to ADHD diagnoses and the role that teachers play. Further information and understanding on how teachers make decisions about referrals is needed (Lee, 2014; Sherman et al., 2008). In this qualitative case study, the purpose was to explore third grade reading teachers' experiences of ADHD in the classroom as well as their referral decision-making processes. This topic requires further research (Lee, 2014; Sherman et al., 2008). In this study, the findings presented can be used to raise awareness of the need for stronger alliances between the health and school communities.

Research Design and Rationale

The research questions were (a) How do elementary school, Title 1 third grade reading teachers in this FL elementary school experience student behaviors in the classroom and (b) how do they determine what behaviors lead to student referral for ADHD testing? In this study, I used a qualitative case study approach.

A qualitative approach was appropriate for a social scientist to study human behavior (Heglar & Cuevas, 2017). A qualitative study is needed to explore and obtain the depth of experiences (Palinkas et al., 2015) of teachers when referring for behavioral health services. The researcher conducted the study using a case study design. A case study is a research methodology that explores a phenomenon within its real-life context (Meyer, 2001). A case study identifies the underlying principles of a phenomenon (Meyer, 2001). The researcher should consider the research question when selecting an appropriate research design (Palinkas et al., 2015). The researcher selected the case study design due to the research question for this study (Palinkas et al., 2015). Not only was the research question suitable for a case study design, but the events being researched are contemporary events which meets the conditions for a case study design (Palinkas et al., 2015).

I collected and analyzed data through semi-structured interviews with participants, including standardized open-ended interview questions. The researcher used triangulation as a tool in this study. An important aspect of qualitative research is triangulation, which allows readers to be confident in the reliability and credibility of the findings (Shenton, 2004), and is required in case study research. The researcher used the case study design to collect data through open-ended interviews with participants. In a case study, researchers commonly use purposeful, criterion sampling in which research participants meet the requirements mentioned (Meyer, 2001). I sampled participants based on criteria of (a) minimum of 1 year of teaching experience, (b) Title I remedial

reading teacher, and (c) a third-grade elementary school in a specific Eastern district in FL.

Role of the Researcher

Qualitative researchers can play various roles in the design and data collection process. The role of the researcher in qualitative studies is quite different than the role of a researcher in quantitative studies (Baxter & Jack, 2008; Moser & Korstjens, 2017; Simon, n.d). In qualitative studies, the researcher processes thoughts and feelings on any topic (Austin & Sutton, 2015). The role of the researcher acts as a human instrument; as a result, researchers need to know their biases and presumptions, experiences, and expectations when conducting research (Baxter & Jack, 2008; Moser & Korstjens, 2017; Simon, n.d.). To manage researcher biases, I implemented a journal to record my feelings of the responses given by the interveiwees to address emotions and maintain objectivity. Merriam (2009) posited that acknowledging one's feelings on questions are deemed as the practice of reflexivity. The researcher collected data from each interviewee to identify common themes. As the researcher of this study, I had no personal or professional relationships with the participants. According to Lodico et al., (2010), relationships with particapants can influence the interpretation of the data and must be regarded.

My role as a researcher was to collect data from participants and to record and transcribe their experiences accurately free from opinions, personal experiences and beliefs. As the researcher, I was aware of possible biases and assumptions within the study (Baxter & Jack, 2008; Moser & Korstjens, 2017; Simon, n.d.). In my role as the

researcher, I used an etic perspective, which provided an objective viewpoint (Olive, 2014). The researcher had no previous relationship or history involving teachers at the selected school; as a result, no ethical issues exist. The researcher gave no incentives in this study; however, interviewees received a copy of the summary of the research findings. To conduct this study, I received permission from the district. The researcher received permission by filling out an application. The research review committee reviewed and approved the application. Response was received, reviewed, and approved within 3 weeks after receipt of application. The application submission process consisted of documents that includes application identification form, research review application form, and prospectus. The researcher submitted the application forms two months before the desired starting date of the study. To recruit teachers for the study, I provided the principal with an electronic flyer regarding the study who then emailed teachers who met the requirements. In addition, I emailed the teachers who met the study requirements directly to inform them of the soon conducted study in their school district. According to Lodico et al. (2010), the use of interviews, observations, and document analysis are quite common in case studies. The researcher's initial intention was doing the study at a particular school; however, the response was minimum, and as a result, approval was granted from the district and the IRB to extend the study to various schools within the district.

There were no foreseen ethical issues within the setting of the study or any conflicts of interest due to no personal or professional relationship existing with

interviewees. The researcher did not give incentives to research participants. The researcher provided participants a copy of the summary of the findings.

Methodology

Researchers commonly use criterion sampling as a sampling technique (Palinkas et al., 2015). The criteria for this study included: (a) minimum of 1-year teaching experience, (b) Title I remedial reading teacher, and (c) teacher at an undisclosed eastern Florida elementary school. My initial ideal sample size for this study was six, Title I third grade reading teachers that taught at a specific elementary school in FL. I spoke to the principal of the school and the principal emailed the teachers that met the criteria for the research. I attempted in solicitation from all six teachers; however, the response was only 1 out of 6; therefore, the study was expanded to other schools in the district and to also include school administrators. I made this change with committee and IRB approval.

Before the COVID-19 pandemic, I intended to contact the interviewers to provide a location, date, and time of interview; however, with COVID-19 protocols in place, I conducted virtual interviews. Following COVID-19 protocols, interviewees requested telephone interviews. I assigned a pseudonym to provide confidentiality and secure the identities of the participants. Once participants completed their interviews, they were given contact information for any further questions and received the results of the research conducted.

Due to the limited number of participants of teachers, I interviewed school administrators as an addition to the sample. Though they were not teachers, school administrators also speak to my research question on experiences of teachers in the

classroom and how they determine a referral for testing. I used semi-structured interviews to explore topics of interest. According to Morse (2000), the determination of the sample size should be guided by the research question. If a research question is narrow, it is understandable that the sample size maybe smaller, along with an in-depth perspective to achieve data saturation. In-depth answers in research are the result of an open-ended interview approach, according to Creswell & Creswell (2017). In Appendix B, you will find a list of all the semi-structured questions asked during the interview. The data collection instruments presented in this study included interviews with the teachers, which consisted of a semi-structured approach. The researcher used a USB voice recorder to audio record the interviews taken. Virtual Speech was the platform that transferred the audio mp3 to text. I then used Microsoft Word to identify common themes from the transcriptions of the interviews. To establish content validity, I used an audio recorder to record data. I also took notes throughout the interviewing process.

Qualitative researchers have various data collection tools such as observations, social media and interviews (Malterud, 2001). Qualitative researchers gain data from interviews and field notes and translate that data into findings. There are various ways of doing data analysis. I used an audio recorder while conducting telephone interviews with the participants. The researcher transcribed, coded, the interviews and identified the themes discovered to address my research questions (a) How do elementary school, Title 1 third grade reading teachers and administrators in a FL elementary school district experience student behaviors in the classroom, and (b) how do they determine what behaviors lead to student referral for ADHD testing?

In addition, it was my intent to be able to review and code schoolwide data reports related to overall school behaviors; however, the school district did not allow me access to the school data. I was also had planned on using NVivo software to analyze the data in the research; however, I used Microsoft Word to look for common themes. According to Yin (2014), codes sorted into categories and thematic structure allows the researcher to identify common patterns and determine variances within data points that yields an in-depth analysis. Braun and Clarke's (2006) provide a thematic analysis approach to aid researchers in analyzing of data. The research implemented the Braun and Clarke approach which is broken down in six phases: (a) familiarization of data, (b) coding, (c) generating themes (d) review of data (e) describe and identify themes (f) and report results.

Triangulation is the use of various approaches to provide understanding of the phenomena being researched (Patton, 1999). To test validity of data sources, triangulation is a strategy often used in qualitative research. Specifically, in this study, I used the method triangulation. Method triangulation definition is the use of various data sources, such as interviews and field notes, about the same phenomenon (Carter et al., 2014). Fontana and Frey (2000) discussed in-depth interviews as a powerful data tool that can be used to collect and explore human beings and phenomenon. In-depth interviews can create an ample amount of data regarding perspectives and human experiences (Fontana & Frey, 2000).

