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An Exploration of Teachers' Experiences with the Completion of Behavior Rating Scales for
Their Students with ADHD

A Dissertation

Presented to the Faculty of the
College of Education and Social Work

West Chester University

West Chester, Pennsylvania

In Partial Fulfillment of the Requirements for

the Degree of

Doctor of Education

By

Amy Jenkins

May 2020

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West Chester University

Dedication

I dedicate this work to all students and families that are dealing with someone that has a diagnosis of ADHD. Hang in there with the person you love and care for, they are dealing with the hardest part of ADHD. I also dedicate this work to my family. Your countless sacrifices so that I could complete this journey have not gone unnoticed. I dedicate this work to my dad, Stan Piecara, who always instilled the importance of education in our family. His hard work and values carried over to his children. I love you and would not be who I am today without you and Mom. I dedicate this work to my mom, Kathy Piecara, thanks for believing in me even when I didn't believe in myself. You are my biggest cheerleader and for that I will always be grateful. Lastly, I dedicate this work to my children, Cori and Aaron, and husband, Joe. You have provided me with the time, support, encouragement, and love to complete this process. Joe, I can't thank you enough for allowing me the time away to write and write some more. I know it was a difficult process for all of us and we showed how strong our little family unit is and made it through this journey together. I know at times it seemed like a never-ending process. But, I got it done and I love you!

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Abstract

This instrumental case study examines teacher completion of behavior rating scales for their students diagnosed with ADHD. The researcher used a qualitative approach following Stake's (1995) approach. Surveys, interviews, classroom observations and review of behavior rating scales were completed to answer the main research question of what information does a teacher use when completing the behavior rating scales for students? Results of the study identified that teachers rely on background knowledge including upbringing when completing the behavior rating scales. Collegial conversations also help to determine the ratings teachers assign to behavior rating scales.

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Chapter I: Introduction

As educators place value on the mental, social, and academic aspects of education, educational systems are shifting their focus from MORE traditional subject areas. Supporting the mental and social education of students requires the assistance of mental health professionals and school personnel such as school counselors, teachers, school psychologists, and social workers. This dissertation will focus on one of the many mental health diagnoses that school age children receive, Attention Deficit Hyperactivity Disorder (ADHD), and the role that the classroom teacher plays in providing accurate, detailed information to the school-based team and doctors that make the diagnosis of ADHD.

Although, the terms to describe ADHD have changed over the years, the behavior patterns and struggles faced have been around for some time. In 1798, Dr. Alexander Crichton, a Scottish physician, described problems of patients in his practice with inattention (Rooney, 2017, p. 300). Since then, numerous physicians and psychiatrists have used a variety of terms to describe people as having attention, organizational, hyperactivity, and distractibility difficulties.

ADHD is a pattern of behaviors that includes inattention and/or hyperactivity-impulsivity. This pattern of behavior interferes with the functioning or development of a child (Diagnostic and Statistical Manual of Mental Disorders, 2013). At one time it was thought that people struggling with symptoms of ADHD had minor brain damage (Rooney, 2017, p. 300). In 1998, the National Institute of Health held a Consensus Development Conference where they shared that there was sufficient evidence to establish ADHD as a disorder (Jensen, 2000). A person can be diagnosed with one of three types of ADHD: (a) ADHD-I which is attention deficit hyperactivity disorder with a focus on inattentiveness, (b)

ADHD-H which is attention deficit hyperactivity disorder with a focus on hyperactive, or (c) ADHD-C which is attention deficit hyperactivity disorder with a combined focus of inattentiveness and hyperactivity.

As more information becomes available about ADHD, misconceptions are being replaced by fears about how genetics contribute to the presence of ADHD. Environmental and genetic factors impact ADHD to make it a complex disorder (Rooney, 2017, p. 301-302). In 2009, the research uncovered that genetics might account for 70-80% of the risk for ADHD (Rooney, 2017, p. 301). Because genetics are a risk factor for ADHD, parental guilt can play a factor (Dauman, Haza, & Erlandsson, 2019). Raising a child with ADHD has shown to be more stressful on parents than parenting a child with a specific learning disability (Miranda et al., 2015, p. 82). Although parenting a child with ADHD can be stressful, ironically some of the symptoms children with ADHD display are passed on from their parents. Not only does it affect parents, but ADHD also impacts the self-esteem of children.

Because of their focus on themselves, social situations can be challenging which leads to lower self-esteem. Children thought to have ADHD may struggle with observing and imitating behaviors which can cause a struggle in social situations. According to Peterson, Slaughter, Moore, and Wellman (2016), “theory of mind” (ToM) is the process of understanding these skills and why they are important. If children have a better understanding of the desires and beliefs behind actions, they should be able to more seamlessly interact with others, as the ability for a child to see beyond him/herself allows for better interaction among a peer group. While Piaget’s stages of cognitive development suggest that once a child reaches the concrete operational stage, they should be able to put

others first, a child with ADHD struggles with that concept (Barkley, 1997). The inability of children with ADHD to consider others leads to some of the emotional toils they encounter (Barkley, 1997).

The Importance of Personal Connections

Fortunately, there are tools and strategies to help with the emotional stress and learning to put others first. One way for children to learn to put others first is through play, as play is an extremely important part of social and emotional growth (Ginsberg, 2007, p. 182). In particular, forming relationships and learning to play can be difficult for children with ADHD. If a child does not form a relationship with a teacher or other children, teachers may view disengagement as a cause for concern, when in reality, a compatibility issue may be the source of the problem. If teachers see children not behaving like expected based on the behavior of peers, there may be cause for concern and a referral to the school psychologist. If relationships are not built among other students and teachers, the reflections of the teacher may not be an accurate depiction of what is occurring in the classroom (Ginsberg, 2007).

Positive connections and relationships between teachers and students are ways to increase the likelihood that students with ADHD fit into the classroom environment (McLaughlin & Clarke, 2010). Relationships among students with ADHD and their teachers are important because schools have experienced an influx of students diagnosed with anxiety, depression, autism, Attention Deficit Hyperactivity Disorder (ADHD), and numerous other mental health diagnoses (Mack, 2011). Schools must continue to meet the needs of all students and continue to show growth in their education. By teachers forming personal connections and positive relationships with students, not only is mental health improved, but

also student achievement and classroom environment (Hattie, 2015). The educational system has a responsibility to stay current and have strategies to help students so they can be successful in life after school.

Purpose of Study

At times, the ability to access the curriculum for students with a diagnosis of ADHD requires modifications and accommodations (Rehabilitation Act of 1973). Although ADHD occurs more frequently in male students, there are also female students with the diagnosis (Gershon & Gershon, 2002). Szarmari and colleagues (1989) uncovered that males are more frequently diagnosed with ADHD since they often have hyperactivity as part of their diagnosis compared to females and their diagnosis of ADHD. The hyperactivity component of ADHD, often seen in males, can lead educators and parents to make earlier and more frequent referrals to school psychologists and medical doctors because the behaviors of these students cause them to stand out in social situations.

The overrepresentation of males diagnosed with Attention Deficit Hyperactivity Disorder (Gershon & Gershon, 2002) may be attributed to students' mothers and their female teachers completing the behavior rating scales (Chi & Hinshaw, 2002). A crucial component of diagnosing ADHD is teacher and parent completion of behavior rating scales. These differences in relationships can lead to behavior form ratings that do not accurately reflect the behaviors of male students (Chi & Hinshaw, 2002). Regardless of teacher or student gender, positive relationships within the classroom setting among teachers and students have a positive impact on student achievement (Hattie, 2012).

In this study, I will examine how teachers' decision-making processes, background experiences, and gender identities can be part of their completion of student behavior rating

scales. For this dissertation, I will use the term gender to designate the preferred identity and the term sex to designate a person's biological markers.

Problem Statement

There is currently no cost-effective blood test or x-ray to identify when a person has ADHD (Gualtieri & Johnson, 2005; Sherman, 2018). ADHD is diagnosed with behavior rating scales, parent reporting, and observation— all of which are subjective assessments (Gualtieri & Johnson, 2005). In addition to initial ADHD evaluations, teachers also complete behavior rating scales once a student has started the ADHD reevaluation process, which occurs every three years. Despite the important role these evaluations play in the initial evaluation and reevaluation process, most teachers do not receive professional development on how to complete the scales or clarification for the definitions of the terms included on the behavior rating scales. Thus, when teachers complete the scales they often rely on their background knowledge and prior learning experiences. Since background knowledge is different for each individual, those differences could be reflected in the completion of the behavior rating scales. In turn, this subjectivity may lead to results that do not accurately represent the child's behaviors and can lead to a misdiagnosis of ADHD.

Research Questions

The main research question for this study was: what information does a teacher use when completing the behavior rating scales for students?

The sub-questions that guided this study were:

1. What child behaviors during a class period coincide with their teacher noting hyperactivity on the rating form?

2. How does a teacher reflect about personal upbringing or people they are closely associated with that have similar difficulties to the identified student when completing a behavior rating scale?

3. When and why do teachers talk to other teachers before completion of a behavior rating scale?

The research method for this study was an instrumental case study approach. According to Stake (1995), using an instrumental case study is beneficial when research on a case leads to an understanding of something else. For this instrumental case study, the lived experience of the teachers in the study will be important as these experiences will have an impact on how teachers will complete the behavior rating scales. Stake (1995) recognized the background information is important to the instrumental case study. This study included surveys and the history of the teachers completing the rating scales matters to assist with gaining background knowledge. An example of an experience that may affect the completion of behavior rating scales is if a teacher has been diagnosed with ADHD or has a sibling with ADHD, they may be more likely to see and report the symptoms associated with ADHD.

Rationale for Study

Teachers contribute to a crucial component of ADHD diagnosis through the completion of behavior rating scales. During this qualitative case study, I will examine classroom teachers' decision-making process as they complete behavior rating scales for students in the ADHD reevaluation process. Through my use of observations and interviews, I intend to capture how teachers' prior experiences and background knowledge, as well as conversations with colleagues inform their completion of behavior rating scales.

One important reason to conduct qualitative research with regards to teachers' completion of the behavior scales is to provide an opportunity for teachers who complete the scales to reflect upon their decision-making process when evaluating a student's behaviors. As an administrator, I have observed that some teachers take pride in completing these scales with fidelity, while other teachers complete the scales quickly. My observations have led me to wonder whether teachers fully understand the gravity of their role in the ADHD evaluation process. Although teachers may see the behavior rating scales as another piece of paperwork, the scales are one piece of documentation that can lead to diagnosis. Throughout this case study, I will interact with teachers to gain an insight into their decision-making process, use of background knowledge and prior experiences, and how reliance on colleagues informs the way they assess a student on the behavior rating scales.

Three to six identified teachers at the high school level will be asked to participate in the case study. The teacher's content areas will vary depending on the students that are due for a reevaluation at the time of data collection. During the reevaluation process, the school psychologist typically distributes the rating scales to one content area teacher and one elective teacher for the child under evaluation. I will identify which teachers the school psychologist has selected for completing the rating scales and then those teachers will be provided an opportunity to participate in the study. The selection of teachers is based on the student schedule that was completed during the summer months. The school psychologist randomly picks a content area teacher and an elective area teacher. If a student does not have an elective course at the high school, the school psychologist will pick two content area teachers.

An important aspect of qualitative research is “that it is a situated activity that locates the observer in the world” (Denzin & Lincoln, 2003, p. 3). The qualitative researcher will study in the natural environment and attempt to make sense and “interpret phenomena in terms of the meanings people bring to them” (Denzin & Lincoln, 2003 p. 3). The qualitative researcher must be open to the situations and environments in which they are placed. Not only must researchers be open to the environments, but they must also observe and document without influencing the experience. Thus, it is important for the researcher to build a relationship before starting the research. The relationship building will allow me to be non-intrusive as an observer in the classroom as I am collecting data.

Furthermore, there are many experiences, and we all experience life differently, so the research questions and items that can be documented are countless. Lincoln (2005) explained, “Qualitative research continues to be deployed for a variety of disciplined inquiry purposes: research, evaluation and policy studies, as well as deconstructive analysis and Foucauldian archaeologies” (p. 29). The strongest quality of qualitative research, is that this methodology helps to answer *what* and *why* questions. The *what* and *why* responses are important to this study as I will be examining the choices the teachers make on the behavior rating scales. These are questions that cannot be easily answered with numbers. Qualitative research provides answers to these questions by placing the researcher in the field with the students and collecting observational and interview data. The data will provide context to teachers’ completion of the behavior rating scales. The systematic approach to qualitative research is an essential part of the process, as it provides a process for ensuring that the data is not subjective to the interpretation of the researcher (Lincoln, 2005). The researcher must remain neutral and not include personal bias into the conclusions that are drawn. The

collection and analysis of data will help to draw the conclusion and discussion for the researcher.

Rationale for Methods

In this study of teacher completion of behavior rating scales, I used an instrumental case study approach. According to Stake, using an instrumental case study is beneficial when research on a case is used to gain an understanding of something else (Stake, 1995). For this instrumental case study, the experiences the teacher had will be important to include. The experiences of each teacher will have an impact on how they will complete the behavior rating scales. An example of an experience that may impact the completion of behavior rating scales is if a teacher has been diagnosed with ADHD or has a sibling with ADHD, they may have ratings that are inconsistent with other teachers.

The teacher online surveys (Appendix F) allowed the researcher to ask background information from that teacher. This left the time for the interviews to be structured around questions or information that was left unanswered or needed further clarification. The online surveys also allowed the teachers to include any information they felt was pertinent to the researcher. Once background information was obtained, the observations were scheduled.

Classroom observations of the student were completed, using the observation data collection form (Appendix G). The observations allowed me as the researcher, to observe if the documented behaviors on the rating scales were demonstrated by the student on the day of the observation. If the behaviors were not observed, I followed up with the teacher during the interview.

To discuss the experiences and any unanswered questions of each teacher, I conducted a semi-structured interview with each teacher that completed the behavior rating

scales. The semi-structure interview allowed me an opportunity to ask teachers specific questions about childhood and the view of the education the teacher perceived that they received. The background information of each teacher was highlighted so the reader is aware of the dominant issue of what could be influencing the teacher's ratings. Stake recognized the acknowledgement of background knowledge of the teachers is important to consider, making the surveys and history of the teachers completing the rating scales applicable (Stake, 1995). The questionnaires, observations and interviews allowed for me to gain an extensive picture of the teacher completing the behavior rating scales.

Significance of Study

By completing this study on teacher completion of behavior rating scales, the resulting information provided information to the teachers, so more accurate information will be recorded about student behaviors (Whitlet, Smith, & Vaillancourt, 2013). With updated professional development and more accurate reporting, the number of students diagnosed with ADHD will now be more accurate. The more accurate information provided to doctors will help, so there is no longer an overrepresentation of ADHD, especially in males.

Researcher Bias

As someone who has served as an administrator in this school setting for five years, I gave particular attention to reducing researcher bias. Because my position in the school could possibly make teachers feel obligated to participate, I had the school psychologists distribute the consent scales to teachers and students. Prior to the returned consent scales, I was not aware of which teachers the school psychologist had asked to participate in the study.

Although I worked as an administrator alongside teachers in the study, participation and what was reported during the study was not reflected on their evaluations. To help remove the fears and anxiety of teachers, I did not include any teachers who directly reported to me. The honesty and openness of the teachers was important so I understood all influences involved in the completion of the behavior rating scales.

Limitations

This study of teachers' decision-making when completing the BASC rating scales had several limitations: (a) teacher bias when completing the scales, (b) insight into the decision-making process that is occurring within the teacher, and (c) accurate reporting of what the teacher said about the decision-making process. Teacher bias was documented with information provided by the teacher to the researcher. With the decision-making process, there was no way for this researcher to "see" what the teacher thought. The researcher had to rely on the teacher and what they reported as truthful.

Threats to Internal Validity

It was important that I scheduled interviews in a space where teachers felt comfortable. The area was out of the main office and in a location where teachers identified that they could have discussions without distractions. The teacher work rooms or another location identified by the teacher were used.

As a result of my role as the assistant principal, the student did not demonstrate some of the behaviors on the behavior rating scales as they feared discipline. Often times, the climate of a classroom changed when an administrator was present. It was important that I remained as neutral as possible and did not insert myself into the lesson or classroom environment.

Definition of Terms

Attention Deficit Hyperactivity Disorder (ADHD) – One of the most commonly diagnosed neurodevelopmental disorders. Those diagnosed with ADHD frequently have trouble paying attention, controlling impulses or being overly active. (Center for Disease Control [CDC], 2020).

Individualized Education Plan (IEP) - A written document that is created for each special education student. The document is created, reviewed and revised in accordance with the Individuals with Disabilities Education Act (Individuals with Disabilities Act [IDEA], 2004).

Individuals with Disabilities Education Act (IDEA) – A federal law that helps to allow students with disabilities access to the same education that a child without a disability (Individuals with Disabilities Act [IDEA], 2004).

The Behavior Assessment System for Children (BASC): Pearson developed and maintains this form –The BASC is completed for people thought to have a mental health diagnosis such as ADHD. The scales are completed by parents, teachers and self-reporting. After the completion of the scales, psychologists score the scales and that information is provided to a medical doctor and a team at the school level (Reynolds & Kamphaus, 2015).

Summary

This chapter provided an overview of ADHD and identified a problem regarding how teacher's report information on behavior rating scales. The completion of the instrumental case study will allow for information that can have an impact on not only the educational setting but also the medical field. The importance of accurately diagnosing ADHD, could

not only lead to students that are not labeled as other health impairment or given an IEP but may also lead to less students that are medicated for ADHD.

As this study continues, the next chapter will focus on the literature review. The literature review will demonstrate experiences of teachers and the role they play on the completion of behavior rating scales and how relationships also play a part in the completion of behavior rating scales. The teachers and their ability to form connections and positive relationships with students of teachers and students affects how the behavior rating scales are completed.

Chapter II: Review of Literature

Teachers and parents need to complete behavior rating scales as part of the complex process of identifying ADHD. This literature review focused on the teachers who worked with students in the classrooms, male students and their maturity, and how the female teachers in the classrooms combined with immature male students lead to completion of behavior rating scales that do not depict an actual representation of male students.

Gender and Today's Classroom

With 77% of today's teachers identifying as female, the classroom interactions between female teachers and male students can become a dynamic situation (Loewus, 2017). Not only are female teachers the majority of the teacher force, 80% of all teachers are white. This homogeneity shows a lack of diversity with the additional 20% broken down as follows: 9% Hispanic, 7% Black and 2% Asian (Loweus, 2017). The average teacher has 14 years of experience, while 57% have an advanced degree such as a, master's, education specialist or doctoral degree (Walker, 2018). Historically, there have always been more female elementary teachers (Loewus, 2017), and the percentage of female teachers is highest at the elementary level (Robinson & Lubienski, 2011).

A teacher's gender is one of the factors that shapes gender equity in a classroom (Jones & Dinida, 2004; Duffy, Warren, & Walsh, 2001). With this knowledge, administrators and school districts must work with teachers to enable all students to achieve to their potential. Professional development should be focused on social and emotional learning which would include working with teachers on connecting with all students. Thomas Dee states "Gender interactions have statistically significant effects on a diverse set of educational outcomes: test scores, teacher perceptions of student performance and student

engagement with academic subjects” (p. 549). The gender of teachers and the assignment of students can account for one third of the achievement gap that starts to develop at the elementary level (Dee, 2007; Gong, Lu & Song, 2018). The gender of teachers and students not only has an effect on achievement but also on perceptions teachers have on students. In a classroom with a female teacher, male students exhibit 11% more disruptive behaviors compared with their female classmates (Dee, 2007). When a male student has male teacher at the middle school level, the difference in disruptive behavior drops at least half (Dee, 2007).

Making connections with students is one of the most useful classroom management strategies (Caine & Caine, 1991; Gay, 2006). However, some female teachers struggle with making connections with male students. Yet, if a student feels they have a connection with a teacher they are less likely to act out in the classroom setting (Gay, 2006). One of the ways teachers scales these bonds with students is making a connection with the student on something outside of the classroom content. With these personal connections, teachers demonstrate to students that they are valued and seen as individuals (Johnson & Aragon, 2003). The increase in personal connections from teachers also leads to welcoming atmospheres where students have a sense of belonging and feel safe (Gay, 2006). For teachers who make these connections, classroom management becomes easier and less discipline occurs. While these personal connections may make it easier for a female teacher to provide positive comments and outside classroom connections to female students, forming connections with male students may be more difficult (Split, Koomen, & Jak, 2012).

Executive Functioning

As mentioned above, a majority of teachers are female, and that matters because executive functioning is dependent on gender; female and male students, and by extension, teachers experience different executive functioning processes. Executive functioning skills are used by everyone to process and act on incoming information. Executive functioning skills are classified differently by researchers. There are eight areas of executive functioning skills: impulse control, emotional control, flexible thinking, working memory, self-monitoring, planning and prioritizing, task initiation and organization (Understood Team, 2019). No matter how these skills are labeled they are responsible for helping humans survive and thrive in society. Executive functioning skills begin development quickly in early childhood and teenage years. The skills continue to develop into the mid to late twenties for some people (Understood Team, 2019). Difficulties with executive functioning skills are the hallmark trait of many children with ADHD (Brown, 2016). The section of the brain, the frontal lobe, responsible for the development of executive functioning skills is the slowest to develop (Brown, 2016).

Frontal Lobe Role with Executive Functioning Skills. The brain consists of three main parts, cerebrum, cerebellum, and brain stem. The cerebrum is the largest part of the brain and is comprised of two hemispheres, right and left. The cerebrum is also divided into four lobes: frontal, parietal, occipital, and temporal. The frontal lobe controls the functions of: personality, behavior, emotions, judgment, planning, problem solving, speech, body movement, intelligence, concentration, and self-awareness. These tasks are also known as executive functioning skills. The body also makes a neurotransmitter called dopamine.