Issues of Trustworthiness

In displaying trustworthiness, it is necessary to ensure that the research is credible, transferable, confirmable, and dependable. According to Guba and Lincoln (as cited in Morse et al., 2002) negative cases, peer debriefing, audit trails, consistent observation are tools to obtain trustworthiness. Yin (2014) posited that data reliability is reached when a researcher can provide consistent data and repeat the data on numerous occasions throughout the research. According to Korstjens & Moser (2018) the four components of credibility, transferability, dependability, and confirmability aid researchers to achieve quality criteria in qualitative research.

Credibility is defined by Lincoln and Guba (1985) as confidence that one can have in the reporting of a research conducted. Credibility determines if the reported data from research is data derived from participants original data and is an accurate expression of the participants thoughts (1985). The researcher in this study achieved credibility through member checking. As part of member checking, I allowed interviewees to review the transcripts for accuracy (Creswell, 2013). Participants are the ones to determine whether the outcome of the study truly depicts the phenomenon being studied; therefore, triangulation is a common strategy that involves cross-checking from various data collection techniques and sources tto strengthen the results of the study (Shenton, 2004).

Transferability also known as external validity, implies that the outcome of the research can be transferability to other contexts (Korstjens & Moser, (2018). This is achieved in the study as the researcher providing details of the context to aid the future researchers in determining whether the results can be transferred to other contexts

(Korstjens & Moser, 2018). The strategy the researcher of this study will use to aid in transferability is having a thick description. Providing a thick description of the interviewees behavior and experiences, as well as the various stages of the study will allow the reader to determine whether the outcome of this study can be transferred to the reader's setting (Korstjens & Moser, 2018).

Dependability implies the consistency that the findings could be repeated, and the outcome remain parallel to previous findings (Korstjens & Moser, 2018). To ensure dependability the researcher in this study will provide an audit trail (Korstjens & Moser, 2018). An audit trail is a set of notes derived throughout the journey of the research and the management of the data retrieved (Korstjens & Moser, 2018).

Confirmability ensures that the study conducted can be confirmed by other researchers. Confirmability in research measure whether the researcher interjected their biases in the findings which can be assessed and supported by the judgments of others that supports and confirms the outcome of the study (Korstjens & Moser, 2018). An audit trail not only ensures dependability but also confirmability in research because it provides transparency in the description of the various phases beginning from the start of the study to the development and the conclusion of the study (Korstjens & Moser, 2018).

Ethical Procedures

Prior to conducting the research, approval from the Institutional Review Board was established. Ethical procedures in this study also included an informed consent. The informed consent provides research participants information regarding the description and purpose of the study, audio recording of the interview, as well as recording of

interview transcribed, and findings published. All participants were made aware of their rights to withdraw from the study at any given time with no consequences. Anonymity is also another ethical concern that was honored during this study. The teachers were made aware of the anonymous nature of the study which is important. For the assignment, the IRB consent was provided; furthermore, the IRB proposal specifies that participants of the study remain anonymous with no identifying information given at any phase of the data collection process. All informed consents are locked in a storage file in my home and all research data is stored on a password protected laptop in which I will be the only individual with access to the laptop. All documents are shredded, and the research data retrieved from the study will be deleted at the 5-year mark.

Summary

The purpose of this qualitative case study approach was to explore and obtain the depth of experiences (Palinkas et al., 2015) of teachers when referring for behavioral health services. The target population for the study was Title 1 third grade remedial reading teachers, with at least 1 year of teaching experience. The sample size for this study were six participants, four teachers, one principal, and one assistant principal. Data sources of the study consisted of interviews and field notes. Microsoft Word was the tool used to analyze the data. Chapter 3 provided information of the research design and rationale, role of the researcher, methodology, issues of trustworthiness and ethical considerations. Chapter 4 provides information of the data collection and research participants along with the findings of the research.

Chapter 4: Results

The purpose of this qualitative study was to explore the experiences of Title 1 reading teachers' experience in the classroom and how they determine what behaviors lead to student referral for ADHD testing. A case study approach was used to explore the experiences of six individuals who were either a reading teacher or school administrator. The use of standardized open-ended interview questions was used to collect the data. The research questions addressed were (a) How do elementary school, Title 1 third grade reading teachers and administrators in a FL elementary school district experience student behaviors in the classroom and (b) how do they determine what behaviors lead to student referral for ADHD testing? In previous chapters I provided background information and the theoretical framework and methodology for this study. In the literature review I provided support and understanding of teachers' training and experience of ADHD in the classroom. In Chapter 4, I presented the outcome and setting of the study, demographics, data collection process, data analysis process, codes, categories, themes and subthemes, and evidence of trustworthiness. At the end of this chapter a summary is provided that synthesizes the responses to the research questions.

Setting

The setting of this study included six different public elementary schools in Eastern Florida. Permission was received by the IRB and the school district to expand the original parameters from one school to other Title 1 schools in the district due to difficulty in receiving participation responses. COVID-19 procedures were considered; therefore, interviews were conducted over the phone as opposed to face-to-face. The

research participants included four third grade reading teachers, one principal, and one assistant principal. I conducted the first interview June 2021 and the last interview December 2021.

Demographics

Participant demographics were based off grade level taught and teaching experience. Seven prospects completed the informed consent; however, one did not meet the inclusion criteria of being a reading teacher. consisted of Title 1 third grade reading teachers and administrators in a district in Eastern, FL. Participant 1 was a black man and the principal of the school. All participants interviewed for this case study had teaching experience ranging from 3 to 25 years. Five out of the six participants identified themselves as women. To maintain privacy participants were given pseudonyms. Table 1 displays demographic data.

Table 1

Participant Demographic Data

Participant (pseudonym)	Gender	Race	Years of experience
Michael (principal)	Male	Black	25
Christine	Female	Black	3
Amy	Female	White	23
Cherish	Female	Black	25
Cathy (Ast.principal)	Female	Black	22
Alexis	Female	White	12

Table 2

(Secondary Data) Florida Department of Education

Discipline Description	White	African American/Black	Hispanic	Female	Male
*In School Suspension	426	721	422	559	1115
*Out of School Suspension	472	927	416	561	1361
*Placement in Alternative Educational Setting	16	20	9	15	34
*Physical Restraint	14	20	7	11	32

Data Collection

Before the data collection process began, I submitted an IRB application to conduct the study and it was approved on June 7, 2021 (Approval Number: 05-18-21-0398069). The study initially targeted one school; however, due to a lack of participatory response the study was expanded to other schools with the approval of the school district and the IRB. I collected and analyzed data through semi-structured interviews with participants, including standardized open-ended interview questions and secondary data was coded from Florida department of Education (FDOE). The Florida department of education give reports on disruptive behaviors that occurs on school grounds, school transportations and school sponsored events in the researched region. Triangulation in qualitative research was used in this study and is used to help readers know that the findings are credible and trustworthy (Shenton, 2004), and is required in case study research. The data coded provides secondary data on disruptive behaviors and incidents that are reported within the district. The data based off incidents reported to the Florida Department of Education website in which demographics of students were categorized

based on the following categories: in-school suspension, out of school suspension, placement in alternative educational setting, and physical restraint.

During the interviewing process I journaled in a notebook my feelings to document and address my emotions. According to Merriam (2009), reflexivity is demonstrated through acknowledgment of one's emotions on topics discussed. As a researcher, I am also a human instrument within the study and being cognizant of biases and attitudes that may be embedded within the study is key in qualitative studies (Baxter & Jack, 2008; Moser & Korstjens, 2017; Simon, n.d.). Due to the 2019 COVID-19 pandemic, IRB did not allow interviews to be conducted face-to-face; as a result, interviews were conducted over the phone and recorded with a Sony ICD-PX370 Mono Digital Voice Recorder with built-in USB. Interviews were converted into mp3s which were then uploaded and transcribed by a transcription service called Virtual Speech. Research participants selected the date and time of their availability to be interviewed. The length of the interviews ranged anywhere between 25 minutes and 60 minutes.

The recruitment process did not include any form of incentives and research participants were solicited through email in which 75 emails were sent out to third grade teachers at various schools in the district. Out of the 75 emails, eight responded to the email; however, only four teachers completed the consent and provided time to schedule the interview. The other two participants were acquired through the snowball sampling technique in which one of the prospective participants recommended two other teachers that would be suitable candidates for the study. Two out of the six interviewees were the elementary principal and assistant principal, while the others were third grade Title 1

reading teachers. All research participants were informed of their rights to withdraw from the study at any given time without retaliation and that their identities would be confidential. They were informed that pseudonyms would be assigned to maintain their privacy. All research participants were informed that the interview would be recorded prior to the recording and all teachers were located within the Eastern region of Florida at the time of the study.

The interviewing process was conducted over a 3-month period due to the difficulty of finding willing research participants. The six interviews conducted for the study provided adequate information and I believed to have reach data saturation with information collected. Research does not provide a definitive solution to an appropriate size to use for qualitative studies and if saturation is used as a guiding factor, it can be achieved at any point (Mason, 2012). Morse (2000) posits the sample size is guided by the research question, furthermore, if a research question is narrow, it can be assumed the sample size will be smaller with emphasis on in-depth experiences to achieve data saturation.

During the interview, the interviewees were asked seven questions (Appendix B) along with follow-up questions as needed. During interviews that I felt needed to go more in-depth, I probed and asked follow-up questions in attempt to achieve an in-depth perspective. To ensure trustworthiness of the study's findings, participants were informed that they would receive a copy of the transcription as a part of the member checking process. At the end of the interviews, interviewees were encouraged to contact me with any questions and received appreciation for their participation in the study. While no

incentives were given to research interviewees for their participation, they were informed that they will be given a copy of the summary of the findings of the study.

Data Analysis

The audio recording of the interviews was transcribed by the company called Virtual speech. Initially, I had intended on using the NVivo software to analyze the data in the research; instead, the data was analyzed and coded in Word document. The transcription of the interviews that were uploaded to Word document were then compared to the audio recording to ensure accuracy of data. Thereafter, I carefully examined the data and each interview question to identify emergent patterns and common themes that expressed teacher's experience of hyperactive behavior in the classroom. A deep connection and familiarization with the data was made prior to the coding process. After review of each interview questions, common themes and subthemes that answered the research question were identified. The study utilized the Braun and Clarke (2006) analysis method which is broken down into six segments: (a) familiarization of data, (b) coding, (c) generating themes (d) review of data (e) describe and identify themes (f) and report results. The six interviews transcribed produced 41 codes. Some of examples of the codes and its definitions are listed in the table below.

Table 3

Example Codes

Code	Definition
Fidgety	Unable to sit still, tapping of the pencil and things
Data Collect	Before referral is submitted data is collected on student's behavior and its impact on learning
Organization	Clear cut rules and structure that is outlined and explored from the beginning of school in which it becomes a daily routine
Attention	Attention seeking behaviors in which student behavior is directed to draw attention to him/herself

From the 41 codes created from the data five categories emerged. According to Yin (2014), codes sorted into categories and thematic structure allows the researcher to identify common patterns and determine variances within data points that yields an in-depth analysis. The interviewees provided rich descriptive information regarding their experiences in the classroom. I believe data saturation was achieved with the six interviews conducted. The five categories derived from the data are as follows: student behaviors, teacher experiences, teacher challenges, teachers' adaptations, classroom strategies (preventative, creative, interventions, positive, disciplinary actions, sensory), and student data. These categories represented how the six participants experience students' behavior in the classroom and determine their referral decision making processes. The themes emerged addressed the study's research questions (a) How do

elementary school, Title 1 third grade reading teachers in this FL elementary school experience student behaviors in the classroom and (b) how do they determine what behaviors lead to student referral for ADHD testing? As the data was conceptually analyzed the five themes that eventually evolved were (a) teachers experience behaviors of their students, (b) teachers experience their own frustrations and challenges, (c) teachers need to be adaptable to students' needs, (d) teachers enacted several classroom strategies to address students' behavior, and (e) teachers collect and monitor data to assess need for additional resources. Participants expressed and described their experience in the classroom in different ways sharing some similar experiences. For example, while some of the participants had different views of their experiences in the classroom, majority of the participants expressed the importance of collecting and observing the student's data. The code DATACOLLECT had a total frequency of N=8. Michael stated,

> So the teacher's role is basically to collect data not to say this child is a 'ADHD,' this child is hyper, or this child is that their collecting data and letting the medical professionals sort of make that determination. So, our role is pretty much to collect data from an educational standpoint, the frequency of the behaviors, how often they happen, and what their triggers are.

Seemingly, the data then provides the evidence of the possibility of additional support such as referral for ADHD testing or other services. Theme 2, teachers experience their own frustrations and challenges, had two subthemes (a) teacher frustrations and challenges and (b) emotional effects. More details of the themes outlined,

and its findings are presented in the result section of this chapter. The secondary data collected and coded was demonstrated with participant Alexis as she found hyperactivity more common among boys and among research participant Michael when he provided a takeaway at the end of the interview. One of the questions the participants were asked at the end of the interview was “out of all the things that we have talked about today, there may be some topics we've missed. What should have been discussed and why do you feel that topic is important?” Michael’s stated,

> I think you also need to understand the uh within the educational landscape there is a over representation of minority uh particularly African American boys in um special education programs. And there's an under representation as it relates to the gifted program for minorities and particularly African American males. So the point I wanted to make with you specifically is that one of the things we got to continue to look at as we progress forward as educators is making sure that we're understanding the different levels of cultural difference that walking with our classrooms. So, we're not over representing one particular uh ethnic group over another. So just making sure we understand the cultural differences for the different learning styles and making sure we're doing everything possible before making that referral. So that's not an overrepresentation of any particular group. Specifically, minority group in a special education program or overdiagnosis in terms of ADHD.

Michael’s statement is profound because his perspective as it relates to the

overrepresentation of minority males and the importance of understanding cultural differences in learning style is what is being demonstrated in the secondary data when we see black males' data close to be doubled compared to the White population.

Evidence of Trustworthiness

Credibility is defined by Lincoln and Guba (1985) as confidence that one can have in the reporting of a research conducted. Credibility determines if the reported data from research is derived from participants original data and is an accurate expression of the participants thoughts (1985). To ensure credibility in this study member checking was utilized which allowed interviews to review transcripts to ensure accuracy and to highlight possible discrepancies that exist in data. During this process, no changes or discrepancies were found by interviewees and therefore data derived from interviewees were deemed accurate. Participants are the ones to determine whether the outcome of the study truly depicts the phenomenon being studied; therefore, triangulation is a common strategy that involves cross-checking from various data collection techniques and sources that will help to strengthen the results of the study (Shenton, 2004).

Transferability also known as external validity, implies that the outcome of the research can be transferability to other contexts (Korstjens & Moser, 2018). According to Korstjens & Moser, 2018 to achieve transferability in a study the researcher must provide details of the context to assist future researchers in possibility of duplicating outcome in another context. My strategy in this study to achieve transferability was having a thick description of the interviewee's behavior. Initially, the interviews were meant to be conducted face-to-face; however, due to COVID-19 protocols, interviewees

opted to be interviewed over the phone. Providing a thick description of the interviewee's behavior and experiences, as well as the various stages of the study allows the reader to determine whether the outcome of this study can be transferred to the reader's setting (Korstjens & Moser, 2018).

Dependability implies the consistency that the findings could be repeated, and the outcome remain parallel to previous findings (Korstjens & Moser, 2018). To ensure dependability an audit trail was utilized throughout the journey of the research and management of the data retrieved (Korstjens & Moser, 2018). I asked all the interviewees the same questions outlined in the interview guide provided in Appendix B. I transcribed the interviews and provided participants with the transcription to ensure accuracy of data. After member checking the data was coded into Word document and ensured data, audio, transcripts, memos and notes were safely secured to achieve dependability.

Confirmability in research measures whether the researcher interjected their biases in the findings which can be assessed and supported by the judgments of others that supports and confirms the outcome of the study (Korstjens & Moser, 2018). To ensure confirmability I maintained an audit trail that consisted of audio recordings, accurate transcription of participants' responses and experiences, notes, memos, email-correspondences, codes, categories and themes derived from data. Commonalities found within the participants 'responses were supported by verbatim responses. With the implementation of transferability, dependability, and confirmability the validation of the study was achieved.