The Role of Dopamine in Executive Functioning Skills. The frontal lobe of the brain is responsible for executive functioning and the creation of dopamine. Dopamine in the frontal lobe regulates a variety of the executive functioning skills. Dopamine can be thought of as “motivation.” When dopamine is released to the frontal lobe a person is motivated to continue with their actions. People with ADHD may have a lack of dopamine in the frontal lobe, and this accounts for a person’s behaviors and actions.

People with ADHD struggle to activate the dopamine in their brain and this can lead to impulsivity and lack of executive functioning skills. Dopamine is a neurotransmitter that the nervous system uses to send message to the nerve cells. Dopamine is commonly referred to as a chemical messenger. Dopamine helps people to focus and find things interesting. When a person finds something interesting they are more motivated to continue with that task. Researchers are currently trying to identify if people with ADHD have a shortage of dopamine. By raising levels of the neurotransmitter, dopamine, in the frontal cortex of the brain, impulsivity has significantly decreased.

Dopamine affects male and female students. The frontal lobe is slower to develop in male students making it appear that males are less mature than their female counterparts. Male students are often seen as less ambitious and motivated than their female peers, yet that has much to do with their frontal lobe and the processing of their executive functioning skills (Bush, 2011). Female teachers typically view male students as not as motivated and lazier than their female peers (Split, Koomen, & Jak, 2012). Male students may take more time to complete tasks, and at times, the male student appear disorganized and disengaged in the task. The skills that are often lacking for male students at the middle school and high school level are the executive-functioning skills (Willcutt, Sonuga-Barke, Nigg, & Sergeant,

2008). Executive functioning skills are part of the diagnosis criteria to describe the inattentive piece of ADHD (Nigg, 2013).

In addition, male students typically struggle more with time management and organization. The lack of perception of time and management of time skills can be frustrating to female teachers (Misra & McKean, 2000). However, the lack of these skills can also be an extension of executive functioning skills (Willcutt, Sonuga-Barke, Nigg, & Sergeant, 2008). The lack of executive skill development can be frustrating for teachers and those trying to work with male adolescents to develop lifelong learning skills (Sonuga-Barke, Abikoff, Klein & Brotman, 2006). Frustration and lack of connection are felt when female teachers try to relate to male students and their struggles (Willcutt, Sonuga-Barke, Nigg, & Sergeant, 2008).

Even though executive functioning skills may be late to develop, male students can learn the skills to adapt and be successful. Although the executive functioning of male students is imperative to discuss, perceptions regarding the entire student body must be considered. Often these perceptions begin before a student even walks into the classroom for the first time. The perceptions can start from just the gender of the student that is listed on the roster. Male students who do not have the ability to focus, exhibit aggressive behaviors and disruptive actions in the classroom exhibit hyperactivity. Some of these perceptions' teachers can have on students can be from prior experiences and background of the teacher.

Maturity of Male Students

Maturity takes longer for male adolescents than for female adolescents. The immaturity in males becomes more noticeable during the middle school years. According to Bush (2011), the frontal lobe volume develops at 9.5 years for females and 10.5 for males.

That delay involves executive functioning which is responsible for impulsivity (Bush, 2011). Furthermore, the time when the caudate nucleus peaks is delayed for male adolescents as well (Bush, 2011). The caudate nucleus is associated with motor processing and does not fully develop until 14 years in boys (Bush, 2011). This development occurs approximately 3.5 years later than it fully develops in females (Bush, 2011). Those two delays in brain development help to explain why more males are diagnosed with ADHD. Through a better understanding of brain development by teachers and parents responsible for completing the behavior rating scales, doctors will have a clearer understanding of the person for a correct diagnosis that does not lead to overrepresentation of male adolescents diagnosed with ADHD.

Overrepresentation of Males with ADHD

Over the last twenty years, more students have been diagnosed with anxiety, depression, autism, Attention Deficit Hyperactivity Disorder (ADHD) and numerous other mental health diagnoses (Mack, 2011). In 2011, the Center for Disease Control and Prevention (CDC) estimated that nearly 9% of children in the United States have ADHD and the diagnosis is made in approximately twice as many boys as girls (Akinbami et al., 2011). This percentage increased from 7% during 1998-2000 (Akinbami et al., 2011). As the CDC furthered their study, the presence of ADHD increased to 10% for children with a family income less than 100% of the poverty line. This number increased to 11% for children with a family income between 100% and 199% of the poverty line.

In clinical representation of ADHD, the male to female ratio is 5-9:1. This ratio shows that far more boys are diagnosed and receive treatment for ADHD as compared to girls. Some studies suggest that boys are more aggressive and hyperactive therefore that

leads to more referrals for screenings. Studies have shown that girls tend to be more inattentive but that does not lead to classroom disruption. Since there is no disruption to the educational environment girls are less likely to be referred for evaluation from a school-based team. In a study by Bruchmiller, Margraf and Schneider (2012), more false positives were noted when males were diagnosed with ADHD. To make the diagnosis of ADHD practitioners reference the DSM manual. According to the Diagnostic and Statistical Manual of Mental Disorders -2013, “ADHD is a persistent pattern of inattention and/or hyperactivity-impulsivity that interferes with functioning or development” (DSM, 2013).

Overview of Using BASC

When a teacher or parents notices symptoms of ADHD and refers that student to a school psychologist, the school district considers the student thought to be until the school psychologist and behavior rating scales are able to prove otherwise (Individuals with Disability Act, 1973). Once a school psychologist begins the evaluation process, they will distribute behavior rating scales to teachers. The BASC-3 triangulates behaviors with form completion by the teacher, parent and student (BASC-3, 2015). The teacher behavior rating form takes between 10-20 minutes to complete, the 105-165 questions contained in the form. The number of questions varies for the 3 levels of scales; preschool, child, and adolescent (BASC-3, 2015). This study will focus on the adolescent form. All questions have a four-point rating scale. Teachers can rate each question from never to almost always (BASC-3, 2015). When completing the scales, there are numerous factors that can contribute to the accuracy of reporting from the teacher. Some of these factors include, cultural differences, previous experience with the student, rapport with the student and

students in the classroom, classroom management, and familiarity with the testing materials (Kimball & Huzinec, 2019).

Attention Deficit Hyperactivity Disorder is one of the primary referrals made from a school setting to a psychologist (Barkley, 1998). For children under the age of 16, 6 of the 9 symptoms must be developmentally inappropriate. To diagnosis ADHD, 5 of the 9 criteria for disability must be developmentally inappropriate once a child reaches the age of 17 (DSM-5). The DSM further classifies the items into inattentive and hyperactive. Children must show functioning difficulty in at least two domains, such as school and home in order to distinguish between environmental factors and problematic behaviors (Barkley, 1998).

When completing the teacher rating scales, completion of the scales is not required in one sitting and the estimated time given to a teacher is 10-20 minutes (Reynolds & Kamphaus, 2015). The return date and location are written on the scales so the school psychologists can analyze the data and make a recommendation to the parents, child and administrators (Reynolds & Kamphaus, 2015). The return timeline is dependent on the school psychologist and when the scales are distributed. Once the scales are returned to the school psychologist the teacher no longer has access to the information they submitted (Reynolds & Kamphaus, 2015). The teacher also does not know if the rating they provided will show that a child is in the average range, slightly out of the range or significantly out of the range (Reynolds & Kamphaus, 2015). This information will be discussed in a meeting with parents and school personnel present (Mancusco, Stotland, & Rieser, 2000).

If a student already has a diagnosis of ADHD, they must still complete reevaluations during their schooling career (Mancusco, Stotland, & Rieser, 2000). The reevaluation reports also require the completion of the behavior rating scales. Once the scores are

compiled the numbers are shared with school team and can also be shared with the child's doctor, outside of the school district. The completion of the scales for reevaluation confirm that symptoms of ADHD are exhibited by the child and the need for supports continues (Reynolds & Kamphaus, 2015).

In the school psychologist report, the scores are documented for each teacher that returned a form, a parent form, and if completed, a student completed form. After each score is reported, the school psychologists provide a number for each section, the number determines if a score is above the normal range. Scores that are out of the average range are indicated with one asterisk if slightly above the average and two asterisks if the score is significantly above the average (Reynolds & Kamphaus, 2015). Depending on the number of asterisks, observations completed, and other testing factors the school psychologist will make a recommendation if the student is thought to have ADHD (Reynolds & Kamphaus, 2015).

Teacher Completion of Behavior Rating Scales

A teacher often receives behavior rating scales in their mailbox with directions attached for a return date. A teacher may also receive an email with completion information and told to pick up the scales at the school psychologist office. Once teachers receive the scales, the individual teacher decides when they will complete and return the form to the school psychologist. The school psychologist is not required to provide any specific directions to the teacher. The directions on the BASC-3 rating form from Reynold and Kamphaus (2015) state:

The form contains phrases that describe how children may act. Please read each phrase and select the response that describes how this child has behaved

recently (in the last several months).

Select **N** if the behavior **never** occurs.

Select **S** if the behavior **sometimes** occurs.

Select **O** if the behavior **often** occurs.

Select **A** if the behavior **almost always** occurs.

Please mark every item. If you don't know or are unsure of your response to an item give your best estimate. A "Never" response does not mean that the child "never" engages in a behavior, only that you have not observed the child

Behaving that way. (n.p.)

Teachers can talk about students to other teachers, especially if they have the student in common. Schools encourage team conversations of how to help a child (Hattie, 2015), as when what is working for a student in one classroom can be mimicked in another classroom to help a child, the school would want that to occur.

The conversations and relationship with the child may have an impact on how the teacher completes the form. Relationship building is an important piece to any successful classroom, having a positive relationship with a student can increase student engagement and achievement by .52% (Hattie, 2015). This relationship can also have an impact on how the teacher rates the student on behavior rating scales (Bolstad & Johnson, 1977). Teachers with effective classroom management strategies have less behavior issues during a class period (Marzano & Marzano, 2003). When completing the BASC the information about the student is evaluated however, the information about relationship building and classroom management strategies are not documented (Reynolds & Kamphaus, 2015). Since every classroom is different, this can lead to varying scores for the same student from different

teachers (Reynolds & Kamphaus, 2015). When expectations are not clearly understood student behavior problems escalate (Marzano & Marzano, 2003). These behaviors can escalate in and out of the classroom. These behaviors can carry over to the hallway, cafeteria and other non-structured environments in the school (Marzano & Marzano, 2003). According to Lane and her colleagues (2006), they create a “strained relationships with peers and adults, referrals to the school site disciplinarian, missed instructional time and content, referrals to the preferred intervention process and assignment to alternative settings” (p. 153). The need for high, clear expectations for all students should be set at the school level and not just the classroom experience (Murphy, Weil, Hallinger, & Mitman, 1982). Lane et. al (2006) indicated that given the above consequences the requirements or expectations that teachers have for student behavior across the grade span must be clearly understood. However, information about teachers and management of classroom, are not included in the school psychologist report (Reynolds & Kamphaus, 2015).

Teacher Perception of Students

Teachers also can form different views of a student based on the conversations occurring about a student with other adults in the school building. The conversations and information gained from those conversations is not documented in any way on the BASC rating scales (Reynolds & Kamphaus, 2015). This can lead to inaccuracies reported on the behavior rating scales. The teacher conversations and relationships with other teachers can have an impact on how teachers see a particular student (Hattie, 2015). That impact can have consequences on the outcome of the testing. Teachers not labeling students has a growth rating .42%. The rating has a positive impact on student achievement when teachers do not label students (Hattie, 2015). Even though the teachers are not making the diagnosis

of ADHD, when a teacher completes the behavior rating scales, a teacher can be considered as labeling a student. Copies of the report are provided to the student and parent by the school psychologist with all information included. The child and parent can see how the teacher rated the student on the behavior rating scales. Even though the single completion of a behavior rating form does not diagnosis ADHD or label a student, the form does provide one piece of information that can help to identify the student as ADHD. The label of ADHD or other mental condition does have an impact on how a student view themselves (Hattie, 2015). Even though the completion of the behavior rating scales can help to label a student, the correct diagnosis is important. The correct diagnosis will help the student get the supports they need in school.

The Impact of the Mother's Perception of Male Children's Behaviors.

The practitioners making the diagnosis of ADHD are relying on family members and teachers to report the behaviors and symptoms of the child. The behaviors for some children may not be reported accurately to doctors and on behavior rating scales as depression-distortion hypothesis can impact how a mother views her child (Richters, 1992). According to Essex and her colleagues (2003), maternal depressive symptoms can lead to an increased risk for behavior problems in male offspring. If mothers have mental health problems, whether diagnosed or undiagnosed, the mental health issues can initiate inaccurate ratings on documented behaviors. The misperception of the male behavior by the mother is the basis for depression-distortion hypothesis.

The behavior rating scales such as the BASC or similar scales that teachers and parents or guardians complete provide confirmation of the diagnosis of ADHD (BASC, 2015). If a parent has a mental health diagnosis such as depression, they are more likely to

rate a child higher on the behavior scales of the form, which would lead to an increased diagnosis of ADHD (Richters, 1992). Behaviors a child is exhibiting may be exaggerated when completing reports, as a result of the mental health disorder of the mother (Richters, 1992). Chi and Henshaw (2002) state that since parents are often the primary source of information regarding a child's emotional and behavioral disturbances, the possibility of depression-related distortions in perceptions of child behavior is important clinically as well as conceptually. If a parent is not accurately able to report a child's behavior to a doctor, a misdiagnosis is possible. Chi and Henshaw (2002) found that mothers with mental health diagnosis had more negative ratings about child behaviors compared with observers. According to van der Oord and her colleagues (2005) the emotional wellbeing of the person providing the information is extremely important as the mental health conditions are significantly and systemically related to the ratings. The emotional wellbeing of the parent relates back to the importance of the parents' stress levels as this also has an impact on the rating scales. Parents that are more stressed do not accurately reflect the child's behavior on rating scales (van der Oord et. al., 2005). Behaviors of the child must be reported accurately without exaggeration to the doctor (Chi & Henshaw, 2002).

Mothers also have a different relationship with their sons compared to their daughters (Shearer, Crouter, & McHale, 2005). Mothers tend to make excuses and not hold male children accountable (Lamb, 1997). Mothers also feel the need to have a more nurturing relationship with male children (Shearer, Crouter, & McHale, 2005). Fathers tend to focus more on leisure activities with children, these activities may include athletic events and skill development (Collins & Russell, 1991; Shearer, Crouter, & McHale, 2005). The

understanding of the relationships is important for the completion of behavior rating scales as the way parents view their child will be reflected in the scales.

Teachers can start to form these perceptions as soon as they see the class list and before a student even enters the room. These perceptions often form from just the gender of the student. Male students can be seen as being hyperactive, not having the ability to focus, aggressive and more disruptive in the classroom (Arbuckle & Little, 2004). The relationship between mothers and children is important to consider for this study as part of the norming information provided in the BASC-3 is based on the parent education level of the highest school grade completed by the child's mother. The child's father was considered if the mother's educational level was not available (Reynolds & Kamphaus, 2015). Even though this study does not focus on the parental role in education, it is important to note that 67% of the teachers in this study are also parents.

Prior Knowledge and Influence of Teachers on Rating Scales

Prior knowledge and interest are important parts of education and have an impact on how a person views and understands information (Tobias, 1994). Teachers are using their knowledge from prior experiences in lessons designed to instruct students. Activating prior knowledge and using that in instruction allows for students to make meaningful connections with teachers. Connections can lead to increased classroom engagement (Hattie, 2015).

Prior knowledge not only has an impact on daily lessons and instruction but it also influences the duties that are required by all teachers outside of the classroom such as grading papers, form completion and colleague conversations. A teacher's prior knowledge can also have a bearing on classroom management. The way a teacher was raised, including the discipline, rewards and consequences for actions can carry over into the way a teacher

maintains control in the classroom. The structure of the classroom may have an impression on a classroom environment or specifically on a student and how that student views the classroom (Rosenfield, Lambert, & Black, 1985). A part of classroom management is the arrangement of the classroom. Desk arrangement has guidance on classroom environment. Desk arrangement has an impact on thinking, participation and appropriate comments (Rosenfield, Lambert, & Black, 1985).

When educators enter a classroom for the first time face an overwhelming amount of responsibilities. The teacher is responsible for the set up and management of the classroom from the time the students enter the school building until students depart for the day. Student achievement is also impacted by the set up and management of a classroom. (Rosenfield, Lambert & Black, 1985; Weinstein, 1979). Many times, the desk arrangement the teacher uses is based on their experiences of what has worked for them. If a teacher has problems managing the students talking and behavior, they are more likely to put the desks in rows instead of a group setting, even though desks in rows produce more disruptive behaviors (Rosenfield, Lambert & Black 1985; Weinstein, 1979).

When completing the behavior rating scales, teachers draw on information that they have learned through their child and adult experiences. Every person is an individual that is partially defined by the way that person was raised with the situations that occurred during their life experiences to date. A person's perception may change as they experience more of life. Results show that expectations about a student's academic performance are influenced by student race and social class information (Cooper, Baron, & Lowe, 1975). If a teacher has low expectations for student achievement, that student will not achieve to his/her fullest potential (Hattie, 2015). Setting high expectations are important for all students in the

classroom so students will work towards success, the Pygmalion effect (Rosenthal & Jacobson, 1968). If a teacher has low expectations for a student and that student is achieving to the expectations set forth by the teacher instead of the students' potential achievement that information could be misinterpreted as a potential issue for the student.

Teachers that are white and middle class can present obstacles to being a successful teacher to all students (Mason, 1999). Teachers can be considered ill-prepared or uncaring if they are not in touch with the cultural backgrounds of the students they are teaching (Mason, 1999). Even though a teacher cannot change his/her background experiences it is important that the teacher find ways to relate to all students.

Follow up after Completion of Behavior Rating Scales

Once completed, teacher feedback is included in the school psychologist report, additional questions or feedback about why a teacher scored a student in a certain way would occur when the parent reached out to the teacher or during a manifestation determination hearing (Lowman, Darr, & Roth, 2014). The feelings a rating can leave with a parent or student can be misconstrued as negative and that the teacher views the child in a negative way (Kokkinos, Panayiotou, & Darazoglou, 2005). This assumption can lead to a poor relationship between the student and the teacher and/or the parent and the teacher (Hattie, 2015). Lightfoot (2014) discussed the need for honest conversations between parents and teachers. Honest conversations can be difficult for teachers to have with parents since they are not trained in the BASC rating scales and how to interpret the data. Teachers are supposed to complete the scales based on the observations in the classroom (Reynolds & Kamphaus, 2015). Even though the teachers provide information to the school psychologists, the teachers do not know the outcome before the school psychologist

complies all data. Once the school psychologist reviews the data at the manifestation determination hearing, the parents and students can and at times do ask questions (Lowman, Darr, & Roth, 2014). The parents do receive the document 10 days prior to the meeting so they have time to read and process information contained in the report (Lowman, Darr, & Roth, 2014).

We know that positive teacher relationships can have an achievement impact on students (Hattie, 2015). If the completion of BASC rating scales affects the relationship between the student and the teacher that can also have an impact on student achievement.

There is also no follow up between the school psychologist and teacher regarding the rating scales and the determination of results (Reynolds & Kamphaus, 2015). If a teacher's rating scales were vastly different from the parent report or school psychologist observation, the discussion as to why does not occur. Just seeing the results on the report provided to the parents, can lead to frustration from the teachers and embarrassment when teacher scores are vastly different. The parent may question if the teacher is truly observing those behaviors or just does not like the student so they are rating them unfairly. Relationships between teachers and parents can affect the achievement of students by .12% which is a positive impact on student achievement (Hattie, 2018). A positive relationship between the parents and teachers, helps to increase student achievement even though the student is not directly involved in the relationship.

Administration Support of Teachers

Administrators and teachers must realize the role background knowledge has in instructing students (McMillan, 2000). Time for reflection is important for teachers and should be encouraged by administration (Veal, Clift & Holland, 1989; Birky, Shelton, &

Headley, 2006). Time and support should be provided to teachers as they try new strategies and incorporate engaging activities. Noffke-Brennan (2015) stated:

Technical skills, those of creating experiences for children that are both meaningful and satisfying, are not merely valuable, they are essential to getting things done, and they embody ethical deliberations. Whatever system evolves for understanding teachers' reflections, it must not, explicitly or implicitly, denigrate those skills.

Rather, it should build from these, allowing for a more "connected" critique, one that leads from practice, through critical reflection, but always back to practice in a continuing dialectic. One must know how to, not just what and why (p. 66).

As educational leaders consider the power of reflection and the need for increased knowledge of how a teacher's background affects the classroom this provides further evidence of the need for professional development and cultural awareness.

Theoretical Framework

The theoretical framework will explain how transformative learning theory and social learning theory have an impact on the completion of behavior rating scales. Transformative learning theory explains how a teacher's background knowledge shapes the completion of behavior rating scales. Social learning theory explains how a teacher's thought process and application of a consequence to an action inspire how behavior rating scales are completed. Both theories will show how the approach of each teacher supports the ratings given on the completion of behavior rating scales.

Transformative Learning Theory

Teachers are using their background knowledge and thought processes developed as they were growing up to assist with the understanding and completion of behavior rating

scales. According to Mezirow (1991) transformative learning the process where adults transform frames of reference to make them inclusive. Adults then use these inclusive frames of reference to generate beliefs and guide actions. To have this process occur, critical reflection is essential (Mezirow, 2000). The outcome of behavior rating scales can be influenced on how an adult makes sense of their own experiences and translate the experiences into ratings. Transformative learning theory focuses on “how we learn to negotiate and act on our own purposes, values, feelings, and meanings rather than those we have uncritically assimilated from others - to gain greater control over our lives as socially responsible, clear-thinking decision makers” (Mezirow, 2000, p. 8). If an idea or action is outside an adult frame of reference those ideas can be labeled as unworthy of consideration (Mezirow, 1997). The frames of reference also help create an adults’ habit of mind. The habits of mind are beliefs, judgments, and attitudes adults have about specific groups or individuals (Mezirow, 1997). If adults are acting on their own feelings and values that information can be translated into how teachers are completing the behavior rating scales on students. When an experience, such as the behavior of a student in a classroom, does not match what we as adults have experienced it causes us to question and can lead us to shift our assumptions and expectations (Mezirow, 1991). The shift in assumptions and expectations can lead to completion of behavior rating scales that do not accurately reflect the behavior of the child. If behaviors are not accurately reflected on the behavior rating scales, it can lead to an over or under representation of students with ADHD. When interpreting the world adults make meaning from a logical perspective, this context is critical to understanding (Clark, 1991).