Results

The findings of this study will be reported and discussed by the five themes that emerged: Teachers experience behaviors of their students, Teachers experience their own frustrations and challenges, Teachers need to be adaptable to student needs, Teachers enacted several classroom strategies to address student behavior, Teachers collect and monitor data such as behavior and grades of student to assess need for additional resources.

Theme 1: Teachers Experience the Behaviors of Their Students

The first theme the participants began to discuss the behaviors of the students that they experience in the classroom prior to a student's referral to ADHD. Common behaviors mentioned and described during the interview by the participants were fidgety (which had the highest frequency of N=18), constantly out of seat, defiant, attention seeking behaviors, acrobatic behaviors, running in the classroom, elopement, easily distracted, and lack self-control. Amy said:

> I would just say um that the student can't finish a task one task, they go from one task to another and you know, you are constantly redirecting them but they for some reason they don't seem to be able to um to complete the simplest, seemingly the simplest task.

Michael said:

> Well, I guess a lot of times you may have a particular scholar that just may sit at the desk and tap or what have you uh that may be a mild form of if they just need

> to tap for a little bit or whatever, but then you have those that really, really can't sit still.

Christine said:

> not being able to control your body on your own. Your brain saying we have to move, we have to do this, We have to do that, when someone else is telling you to just calm down or just let's do this or just do that. It's your body saying no, we can't do that. We have to do something else. We have to move faster. We have to do this faster and things like that.

Cherish said "attention seeking, mm, um Yeah not the word I want to use. I don't want to say fidgety, but that's the only word I can think of right now." Cathy said, "students who are constantly moving constantly fidgeting, constantly, easily distracted or being a distraction." Alexis stated, "hyperactive behavior can take many different forms and it kind of has a range it might be something as simple as kind of self-stimulation where they're bouncing or they're fidgeting with their hands."

An interesting perspective made by research participants Cathy and Cherish was how anxiety can be masked as hyperactive behavior. Cathy said, "I think that if the student is apprehensive about something and sometimes anxiety can be misconstrued as hyperactivity in the student." Christine discussed the difficulty of the third-grade level and how in some students the difficulty and pressure can cause form of anxiety that may look like hyperactive behaviors. Christine stated:

> it does get a little harder with knowing the work that we have to do in the classroom can also make there hyperness even more because of the anxiety of the

> work that we have to do and how hard it can be for them. So um I think that that affects them as well.

The first theme in which participants expressed how they experienced hyperactive behaviors provided a range of various ways in which hyperactive behaviors are experienced in the classroom. Behaviors were experienced in various ways such as an in ability to finish a task, an inability to sit still for a period of time, and a lack of control of one's own body are a synthesis of the experiences provided by participants.

Two of the participants discussed how they believe the third grade and the beginning of standardize testing takes a toll on the emotional state of some of the students and as a result the anxiety and pressure can often be seen or masked as hyperactive behaviors. This perspective on behavior implies the need to look beyond the external behavior and to examine factors that may not be so evident such as stressors that can influence or cause behaviors.

Theme 2: Teachers Experience Their Own Frustrations and Challenges

Some participants discussed the frustrations and challenges they have when they experience hyperactive behaviors in the classroom. Some participants discussed how the hyperactive behaviors can interfere with their learning environment, while others discussed how they do not experience any form of frustration, they simply redirect or remove student from classroom and continue. Alexis stated:

> but there are times when interruptions become a higher magnitude and it's frustrating for me and I start to show that frustration in my tone or my interactions with the students. I try to avoid that, but it does happen.

Amy discussed how it can become more challenging as an educator when you try to conform a student to a sedentary learning style that it becomes more complicated because that child may not respond to that learning style. Amy said:

> so if you give that outlet to them, then I find that it doesn't escalate as much. Um but if you try to make them conform to sit in your seat, you know, put your feet under your desk, you know, um hold the pencil this way, if you really try to fit them into the mold of quote unquote the perfect student, you will see um you know, the progression of these kinds of behaviors, my experience anyway.

Some of the other participants that described how they were not impacted by the behaviors they experience in the classroom. Christine discussed how her experience of behaviors in the classroom is not her concern but rather her priority is focused on the experience that the students are having and their needs. Christine stated:

> Yeah, well, I think, I think it's more of a, what can we do to make sure this doesn't happen? What what can be done so that this child of these students won't have to experience that, where they could be on the up all day, not just half of the day, not just half of the morning, what preventions can be taken? So they won’t have to experience that at all. That's my my name concern on it.

Amy stated:

> Um it's not gonna affect me at all. I mean literally I just, I can do that, I can't I can be teaching a lesson or working with the group and uh excuse me a second, get through what I have to do, come on back and keep on going, you know? Um I've had, you know, kids where they're, the hyperactivity has been like, you know,

> with an autistic child or something that's nonverbal child where they also have hyperactivity, those kids, it's a little more difficult because you aren't really sure what they're gonna do. You know, you, if you come over to them and you touch them on the shoulder you might actually startle them and you could get, you know, a fist to the face, you know, not realizing what they're doing of course, but that has happened to me, I've had my hair pulled like really, really hard things like that, but generally speaking, it doesn't really do anything to me.

Cathy stated:

> No, I think those kind of if you display a negative reaction to that it kind of exasperates that um just understanding how they develop a relationship with that student and making sure that those developing some type of cues with that student. So when the student is feeling that way, they can kind of give you an indicator or if you observe that that the student is displaying those behavior so that you can quickly um immediate a response so you can curtail it.

A subtheme that emerged was emotional effects on teachers. Cherish when interviewed was a particular participant that emphasized the emotional impact that dealing with a hyperactive student can cause emotionally. Cherish within her interview the word draining four times. One statement given by Cherish said:

> Uh huh besides it being draining. But at the end of the day I'm just like it has to be done because a lot of times and it's not funny but it's sad a lot of times we were always quick to say build relationships with the kids, a lot of them they want the structure, they want the discipline part but they don't know how to really voice it,

> so to speak. So again, I don't know how their home environment is, but I try to give them the structure part at school, l and also that nurturing part, so I'm not gonna lie, it's draining.

Most of the participants discussed how they try to avoid students' behaviors from effecting their emotions and focus on how to reach the student. Michael a principal stated:

> I think the main the main experience will be for those percentage of the scholars that are hyperactive or hyperactive behavior, it's probably going to reduce the number of the referrals outside the classroom because they're given an opportunity to express themselves or be able to deal with whatever form of hyperactivity without having to be sent out because they have something else to keep them busy.

Amy stated"

> You know, like I've gotta, I've gotta deliver this material to the best of my ability to 18 students every day. I don't have time to get upset. If I have one student that I know, um you know, has issues with hyperactivity or any other multitude of issues that I deal with on a daily basis, um that student has, I have mechanisms in place, coping mechanisms for that child and that child at a certain point have strategies that they can use.

Each participant was unique in their own way as thoughts were expressed regarding frustration and challenges of hyperactive behavior in the classroom. While each participant was unique there were commonalities along with differences. It was

unexpected when one participant expressed that they were not impacted at all when they experience hyperactive behavior in the classroom and on the other end of the spectrum other participants expressed their frustration dealing with hyperactive behavior. A perspective that was shared by at least two participants was the importance of focusing the efforts not on the behavior that is being displayed but rather understand the student's experience and their needs. Understanding the students experience and their needs were topics that were addressed by multiple participants. Some participants discussed how they believe the hyperactivity being expressed and demonstrated is the student's way of communicating that they need help.

Theme 3: Teachers Need to be Adaptable to Student Needs

When participants discussed their experience of students' behaviors in the classroom some participants expressed the importance of educators adapting and being flexible to meet the learning needs of students. Some participants expressed that sometimes the acting out is indication that there needs to be adjustment made to the learning approach of the educator. Alexis stated:

> So as a whole, I think we are asking students to be too still too quiet and too focused for longer periods of time than they're ready for. And I think when you do not make accommodations for a student who's got sort of those low-level hyper tendencies that it will escalate if they feel like they can't control it and it's beyond their control it will escalate.