Within Transformative Learning Theory, Mezirow (1990) referred to meaning schemes and meaning perspectives. Meaning schemes are sets of related and habit expectations (Mezirow, 1990, p. 1). Meaning schemes help to explain why we go to food when our body signals it is hungry or why we know that we will get to a place quicker if we run instead of walk. Meaning perspectives describe how new experiences are transformed by past experiences (Meizrow, 1990, p.1). Most meaning perspectives are acquired during childhood and are learned through socialization. The meaning perspectives that are made are not free from bias since they are based on the interpretations. Meizrow explains how the use of meaning schemes and meaning perspectives allows for critical reflections. The process of reflection is what occur when habits combine with the way events are interpreted (Meizrow, 1990, p. 2). As people continue to reflect and learn, new meaning schemes are made.

Meizrow also discussed how instrumental learning and communicative learning both require validation and that is accomplished through reflection. Instrumental learning is when learning is task-oriented or requires problem solving. Communicative learning requires the understanding of what others are communicating. Validation of learning occurs through discourse (Meizrow, 1990, p. 4).

Social Learning Theory

Transformative learning theory and social learning theory have similarities that help to explain how an adult's past can inspire their learning. Bandura defined social learning theory as a thought process of mediational prior to imitation. This process occurs after a behavior is observed but before an act of imitation occurs. As Bandura stated (1978), humans think about their behaviors and the consequences, teachers could be thinking about their own behavior and the consequences and that is reflected in the responses on the

behavior rating scales completed for students thought to have ADHD. Behavior is learned from the environment through the process of observational learning (Confrey, 1990). Bandura's social learning theory supports Confrey's statement and a constructivist approach. The learning of teachers did not start when they entered school and did not conclude when they graduated from college. Teachers started to learn from the environment including how they were raised and from the places they have worked. Using Bandura's social learning theory helps explain how past experiences including schooling and upbringing can have an impact on how teachers are completing the behavior rating scales.

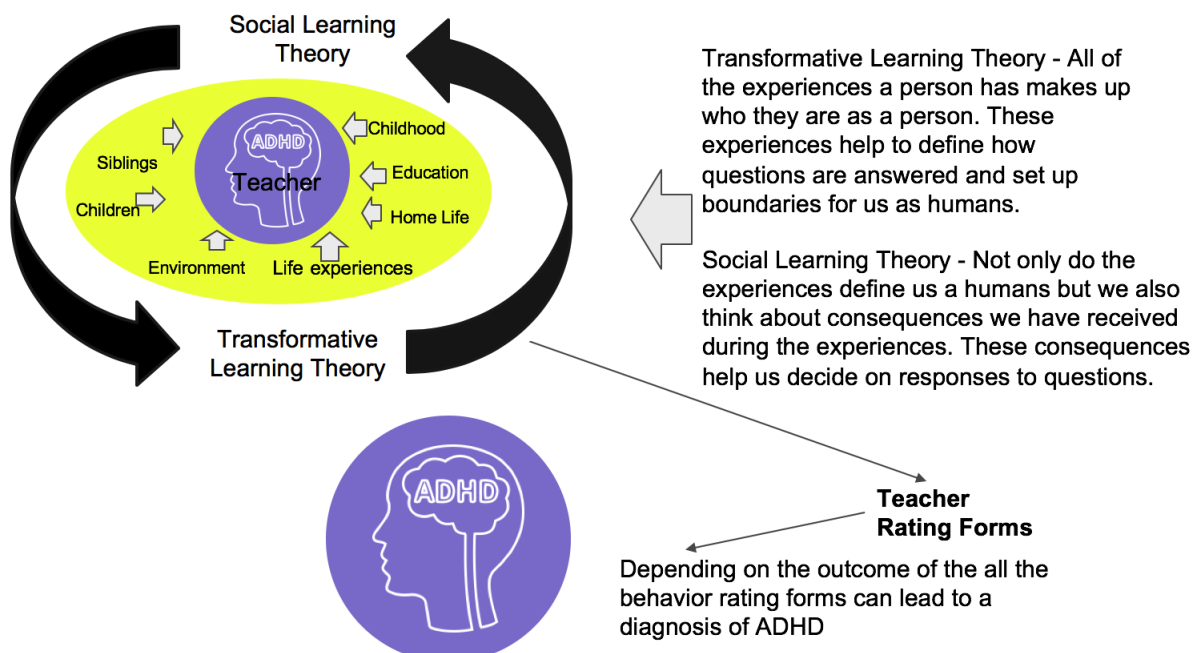
Teacher efficacy has guidance on the learning that occurs in the classroom. When teachers set high expectations and assume responsibility for learning, students have a greater chance of success (Gibson & Dembo, 1984). Teacher efficacy and that teacher belief encourages the achievement of students in a classroom supports Bandura (1978) that outcomes and efficacy expectations are different because individuals that believe certain behaviors produce certain outcomes.

Transformative learning theory and social learning theory are important and will help to explain some of the findings during this study. According to Piaget's (1964) stages of cognitive development by the formal operational stage children should have the ability to move beyond the need for concrete objects to gain an understanding of the world around them. This should occur around the biological age of 12. Also, at this time, a child's abstract and symbolic thinking should be used while problem solving and making decisions (Piaget, 1964). With children with ADHD this can be delayed (Barkley, 1997). "Children can have a delay in (a) working memory, (b) self-regulation of affect–motivation–arousal, (c) internalization of speech, and (d) reconstitution (behavioral analysis and synthesis).

Extended to ADHD, the model predicts that ADHD should be associated with secondary impairments in these four executive abilities and the motor control they afford”, (Barkley, 1997). As doctors continue to diagnosis children with ADHD and include input from parents and teachers, it is imperative that transformative learning theory and social learning theory are taken into consideration when behavior rating scales are completed.

Figure 1

Social Learning Theory and Transformative Learning Theory



Note. This visual illustrates how Social Learning Theory and Transformative Learning Theory can work together to help explain how teachers form opinions about behaviors when completing behavior rating scales.

Summary

In this chapter, I reviewed the literature that supports the premise that teacher experiences and background knowledge have an impact on the completion of behavior

rating scales. The completion of behavior rating scales, does not always reflect the actual behaviors of the student. The reported behaviors are influenced by the experiences and perceptions of the teachers. The use of social learning theory and transformative learning theory influences the teachers in classrooms today. With the percentage of female teachers in the classroom today, many of the classroom environments are focused on the values of females.

This chapter also included literature to review the importance of teachers setting high expectations in the classroom. If high expectations are set, the students will strive to meet those expectations, the Pygmalion effect. The expectations should be set for behavior and for academic achievement.

In the next chapter, I will explore how the methodology of an instrumental case study will play an important role in helping to explain how teacher behaviors and past experiences impact the completion of behavior rating scales. The case study selection and participation of teachers will be an important part.

Chapter III Methodology

The purpose of this research was to examine the process teachers use to complete behavior rating scales on students with an ADHD diagnosis. By bringing awareness to the impact that behavior rating scales can have on the diagnosis of ADHD, teachers may gain a better understanding of how their own background knowledge prompts the feedback they provide on the behavior rating scales. Given the weight that behavior rating scales have on the diagnosis of ADHD, it is essential to mitigate bias in the rating scales to provide accurate information to medical professionals.

In this chapter, I will provide a detailed overview of the methodology I employed in this study. In particular, I will describe the case study approach I used to examine teachers' completion of behavior rating scales, including: (a) case selection, (b) instrumentation, (c) data collection and analysis, and (d) researcher bias.

Case Study Overview

This study implemented a qualitative case study design. Case study is a methodology that researchers may choose when they are focusing on and “studying a specific, complex, functioning process” (Stake, 1995). A case study can vary in duration from short to long term, as there is no specific length of time for engaging in this type of research, and it may have many parts, which are contained within the boundaries of the study. Even though a case is an integrated system, it does not need to be functioning well or have a clear purpose (Stake, 1995). Within my study, the integrated system included the school's stakeholder groups, specifically teachers, students, parents, school psychologists, and administrators.

One of the defining characteristics of Stake's (1995) method of case study is the use of a holistic approach, which examines the relationship among different participants in the

system, to better understand the system. With a case study approach, researchers use their research questions to guide them as they collect data from observations, interviews, and/or the review of other data sources. As researchers collect data, they begin to draw conclusions about the implications of their study's findings that then inform future research.

Another prominent educational case study researcher, Merriam (1998), shared Stake's (1995) notion that a case study is a bounded system and asserted that a case study must be "fenced in," so the boundaries are still well defined. A bounded system has very clear objectives and boundaries that help to provide a clear understanding of the case study. Merriam defined a case study as "an intensive, holistic description and analysis of a bounded phenomenon such as a program, an institution, a person, a process, or a social unit" (1998, p. xiii).

More recently, Yin (2003) described a case study as a way to answer "how" and "why" research questions and suggested the use of a case study methodology to evaluate real-life events. Yin defined a case study as an "empirical inquiry that investigates a contemporary phenomenon within its real-life context, especially when the boundaries between phenomenon and context are not clearly evident" (2003, p. 13). While Yin's definition of a case study could be used to help explain the "how" and "why," the definition does not fit the analysis I will use to draw conclusions as I look for patterns. Stake (1995), Merriam (1998), and Yin (2003) agree that there is no specific time frame for a case study; however, their approaches toward case study inquiries vary. In taking into account these various case study approaches, I determined that Stake's (1995) instrumental case study, specifically Stake's view on analysis and drawing conclusions, was the best approach for this study.

Instrumental Case Study

An instrumental case study is the study of a process whose purpose is to provide insight into a particular issue, redraw a generalization, or build theory (Mills, Durepos, & Wiebe, 2010). According to Stake (1995), an instrumental case study is used to gain an understanding of how something else is done and how the understanding is beneficial to the overall process. Using Stake's approach, I studied teachers in order to better understand their decisions when they completed behavior rating scales for students with a diagnosis of ADHD. For this instrumental case study, the teachers' prior experiences were just as important as their current experiences in understanding the complexity surrounding their completion of behavior rating scales. For example, if a teacher has an ADHD diagnosis or family member with an ADHD diagnosis, their experience may impact their ratings in ways that are different from others involved in the ADHD reevaluation process. In adopting an instrumental case study methodology, I will be able to highlight the background of each teacher participant in order to identify and understand the patterns of how these particular teachers individually and collectively approached the completion of behavior rating scales.

Data Collection. Stake (1995) posited that data collection should be completed through the use of document review, interview, and observation. I used all three methods to collect data during this instrumental case study and analyzed the data in a way in that Stake defined as "a matter of giving meaning to first impressions as well a final compilation" (1995, p. 71). I began to look for patterns and draw conclusions after the completion of the first survey. From there, I followed the same process until all data was collected. After data collection, I continued to look for meaning in the research. The researcher's impressions are the main source of data and making sense of them is the analysis (Yazan, 2015). This study

aligns with Stake's view of an instrumental case study by using a constructivist approach, data collection tools of observation, interviews, and surveys, along with forming impressions as the study progressed.

Stake (1995) recognized that surveys and interviews were an important part of collecting data and completing a case study. Given that teachers' background knowledge and history of the completing rating scales was essential to this study, I collected data from each teacher's early childhood, college years, and life experiences since receiving their undergraduate degree. According to Denzin and Lincoln, "The province of qualitative research, accordingly, is the world of lived experience, for this is where individual belief and action intersect with culture" (2003, p. 8). In this study it was important to highlighted teachers' background, as their documented past experiences were likely to inform how these teachers responded to behavioral rating scales.

Instrumental case studies can focus on a specific issue within a case, and that information is used to illustrate the topic, thus illuminating a particular problem (Creswell, 2015). In this study, the examination of the Behavior Assessment System for Children (BASC) rating scales showed how teachers' prior experiences informed their completion of BASC rating scales. Through a survey, teachers shared their personal and professional backgrounds from childhood through their current careers, while the interview component provided information regarding teachers' processes in completing the behavior rating scales. Researchers gained insight from classroom observations regarding the reevaluated students' behavior as it pertained to the BASC. The use of observations, interviews, and surveys followed Stake's description of an instrumental case study.

Analysis. In Stake's approach to a case study, there is no specific start or end to data analysis. The analysis of data started when I collected the first piece of data and continued as I collected additional data. As I was collecting and analyzing data, I was looking for patterns and framing my thoughts. The analysis Stake describes in his case study approach is the piece that closely mirrored my approach to completing a case study. The ability to start to analyze when I started collecting data and then continue with analysis without a specific path led me to my conclusions. When analyzing, Stake (1995) described the importance of combining the art with the intuitive process. To do so, researchers draw meaning by watching their cases closely. The method is unique to each researcher as each researcher is adding in their own experiences and reflections. As conclusions are drawn from patterns, it is important to look for consistency, or what Stake (1995) referred to as a "correspondence." The correspondence and conclusions helped to make the case understandable.

Research Questions

The main research question for this study was: What information does a teacher use when completing the BASC rating scales for students?

Three sub-questions guided this study:

1. What child behaviors during a class period coincided with the teacher noting hyperactivity on the rating form?
2. How did a teacher reflect about their own personal upbringing or people they are closely associated with that have similar difficulties to the identified student when completing a behavior rating scale?
3. When and why do teachers talk to other teachers before completion of a behavior rating scale?

Table 1*Research questions and data sources*

Research Question	Data Source
What child behaviors during a class period coincided with the teacher noting hyperactivity on the rating form?	Observation, Review of BASC
How did a teacher reflect about their own personal upbringing or people they are closely associated with that have similar difficulties to the identified student when completing a behavior rating scale?	Survey, Interview
When and why do teachers talk to other teachers before completion of a behavior rating scale?	Interview

Note. This figure represents the research questions that guided this study along with the data sources used to respond to the questions.

Setting

This study took place in a suburban high school in the mid-Atlantic region of the United States. The high school had approximately 1,400 students and over 100 staff members at the time of the study, with most students coming upper-middle to upper-class households. The school has considerable resources to support students at all academic levels. The student participants in the study came from a variety of academic levels, ranging from special education to Advanced Placement courses. The observations were completed in three special education classrooms, two Honors level classrooms and one Academic level classroom.

Participants and Case Selection

Three ninth through twelfth-grade students under reevaluation for ADHD and their six teachers participated in the study. The three students were Ryan (ADHD-C), Cam (ADHD-C) and Cash (ADHD-I). Of the three students under the reevaluation process, two of

the students have a diagnosis of ADHD Type Combined and the other student has a diagnosis of ADHD Type Inattentive. Two of the students, one with ADHD-C and ADHD-I, were medicated during the completion of this study. The reevaluation for ADHD criteria referred to students who: (a) had either a 504 plan or an Individualized Education Program to support the diagnosis of ADHD and (b) were being reevaluated between November 1 and December 2019. Since students with ADHD qualified under the disability category of Other Health Impairment for an Individualized Education Program (IEP), they must undergo a reevaluation every three years after an initial evaluation and diagnosis of a disability in accordance with Pennsylvania State Law (Chapter 14, PA school code). If a student does not qualify for an Individualized Education Program, they may qualify for a Section 504 Plan. A student with one of the three types of ADHD, would qualify if they had an impairment with at least one major life activity. The teachers currently working with diagnosed students are taking part in a larger evaluation process. Completion of the behavior rating scales is one of the instruments used in the reevaluation process, and, ultimately, it is up to school psychologists to determine reevaluation.

Parents who had children in the reevaluation process who qualified for inclusion in this study were provided with the opportunity to consent to their child's participation (See Appendix B). After their parents consented to their participation in the study, students confirmed their participation on an assent form (See Appendix C). Parent consent and student assent were necessary, as I would be examining the completed behavior rating scales of students and completing observations of the students during a class period to compare the ratings the teachers assigned on the behavior rating scales.

Teacher Participants

A total of six teachers participated in this study. All six of the teachers are certified through the state Department of Education. The teachers range in age from 30 to 45. All six of the teachers in the study were Caucasian. Of the six teachers, four were female teachers and two were male teachers; 67% are married and have children of their own. The five teachers with a Master's Degree were Sam, Erin, Keri, Jen and Pat. Joe was also included in the study and he has a Behavior Analyst Certification. Teachers participating in the study also signed consent scales (see Appendix D) to consent to the use of their survey, interview, and observational data as per the Institutional Review Board (IRB) policy (See Appendix A). After analyzing the survey results, I conducted semi-structured interviews with each participant in order to gain a more in-depth understanding of their background experiences and decision-making process as it related to their participation in the reevaluation process for a student with ADHD.

Instrumentation

For this instrumental case study, I used several qualitative instruments to gather data, including a survey, an observation rating form, and a semi-structured interview protocol.

Survey

The survey consisted of 15 multiple-choice questions and 4 open-ended questions that sought information regarding teaching experience, educational background (including special education courses), professional development, and personal upbringing. I asked teachers to complete a survey prior to the completion of the behavior rating scales and the semi-structured interview (Appendix E and F). The survey was an opportunity for teachers to share their background knowledge of behavior rating scales and other relevant experiences. Using

the survey, I looked for conclusions that suggested that a teacher's upbringing informed their completion of behavior rating scales.

Use of Observation Rating Form

I completed two observations in each teacher participant's classroom during a 47-minute class period, for a total of 12 completed observations. I was able to observe each of the three student participants across four 47-minute observations. During the observation, I used the observation rating form (Appendix G) to focus my observation on the student who was identified as having ADHD and in the reevaluation process. During the classroom observations, I collected the following data: (a) the number of minutes the student took to complete classroom activities; (b) instances where a student was inattentive, (c) calling out, or causing a classroom disruption; and (d) evidence of hyperactivity (e.g. provide examples of specific behaviors you considered hyperactive) during a 47-minute class period. Explain the table and refer to it in your narrative.

Table 2

Observations and BASC-3 TRS

Observable behavior during the classroom observation	Statement number and behavior listed on BASC-3 TRS	Relates to Clinical Scale on BASC-3
Number of minutes to complete classroom activities	38- misses deadlines 53- has a short attention span 64- listens to directions 105- has trouble concentrating 118- does not complete tests	Attention Problems
Inattentive	2- pays attention 14- is easily distracted 96- easily distracted from classwork 101- is distracted by smartphone or similar device during class	Attention Problems

Calling out or causing a disruption	17- speaks out of turn during class 24- gets into trouble 41- disrupts the schoolwork of other adolescents 44- breaks the rules 89- has poor self-control 112- cannot wait to take turn 140- disrupts other adolescent's activities	Hyperactivity
Hyperactivity	4- is overly active 99- acts without thinking 108- is in constant motion	Hyperactivity

Note. This figure represents the behaviors the researcher documented during the observations and the item number those behaviors relate to on the BASC-3 TRS. The third column represents the Clinical Scale associated with the BASC-3.

BASC-3

The BASC was originally published in 1992 after seven years of research and development. The BASC was developed by two practicing psychologists after witnessing the increase in the need for services for students with emotional and behavioral difficulties. The psychologists realized the need for an integrated assessment that included the behaviors at school. The BASC “is a multimethod, multidimensional system used to evaluate the behavior and self-perceptions of children and young adults ages 2 through 25 (Reynolds and Kamphaus, 2015, pg 1). In the late 1990s, the BASC was the dominant tool used in education for assessing students with behavioral and emotional difficulties. In 2004, the BASC-2 was released with the change of a Spanish version. In 2015, the BASC-3 was released for use which included an option for digital administration and scoring. The BASC-3 includes a TRS includes scales such as study skills and additional areas that are relevant to the school setting. (Reynolds & Kamphaus, 2015). For this study, the researcher focused on 19 of the items on the BASC-3. Of the 19 items, nine of the items fell under the attention

scale while the remaining ten items fell under the scale assessing hyperactivity. Figure 2, above, shows the 19 items that were examined along with the observable classroom behaviors documented during the observation process.

Hyperactivity and Attention Problems

The BASC-3 includes five composite scales: (a) externalizing problems, (b) internalizing problems, (c) school problems, (d) adaptive skills, and (e) behavioral symptoms index. Of the five composite scales, this study focused on externalizing problems and school problems. The externalizing problem scale includes items that are centered around hyperactivity. According to the BASC-3 manual, the hyperactivity scale combined with the Attention Problem scale has been shown to distinguish between the three types of ADHD (ADHD-I, ADHD-C and ADHD-H). The BASC-3 manual goes on to further explain that the Hyperactivity items can be described as the student is overly active, rushes through work or activities and acts without thinking (Reynolds & Kamphaus, 2015). While the Attention problem scales provides the explanation of tends to be easily distracted and unable to concentrate more than momentarily (Reynolds & Kamphaus, 2015). These definitions should be known by school personnel administering the assessment.

Validity and Reliability of the BASC-3

The results of the Teacher Rating Scale (TRS) should be considered cautiously if there is reason to believe that the teacher has not provided accurate data. The scale can be compromised for a variety of reasons, including but not limited to, emotional difficulties, stress on the part of the teacher, and intentional dishonesty.

The BASC-3 does have steps and measures in place to help gain a true reflection of the students and their behaviors. One example of this is the *F* Index. The BASC-3 for TRS

has 20 behaviors that are woven throughout the form. If these 3-20 of these behaviors are coded as almost always the BASC-3 manual would suggest the school psychologist use extreme caution as a valid result (Reynolds & Kamphaus, 2015).