Cathy stated:

> Making sure that you have a variety of learning modalities giving them technologies or appealing to if there are visual or kinesthetic or auditory, learning making sure that you have incorporate some things such as that". Five out of the six participants expressed the importance of building a relationship with the student. The participants expressed how having a relationship with the student helps the teacher to become more in sync with the student's needs and cues.

Michael explained:

> It is important for teachers to being cognizant of the specific stars within the classroom, understanding their behavior is understanding the idiosyncrasies, understanding I relationship with your student it shouldn't be you preventing anything because they should already know how to handle things, you know?

Alexis discussed the consequences that could transpire if flexibility and adaptability is not made for a student that displays hyper tendencies. Alexis stated "And I think when you do not make accommodations for a student who's got sort of those low level hyper tendencies that it will escalate if they feel like they can't control it and it's beyond their control. It will it will it will escalate." Participant Alexis believed that if accommodations and the willingness to adjust one's learning style to meet the needs of a student can create bigger issues than before. One can wonder if whether some of the hyperactive behaviors being displayed can be minimized if educators learn ways to better accommodate the needs of students with different needs. Cherish responded saying "but you also have to learn how to deescalate quickly, um and just be able to flexible, I would

say flexibility is the key because all kids don't learn the same way. So you just have to understand that child, give or take especially when you're dealing with hyperactivity."

The response for this theme demonstrated the need for teachers learning styles to be flexible and adaptable to meet the learning needs of each student. The participants outlined in this theme discussed the need of cultivating a relationship with students so that teachers can become more aware of the student and how the student learns. A common point made by majority of the participants was the need for having a relationship with students. This theme expressed the importance of educators having more than one learning modality the ability to be flexible in cultivating learning environments for students is essential. Most of the time a student spends is in a classroom or educational environment and it's during an impressionable time of their life and those experiences within their classroom environment influences the way they develop as a child (Cadima et al., 2016; Rucinski, Brown & Downer, 2018).

Theme 4: Teachers Enacted Several Classroom Strategies to Address Student Behavior

The classroom strategies were broken down into the following: preventative classroom strategies, creative strategies, interventions, positive reinforcement, and sensory environment. Some examples that were provided for preventative classroom strategies were developing a relationship with the student, building a community of learners where students can feel safe among their peers and flexible seating arrangements. Examples of creative classroom strategies are as follows: a notebook for drawing or doodling, and physical activity in which educator intentionally aids student to

burn off energy; The next form of classroom strategies are identified as interventions, and some examples given were point sheet, reflection room, and proximity. Proximity is where the teacher uses physical touch or comes close to proximity of the student to discourage hyperactive behaviors. In addressing the use of proximity Alexis explained: "I may need to use proximity to stand near them so that they definitely here and register those instructions." The next form of classroom strategies is positive reinforcement and an example given are incentives. Cherish in explaining how she utilized incentives to reinforce positive behavior explained:

> So I literally had to like put something in front of their face. It might have been like a rice krispie treat today. I said okay, if this keeps up, then the rice krispie treats gonna go to somebody else, and then of course they sat there and did it and then they did alright.

The last type of classroom strategy is labeled as sensory interventions and some examples are fidget spinners or any other Sensory toys used to stimulate senses to help student focus and calm down, calming music and soft lighting. Research participant Christine expressed an example of how she utilizes various interventions including sensory toys stating:

> So I like to I have these um I would say I have a calm spot in my classroom. So if you ever feel overwhelmed, if you feel like you just you just can't do something, you can just go there, you can take a mental break can you can look in the mirror. All right, let me take a few deep breaths. Let me take the timer and give myself a full minute to just relax and think and calm down. And if that

> doesn't work, you can Sit down in the chair, you can play with the different sensory toys that I have and if that doesn't work, then we just have to remove you from the classroom to get you into a totally different environment and you've got 15 minutes to be out of the classroom to a designated spot.

All the research participants provided creative interventions that they implement to decrease hyperactive behaviors. The responses of the participants really demonstrated the creativity that can be presented in a learning environment. All the participants expressed having various interventions that they used to help with behaviors in the classroom that are used for interventions as well as preventative strategies. The participants each expressed the need of utilizing unconventional methods as interventions for example, Principal Michael stated that for students who constantly rock in the chairs they have oversized bouncing balls they can use as chairs. This theme expressed the need to normalize unconventional methods when addressing hyperactive behaviors in the classroom.

Theme 5: Teachers Collect and Monitor Data Such as Behavior and Grades of Students to Assess Need for Additional Resources

A part of the research question addressed how teachers determine what behaviors lead to student referral for ADHD testing. A commonality found throughout majority of the interviewees was the importance of documentation and supporting evidence on students' behavior and grades. Michael as the principal described the process at his school that teachers must take with students who displays hyperactive behavior stating:

> So there's no one way to specifically say this particular child is hyperactivity. I think it's going to have to be a conglomeration of the teacher taking data in terms of maybe a school social worker or psychologist doing an evaluation and also a physician.

When discussing the referral process the assistant principal Cathy stated:

> Generally, we'll do some baseline data has been my experience. I sit on what we deem as a school-based team and that school, base team consists of administration classroom teachers, um support personnel, teachers or behavioral health professionals which is like our in-house social worker. And so students that are often referred teachers has given the administrator just like the baseline data and they bring that it really is just the mark of sorts and the frequency of whatever is the most concerning behavior.

Christine expressed the significance grades play as it relates to setting a referral expressing if behavior is impacting grades something needs to be done. Christine stated:

> It would mainly be if a child cannot complete any work or their academics are being hindered because of their over active behavior. So if they cannot sit and do a center and not comprehend that content in front of them because they can't sit still because they can't stop swarming things like that, then that's where that's where it is for me, if they cannot hit the academics at all, that's when I would have to set a referral because now you're going to have a loss of skill because you not being able to control your body.

It was quite common among the research participants in the importance of collecting and monitoring data based off student's behavior and academics. The importance of monitoring the data to observe behavior and academics was to provide supporting evidence regarding the teacher's suggestions or thoughts regarding a student's behavior. In other words, without data that supports teacher's opinions no actions or steps can be taken further. Based upon the interviews and the data derived from the interviews it was a commonality that was stated that in order for referrals to take place data must be collected for a period of time that supports the observations and concerns held by teacher.

Additional Data

Secondary data was derived from the Florida department of Education in the district that is relevant to the case study. The FDOE provides information regarding various behavioral incidents that transpires on school property, transportation, or events in the researched region. The secondary data consisted of in-school suspension, out of school suspension, placement in alternative educational setting, and physical restraint. The demographics consisted of White, African American/Black, Hispanic, Female, and Male.

The secondary data that aligns with my themes highlights the overrepresentation of blacks. The secondary data shows how in some cases the minority is doubled in comparison to the White population. Another correlation between the secondary data and theme is the hyperactivity represented higher among males than females. The secondary data allowed for triangulation to help readers know that the findings are credible and trustworthy (Shenton, 2004).

In summary, when we look at the data collected regarding the interviews and the secondary data one of the correlations can be seen in which one of the participants discussed her observations of hyperactivity being more common among boys than girls. In the secondary data the numbers are significantly higher among males as opposed to females. The participants indicated that while dealing with hyperactive behaviors in the classroom has it challenges, the important thing is to focus on meeting the needs of the student. Learning how to be flexible and adapt to meet the student's needs is priority. Also, regardless of behavior the main determinant is the impact the behavior is having on the student's grades. If student's behavior is impeding upon his or her ability to succeed the process for a referral must begin with the supporting documentation as evidence.

Summary

The primary research questions this study addressed asked how Title 1 third grade reading teachers' experience student behaviors in the classroom and how they determine what behaviors lead to student referral for ADHD testing. The six participants provided rich description of their experience of hyperactive behaviors in the classroom and how they determine when a referral for ADHD testing is needed. The analysis of the data provided details summary of the accounts given by the participants which led to five significant themes: Teachers experience behaviors of their students, Teachers experience their own frustrations and challenges, Teachers need to be adaptable to student needs, Teachers enacted several classroom strategies to address student behavior, and Teachers collect and monitor data such as behavior and grades of student to assess need for additional resources. The core theme of "Teachers experience their own frustrations and

challenges" had subthemes of Teacher frustrations and challenges and Emotional effects. Furthermore, the themes derived from the data provided insight to what behaviors are descriptive of ADHD-type behaviors, what strategies are used in the classroom to promote and encourage positive behavior, and when to take the next step and request a referral for a student. In chapter 5, I provide interpretation of the findings for the study, provide limitations of the study and recommendation for future researchers and practitioners, and implications to ensure social change within the boundaries of the study that has potential impact at the individual, organization, and societal levels.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative study was to explore the experiences of Title 1 reading teachers' experience in the classroom and how they determine what behaviors lead to student referral for ADHD testing. To achieve the purpose of the study I collected data by conducting semi-structured interviews with six research participants. I provided the description each participants shared as they discussed in-depth their experiences in the classroom regarding hyperactive behaviors and how they determine what behaviors lead to a referral. The data analysis was based on Braun and Clarke's (2006) thematic analysis approach which is broken down in six phases: (a) familiarization of data, (b) coding, (c) generating themes (d) review of data (e) describe and identify themes (f) and report results. Based upon the research question a case study was deemed as the appropriate design. The findings of this study may benefit school districts and administrators to develop useful reforms such as a proper systematic referral system and aid teachers with classroom strategies and various perspectives regarding students with hyperactive behaviors. The findings may also show schools districts the need for providing teachers with ADHD training. Chapter 5 includes interpretation of the findings, limitations of the study, recommendations for future research, implications for social change, and study conclusion.

The research question for this qualitative case study was the following: a) How do elementary school, Title 1 third grade reading teachers in this FL elementary school experience student behaviors in the classroom and (b) how do they determine what behaviors lead to student referral for ADHD testing? As the data was conceptually

analyzed the five themes that evolved were (a) Teachers experience behaviors of their students (b) Teachers experience their own frustrations and challenges (c) Teachers need to be adaptable to students' needs (d) Teachers enacted several classroom strategies to address students' behavior (e) Teachers collect and monitor data to assess need for additional resources.

Most of the participants expressed their description of hyperactive behavior as fidgety and unable to sit still or complete a task. The majority of the participants gave an in-depth experience of what the behaviors entails such as elopement, acrobatic type behaviors, constantly out of seat to name a few. Many of the participants also expressed the importance of trying to avoid the behaviors to affect you emotionally while some participants expressed frustration and how dealing with hyperactive behaviors in the classroom can be challenging and emotionally draining. Five out of six participants expressed the importance of developing a relationship with the students to be able to identify their needs and their cues before they spin out of control in the classroom. There were many commonalities between the participants; however, there were some uniqueness as each participants share their in-depth experiences.

Interpretation of Findings

To discuss the interpretation of the findings from this study I will address part A of the research question: How do elementary school, Title 1 third grade reading teachers in this FL elementary school experience student behaviors in the classroom? One of the findings of the study show how teachers experience the behaviors of their students. One of the most common behaviors that the research participants said they experienced in the

classroom was fidgety behaviors with an occurrence of 18 times in the data. In which participants descripted fidgety behaviors as some of the following behaviors: constantly out of the seat, districting behaviors, lack of self-control and attention-seeking behaviors. Some of the participants described how students would display an inability to complete a task and would go from one task to another without completion. Two of the six participants discussed an interesting perspective in which they believe anxiety plays a role and masks itself in hyperactive behaviors. From the research participants in-depth experience of students' behavior it can be stated that teachers experience a wide range of behaviors in the classroom and those behaviors experience by the teacher can create various frustration and/or challenges. Which leads to the next finding of the study.

When participants were asked to describe their definition of hyperactive behaviors demonstrated in the classroom, their description corresponded with the APA definition provided in Chapter 2. Children with hyperactive behaviors often displays excessive talking, fidgeting, distractibility, and impulsivity (APA, 2013). Teachers experienced their own frustrations and challenges. Some participants explain how the demonstration of these hyperactive behaviors can impact the learning environment for everyone in the classroom due to the attention needed to address these behaviors. One of the main points made in this finding was acknowledging how challenging it can be dealing with the depicted behaviors but to focus efforts and energy on the experience of the student and not allowing your emotions to exasperate the situation. This finding confirms the literature in Chapter 2, which validates how teachers are faced with daily challenges with students who demonstrates behavioral disturbances and are constantly redirecting,

managing disruptive behaviors while aiming to provide an optimal learning environment (Ohan2008). It is beneficial to approach and understand the expression and behavior of the student as a way of the student communicating that their needs are not being met; as a result, learning the needs of the students and discovering their learning style is an approach to connecting with students and curtailing behavior. Alexis was the only participant that highlighted her experience with seeing hyperactive behavior more commonly among boys than girls, which confirms the literature in Chapter 2 that states boys are diagnosed with ADHD more often than girls. In the secondary data provided by the district, the male demographics were significantly higher in all the categories which support Alexis's observation of hyperactivity being more common among boys than girls. What was particularly interesting while analyzing the data was the lack of discussion regarding the role culture plays. Michael mentioned at the end of the interview his thoughts about seeing an overrepresentation of Black boys in special education programs and the need for more culture awareness when it comes to learning differences. Which I believe the secondary data clearly depicts his view regarding the disproportionate numbers of black males in comparison to other races. Some participants did discuss the understanding of learning differences but did not discuss the role culture plays.

One of the six participants had formal education in behavioral disorders as they had a degree in child psychology, while others did not have a formal education in behavioral disorders such as ADHD. This confirms the literature in Chapter 2, which suggested that teachers lack formal education and training to deal with ADHD (Bradshaw & Kamal, 2013; Guerra & Brown, 2012; Lawrence et al., 2017). Which supports the

premise of the importance formal ADHD education, due to the influence school reports has on diagnoses gives by pediatricians and mental health professionals it is essential for teachers to be properly trained and knowledgeable of ADHD (Lawrence, 2017). Most of the participants shared the importance of collecting data on the student and allowing either a school psychologist to review information and observe students behavior. A collaboration process corresponded with the behavioral intervention outline in a case study presented in Chapter 2. Levine & Anshel (2011) presented a case study of an 8-yr old child named Alex that was diagnosed with ADHD. The researchers in the case study used a collaboration approach to treat Alex that involved the school psychologist and his parents, along with CBT strategies. Alex was referred by his classroom teacher due to disruption in the classroom and non-participation in classroom assignments. The teacher reported numerous occasions of having to remove the student outside of the classroom to do one-on-one work with the teacher's assistant. Upon referral, the student was then evaluated by the school psychologist. The evaluation showed Alex's impairment in the academic, social, and home-based functioning domains. The evaluation also included observations from teacher, parent, and student. The psychologist used standardized testing, classroom observations, and school records. The collaboration method was a method utilized and described in similar manner when the referral process was described.

Implications Regarding the Theoretical Framework

This research study used the Bronfenbrenner's (1979) bioecological model as the theoretical framework. Bronfenbrenner (1979) theorized the importance of considering the complete ecological system in which development takes place to understand a child's

development (Ben-David & Nel, 2013; Bronfenbrenner, 1994; Tudge et al., 2009). Bronfenbrenner's theory suggest that children development is impacted by the system of relationships that exist within his or her environment, such as a child's relationship with teachers and other students in the classrooms (Ben-David & Nel, 2013; Bronfenbrenner, 1994). Bronfenbrenner bioecological model discussed five layers that each impacts a child's development and mental health the microsystem, mesosystem, exosystem, macrosystem, and chronosystem (Bronfenbrenner, 1979). The microsystem as the first layer consists of the system that is closest to the child and the one that has direct contact which often includes, family, peers, teachers, and caregivers. Relationships in the microsystem are bidirectional, making the microsystem the most influential level of the ecological system (Bronfenbrenner, 1994). As a result, a child's interaction with their teacher and peers are factors that impacts a child's development. The participant Alexis stated:

> Also I try to build a community of learners where they feel safe among their peers, among the adults in the classroom. Um and that kind of lessons, that stress reaction and therefore they're, if they're able to be more calm, they're able to be less hyper if they feel more safe and included, they're able to be less hyper. Five out of the six participants discussed the importance of developing a relationship with the students.