The BASC-3 also takes into consideration the inconsistency with other results. The overall results of the TRS, PRS (Parent Reporting Scale) and SRP (Self-Report of Personality) are compared against each other. If there is an outlier, the school psychologist may complete an SOS (Student Observation System) or have a detailed developmental history completed. To assist with the validity, more than one teacher should complete the adolescent TRS. School psychologists may also take into consideration that certain behaviors may not occur in front of different audiences (Reynolds & Kamphaus, 2015). For example, a student may back talk a parent but does not exhibit that behavior in the classroom.

There is also the possibility that teachers omit some of the items, even though directions are provided that instruct teachers respond to all prompts. A maximum of two omitted items are allowed per scale (Reynolds & Kamphaus, 2015). If three or more items are omitted, the scale is considered invalid. When two items are omitted, an adjustment factor may be used. An adjustment factor is based on the average item responses for each scale in the general norm sample (Reynolds & Kamphaus, 2015).

The remaining two indexes the BASC-3 takes into consideration for validity is Patterned Responding and the Consistency Index. The Patterned Responding allows for school psychologists to question the validity of a rating scale that codes all Ns or alternates responses. The Response Pattern Index is a “tally of the number of times an item response differences from the response to the previous item” (Reynolds & Kamphaus, 2015, p. 46). A TRS with a tally of 23-104 should be view with high caution while a tally of 0-23 should be

viewed with low caution. The two extremes of low and high indicate caution and it may be necessary to speak to the teacher and inquire about the responses. The Consistency Index does not look at the consistency among teachers that complete the TRS. Instead, the Consistency Index examines the consistency of ratings of item number that are highly correlated. A consistency score of 0-12 is considered in the acceptable range (Reynolds & Kamphaus, 2015).

The BASC-3 not only takes validity into consideration but also examines the reliability. The reliability of the test scores refers to the accuracy, consistency, and stability across situations (Anastasis & Urbaina, 1997; Sattler, 2008; Reynolds and Kemphaus, 2015). The evidence provided for reliability is based on Internal Consistency, Test-retest reliability, and Interrater reliability. The Internal Consistency reliability for the BASC-3 is considered high and is consistent between males and females (Reynolds & Kemphaus, 2015). The behavioral dimensions provided by the BASC-3 should be considered reliable (Reynolds & Kemphaus, 2015). The test-retest reliability looks at if the same teacher would complete the scale on the same student with a several week gap between the scoring. The mean scores between administrations are under .10 which indicate a very stable performance (Reynolds & Kemphaus, 2015, p. 124). An additional test considered for reliability to the Interrater Reliability. The Interrater Reliability examines the ratings of different raters that provide information on the same child during the same period of time. Three factors should be taken into consideration when examining the Interrater Reliability, (a) teacher interpretations of the items, (b) perception of the intensity of the behaviors exhibited by the student, and (c) a child's behavior may vary in different settings (Reynolds & Kemphaus, 2015). Reliability on

the BASC-3 are considered higher than interrater reliability found on other rating scales (Reynolds & Kamphaus, 2015, p. 126).

This study used the BASC-3 TRS, specifically examining the areas of Hyperactivity and Inattention. This study also focused on the interrater reliability between teachers. I examined the responses to the interview and survey questions and how the teachers completed the behavior rating scales. Teachers were asked to discuss their background and if their background knowledge played a role in the rating completion.

Teacher Rating Scale

This study included the use of the Teacher Rating Scale (TRS). The TRS has a varied number of statements for teacher response. According to the BASC-3 manual, the number of items can range from 105-165. It is recommended that the teachers complete the scale in one setting. Teachers should spend approximately 10-20 minutes to complete the scale. All of the 105-165 responses require a teacher to respond with Never, Sometimes, Often or Almost Always. Once a teacher completes the form, the form is returned to the school psychologist for scoring. The TRS can be completed online or on paper. The teachers in this study used the paper version. The teachers in this study were asked to complete the adolescent version of the TRS. The adolescent version is for students between the ages of 12 through 21. Even though there are instructions provided in the manual that should accompany the distribution of the forms, this procedure was not completed. The paper version of the TRS was placed in the teacher mailbox. The teacher received an email informing them that the scales was in their mailbox and they should return the form to the school psychologist mailbox.

Semi-Structured Interviews

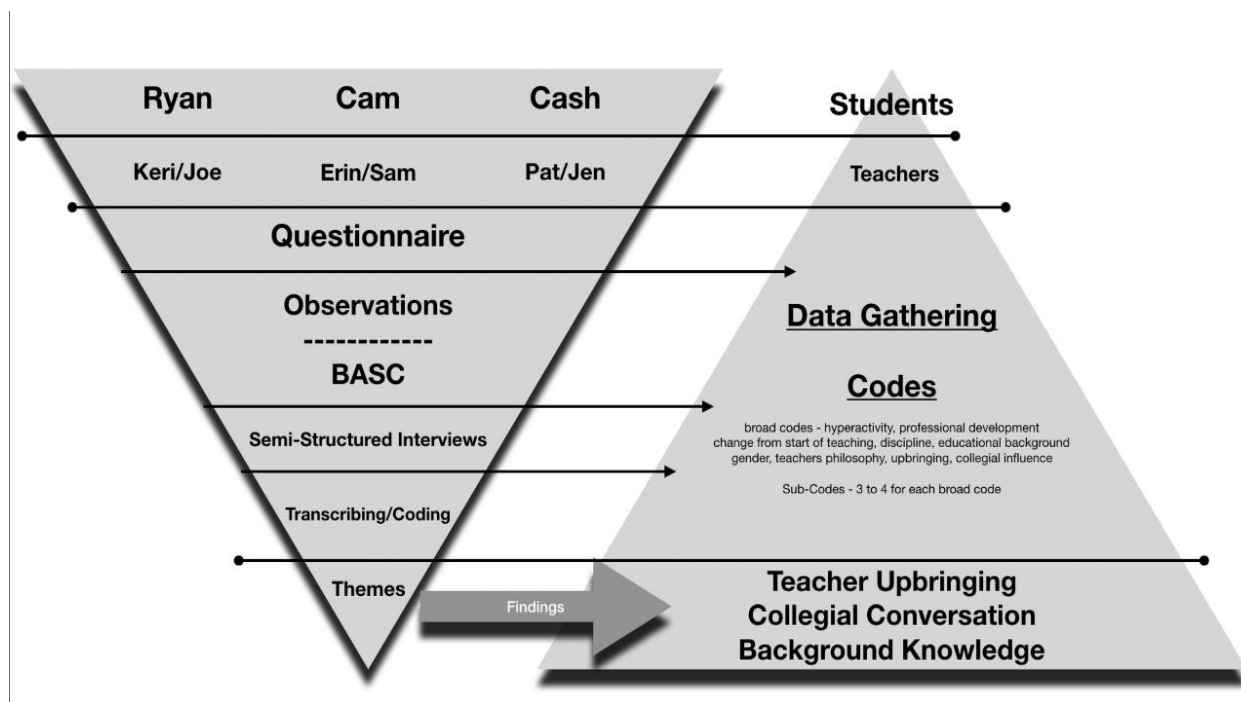
Semi-structured interviews provided an opportunity for teachers to explain their thought process while they were completing the behavior rating scale. The interview consisted of six structured interview questions, four of which included two sub-questions. The interview was conversational, where I would ask a question from the interview protocol, and the teacher would respond. When appropriate, I asked for clarification or expansion on the teachers' responses. I began the interview with questions to gather educational background information and ended with questions about teacher upbringing, birth order, and the gender of their siblings.

This semi-structured interview gave the teacher an opportunity to explain the how and why behind their specific ratings on the behavior rating scales. Thus, their explanation was as important, if not more important, than their actual rating. The interview provided an opportunity for each teacher to provide information about their background and professional development experiences, and whether they perceived these experiences informed their completion of BASC rating scales.

The semi-structured interviews took place at the participating teachers' discretion, in either the teacher's classroom during an open period or in my office during a scheduled time. The teachers were informed that they were being audio-recorded and that the recordings would be kept confidential. Each interview lasted approximately 15 minutes, and all teachers were asked the same open-ended questions. After three questions focusing on completion of the behavior rating scales, the questions moved into the background of the teacher and how they perceived their childhood experiences influence their classroom management and completion of scales.

Figure 1.

Instrumentation Visual



Note. Figure 3 provides a visual of the instrumentation used during this study. The figure on the left shows the tools used while the figure on the right documents the specific information.

Data Analysis and Coding Procedures

According to Stake (1995), there is no particular start time or end time for data analysis. In this case, the data analysis began when I distributed the surveys and continued until I concluded the study at the end of the six-week data collection period. All audio-recorded data was uploaded to Trint for an initial digital transcription. Trint is a Web 2.0 tool that assists with digital transcription. Next, I listened to the recordings and adjusted each transcription to accurately reflect the language from each interview. For this study, it was important that I discuss the story within the data. To accomplish this, I used the constant comparative method for data analysis (Glaser, 1965).

The constant comparative method of qualitative analysis informed the coding and interpretation of data (Glaser, 1965). Glaser (1965) described four stages of data analysis which were followed in this study: (a) all data collected was coded and compared to look for patterns; (b) as patterns started to emerge, the codes were then compared to each other and other sub-questions; (c) the emerging patterns also helped form thought patterns about why and how teachers completed the behavior rating scales; (d) the theories of Social Learning Theory and Transformative Learning theory were compared and explained. The comparisons allowed the researcher to assess similarities across the research question and sub-questions. The outcome was that the researcher was able to see a theory emerge from the coded data.

During the start of data collection, I was examining the data to see how I could respond to the research question and sub-questions. When I began to see how I could respond, I also started to notice other questions and responses emerging. Therefore, I was able to examine these questions and tie them back to my research questions. As the data collection continued, the integration of questions and sub-questions became clearer and allowed for expansion. With the data, I was not only able to see the patterns I was looking for but I was also able to see new patterns emerging. After all data were collected, I was able to draw connections between Social Learning Theory and Transformative Learning Theory and the emerging patterns in the data. The theories helped to explain why certain patterns were emerging and provided context for the why and how teachers scored students on behavior rating scales. Once connections were made between the theories and data, I was able to discuss the themes.

Procedures

After meeting with the superintendent to explain my study and provide research questions, I was granted permission to conduct research in the district. I then submitted for IRB approval (Appendix A). After obtaining all IRB approvals, I met with the school psychologist to provide a copy of the approval and explain the study. I provided the school psychologist with parent and teacher consent forms (Appendix B and D) and student assent scales (Appendix C).

Parent Consent and Student Assent Process

Once the school psychologist identified the students due for a reevaluation, they distributed the consent scales to parents and teachers along with other paperwork necessary for the reevaluation process. The assent forms were also provided to the student. I spoke with parents on the phone, described the purpose of the study, and stated that the students would be bringing the consent and assent forms home with them. I also explained that after reading the consent and assent forms and discussing the study with their child, they should call me if they had additional questions. I then contacted the school psychologist to review the names and content areas of the teachers they identified to complete the behavior rating scales.

Teacher Consent Process

After the school psychologists identified the teachers that would be given behavior rating forms to complete, the school psychologist asked the teacher if I could speak to them about my study. Once the school psychologist received verbal consent, I contacted the teacher. I made an appointment with the teacher based on the feedback they provided as to a best time to meet. I met the teachers in their classrooms to explain the study. After our

conversation, I provided the teacher with a copy of the teacher consent form. I asked the teacher to take the form and review the form at their convenience. I did ask the teacher to return to form to me within four days if they agreed to participate in the study. All six teachers agreed and completed the teacher consent paperwork.

Survey Distribution

After all signed consent forms were collected, I administered the survey to the teachers through Qualtrics. The survey took approximately 10-to-15 minutes for the teachers to complete. When I received the survey data, I downloaded the content into an excel spreadsheet.

Behavior Assessment System for Children – 3 (BASC-3)

I reviewed the BASC rating scales after the psychologist scored the scales. During the review of the scales, I documented patterns and scores that were high on the rating scale. I also noted areas of consistency and areas of discrepancy, which were discussed and reviewed during the semi-structured interview. The interviews provided teachers with the opportunity to explain their thought process when completing the BASC rating scales.

I followed up on the completion of the behavior rating scales with a semi-structured interview. The interview started with a question about any education and training teachers may have received on how to complete behavior rating scales. The teachers involved and I were able to discuss the background information and how that information translated to the completed the behavior rating form. I documented some of the background information on the initial survey and followed up on during the semi-structured interview. I transcribed and entered all interviews into Dedoose software. The interviews were coded for common language and patterns. Once I completed the coding, I was able to see emerging themes

from the patterns. The patterns were then compared to the observations completed by the school psychologist by using the constant comparative method (Glaser, 1965).

Threats to Internal and External Validity

There are numerous limitations to the methodology in this study. There were a small number of teachers involved in the study, thus the diversity of the teachers was limited.

Increasing the diversity of teachers and content areas would allow for greater clarity when looking at the data. The study was also limited in that the students with ADHD needed to be due for reevaluation when I was collecting the data. Not all students with a diagnosis of ADHD could be asked to join the study, only those that were due for a reevaluation.

Another consideration is that students who were part of this study could be at any academic level. Thus, the teachers in the study had students ranging from the average academic level to the honors level, with some students already identified as requiring special education.

Given that ADHD can affect students of any academic ability, behavior rating scales must reflect the observed behavior of the specific student and not the behavior of a class.

Behavior rating scales that are completed based on the behaviors of the class instead of the observable specific student behaviors can affect the reliability and validity.

The BASC-3 also has reliability and validity limitations that must be considered.

Even though the interrater reliability and internal consistency rate high on the tests completed by Reynolds and Kamphaus, 2015 there are still areas for improvement.

Researcher Bias

As the researcher, I needed to exclude personal and professional bias from the study. Seeing that I am an administrator in the building for the past five years, I needed to remove my personal thoughts regarding teacher attitudes towards students' specific academic levels.

As a parent of a child diagnosed with ADHD, I was aware of my personal bias in my understanding of ADHD and how I believed behavior rating scales were completed. I kept this information confidential to ensure that I did not project those feelings onto teachers and students. By focusing on the collected data and looking for patterns, I did not let my beliefs influence my interpretation of the data; the patterns and words provided the information needed.

Limitations of Methodology

Limitations were unavoidable, even though I tried to limit variables to increase reliability and validity. Student participants in this study had a confirmed diagnosis of ADHD and were in the reevaluation process. Albeit out of my control, the population of teachers and students was limited since students had to be in the reevaluation process during the data collection period in November and December 2019 to be included in the study.

Another limitation of the study was that the school psychologists distributed the behavior rating scales. There was not a set procedure the school psychologist used to determine which teachers received the behavior rating scales. The behavior rating scales are frequently distributed to teachers who return the scales in a timely manner so the school psychologist has time to score and write the final report. The school psychologist indicated that they frequently do not give the scales to specific teachers because they know the scales will not be returned. Since the behavior rating scales take time to complete and teachers are often rushed to get tasks done during the day, tasks that are not required are usually not completed or completed last. The completion of behavior rating scales is not a requirement for teachers. Some teachers do not complete the scales because they do not have the time in

their day. The lack of procedures for distributing and returning scales limited the diversity of teachers asked to participate in the study.

Summary

In this chapter, I reviewed the purpose of my study, my research design, my research questions, procedures, and data analysis. I started with a review of why I used Stake's approach to a case study and how my study aligned with his methodology. I also reviewed transformative and social learning theory to show how they helped to define the study. I included information about limitations to give a better understanding of how I obtained the data. I used three data collection methods including survey data, observation, and semi-structured interviews. The collection of data and use of the constant comparative method allowed me to look for patterns. In Chapter IV, I will explain the study's results as gathered from the data analysis.

Chapter IV

Results

In this chapter, I present the key findings from this qualitative instrumental case study of high school teachers who were tasked with completing behavior rating scales for students in their classes who were being reevaluated for ADHD. I collected data from interviews, surveys, observations, and behavior rating scales from six high school teachers. After data collection, I analyzed and triangulated the data using the constant comparative method (Glaser, 1965) discussed more fully in Chapter III and supported the coding decisions with information gleaned from the literature review in Chapter II.

This chapter will introduce the cases and present the results from the study organized by the three sub-questions that guided the study: (a) What student behaviors during a class period coincided with their teacher noting hyperactivity on the rating form? (b) How did a teacher reflect about their personal upbringing or the people they were close to with similar difficulties to the identified student when completing a BASC rating form? and (c) When and why did teachers talk to other teachers before completion of a BASC form?

Participants

From the surveys, five of those six teachers (83%) reported that they received a Master's degree, and four of them (67%) took at least one special education course as part of their graduate curriculum. All six teachers are employed by the same school district and teach at the same high school (See Table 1).

Table 1*Teachers' Post-Secondary Degree and Years of Experience*

Teacher	Degree / Certification	Teaching Experience	Courses in Special Education	Completed BASC-3 for Student
Sam	Master's Degree	5-9 years	Yes	Cam
Erin	Master's Degree	5-9 years	Yes	Cam
Keri	Master's Degree	10 plus years	Yes	Ryan
Joe	Behavior Analyst Cert.	10 plus years	Yes	Ryan
Jen	Master's Degree	10 plus years	No	Cash
Pat	Master's Degree	5-9 years	No	Cash

Note. This table represents the teachers included in this study along with their highest post-secondary degree held. The third column represents the number of years of experience teaching. The fourth last column represents if a teacher had taken at least one course in the area of special education. The last column is the student on the teacher's caseload.

Student Participants with ADHD

There were three students in grades 9-12 included in this study. All of the students had a diagnosis of ADHD and were about to start the reevaluation process when this study began. Two of the students were female, one with a diagnosis of ADHD-C and the other with a diagnosis of ADHD-I. The third student was a male with a diagnosis of ADHD-C. All three of the students have an IEP for Other Health Impairment and are followed by a case manager. At the time of the study, all three students were functioning at the academic or college prep level of courses (See Table 2).

Table 2*Student Information*

Student	Grade	ADHD Type	Medicated
Ryan	12	ADHD-C	Yes
Cam	10	ADHD-C	No
Cash	12	ADHD-I	Yes

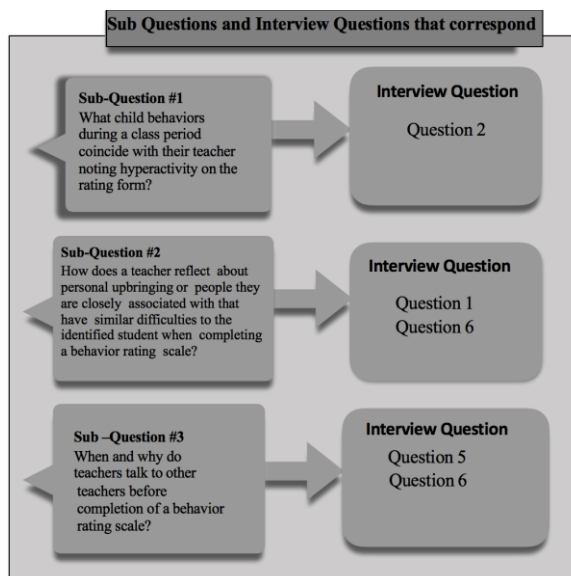
Note. This table represents the students included in this study. The second column is the present grade level for the student. While the third and fourth columns contain the diagnosis of the student and if they are presently taking medication.

Summary of Interview Results

There were six main research questions within the questions were seven sub-questions that were asked of each of the six teachers. The research questions helped to further explain results from the original survey and the review of the BASC-3 analysis. The teachers provided a time and location that was comfortable for them to complete the interviews. During the interview process, three of the teachers paused at question one and six. The teachers discussed how they never thought about it but it was evident they were using their personal upbringing when completing the behavior rating scales. Although question three and four are not specifically noted in the Figure 1 below, they did provide valuable information that was used during this study.

Figure 1

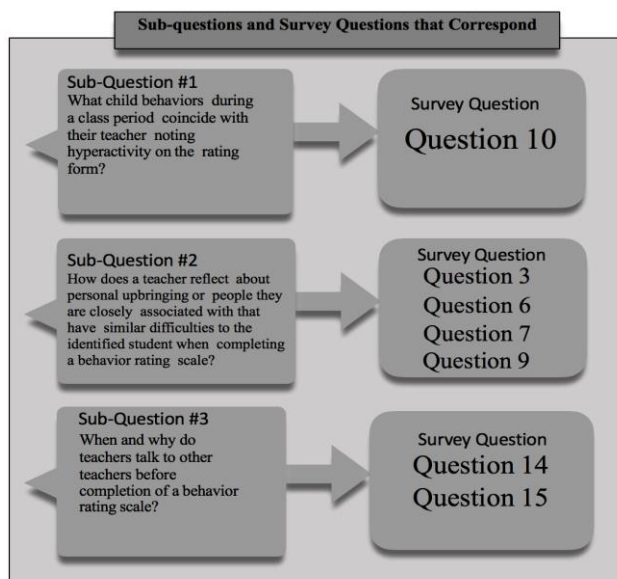
Sub-Questions with Corresponding Interview Questions



Note. The figure represents the three sub-questions that were explored during this instrumental case study and the interview questions that corresponded with helping to form to a response.

Summary of Survey

There were six survey questions with seven additional sub-questions that teachers were asked to respond to. The survey was the first data collected. The survey was used to gather background information on education received, number of teachers teaching and experience with someone diagnosed with ADHD in the family setting. The teachers were not given a set amount of time to complete the survey. The survey provided additional information that helped respond to the research question and sub-questions (Appendix F).

Figure 2*Sub-questions with Corresponding Survey Questions*

Note. The figure represents the three sub-questions that were explored during this instrumental case study and the survey questions that corresponded with helping to form to a response.