Cathy stated:

> just understanding how they develop a relationship with that student and making sure that those developing some type of cues with that student. So when the

student is feeling that way, they can kind of give you an indicator or if you observe that the student is displaying those behavior so that you can quickly um immediate response so you can curtail it.

Many of the participants discussed the importance of cultivating relationships with students. To advocate for the needs and support that the child needs. As stated in Chapter 2, a child's interactions with their teacher and peers impact their development.

The second layer is the mesosystem contains the interactions between the different parts of a child's microsystem (Bronfenbrenner, 1994). The interactions between the different microsystems have an indirect impact on a child's development (Bronfenbrenner, 1994). For example, the relationship between a parent and a teacher, and the role a parent may play in being a positive influence in the child's academic journey is an example of a positive indirect influence due to the interaction of two microsystems. Christine at the end of her interview when asked if there was anything she would like to add that she feels is important to discuss, she mentioned her desire to see more parents involve in the development and education of their children. She mentioned that she does not experience enough parent interaction in their child educational path. The third layer is the exosystem which is a setting that decisions are made that affects the child such as a teacher making an ADHD referral. While the child is not an active participant, decisions that are made in relation to the child has a causal effect.

A commonality found among the interviewees was the importance of documentation and supporting evidence on students' behavior and grades when referring a student to behavioral health. Christine expressed the significance grades play as it

relates to setting a referral expressing if behavior is impacting grades something needs to be done. Christine stated, “It would mainly be if a child cannot complete any work or their academics are being hindered because of their over active behavior.”

The fourth layer is the macrosystem, which includes a child’s cultural environment and the other systems that affect a child, such as the economy, cultural values, and the political system (Bronfenbrenner, 1994). The macrosystem can be considered as a societal blueprint that becomes embedded in various institutions within society such as family, school, and forms of government.

An example is Every Student Succeeds Act (ESSA) that replaced the No Child Left Behind a bipartisan congressional achievement that kept standardized testing requirements but shifted accountability from federal to state (Richard, 2019). Christine discussed the difficulty of the third-grade level and how in some students the difficulty and pressure can cause form of anxiety that may look like hyperactive behaviors. Christine stated:

> It does get a little harder with knowing the work that we have to do in the classroom can also make there hyperness even more because of the anxiety of the work that we have to do and how hard it can be for them. So um I think that that affects them as well.

The final level is the chronosystem, which is the role of time in a child’s development (Bronfenbrenner, 1994). For example, a child growing up in an era of technology where video gaming and computer devices have become the apparatus for children to receive information can have an impact on a child’s development, learning

style, and social skill. When a change in one of the ecological systems occurs, it has a possibility of impacting the other systems (Bronfenbrenner, 1979). Two out of the six participants expressed the importance of understanding the learning style of each child and being flexible in your learning ability which should include various learning modalities. Cathy stated:

> "…making sure that you have a variety of learning modalities giving them technologies or appealing to if there are visual or kinesthetic or auditory, learning making sure that you have incorporate some things such as that." Michael expressed the importance of being aware that not each student is going to be able to sit at their desk for 45 minutes straight and how some kids may be sitting on a bouncy ball.

Michael stated:

> If you walk in one of our classrooms that has the alternative seating, you're going to see some chairs that maybe like the, like a bouncing ball and you may have something like a stool that kind of rocks and what have you, giving them options in terms of different seating, because not every single child sits in a chair at a death straight up for 45 minutes.

Some of the participants expressed the need to adapt the learning environment to fit the needs of the students, which consists of various learning modalities such as technology.

Limitations of the Study

The limitations of my study begin with the small sample size and case. With a small sample size, it may be difficult to reach data saturation. This study was conducted with a small criterion sampling; therefore, unable to generalize the results of this study. A small sample size provides difficulty with generalizing and transferability of the results to various contexts beyond the scope of this study. The results may have been different if I had included teachers from grades K-5, assuming teachers met qualifications, increasing the sample size. Increasing the sample size could have provided more in-depth experiences and the ability to generalize the study results. It is also important to consider that the inclusion criteria of 1-year minimum teaching experience may had provided information from teachers with inadequate training or experience in the classroom; however, all the research participants had three or more years of experience. Another limitation is that the interviews were based on the teacher's perspective; as a result, the teachers may not have been truthful about their views of the children and the services that they may or may not need. Furthermore, the teacher may lack the knowledge about mental health services or be uninformed to properly provide information about signs of mental health needs. Another limitation is the inclusion of non-Title 1 schools and the use of other districts which could have provided a broader sample size and perspective on mental health in elementary schools and their referral processes.

Another limitation of this study was the data collection method. It was my original intention to collect data through face-to-face interviews semistructured interviews. However, due to COVID-19, face-to-face interviews were no longer allowed

and so phone interviews were conducted. Phone interviews do not allow the researcher to observe verbal and nonverbal cues or emotions and behaviors that face-to-face interviews provides along with a higher data quality. Having a face-to-face interview provides the opportunity to build a rapport that will allow the participant to feel comfortable in sharing in-depth experiences. For example, one of the participants was very short and brief in their responses and it took me having to probe for more in-depth information.

Recommendations

The results of this study helped determine the need for teachers to receive formal education on ADHD behaviors and classroom interventions as most participants haven't received training or education. Teachers discussed that referral process is mainly triggered by student grades being impacted. The question is should the response of seeking a referral be reactionary in which the grades and work of the student is impacted? This study shows that the need for a uniform referral system and not just based on informants' report of behavior. As mentioned in the literature in chapter 2 Researchers Lawson et al., (2017) examined the teacher and parent rating and the effects SES has on what is reported and it discussed social and cultural context can possibly affects the differences between informant reports of behavior. The findings of this study coincide with literature in chapter 2 which suggests that further research be conducted to influence the need for proper training on mental health for educators and a need for a standardized referral process (Lee, 2014). Despite the small criterion sample used in this study and the inability to generalize the results, the researcher believes that it provides a starting point for a dialogue with teachers, parents, and school personnel about current services

available to students and training available to educators. The results of this study show that there should be more research conducted on teachers' experience of hyperactive behavior and the referral process in elementary, middle and high school. This study focused on Title 1 schools in and Eastern Fl, school district; however, research should be conducted on all schools not just Title 1 schools in all counties to provide a broader perspective to the research study. This study highlights how Title 1 Reading teachers experience hyperactive behaviors in the classroom and what behaviors lead to a referral and the importance of identifying the needs of your students. This study helps other teachers, parents and school personnel identify with experiences that teachers face in the classroom, includes knowledge of the referral process at their schools, and strategies to handle behavioral problems in the classroom. The participants description of how they experience hyperactive behaviors confirmed points mentioned in chapter 2 that addressed how teachers are faced with daily challenges with students who demonstrates behavioral disturbances and are constantly redirecting, managing disruptive behaviors while aiming to provide an optimal learning environment (Ohan et al., 2008). Another recommendation is to conduct further research and exploration on the efficacy of classroom strategies that teachers use to address hyperactive behaviors in the classroom. This is based upon participants response regarding their classroom interventions to address hyperactive behaviors in the classroom.

Implications for Social Change

This qualitative case study has implications for social change, because exploring teachers' experience of hyperactive behaviors in the classroom and their referral decision

making processes is unexplored research topic as presented in Chapter 2 literature review; therefore, the findings of this study can add to the current body of literature. The implications of this study can be used to influence the importance of educators receiving mental health education. Mental health education is essential for teachers as they play a crucial role in the identification and treatment of students with ADHD and are usually first identifies. There is a need for further information and understanding of teachers' decision-making processes and how they make decisions about referrals. Teachers face daily challenges with students who demonstrates behavioral disturbances and are constantly redirecting, managing disruptive behaviors while aiming to provide an optimal learning environment (Ohan et al., 2008).