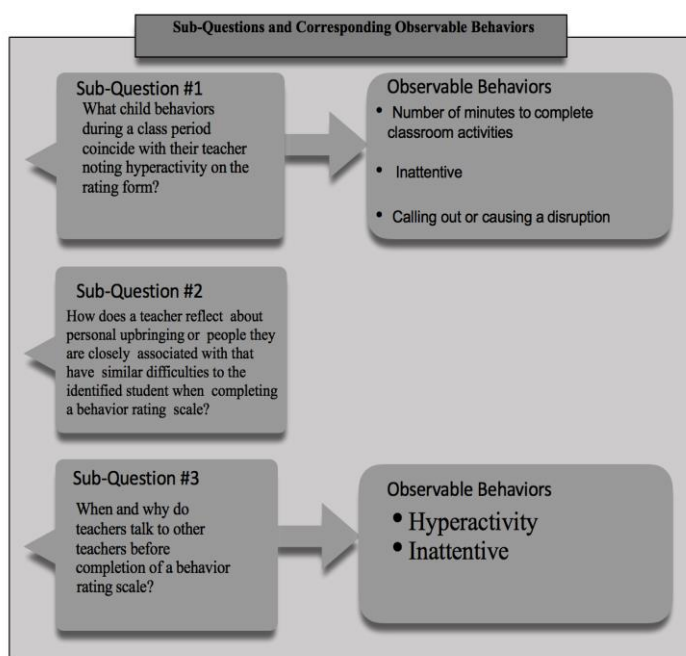
Summary of Observations

There were two observations completed for each teacher for a total of 12 observations. The observations were 45 minutes in length. The observations were not scheduled but the teachers were aware of the time period the observations would take place. The teachers were also aware of the class period, as they knew the student that was involved with study. When I arrived for an observation, I arrived before the class period began and positioned myself in the back of the classroom within eyesight of the student involved. During the observations, I recorded the student behaviors that coincided with hyperactivity and attention problems according to the BASC-3 (See Figure 3) (Reynolds & Kamphaus,

2015). The observation table can be found in Appendix G. The behaviors observed during the class period were compared with the teacher completed Teacher Rating Scales.

Figure 3

Sub-Questions and Observable Behaviors



Note. The figure represents the three sub-questions that were explored during this instrumental case study and the observable behaviors that corresponded with helping to form to a response.

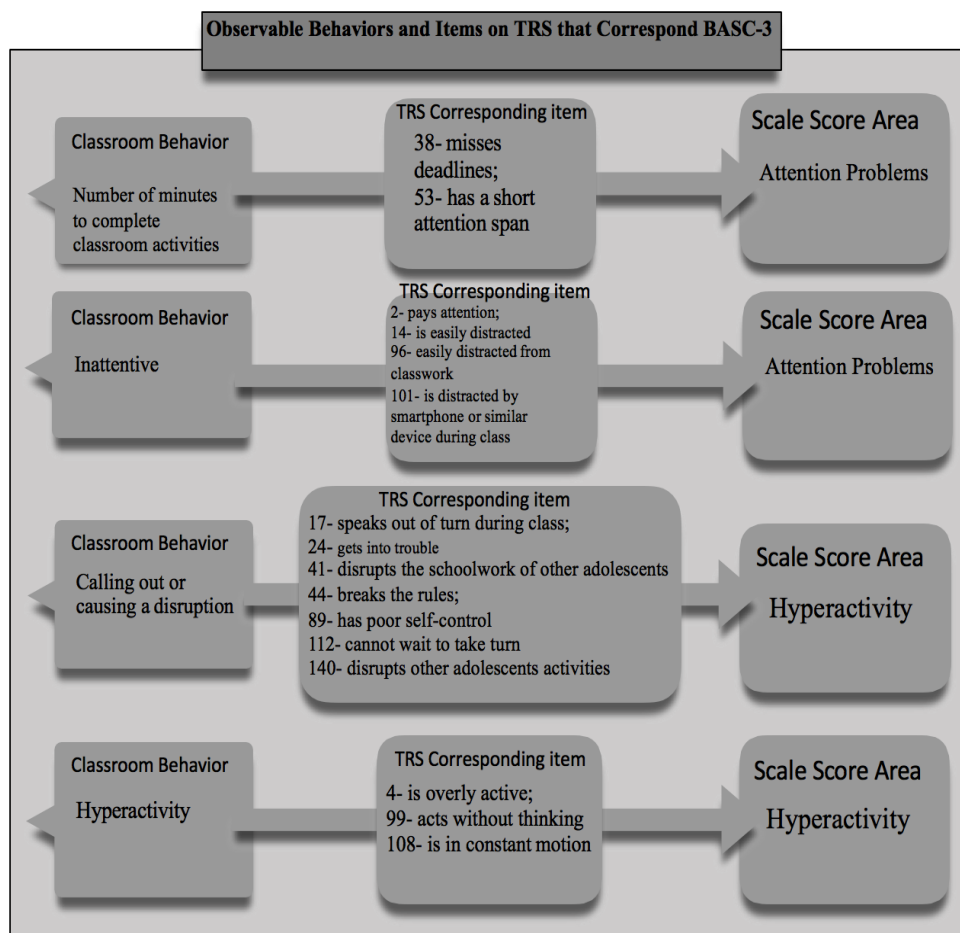
Summary of BASC-3 Review

The BASC-3 review was the last piece of data collected during this instrumental case study. After the Teacher Rating Scales were completed and scored by the school psychologist, I was provided an Interpretive Summary Report (Reynolds & Kamphaus, 2015). The report contained a thorough analysis of the completed teacher rating scales. After reviewing the report, I compared the scores given by teacher to the observations. I noted

areas that were observed during the two 45-minute observations that were or were not documented on the TRS (See Figure 4).

Figure 4

Sub-Questions and Corresponding Teacher Rating Scale Items



Note. The figure represents the classroom observable behaviors, the TRS corresponding item number and the scale score area for the BASC-3.

Behaviors During a Class Period that Coincide with Teacher Noting Hyperactivity

In this study, several themes emerged that captured the behaviors that students exhibited during a class period that would prompt teachers to mark symptoms that relate to hyperactivity on a behavior rating form, including: (a) getting up during class, (b)

conversations during a class period, and (c) constant movement. This section will focus on sub-question 1: What child behaviors during a class period coincide with their teacher noting hyperactivity on the rating form?

Getting Up During Class

All six of the teachers remarked that students getting up during a class period was a common reason why they would think the student exhibits high hyperactivity. For example, Jen and Pat noted in their interviews that students would get up for different tasks such as walking to the trash can. Pat also shared that sharpening a pencil or getting a tissue were common reasons that her students would leave their seat during class (Interview). Sam, Keri, Jen, and Pat all reported in their interviews that they viewed the activity of getting up and walking as a strategy some students used to refocus. However, Jen reported in her interview that she did not view this behavior as a distraction to her teaching. Sam, Keri, Jen, and Pat described getting up during a class period as a symptom of hyperactivity on the Behavior Rating Scale. During the observations in Keri, Jen, Pat, and Joe's classrooms, students in four of the classes got out of their seats during the class period, though it appeared they had a purpose or reason for the movement. During the observations in Keri, Jen, Pat, and Joe's classrooms, the students either went to the trashcan or to pick up material needed for the class period, while up the students did not wander around the room. The period of time the students were out of their seats ranged from 30 to 67 seconds. The students did not disrupt the class and did not stop to talk to other students. The three students that went to the trashcan went directly to the trashcan, threw away the object, and went immediately back to their seats. The other student got up to retrieve a calculator and textbook. The student visited two locations in the classroom before returning to his seat. Even though this student was out

of his seat the longest, he did not appear to disrupt his classmates or teacher. All four of the students only got up one time during the 47-minute observation.

Jen noted in her interview that there are not as many task-driven opportunities for students to get up during a class period in high school. Thus, “a lot of it [finding opportunities for students to move around the classroom at appropriate times] kind of turns to me [becomes my responsibility to try to find tasks for the student to complete]. So maybe waiting in line or maybe it’s waiting for their chance to speak. Or perhaps just taking the time to pass out papers” (Jen Interview). During the observations, the teachers did not have to assign students opportunities to get up and walk around. The four students that got up during the class period did so on their own terms (Keri, Jen, Pat, and Joe Observations). In sum, according to Jen, there are minimal opportunities at the high school level to move around during a lesson, and teachers are responsible for providing opportunities for students who need to walk around during a lesson.

Conversations During the Class Period

Erin, Jen, and Joe reported that they noticed that their students with hyperactivity had difficulty avoiding conversations during a class period (Interviews). For example, Jen reported that these students made frequent eye contact with their classmates, which then drew them into a side conversation instead of focusing on the teacher (Interview). In addition, Joe reported that many of his students being reevaluated for ADHD had difficulty with impulse control, such as a scenario where a student will interrupt a conversation even if they were not originally included (Interview). From Joe’s interview, it was evident that these teachers perceived side conversations as sign of hyperactivity and noted these specific behaviors on the completion of behavior rating scales. The side conversation in one

classroom started when Pat allowed group time to complete an assignment. Once the students broke into their groups, the students were off-task with conversations. The students spoke about activities taking place outside of the classroom. It was difficult to follow the conversation as I was sitting away from the group and did not want to intrude. The conversation lasted four minutes 37 seconds. When Pat started walking toward the group, they changed the conversation back to the material covered during class. Pat's proximity also informed me as the observer that the students were aware that they were off-task and needed to get back to the task assigned (Pat Observation). Contrary to the interviews, in classroom observations, I only recorded side conversations in three of the six classrooms. Generally, the students participated in side conversations during group work or during unstructured time (Pat and Jen Observations).

In Jen's classroom, students participated in side conversations during unstructured time in the lesson. Students were provided independent work time as Jen circulated among the students to assist them with the completion of the worksheet. However, when Jen was away from the student that had ADHD, the student with ADHD would have conversations with a classmate sitting in close proximity. The conversations did not last more than two to three minutes. As Jen circulated the room, the students would stop talking. The conversations between the two classmates were not loud and did not disrupt the entire group setting. The student with ADHD only had conversations with one classmate. (Jen Observation). Jen did not note this behavior on the completed behavior rating scales.

On the other hand, Keri did not mention conversations between students during a lesson as a sign of hyperactivity in her room. However, during an observation in Keri's room, the student being reevaluated for ADHD made the letter L with her right hand, and a

student across the room commented on the “loser” symbol. The class got off-topic until Keri commented and the class calmed down. Once the class regained composure, the students resumed working on the lesson. Most conversations occur verbally; however, students are still able to start and maintain conversations with eye contact and hand gestures. In the situation above, Keri noticed the verbal and non-verbal communication styles.

Constant Movement

Teachers also identified their students’ constant need for movement as a third area of evidence of hyperactivity in the classroom (Keri, Jen, Joe, and Pat Interviews). Even though only four teachers (67%) indicated students’ need for movement as a sign of hyperactivity, all six of the observations (100%) included examples of students with fidgety behaviors. In addition to students walking around the classroom during instructional time and engaging in side conversations, the teachers acknowledged that students being reevaluated for ADHD were constantly moving. Teachers categorized students’ movement in a variety of ways. Pat observed that some students doodled on their paper (Interview), while Erin, Keri, and Jen shared in their interviews that they observed their students tapping, fidgeting, or fiddling with an object. During observations completed in Erin and Keri’s classrooms, two students tapped a pen or pencil for at least three minutes during the class period. While the students did not tap for three consecutive minutes, the behavior was carried over throughout the period for 10 to 15 second segments. Another student displayed her constant movement by playing with her fingers during Jen’s class period (Observation). The student would squeeze her hands and grasp her fingers when the student was not writing or typing on her laptop.

There were also teachers that commented that constant movement included eye movement. Sam and Keri observed students constantly looking around the room and

perceived that the students were not focused on the instruction (Interviews). A student in Sam's class frequently looked up from his work and scanned the classroom. The student did not appear to focus on one person or object but instead scanned the room appearing to look at the windows, door, and the teacher, repeating this process every ten to fifteen minutes (Sam Observation). After a few seconds of looking around, the student would appear to go back to work, and Sam did not have to redirect or refocus the student. Each of the teachers identified the student they were completing behavior rating scale for engaged in at least one of the above activities during a class period. In addition, teachers noted that they did not observe these students using specially designed tools to help with fidgeting during class periods such as fidget spinners, clay, or small items to occupy hands (Interview with Keri). Keri identified that often her students do not appear to realize they are fidgeting and being a distraction to the class (Interview). Teachers stated that they frequently tried to redirect students to get them back on task (Interview with Keri). The researcher only documented the redirection of the student during the observation in Keri's room (Keri Observation). While teachers perceived these redirection attempts to be successful, they acknowledged that at times the redirection is only effective for a short time (Keri Interview).

During the interviews, I asked teachers how they handled the constant movement during their class periods. Each teacher had a different way to address their students' activity. For example, Jen purchased flexible seating for her room to allow the students to stand and move whether or not they were identified as having ADHD (Interview). During the observation in Jen's room, students used the flexible seating. The student being reevaluated for ADHD sat at a desk during the class period. In Keri's classroom, a student was sitting on a stool and leaning on a desk. Even though Keri did not specifically purchase

flexible seating for her classroom, a student modified the seating in the room to fit their need (Observation). Keri explained in her interview that this frequent movement was when “your brain is moving and you need to move and you’re still paying attention.” In turn, she did not see constant movement as an issue in her classroom, and she attempted to get the students up and moving frequently to provide an outlet for movement (Interview).

According to Keri, movement in the classroom can help all students focus and pay better attention. However, Keri noted that she provides less opportunities for movement during her Honors and Advanced Placement level courses than during her academic-level courses, but she did not expand on the reasoning for her decision.

Sam and Erin noted that their students under reevaluation for ADHD often have difficulty with executive functioning skills, especially with organization of materials and the ability to get back on task after being redirected (Interviews). Building on this idea, Erin indicated that these students often have difficulty organizing their course materials and frequently have paper in the wrong section of their binders (Interview). When these students are unable to locate the material they need for class, they begin the class period already unfocused. Erin expressed that even though disorganization is not typically an example of hyperactivity, it contributes to a student being off-task and unable to focus (Interview). In Sam’s classroom, he spent approximately fifteen minutes helping a student organize his binder and bookbag to prepare for classes and homework (Observation). Erin also indicated that she spends time during her class period helping students develop organizational skills (Interview).

Teachers used the observable behaviors of getting up and moving around the classroom during a class period, the inability to avoid side conversations during a class

period, and constant movement to describe hyperactivity. While there were numerous behaviors that prompted teachers to identify a child as hyperactive, the teachers in this study most often used these three themes to rationalize why they identified hyperactive behavior on a behavior rating scale.

Overall BASC Rating

The behaviors documented above led all students to have some form of hyperactivity marked on their BASC rating form. As expected, Cash, a student identified as ADHD-I had less hyperactivity noted on her completed scales, but some were still notable. On Cash's form items 17 (speaking out of turn during class), 99 (acts without thinking), and 108 (is in constant motion) were documented. However, Cash also had items 13 (performs poorly on school assignments), 25, 126 and 137 documented which the observer was not looking for during the observation process. On Ryan's and Cam's TRS, the Inattention items were notable. Ryan had items 4, 17, 41, 89, 99, 108, 112, and 140 documented on his teacher rating scales. However, items 17, 41, 89, 99 were only documented by one teacher and items 99 and 108 were only documented by the second teacher.

Teacher's Philosophy

The following items pertain to the response to sub-question number two; how does a teacher reflect about personal upbringing or people they are closely associated with that have similar difficulties to the identified student when completing a behavior rating scale? Many of the behaviors and information documented on the behavior rating forms may illustrate a teacher's philosophy on classroom management. Sam, Keri, and Joe all voiced that relationship building was their way of eliminating unwanted behaviors in the classroom (Interviews). Keri and Joe perceived that if they established high expectations for students

along with a support system, they could overlook some of the behaviors, as long as students were successful (Interview). All teachers set high expectations for all students, which was observed in all six class periods. The teachers had objectives posted with agendas for the class period. All six teachers had bell-to-bell instruction during the class period. Keri and Joe also recognized that they wanted the students to know that mistakes should be viewed as learning opportunities, and that as long as a student learned something and was able to move on in the lesson without a disruption, the teacher did not feel that was an example of hyperactivity (Interview). In support of this sentiment, Sam expressed in his interview:

Let's celebrate all those little successes and learn from the things that we did that were wrong. I try to always go back to be like, what do we do better next time? Like, we need to learn from this. We can't keep doing the same thing because that didn't work. And it might be different for each student, might be different for each class, may be different each day. But really, what happens?

According to Sam, the goal is not about catching a student doing something wrong so that it can be marked on a behavior rating scale. Rather, the goal is to make a difference in the life of a child and to help them see that mistakes do not define a person (Interview). Sam, like the other teachers mentioned above, wants students to learn from his experience and improve on behaviors through setting high expectations and building relationships.

The Role of a Teacher's Upbringing in the Completion of Behavior Rating Scales

Participating teachers' past experiences and upbringing informed their completion of the behavior rating forms, which is evident in the study. During their individual interviews, each teacher identified that their upbringing has influenced their classroom management and their views of students in their classroom. In my survey, teachers responded to a question

regarding their understanding of hyperactivity in their peers when they were growing up. Of the six teachers, 50% reported that they had had interactions with a hyperactive child, although none of the hyperactive children resided in their household (Survey). From the teacher data on upbringing, three themes emerged that affected how the teachers completed the behavior rating scales. The three themes are: (a) high expectations growing up and now setting high expectations in the classroom, (b) the belief that everyone can succeed, and (c) the belief that students should not be labeled at all, including for ADHD. It is important to note, the three themes are based on the information expressed by the teachers during the interviews and on the surveys.

Setting High Expectations

Three of the six teachers indicated that their parents were “laid back,” and so long as they were completing a given task, some of the off-task behaviors were ignored (Sam, Erin, and Joe Interviews). Joe indicated that he follows this same pattern in his classroom. If a student is doing something off-task like listening to music or doodling and they are still completing their work, he ignores the off-task behavior (Interview).

When some teachers ignore behaviors and others don't, it can lead to inconsistent behavior rating scales data. For example, a teacher that does not ignore the off-task behaviors may rate the student higher on a behavior rating scale compared to the teachers who ignore the behaviors. A student may be considered elevated for symptoms of ADHD based on how highly their behaviors are rated on the behavior rating scale. Since the student presents the same behaviors in both settings, the inconsistency between the teachers' reactions should not make for discrepancies on the rating scales.

Through the survey and interviews, as mentioned above, teachers disclosed that they use information from their own upbringing to complete the behavior rating forms. The bias that teachers bring to the completion of behavior rating forms can play an important part in determining a student's ADHD diagnosis. If a teacher was raised with strict parents with high expectations, they bring that into their classroom and often mirror that expectation to their students.

Teachers also identified their birth order as a major influence in how they were raised. Sam, Jen, and Joe identified that their parents' expectations were the same for all the siblings but the way their parents handled each child and encouraged them to reach those expectations varied (Interview). Erin and Pat discussed the differences they associated with birth order, while Sam, Jen, and Joe identified gender as a factor in their families of origin (Interview). All agreed that they try to remove bias from the completion of behavior rating scales but know that their background can heavily influence their responses.

Upbringing and Discipline Connection

After coding all the interview data, I was able to run a co-code report in Dedoose to see if any codes were closely linked. The coding looked at the teacher responses and how they were coded in Dedoose. Through this process, I identified that upbringing and discipline overlapped significantly. Thus, the way teachers view and handle discipline was associated with their upbringing. For example, Pat indicated that "adults seemed to have a shorter fuse when it came to these [hyperactive] children. It appeared as though punishments were harsher than for those who were less hyperactive" (Keri Survey). Further, Keri was able to commiserate with her cousin who was diagnosed with ADHD. Keri reported in her survey:

My cousin was diagnosed with ADHD when we were young (in the early 90s), but he did not receive special education services, nor was he medicated. In elementary school, I remember that he was always in trouble and often got yelled at by the teacher. He was often 'in' for recess, sent to the hallway to do work, and his desk was usually at the front of the classroom away from everyone else.

Keri was able to relate her management of student's with ADHD to her cousin. Keri and Pat both saw that adults had less tolerance for hyperactivity.

Erin, Joe, and Jen reported that they use the same discipline style in their own home as they do in the classroom (Interview). They all discussed their ability to set high expectations and hold children accountable. The severity of "discipline" corresponded with gender in the coding. Erin, Keri, and Joe identified that their parents allowed certain behaviors because "boys will be boys" or "boys need to run off extra energy" (Interview). During the interviews, the teachers also discussed the need for relationship-building and having the mindset that everyone can succeed (Keri, Joe, and Sam Interviews). Having a mindset that everyone can succeed lets the students know that a teacher cares about them and wants them to be successful (Hattie, 2012).

Labeling of Students

The labeling of students played an important role on teachers' perceptions before they even met the student. Jen indicated that she was not aware of the symptoms a child with ADHD could exhibit but had false expectations when a student labeled with ADHD walked into her classroom. Keri was adamant that it was important for her not to be part of the students' labeling process. Her family of origin did not agree with labeling and often explained that certain behaviors were because a child needed to run around more. Sam, Erin,

and Joe discussed the misconceptions they have had after finding out a student has ADHD, yet Keri tried not to let misconceptions affect her as much when dealing with students with ADHD.

Teacher Conversations and the Influence on Behavior Rating Scales

The last section relates to the sub-question 3; when and why do teachers talk to other teachers before completion of a behavior rating scale? Humans want to have conversations and find solidarity in the number of people are also experiencing the same issue (Wheeless, 1978). When teachers are in the faculty lounge or breakroom, they may discuss a student with whom they are having problems. If other teachers are experiencing those same problems, the shared problems give the teacher some reassurance that their classroom management and views on a student are accurate. However, the discussions in the faculty room also give the teachers additional student behaviors to observe that they might not have noticed prior to the conversations.

During the interviews with teachers, all teachers reported they try to only report on observable behaviors in the classroom. Even though this is their intention, Sam, Erin, and Jen admitted that they often think about what another teacher said and include that in their rating (Interviews). Joe, a teacher in the special education classrooms, said in his interview that he does include reports from the regular education teacher and he considers his smaller, special education classroom as “not a normal classroom.” Because of the smaller class size and more adult supervision, some of the behaviors are not exhibited like they are in a regular education classroom. Joe noted that the small group setting of the special education classroom did not allow him to see behaviors, and he does not want to miss something (Interview). The faculty room conversations can lead to false reports on the behavior rating

scales, as the teachers are not reporting observed behaviors. Joe pointed out that he has known and worked with a student for over three years, so when he completes a behavior rating scale, he attempts to only think of the student at the present time, not what the student was like a few years before. He said he finds it difficult to remove prior knowledge from his time with the student, and he said he frequently has to remind himself that he is only including current observable behavior on the rating scales (Interview and Survey). Having a student for several years allows teachers to see growth and out-of-the-ordinary behaviors, and Joe, who had the same students for years, noted the importance of not holding the student accountable for behaviors that occurred years or months prior (Interview).

During the interviews with Erin, Jen, Joe, and Pat, they discussed how their conversations with other teachers affected their completion of behavior rating scales. For instance, Erin explained that lunchroom conversations about a student with another teacher give feedback that the student may display the same behaviors in other classrooms. The conversations come to teachers' minds as they are completing the behavior rating scales (Interview). Erin and Jen both reported that they will frequently rate the student higher on the scales after the conversations with colleagues (Interviews). Additionally, Erin also indicated that if a teacher comments on a behavior they see in their classroom, she will begin to look for that behavior in her classroom (Interview). Overall, teachers agreed that once they noticed the mentioned behaviors, they marked the behaviors on the behavior rating scale. Thus, while teachers may not notice all behaviors on their own, once a colleague pointed out a behavior, teachers tended to also observe that behavior.

Erin, Jen, and Pat identified in their interviews that collegial conversation played a role in how they completed behavior rating scales. Erin indicated that even the memory of the conversation can cause her to look for other behaviors that she had not previously noticed (Interview). Further, Erin said once she observes these behaviors, she documents them on the behavior rating scales (Interview). Teachers know the rating scores on the scales are based on observable behaviors, yet they do not always follow this rule. The collegial conversations are just one of the influences on how a teacher completes a behavior rating scale. If behavior rating scales are not based on observable behavior but on the conversations in the faculty room, they may provide inaccurate information.

From Start of Teaching to Present Day

All six of the teachers (100%) revealed that they have changed how they complete behavior rating forms from the time they started teaching to their present teaching (Interviews). Of the six teachers included in this study, 50% had taught for over ten years, and 50% had taught for five to nine years (Survey). The three teachers who had been teaching for over ten years, Keri, Jen, and Pat, indicated that they complete behavior rating forms differently now than when they first started teaching because they are now more aware of ADHD and some of the behaviors associated with it (Interviews). For instance, Jen, and Pat reported that they have more background knowledge to draw on for what appears to be a “normally active child” and a “hyperactive child” (Interviews). None of the teachers received professional development regarding ADHD or the completion of behavior rating scales in their work setting (Survey and Interviews); however, 67% of the teachers received an overview of behavior rating scales in their special education classes in a university setting. Yet, 50% of the teachers said they did not feel prepared to complete the

behavior rating scales when they entered the teaching profession (Survey). Sam added, “Not having enough experience in the classroom can lead to poor judgments or decisions,” the classroom inexperience can lead to inconsistent information documented on a behavior rating form (Interview). The lack of preparedness on completion of behavior forms can lead to a diagnosis and that could follow a child for the rest of their lives.

Sam and Joe also indicated that they use the forms to record present behaviors (Interviews). Joe mentioned he used to use the forms to record behaviors for the entire year, but now he only thinks about the last two to three months and records those behaviors (Interview).

During Jen’s interview she was asked if she changed the way she completed behavior rating scales from the time they started teaching to the present day, Jen stated:

I started to see some of those behaviors. And sometimes I'd read some of those behaviors and think this isn't even [possible]. Is this really true? Do kids have this type of behavior? But over time, realizing that, okay, this does happen and seeing more variety of kids and their behaviors, then, yes, I think I was maybe a little more honest, because I realized that stuff was out there, and I saw it. And then I was looking, I could pick up those cues, watching the kids and seeing them. (Interview)

Some teachers are not familiar with behaviors that students may exhibit. Jen stated that as a new teacher without the background experience of common student behaviors, her inexperience teaching multiple classes, and her upbringing of experiencing certain expectations and discipline limited her ability to rate student behaviors accurately (Interview and Survey). Over time, Jen’s background experience was expanded by teaching numerous

students with ADHD yearly which provided the opportunities to accurately report observable behavior on behavior rating scales (Interview).

Jen stated that when a person views the behavior rating scales for the first time, there are numerous behaviors that may cause someone to stop and think, “It is possible for this [behavior] to occur in a school setting” (Interview). Jen perceived that once teachers have more experience with typical behaviors and behavior patterns in their classrooms, they may change how they complete the behavior rating forms (Interview and Survey).

Professional Development on Behavior Rating Scales

Keri, Jen, and Pat all stated that behavior rating scales appeared in their mailboxes without any notice when they first started teaching (Interviews). When this happened, Jen reported that she went to the school psychologist to ask about the form since she had never seen one before. She remembered that the school psychologist told her to follow the directions and answer the questions. Thus, Jen noted that she used what she knew of how a child should act during a class period and completed the form (Interview). All of the teachers indicated professional development was not offered for completion of behavior rating scales (Survey). With no direction from the school district on how to complete behavior rating forms, Jen relied on the printed directions from the publisher to complete the forms and return them to the school psychologist (Interview). Ultimately, the teachers reported that the only time they saw feedback was in the IEP meeting or if the reevaluation report was made available for them to review (survey). By not receiving feedback, Jen reported that she assumed she was completing the behavior rating scales accurately and continued to complete forms in the same way (Survey and Interview).

Teachers that completed an undergraduate degree in special education said behavior rating scales were covered in a course but not in-depth (Survey). The overview given to prepare them for forms they would see in the classroom as they were working with students (Survey). If a teacher did not take a special education course, they had no knowledge of the forms before they saw them in their mailbox (Survey). In fact, Jen and Pat said that they read the directions the first few times, but now they just complete the forms since they feel they have knowledge (Interviews). Teachers and school psychologists should complete the directions to allow for results that are accurate.

Summary

In this chapter, I triangulated data from surveys, interviews, observations, and completed behavior rating scales to highlight the information teachers use to complete behavior rating scales. Through this analysis, the themes of teachers' upbringing, collegial conversations, and background knowledge all arose as factors in teachers' completion of behavior rating scales. In addition, the data revealed that the teachers perceived that the district did not offer professional development to the teachers on how to complete a behavior rating scale or provide definitions for terms used in the behavior rating scales. In Chapter V, I connect my results to my theoretical framework, discuss the results of this study, and provide suggestions for future educational practices and future research directions.

Chapter V: Discussion

The purpose of this instrumental case study was to examine teachers' decision-making process during their completion of behavior rating scales for students being reevaluated for ADHD. In this chapter, I will discuss the results and use the study's theoretical framework as a lens to interpret the findings. Then, I will share the limitations of the study in terms of methodology, analysis, and generalizability. Finally, I will make recommendations for educational practice and suggest future research directions.

Summary of the Study

This study took place at a suburban high school in the mid-Atlantic region of the United States. The high school had over 1300 ninth- through twelfth-grade students and over 100 faculty and staff. This study explored high school teachers' completion of behavior rating scales for their students being reevaluated for ADHD, considering teachers' background knowledge and childhood upbringing to better understand their decision-making process.

For this qualitative study, data collection included teacher surveys, teacher interviews, classroom observations, and the teachers' completed behavior scale ratings. Data was triangulated across these sources and the constant-comparative method was used to examine the data for emerging themes (Glaser, 1965; Fram, 2013).

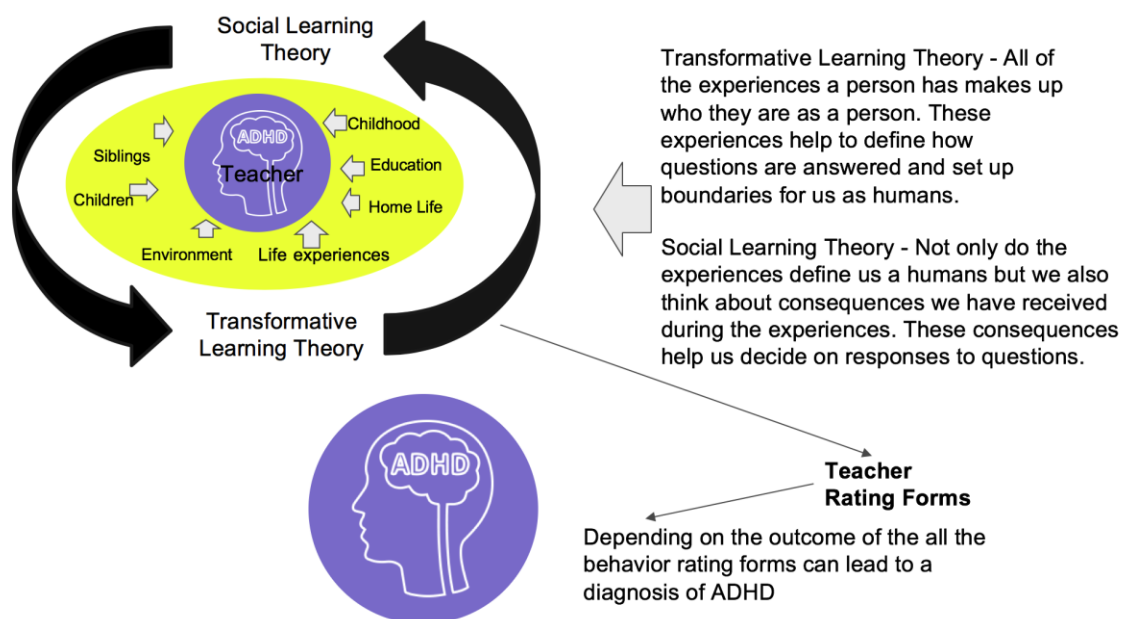
Application of Theoretical Framework

In Chapter II, I introduced a theoretical framework that detailed how both transformative learning theory and social learning theory were useful lenses to understand the decisions that teachers make when they are completing behavior rating scales for

students who are being reevaluated for ADHD. Figure 2 (below) illustrates how Transformative Learning Theory and Social Learning Theory explain the processes of how adults make meaning from experiences.

Figure 2

Transformative Learning Theory and Social Learning Theory



Note. This visual illustrates how Social Learning Theory and Transformative Learning Theory can work together to help explain how teachers draw from their background knowledge and personal experiences when completing behavior rating scales.

Transformative Learning Theory

Transformative Learning Theory is a useful lens when interpreting how teachers' background knowledge and upbringing informs their completion of behavior rating scales for students with ADHD. There are three phases of the change process that all adults would go through for a lifestyle change to occur. The teachers start the change process in the

psychological phase where they are starting to understand the change that is taking place within them. This change take place at any time in the teacher's life, including during their teaching career. After the teachers noticed the change within themselves, they start into the convictional change. During this part of the transformation process, the beliefs systems within the adults are questioned and changed. A teacher such as Jen, is not only noticing behaviors she never thought were possible but she is starting to see how the behaviors are impacting the students daily. Jen is starting to see the importance of changing her belief system so she understands and comprehends what some students encounter daily. Jen spoke of her changing beliefs during the interview. When Jen started teaching, she did not think students were capable of displaying certain behaviors listed on the BASC-3. Jen discussed that her parents had very high expectations for school, academically and behaviorally and would not have tolerated the listed behaviors. As Jen continued teaching and learning about student behaviors, she realized that some students struggle to control some of their behaviors. The last part of the transformation process is the behavioral change that occurs within the teacher. Not only do the teachers see and understand the behavior but they also see why they need to change their behavior during a class period to reach students that are exhibiting such behaviors.

In this study, teachers frequently referenced their upbringing during interviews. For instance, several teachers noted that they were raised with a "boys will be boys" mentality, even though some of the teachers were raised with this mentality not all of them still carry this mentality. During Jen interview, she was able to discuss how she has changed her thoughts from the "boys will be boys" mentality, to now treating genders equally. Jen followed up with the expectations at her house are the same for her sons and daughter. If a

behavior is not tolerated for her daughter it is also not tolerated for her son. Transformative Learning Theory can be used to explain how this mindset of teachers has changed so they do not carry this mindset over into the school setting. Depending on past experiences, teachers may have different expectations for gender behaviors which can lead to inconsistencies in how teachers report behaviors on the behavior rating scales. The background knowledge that teachers have developed when they were growing up and still, continue to develop as adults are what drive the ratings given on the behavior rating scales. All six teachers identified in the interviews perceived that their upbringing had informed their completion of behavior rating scales. For instance, Keri discussed during her interview, “My expectations for appropriate behavior, I think, comes from my background.” Joe and Sam also indicated during their interviews that setting high expectations were part of their upbringing and now they set high expectations in the classroom and also at home. Transformative Learning Theory is a useful lens to view these findings, as the experiences the teachers had from childhood play a part in how they set up and manage their classrooms.

The transformative learning process is occurring over time and takes place regularly throughout one’s life. Meizrow (1990) coined the term *disorienting dilemmas* which describes the initiation of the transformative learning process. A disorienting dilemma is usually triggered by a life event that causes one to stop and think about assumptions. The process of solving a disorienting dilemma helps an adult to apply their experiences and familiar knowledge to the dilemma. A person must apply what they have learned through experiences in their own life to the current situation to solve the dilemma. If an adult has never had that experience or a similar experience, they will have to change the way they are looking at the situation. This would mean the adult has to change their view of the dilemma.

By changing the view of the dilemma, the adult can draw upon other experiences to resolve the problem. The situations Keri, Sam and Joe experienced support the process adults use to try to explain or solve dilemmas. During the interviews, each of these teachers spoke about how their practice of setting high expectations in their classrooms was modeled by adults during their childhoods. In turn, Keri, Sam, and Joe channel these expectations as they determine the appropriateness of student behaviors when completing behavior rating scales. Thus, when these teachers encountered dilemmas in their classrooms they may be changing their view and using the new lens to solve the dilemma. As teachers experience dilemmas, each dilemma does not require all teachers to have a behavioral change. Teachers can change their point of view. Jen discussed the change process during her interview. Jen talked about not believing some of the behaviors listed on the behavior rating scales were actually done by students in the classroom. After teaching a few years, Jen realized that not only were the students exhibiting these behaviors but they were doing them frequently. Jen also discussed the change she went through when she had her own children. The expectations she set although similar to her upbringing she also intertwined the lessons she had learned from teaching.

Two of the responsibilities of teachers are to manage classroom behaviors and to arrange resources. The unique upbringing of each teacher leads to different expectations set by the teachers. According to Meizrow (1990), *meaning schemes* are started during childhood and are learned through socialization. Thus, the understandings a teacher encounters during activities and conversations are constantly adding to and integrating into the meanings learned prior. The teachers in my study were constantly reflecting on these experiences to assess if the meaning of each experience is still the same from previous

experiences. Joe and Sam discussed how they can teach the same students for more than one year. When they are completing behavior rating scales or IEP paperwork, they always question themselves to make sure that they behavior is still occurring. They do not want to complete the rating scales based on information they witnessed a year or more ago. During the interviews, all six of the teachers were able to express that they believe the experiences they had in school and at home, play a part of how they view effective classroom management and appropriate behavior. During the observations, I noticed each classroom was set up and managed in a unique way. However, the rules of the school were followed by the teachers and students in all classrooms. Even though each teacher had their own meaning schemes and was constantly reevaluating them, they were still able to consistently adhere to the rules of the school.

Since all humans have different experiences and may also interpret the same experience in a different way, meaning schemes may contain bias. Meizrow (1997) also discussed the habits of the adult mind based on the beliefs, judgements, and attitudes adults have about an individual or a specific group. Habits of mind are the habitual ways of feeling, acting and thinking, known as codes. A point of view can change and can be either short or long term, a habit of mind requires long term change in a way or habit of thinking. The teacher used the variables to see how they may affect teachers completing the behavior rating scales. The variable and changes in beliefs about the variables are part of transformative learning that teachers are experiencing as they encounter new dilemmas. The change process does not happen quickly and is not something teachers will notice in themselves over a short time. For permanent change to take place, teachers must have change within themselves, followed by changes in their belief system and this will lead to

lifestyle changes (Meizrow, 1997). During the interviews, 67% of the teachers identified that they are currently raising their own children. The teachers were able to identify that they try to treat their children the same. Even though, the teachers discussed treating their children the same, 50% of the teachers stated they have different expectations for the sons versus their daughters. The teachers have encountered the habits of mind and are trying to make the change to treat their children the same. The change in belief system the teachers also discussed during their interviews was how they are not the same teacher as they were when they began teaching. Teachers cited during their interviews that they have changed how they view students from the start of their teaching career. Jen was able to discuss specific behaviors that she did not think students exhibited at all either in a classroom or outside of a school setting; yet, now she notices these behaviors occur frequently as on a daily basis. During Jen's interview, she discussed how she had to change the mindset of how she was raised. Jen's father stressed the importance and value of education. After teaching a few years, Jen started to see that the same stress on the value and importance of education was not apparent in all houses. Keri also discussed the importance of education in her family and how her family instilled in her the value of her education; however, not all of Keri's students have the same value instilled in them. Even though Jen and Keri were able to discuss ways they have changed since the start of their teaching career, educators need to continue to see habits of thinking of others even if they do not share the same point of view. Yet, the upbringing of the teacher is not the only factor that frames how they complete a behavior rating scale, as teachers are also forming their thoughts and processes from the consequences and behaviors of others.

Social Learning Theory

Bandura (1978) theorized that humans model their behaviors after the observation of behaviors of others and also after the observation of rewards and consequences to those behaviors. Not only do humans model behaviors after observing the behaviors but we can also be taught behaviors through direct instruction. As part of the Social Learning Theory learners can go through a four-phase process. During the initial phase, observational learning, people learn by watching others. The process of observational learning leads into reciprocal determinism, where behaviors are learned from the environment (Bandura, 1978). By observing others and being placed in the environment, the social cues are learned. When a person is able to apply what they have learned from observing and being in the environment, they are starting to self-regulate behaviors (Bandura, 1978). When a behavior is learned and a person has the confidence to carry through on that behavior, self-efficacy is forming (Bandura, 1978). The teachers come into the educational setting with their own behaviors established by their experiences but each school and district has its own set of behaviors that must be learned. As a teacher is employed in that school, they learn the new behaviors by observing veteran teachers, socializing with staff members, apply what they have learned both in and out of their classrooms; once the teacher builds their confidence, learns the behavior of the school, and can apply them, self-efficacy is occurring. During the interviews, 100% of the teachers discussed how they have changed how they identify and record student behaviors. Teachers in this study perceived students' classroom behaviors as appropriate or disruptive based on their own upbringing and background knowledge. The teachers developed their view on behavior from not only what they experienced and observed as a child but also from the rewards and consequences they received as a child. Keri discussed in her interview the

behaviors of her brother and she witnessed the consequences he was given for some of his behaviors the family deemed inappropriate. Keri not only avoided those behaviors during the school day, but she also made certain to avoid similar behaviors in the future. Erin discussed how the behaviors of her male cousin was accepted in the family because he was a boy. Erin learned during her childhood that genders have different behavior allowances. Erin reported that her cousin did not get in trouble for certain behaviors because he was a male; however, when Erin exhibited the same behaviors she would get in trouble because that behavior was not acceptable for a female. Some teachers saw behaviors in the students that they also exhibit. Joe discussed in his interview how he ignored behaviors in his classroom as long as the students was completing the requested task just as his parents ignored some of his behaviors as long as he was getting his work accomplished. The expectations set in the classroom are prompted by expectations that the teachers experienced during their upbringing. Not only are these the expectations in the classroom but they are also the expectations teachers use when completing the behavior rating scales. Sam discussed his parents and their high expectations that he and his siblings had to abide by. Sam said as the oldest child, he often thought it was his responsibility to set the example for his siblings. Sam indicated that his parents set high expectations and he would get in trouble when mistakes were made, yet his parents were forgiving. Sam's forgiveness after a student makes a mistake could be why he rated the student higher on the behavior rating scale. Because Sam was forgiven after doing something wrong, the learning process he experienced as a child became part of the background knowledge he brings to completing behavior rating scales. When Social Learning Theory is applied to the teacher completion of behavior rating scales, the teachers are reflecting and thinking about the behaviors they observed and the possible consequences of those behaviors.

Once the teacher forms a consequence about the behavior, the teacher will respond in a way they view as appropriate. Because all adults have different experiences or may view similar experiences differently, each teacher that assigns a consequence may do so differently. Teachers may rate the same behaviors in different ways as a result of all of these experiences, reflections, and consequences.

Teachers are constantly evaluating their background knowledge and experiences as they gain years of experience in the classroom but also through the process of the teacher's life. The findings of this study suggest that teachers may need to consider that their experiences lead to bias and should try to eliminate bias from the rating scales. As teachers are constantly learning and reframing their lens in which they see students, every teacher is somewhere on the continuum of reframing thoughts to forming their habits of mind. Districts need to meet teachers where they are on the continuum and continue to move teachers to removing bias. Transformative Learning Theory and Social Learning Theory help to explain why two teachers can see the same or similar behaviors but view them differently.

Discussion of Results

The researcher questions in this study examined the following: (a) student behaviors and how they coincide with the completion of behavior rating scales; (b) teacher personal reflection on their upbringing; and (c) teacher conversations and the role these conversations have on the completion of behavior rating scales. The following sections will summarize the results and interpret them within the context of the research questions.