This study described the frustration and emotional challenges that some teachers face having to deal with hyperactive behaviors on a consistent basis in the classroom. Assessments given to teachers by pediatricians or mental health professionals expect provide objective and accurate assessment of what child's behavior. Some participants discussed their perspectives of the pressure third grade can have on students due to standardized testing and third grade level work and how the pressure may be masked as hyperactive behavior. Other participants discussed how a student hyperactive behavior can be a way for the student to communicate that their needs are being met; as a result, it is the teacher's responsibility to identify a learning style and environment that would provide the learning needs of the student. If a teacher only observes the hyperactive behavior without taking a closer look at the situation, there is a risk of an incorrect diagnosis and treatment, and possibly medication, being administered to a child. A

student misdiagnosed and medically treated for ADHD can have severe and detrimental social consequences. Misdiagnosis and psychotropic treatment of mental disorders can have long-term health effects (Sciutto & Eisenberg, 2007).

It is important for teachers to receive proper education and training along with knowledge of diverse classroom management strategies and learning styles. Findings of this study shows the need of developing a standardized referral process through-out the educational system. While schools are the gateway to providing behavioral health services for children, there remains limited understanding of the referral process in the school environment for treatment (Bradshaw & Kamal, 2013; Coles, et al., 2012; Guerra et al., 2017; Lee, 2014). This study may increase the awareness and need for school systems to provide teachers with adequate training and education on ADHD and other mental health disparities, so that teacher completes assessments based on expertise and not biases. It is my goal to serve and protect children in the school system from misdiagnosis in my capacity as a researcher and social change agent. It is important to provide learning tools to teachers to aid in proper systematic, ADHD referrals. Having additional studies that depict teachers' experiences of ADHD associated behaviors in the classroom can contribute to a standard of access to mental health services in the schools (Lee, 2014; Sherman et al., 2008).

Another implication of this study is that it highlights the in-depth experiences of teachers and their description of classroom strategies used to address hyperactive behaviors in the classroom. The classroom strategies described by the participants in the

study provides tools and resources for educators and can serve as a resource for other educators who have similar behaviors demonstrated in their classroom.

Conclusion of Study

The purpose of this qualitative case study was to explore how Title 1 third grade reading teachers at one Eastern, FL elementary school experience student behaviors in the classroom and how they determine what behaviors lead to student referral for ADHD testing. Using the Bronfenbrenner's (1979) bioecological model as the theoretical framework for this study, I was able to capture how third grade reading teachers experience hyperactive behaviors in the classroom, highlighting distinctions and commonalities among their experiences. The researcher utilized the Braun and Clarke (2006) analysis method. The analysis method has six segments (a) familiarization of data, (b) coding, (c) generating themes (d) review of data (e) describe and identify themes (f) and report results which was the framework utilized to analyze the data in this study. The six interviews transcribed produced 41 codes. From the 41 codes created from the data five categories emerged. The five categories derived from the data are as follows: student behaviors, teacher experiences, teacher challenges, teachers' adaptations, classroom strategies (preventative, creative, interventions, positive, disciplinary actions, sensory), and student data.

The study shows that majority of the participants have not received formal education specific to ADHD behaviors and other mental health disparities that can exist in the classroom. Children can spend up to seven hours a day at school; furthermore, teachers play a significant role in the identification and treatment provided for students

with ADHD and are usually the first identifiers. Therefore, the need for teachers to receive adequate training and education on ADHD and other mental health disparities is necessary for proper assessment of a child's needs. This study provides the message of how important it is not to assume primarily on the behavior of a student that there are mental health issues or needs. As mentioned in the data, it is necessary to take a deeper look into the situation and needs of the student. Key factors that arose is the possibly of students with disruptive behavior masking their anxiety due to stress of standardized testing or not responsive to the learning style delivered; therefore, the ability to be flexible as a teacher and cultivate a trusting relationship with the student is essential to the overall well-being of every student. The findings of this study can bring educational reform and strategies to the overall approach and perspective of how hyperactive behaviors are addressed and perceived in the classroom.

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Appendix A: ADHD Diagnostic Criteria

1. Inattention: Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

Note: The symptoms are not solely a manifestation of oppositional behavior, defiance, hostility, or failure to understand tasks or instructions. For older adolescents and adults (age 17 and older), at least five symptoms are required. +-

a. Often fails to give close attention to details or makes careless mistakes in schoolwork, at work, or during other activities (e.g., overlooks or misses details, work is inaccurate).

b. Often has difficulty sustaining attention in tasks or play activities (e.g., has difficulty remaining focused during lectures, conversations, or lengthy reading).

c. Often does not seem to listen when spoken to directly (e.g., mind seems elsewhere, even in the absence of any obvious distraction).

d. Often does not follow through on instructions and fails to finish schoolwork, chores, or duties in the workplace (e.g., starts tasks but quickly loses focus and is easily sidetracked).

e. Often has difficulty organizing tasks and activities (e.g., difficulty managing sequential tasks; difficulty keeping materials and belongings in order; messy, disorganized work; has poor time management; fails to meet deadlines).

f. Often avoids, dislikes, or is reluctant to engage in tasks that require sustained mental effort (e.g., schoolwork or homework; for older adolescents and adults, preparing reports, completing forms, reviewing lengthy papers).

g. Often loses things necessary for tasks or activities (e.g., school materials, pencils, books, tools, wallets, keys, paperwork, eyeglasses, mobile telephones).

h. Is often easily distracted by extraneous stimuli (for older adolescents and adults, may include unrelated thoughts).

i. Is often forgetful in daily activities (e.g., doing chores, running errands; for older adolescents and adults, returning calls, paying bills, keeping appointments).

2. Hyperactivity and impulsivity: Six (or more) of the following symptoms have persisted for at least 6 months to a degree that is inconsistent with developmental level and that negatively impacts directly on social and academic/occupational activities:

a. Often fidgets with or taps hands or feet or squirms in seat.

b. Often leaves seat in situations when remaining seated is expected (e.g., leaves his or her place in the classroom, in the office or other workplace, or in other situations that require remaining in place).

c. Often runs about or climbs in situations where it is inappropriate. (Note: In adolescents or adults, may be limited to feeling restless.)

d. Often unable to play or engage in leisure activities quietly.

e. Is often “i. Often interrupts or intrudes on others (e.g., butts into conversations, games, or activities; may start using other people’s things without asking or receiving permission; for adolescents and adults, may intrude into or take over what others are doing).

on the go," acting as if "driven by a motor" (e.g., is unable to be or uncomfortable being still for extended time, as in restaurants, meetings; may be experienced by others as being restless or difficult to keep up with).

f. Often talks excessively.

g. Often blurts out an answer before a question has been completed (e.g., completes people's sentences; cannot wait for turn in conversation).

h. Often has difficulty waiting his or her turn (e.g., while waiting in line).

Combined presentation exist when both Criterion A1 (inattention) and Criterion A2 (hyperactivity-impulsivity) are met for the past 6 months (APA, 2013).

Appendix B: Interview Guide

OPENING INTRODUCTION: My name is Sharmaine LaFleur, a doctoral student at Walden University. I want to thank you for your time in participating in this study. The purpose of this study is to explore Title 1 Reading teacher's lived experience when referring a student with overly hyperactive behaviors for counseling services.

Warm-up Question: Briefly tell us about yourself and your experience with hyperactive students.

How would you define hyperactive behavior?

PART 1 INTERVIEW

Please describe what overly hyperactive behavior may look like compared to a hyperactive child.

Please describe from your experiences common behavioral progressions that eventually lead to hyperactive behavior in school.

How do you interrupt hyperactive behavior in the classroom? What did that experience mean to you?

How do you prevent hyperactive behavior in the classroom?

HALFWAY POINT

SUPPORT & RECOGNITION RESPONSES: We are about halfway through the interview now, and from my point of view it's going very well. You have been telling me some important things. How is it going for you?

1.) Please describe a typical day when you are teaching children that display overly hyperactive behavior. FOLLOW UP QUESTION: What did that experience mean to you?

2.) Please describe your experiences that determine your decision to refer a student to a counseling agency based on hyperactive behaviors. 2a). How did you come to that decision?

Closing- Out of all the things we have talked about today there may be some topics we've missed, what should have been discussed and why do you feel that topic is important?