Inconsistencies When Reporting Behavior

After triangulating data from classroom observations, interviews and the behavior rating scales that teachers completed, a pattern emerged that demonstrated that teachers were rating the students based on their observable behaviors in their classroom; however, the teachers did not consistently rate the behaviors as problematic. For instance, on the behavior rating scale, Keri noted that she observed a student with fidgety behavior during her lessons and rated these behaviors low on behavior rating scale, which indicated that while Keri observed the behavior, she did not see it a problematic. If Keri had identified the behaviors as a problem during her class period, she should have scored them higher. Sam also observed fidgety behaviors for the same students, but he rated the behaviors as problematic on his behavior rating scale. Sam's documented behaviors would be higher on the completed behavior rating scales. Even though observable behaviors such as having side conversations, moving seats during a class period, and walking to the trashcan were informing teachers' ratings, the ratings were still inconsistent on the completed behavior rating scales, as documented by Keri and Sam. For example, the teachers in this study appeared to have different definitions of fidgety or constantly-moving behaviors, which may have led to over- or – under identification of frequency of behaviors on the behavior rating scale. Thus, while one teacher perceived that walking to the trash can or moving seats did not constitute constantly-moving behaviors, another teacher identified the same student as exhibiting constantly- moving behaviors for those specific actions.

Teachers also discussed the distraction of students having conversations during a class period. Three teachers identified conversations as a sign of hyperactivity during the interviews. All three of the teachers noted an area of sometimes or almost always on the

BASC-3 rating scales. Keri did not mention conversations as a sign of hyperactivity during her interview; however, speaks out of turn was documented on the behavior rating scale. The inconsistencies on the ratings of the behavior rating forms are not because the BASC-3 form, as the BASC-3 is considered a very reliable and valid tool (Reynolds & Kamphaus, 2015). In the BASC-3 manual, specific definitions are provided for each of the behaviors evaluated. The inconsistencies can be due to lack of directions provided to the teachers, including definitions of common terms on the BASC-3. The lack of information provided to the teachers could be due to a lack of training on the BASC-3. The administration of the BASC-3 is an important part of the process. Not only were teacher factors noted during the observations that led to inconsistencies on the BASC-3 but teachers were also able to identify their personal upbringing as a factor.

Teacher Reflection on Personal Upbringing

Teachers acknowledged that their classroom management strategies and expectations are based on what they have experienced during their own upbringing, including post-secondary education. In this study, I identified a common theme that teacher upbringing was intertwined with their assessment of student behavior as documented on the behavior rating scales. Personal upbringing and prior knowledge are not the only factors that should be taken into consideration when teachers are completing behavior rating scales, cultural upbringing could also account for inconsistencies. The cultural experiences of teachers and students could also prompt teachers to score students a certain way. In all six of the teacher interviews, teachers recognized that their classroom management and behavior strategies mimicked childhood experiences. Joe was the youngest child and only boy in his family and he categorized his parents as very laid back. His parents would “ignore” some behaviors as long

as Joe was accomplishing what they asked of him. Joe's classroom management strategies mimic the way he was raised. If Joe's requests a student to complete an assignment, as long as the student is working on getting the assignment completed he will "ignore" some of the observable behaviors such as listening to music, movement around the room or having side conversations.

Adults reflect and make decisions based on the events they experienced from childhood through current times. Not only do adults reflect on the events but adults also consider the consequences of those events; adults take the consequences into consideration as they are making decisions about present situations. In his classroom, Joe ignores certain behaviors as long as the student is completing the requested task. Since the strategy of ignoring a behavior was a motivator for Joe, he uses the strategy of ignoring behaviors to try to motivate some of his students. However, if the ignored observable behaviors do not truly reflect the students' exhibited behaviors, this could lead to behavior rating scales that are not accurate. Not only do teachers draw upon their past experiences when completing behavior rating scales, they also use current experiences, including conversations.

During the surveys and interviews, teachers were able to identify that personal upbringing and background knowledge shape some of their responses on the BASC-3. During Keri's interview she expressed that she does not like to label students since she had a cousin that was diagnosed with ADHD. Keri felt that the labeling added to the struggle that some students with ADHD encounter. Keri was able to identify that she does not consider many of the observable behaviors listed on the BASC-3 as hyperactive or disruptive. Jen was also able to express that when she started completing the behavior rating scales she used the same expectations that her parents had for her to complete the scales. Jen discussed

that she was not aware of many of the observable behaviors listed on the BASC-3 because she never witnessed the behaviors in a classroom setting. Jen was able to identify that she had to learn about the behaviors from having the experience in her own classroom. Not only did this take time but it also took Jen seeing students display the behaviors before she realized they were problematic. The background information and personal upbringing of each teacher is what makes the teaching process unique and special. However, it should be noted when completing behavior rating scales there are norms and the directions for administration. The importance of following the procedures can help display a clear picture of the student and their struggles and strengths. The teachers were also able to identify that personal upbringing and background knowledge were not the only areas that swayed their completion of behavior rating scales but teacher conversations also played a role.

Teacher Conversations

As teachers discuss their students with colleagues, the conversation can shape how a teacher views a child's behavior. Additionally, conversations can also lead teachers to look for behaviors that they did not notice in previous encounters with a student, as once a behavior is brought to a teacher's attention they are more likely to notice that behavior and rate it differently on a behavior rating scale. Yet, collegial conversations are an important part of the teaching profession. During the school day, the collegial conversations about lessons and instructional strategies can help teachers with new ideas to assist in their teaching; however, collegial conversations about students can have both benefits and downsides, as teachers can change their view of students for better or worse based on these interactions.

The conversations add to the experiences of the teacher and can lead teachers to rate students based on the information that was exchanged during the conversation instead of behavior teachers observed on their own. During Erin's interview, she indicated if a colleague discussed a student's behavior that she never noticed, then she will look for that behavior once back in the classroom. Once she notices the behavior that the other teacher discussed, she will mark that behavior as one she observed on the behavior rating scale. If Erin did not have that conversation, then she would not have marked that behavior on the rating scale. However, since she had the conversation and the behavior was brought to her attention, Erin now marked the behavior. The teacher conversations and sharing of information can lead to behavior rating scales that do not accurately reflect the actual behavior that a teacher observed on their own.

Limitations

In this section, I detail the limitations of the study: researcher bias, methodology, analysis, and generalizability.

Researcher Bias

As an administrator in the district, I recognize that during observations, classroom dynamics can change. There are times when a disruptive student changes their behavior when an administrator or another adult enters the room. To try to limit the bias, I arrived before the class started and situated myself in a corner away from the students and teacher. I did not bring my laptop and recorded all information on paper, as administrators in the district that was the setting for this study use laptops or iPads to complete observations. Additionally, I recognized that the noise from typing on a laptop can be disruptive, and I aimed to limit my contribution to students' distractibility.

I was also cognizant that I did not want to make the child I was observing feel uncomfortable or singled out that they were being observed. While I recorded their behavior, I would frequently scan the room to look at other students. None of the students asked what I was doing or why I was in their classroom.

Teacher interviews were also an area I had to focus on the removing of bias. This study did not involve any teachers that I directly supervise. The teachers needed to feel comfortable and not judged as they were sharing information about their personal life, presently and in the past. I asked teachers to share information about their family make up and discipline strategies. I made sure to meet the teachers at a space they identified as comfortable. I also tried to position myself so we were sitting and having a conversation; even when the interviews took place in my office I did not sit behind the desk. I also verbally reinforced that any information shared during the interview would not be shared with the school district.

Limitations of School Setting

This study took place in one high school in a suburban upper-middle class district. Over 80% of the students in this school identify as Caucasian. The lack of diversity in socioeconomic status and in race can lead to limitations within the study. It is important to document that the culture of the school is related to the socioeconomic status and race of the majority of the study body. When conducting this study, the lack of diversity can also be a factor in the conclusions. The diversity of the teaching staff mirrors the diversity of the student body in both race and socioeconomic status.

Limitations of School Personnel

When distributing the behavior rating scales, an unbiased approach should be used when selecting teachers. Currently, in this study, the school psychologists distributed the forms to teachers they knew would return them. There could be a process identified by the school or district to determine a method for school psychologists to use when identifying teachers.

Limitations in Methodology

When the school psychologist first identified the students for reevaluation and I received consent from their parents (and assent from the students) to include the students in my study, the next step was to gain permission from the teachers. As per my IRB protocol, the school psychologist initially identified three teachers for inclusion in the study; however, all three were special education teachers. After completing the survey, I recognized how this sample would skew the data, thus, I went back to the school psychologist and asked them to also invite three content area teachers to participate in the study.

Limitations in Analysis

During this study, I followed the constant comparative method to conduct the analysis. Even though this was my method, my research questions guided my analysis. I did not develop codes before conducting the interviews or collecting additional data, following the coding method of a priori coding. Instead, the research questions allowed me to look for themes, I used the themes to develop the codes. Inductive coding was used where the themes emerged from the data. The research question and sub-questions guided the analysis. During the coding, it was important to include the socialization process since human subjects were involved as part of the analysis. The sub themes emerged from the story I was able to tell for the data. As this study is shared and examined with different lenses there will

be other themes that emerge. However, I was able to capture the main themes and use them to answer my research questions. The data gathered led to the conclusions documented in this chapter.

Limitations in Generalizability

With only six teachers in my sample, the results of this study are not generalizable beyond these particular teachers in this specific setting. The sample was limited from the beginning, as I only focused on the students that were eligible for reevaluation. Thus, this limited my study to the three students that already had a diagnosis of ADHD and were going through the reevaluation process for their IEP (Individualized Education Plan) at the time of this study. For each of the three students in the reevaluation process, I focused on two current teachers of the student. Reevaluations in the district where I completed the study, school psychologists commonly provide two teachers with behavior rating scales. If the teachers do not return the scales, the school psychologist will ask a third teacher the student sees regularly to complete the scale.

Implications for Educational Practice

As I reviewed the data and examined how we can continue to grow the educational practice of teaching, I noticed two themes that emerged: (a) how the guidance of teacher upbringing, collegial conversations, and background knowledge all provide inspiration on how a teacher completes the behavior rating scale and (b) how the lack of professional development for teachers on how to complete behavior rating scales.

Teacher Completion of Behavior Rating Scales

In the survey portion of the data collection, even though 50% of the teachers indicated they received some information about behavior rating scales in a college-level course, none of the teachers perceived they were prepared to complete behavior rating scales

when they entered the teaching profession. The BASC-3 manual provides information to help train and support teachers that is not being utilized (Reynolds & Kamphaus, 2015). The BASC-3 does account for teacher uniqueness when considering the reliability and validity of the teacher responses. To help with validity the BASC-3 includes directions for an *F* index (Reynolds & Kamphaus, 2015). The *F* index is a measure that helps the scorer look for excessive negativity about the student's behaviors, self-perceptions or emotions (Reynolds & Kamphaus, 2015). The BASC-3 also has an *L* index that can be used on the self-reporting scale and *V* index which is also for the self-reporting scale (Reynolds & Kamphaus, 2015). It is important for teachers to be educated on removing bias from the completion of behavior rating scales. Learning to remove bias is not only important in the completion of behavior rating scales but also removing bias is important in all aspects of education.

Providing Professional Development

On a BASC rating scale, teachers are prompted to rate the frequency of behaviors at always, sometimes, or never. However, teachers are expected to rate terms with definitions that are not standardized throughout the districts, leading to confusion. Through this study, I was able to identify that the lack of training on definitions consistent with those provided by the test authors, resulted in teachers interpreting a wide range of behaviors to represent terms such as *constantly moving* on the behavior rating scales. In response, districts might consider incorporating professional development on the completion of behavior rating scales, specifically regarding the process and definitions of terms.

In addition to inconsistencies that teachers exhibited in defining the terms on the rating scales, teachers noted that their upbringing and background knowledge reflected in

the scores they provided for the students. While removing bias is difficult, some bias may be able to be mitigated with professional development. During this professional development, an overview of behavior rating scales and their role in a reevaluation report could be highlighted, including information provided to parents to share with a medical professional for diagnosis. Although initial professional development is essential for preparing teachers to complete behavior rating scales, reoccurring professional development focused on removing bias during the reevaluation process is necessary to provide consistency over time.

Future Research Directions

This study was conducted in a high school setting in a suburban school district. This study can be replicated in the elementary and middle school settings. If the study was replicated at the primary level, the teacher experience with the child may be different from the secondary.

This study could also be expanded to include more teachers. The six teachers in this study were content area teachers or special education teachers, elective area teachers should be included. Students can choose an elective class whereas all students must take an English course. A future study could compare student behavior in elective and content area courses. A future study could also include a group of teachers that were trained in completing the BASC-3 compared to a group of teachers that were provided the forms outlined in this study.

Although I was able to respond to the research question and sub-questions that guided this study, there are still other questions related to the completion of behavior rating scales and the part they play in diagnosing a student with ADHD. For example, does the distribution of forms to specific teachers impact the ratings and completion of the behavior

rating scales? And, are there other forms or another way that schools can document the observable behaviors of students while removing bias? Even though there are still questions, I hope this study provided some answers and directions that school students and pre-service programs can implement. The ultimate hope of this study is that students can be more accurately diagnosed with ADHD.

Summary

Through this study I showed that upbringing and background knowledge play an important part in how a teacher completes a behavior rating scale. It is also imperative that teachers remove bias from the completion of behavior rating scales. Teachers need to understand how the scales can play a part in students' lives. After a teacher completes a behavior rating scale, it does not just get filed away, as the scale is part of the student's educational record.

In conclusion, behavior rating scales are an important tool used to help with the diagnosis of disorders such as ADHD. The behavior rating scale of the BASC-3 is one tool to assist with the diagnosis of ADHD. It is important to note that this research supports the legal expectations of multiple forms of assessment before determination of a disability. Professional development is important so educators know how to complete the scales to provide the most accurate information to school staff, parents and medical staff.

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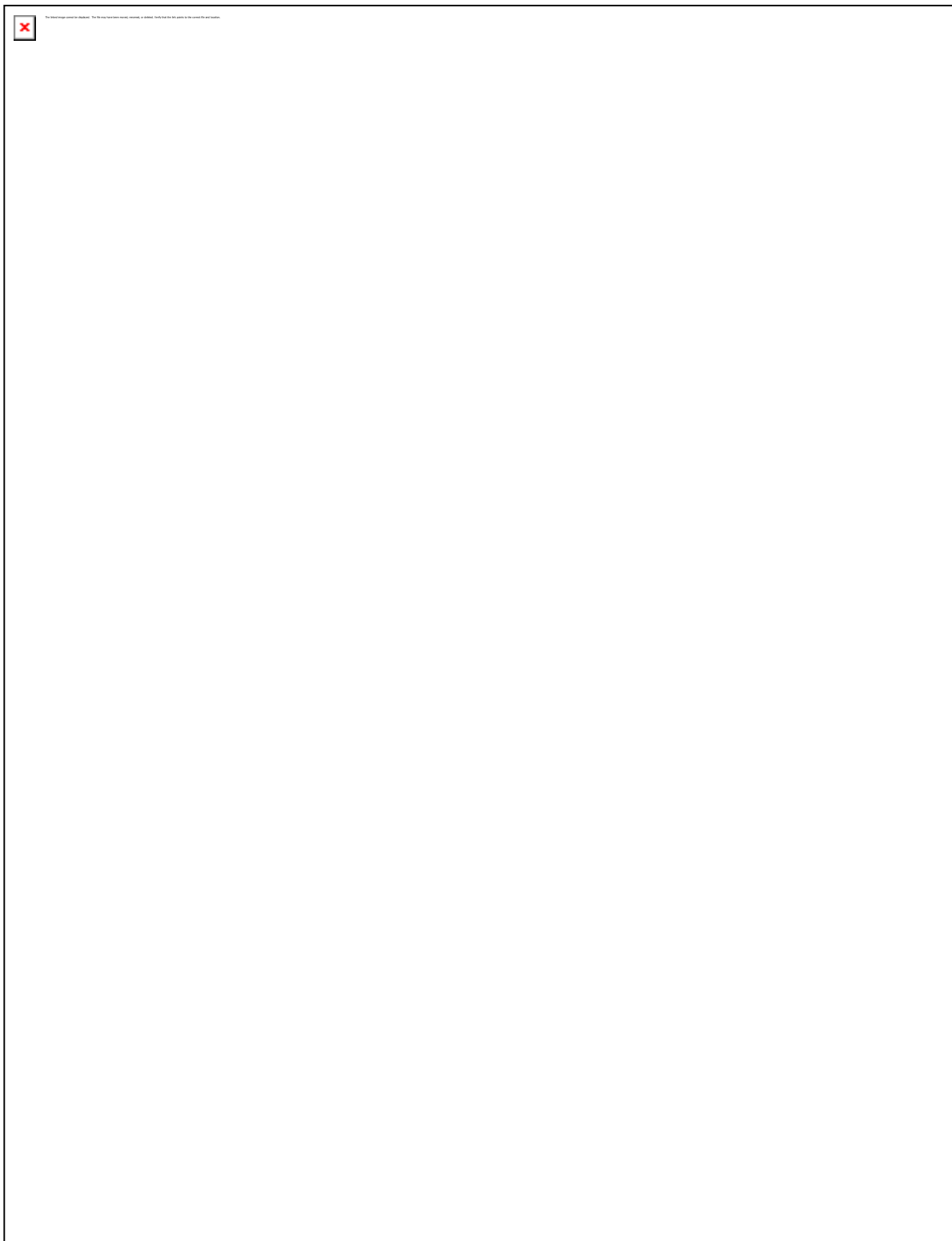
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Appendix A: IRB Approval



Appendix B: Parent Consent Form

Project Title: An exploration of teacher completion of behavior rating scales on students diagnosed with ADHD

Investigator(s): Amy Jenkins; Heather Schugar

Project Overview:

Participation in this research project is voluntary and is being done by Amy Jenkins as part of her Doctoral Dissertation to During this case study I will examine classroom teachers' decision making as they complete behavior rating scales for students being initially evaluated or reevaluated for ADHD. Your child's participation will include 2 class periods of observations and review of the student's Behavior Rating Scales. There is a minimal risk to Students. Students may feel anxiety during a classroom observation. Students will not be singled out or spoken to during the observation. Students and parents may feel anxious and not want data shared. Students and parents will be shown examples of how data is unidentifiable back to the student, school or district. All information will be kept confidential and any identifying information will be redacted. Students and parents may withdraw from the study at any time. This research is not designed to provide participants with any personal benefit. to you as the participant. This study may inform school districts on how teachers approach the completion of behavior rating scales and inform the potential implications of their approaches.

The research project is being done by Amy Jenkins as part of her Doctoral Dissertation. During this case study I will examine classroom teachers' decision making as they complete behavior rating scales for students being initially evaluated or reevaluated for ADHD. If you would like to take part, West Chester University requires that you agree and sign this consent form.

You may ask Amy Jenkins any questions to help you understand this study. If you don't want to be a part of this study, it won't affect any services from West Chester University. If you choose to be a part of this study, you have the right to change your mind and stop being a part of the study at any time.

1. **What is the purpose of this study?**
 - During this case study I will examine classroom teachers' decision making as they complete behavior rating scales for students being initially evaluated or reevaluated for ADHD.
2. **If you decide to be a part of this study, you will be asked to do the following:**
 - Observations

- Teacher Survey
 - Teacher Interview
 - Review of Behavior Rating Forms
 - This study will take observation for 2 class periods of your time.
3. **Are there any experimental medical treatments?**
- No
4. **Is there any risk to me?**
- Possible risks or sources of discomfort include: Students may feel anxiety during a classroom observation. Students will not be singled out or spoken to during the observation. Teachers may feel anxiety about participating in the interviews to share their experiences. Teachers will be informed and provided information that involvement in this study does not influence the teacher's evaluation. Teachers may withdraw from participation at any time. Students and parents may feel anxious and not want data shared. Students and parents will be shown examples of how data is unidentifiable back to the student, school or district. All information will be kept confidential and any identifying information will be redacted. Students and parents may withdraw from the study at any time
 - If you become upset and wish to speak with someone, you may speak with Amy Jenkins
 - If you experience discomfort, you have the right to withdraw at any time.
5. **Is there any benefit to me?**
- Benefits to you may include: This research is not designed to provide participants with any personal benefit.
 - Other benefits may include: Participation in this study, will allow data to be collected which may inform school districts on how teachers approach the completion of behavior rating scales and inform the potential implications of their approaches.
6. **How will you protect my privacy?**
- The session will be recorded.
 - Observations will be recorded to allow the researcher to go back and identify what was occurring in the classroom when specific behaviors. The recordings will not be shared and will be deleted when the study is complete.
 - Your records will be private. Only Amy Jenkins, Heather Schugar, and the IRB will have access to your name and responses.
 - Your name will **not** be used in any reports.
 - Records will be stored:
 - in a locked cabinet [REDACTED], which will also be kept locked.
 - Records will be destroyed Three Years After Study Completion
7. **Do I get paid to take part in this study?**
- No
8. **Who do I contact in case of research related injury?**
- For any questions with this study, contact:
 - **Primary Investigator:** Amy Jenkins at 484-614-1098 or aj200168@wcupa.edu

- **Faculty Sponsor:** Heather Schugar at 443-812-4489 or
hschugar@wcupa.edu
9. **What will you do with my Identifiable Information/Biospecimens?**
- Not applicable.

For any questions about your rights in this research study, contact the ORSP at 610-436-3557.

I, _____ (your name), have read this form and I understand the statements in this form. I know that if I am uncomfortable with this study, I can stop at any time. I know that it is not possible to know all possible risks in a study, and I think that reasonable safety measures have been taken to decrease any risk.

Date: _____

Student/ Participant Signature

Date: _____

Witness Signature

Appendix C: Student Assent Form**Student Assent Form 1**

My name is _____. I am a student [REDACTED] High School. I know my parents agree that I can be in a study with an administrator, Mrs. Amy Jenkins. In this study, Mrs. Jenkins will conduct 2 classroom observation and review my behavior rating scales. I understand that Mrs. Jenkins will not be speaking to me or asking me to complete any paperwork.

(Student Signature)

Appendix D: Teacher Consent Form

Project Title: An exploration of teacher completion of behavior rating scales on students diagnosed with ADHD

Investigator(s): Amy Jenkins; Heather Schugar

Project Overview:

Participation in this research project is voluntary and is being done by Amy Jenkins as part of her Doctoral Dissertation to During this case study I will examine classroom teachers' decision making as they complete behavior rating scales for students being initially evaluated or reevaluated for ADHD. Your child's participation will include 2 class periods of observations and review of the student's Behavior Rating Scales. There is a minimal risk to Students. Students may feel anxiety during a classroom observation. Students will not be singled out or spoken to during the observation. Students and parents may feel anxious and not want data shared. Students and parents will be shown examples of how data is unidentifiable back to the student, school or district. All information will be kept confidential and any identifying information will be redacted. Students and parents may withdraw from the study at any time. This research is not designed to provide participants with any personal benefit. to you as the participant. This study may inform school districts on how teachers approach the completion of behavior rating scales and inform the potential implications of their approaches.

The research project is being done by Amy Jenkins as part of her Doctoral Dissertation. During this case study I will examine classroom teachers' decision making as they complete behavior rating scales for students being initially evaluated or reevaluated for ADHD. If you would like to take part, West Chester University requires that you agree and sign this consent form.

You may ask Amy Jenkins any questions to help you understand this study. If you don't want to be a part of this study, it won't affect any services from West Chester University. If you choose to be a part of this study, you have the right to change your mind and stop being a part of the study at any time.

1. **What is the purpose of this study?**
 - During this case study I will examine classroom teachers' decision making as they complete behavior rating scales for students being initially evaluated or reevaluated for ADHD.
2. **If you decide to be a part of this study, you will be asked to do the following:**
 - Observations
 - Teacher Survey
 - Teacher Interview
 - Review of Behavior Rating Scales

- This study will take observation for 2 class periods of your time.
3. **Are there any experimental medical treatments?**
 - No
 4. **Is there any risk to me?**
 - Possible risks or sources of discomfort include: Students may feel anxiety during a classroom observation. Students will not be singled out or spoken to during the observation. Teachers may feel anxiety about participating in the interviews to share their experiences. Teachers will be informed and provided information that involvement in this study does not influence the teacher's evaluation. Teachers may withdraw from participation at any time. Students and parents may feel anxious and not want data shared. Students and parents will be shown examples of how data is unidentifiable back to the student, school or district. All information will be kept confidential and any identifying information will be redacted. Students and parents may withdraw from the study at any time
 - If you become upset and wish to speak with someone, you may speak with Amy Jenkins
 - If you experience discomfort, you have the right to withdraw at any time.
 5. **Is there any benefit to me?**
 - Benefits to you may include: This research is not designed to provide participants with any personal benefit.
 - Other benefits may include: Participation in this study, will allow data to be collected which may inform school districts on how teachers approach the completion of behavior rating scales and inform the potential implications of their approaches.
 6. **How will you protect my privacy?**
 - The session will be recorded.
 - Observations will be recorded to allow the researcher to go back and identify what was occurring in the classroom when specific behaviors. The recordings will not be shared and will be deleted when the study is complete.
 - Your records will be private. Only Amy Jenkins, Heather Schugar, and the IRB will have access to your name and responses.
 - Your name will **not** be used in any reports.
 - Records will be stored:
 - in a locked cabinet in [REDACTED], which will also be kept locked.
 - Records will be destroyed Three Years After Study Completion
 7. **Do I get paid to take part in this study?**
 - No
 8. **Who do I contact in case of research related injury?**
 - For any questions with this study, contact:
 - **Primary Investigator:** Amy Jenkins at 484-614-1098 or aj200168@wcupa.edu
 - **Faculty Sponsor:** Heather Schugar at 443-812-4489 or hschugar@wcupa.edu
 9. **What will you do with my Identifiable Information/Biospecimens?**

- Not applicable.

For any questions about your rights in this research study, contact the ORSP at 610-436-3557.

I, _____ (your name), have read this form and I understand the statements in this form. I know that if I am uncomfortable with this study, I can stop at any time. I know that it is not possible to know all possible risks in a study, and I think that reasonable safety measures have been taken to decrease any risk.

Date: _____

Subject/ Participant Signature

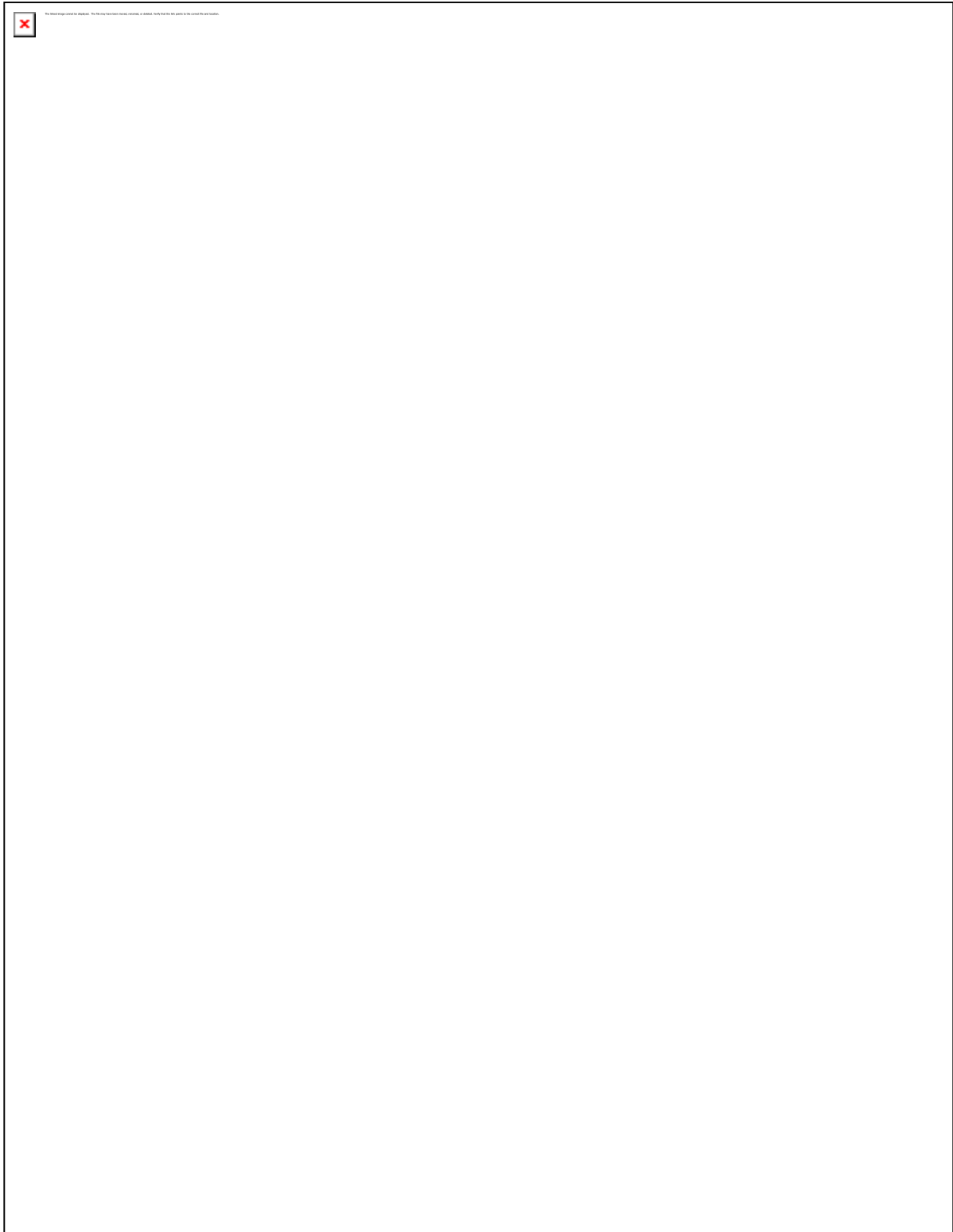
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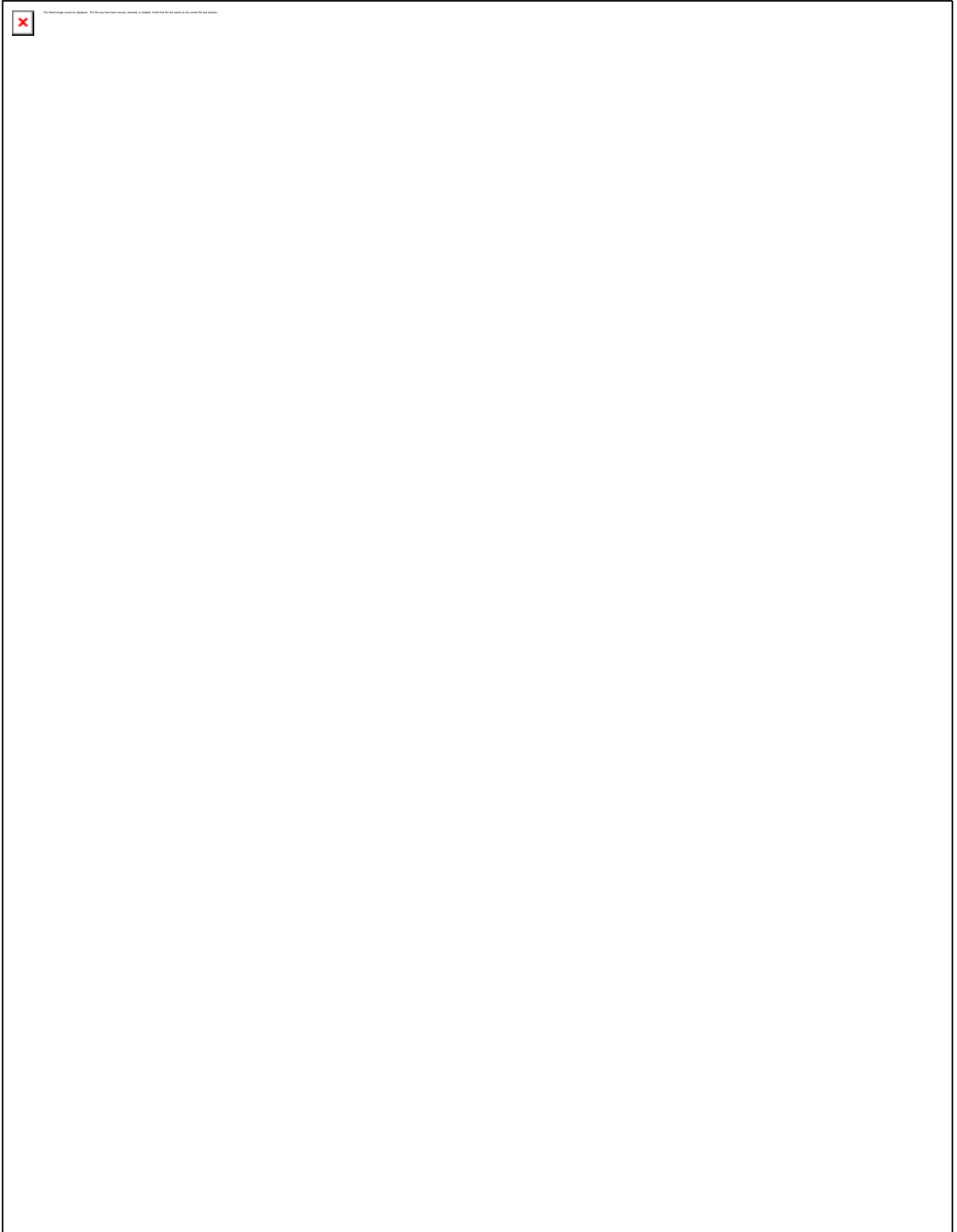
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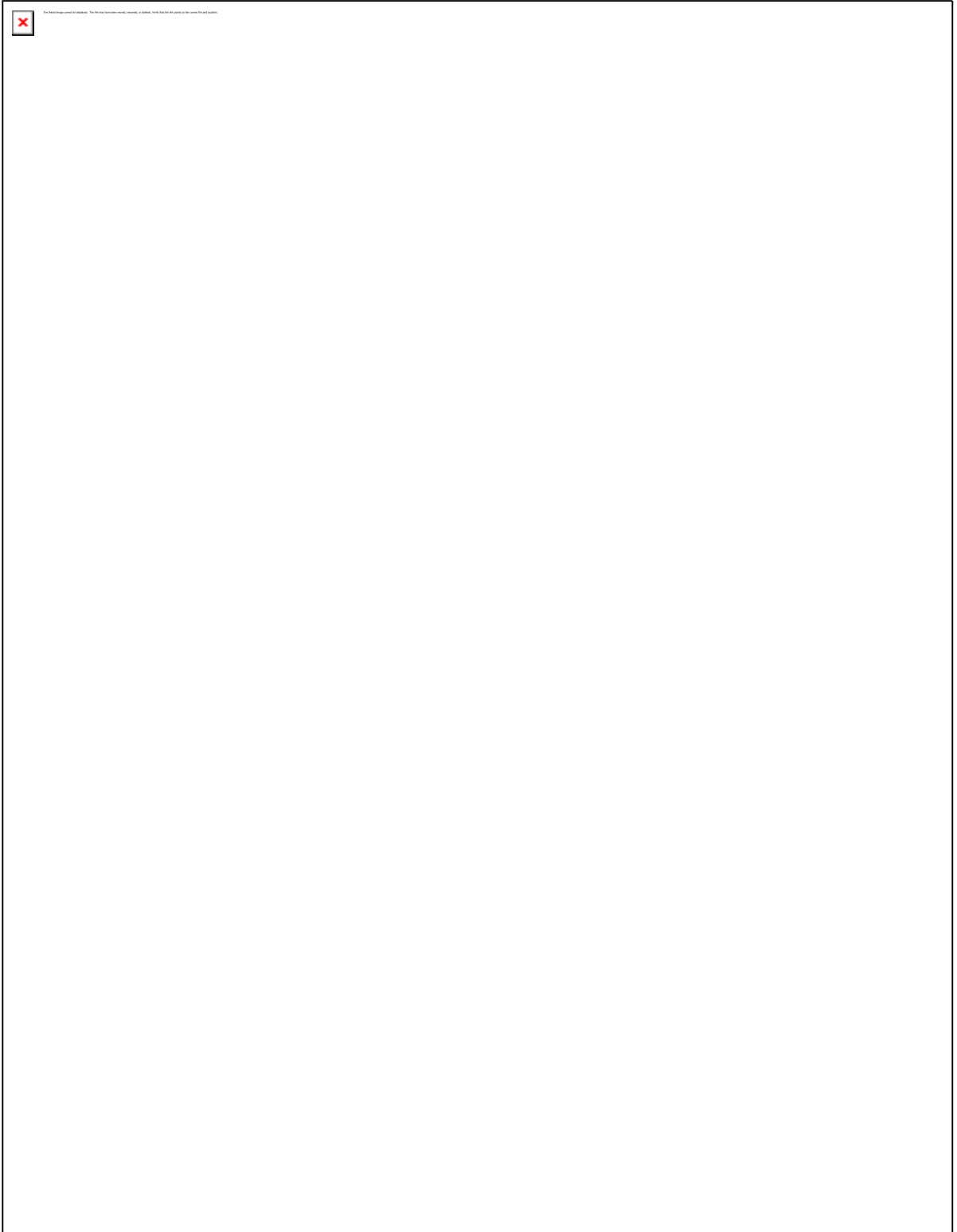
Appendix E: Semi-Structured Interview Questions

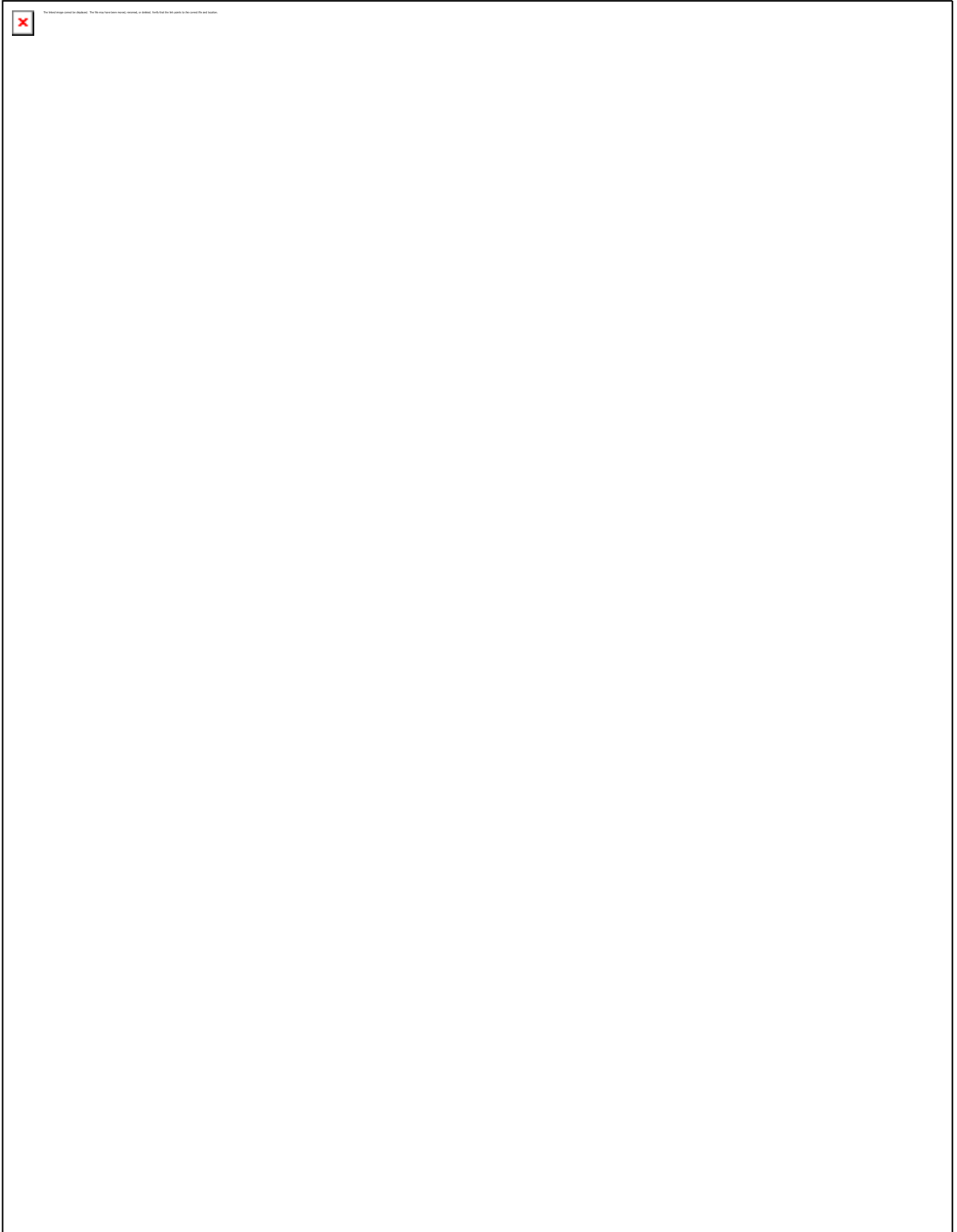
1. You indicated on your survey that you have been teaching for _____ years. Have you changed the way you complete behavior rating scales from the time you started teaching until now?
 - a. If yes, how have they changed?
2. What observable behaviors do you see in a child you suspect of having ADHD?
3. Have you received any professional development on the completion of behavior rating scales?
 - a. If yes, what training have you received?
 - b. If no, do you think that training would be beneficial to you and other teachers?
4. Have you ever been given a behavior rating scale and did not complete it?
 - a. If yes, was there a particular reason why?
5. Does talking with other teachers about a student influence your completion of behavior rating scales?
 - a. If yes, in what way?
6. When completing behavior rating scales, do you think that your expectations of students is influenced with how you were raised?
 - a. If yes, in what ways?
 - b. If no, what do you use to help you complete the forms? For example, how do you know that a student is excessively talking or fidgety?

Appendix F: Online Survey









Appendix G: Classroom Observations

Erin observation

Behavior	Time into lesson	Comment
Raise Hand	12:44 what does dependent even mean? Wrote definition as teacher explained 12:46 Why?	12:46 teacher went over and explained individually
Talk to peers during lesson	Side conversations with same peer 12:27, 12:33, 12:41	
Off-task		
Engaged with lesson	Completed notes on Venn Diagram quiz	
Follow teacher directions		
Fidgety behaviors- examples: tapping writing utensil, moving in seat	Scratching and rubbing leg- moving leg up and down, cracking knuckles	Sitting at a high top- standing desk
Out of seat moving around the room	Went to work with another student 12:26- 12:29 went back to desk to work alone 12:30 went to restroom 12:31 return from restroom	
Task completion	Completed independent work	
Assignments complete during lesson	Venn Diagram Quiz	

Joe observation

Behavior	Time into lesson	Comment
Raise Hand		Small class environment student got up to ask questions or teacher as working with student
Talk to peers during lesson		Only 2 other students in the classroom- all seat at tables individually
Off-task	When not working on progress monitoring on phone- watching you tube	
Engaged with lesson	Progress monitoring individual work	
Follow teacher directions	Was instructed to work on incomplete work for other courses	Student worked on assignments but did not complete any
Fidgety behaviors- examples: tapping writing utensil, moving in seat		
Out of seat moving around the room	11:47 went to trashcan 12:02 student went to teacher desk to ask a question	Question was related to independent reading probe- teacher did not provide specific answers
Task completion	Completed probes for progress monitoring	
Assignments complete during lesson	Independent reading probes	

Keri observation

Behavior	Time into lesson	Comment
Raise Hand	1:26 called out "wait I know this" "This question is so easy" 1:30 "just to be clear I did not get that wrong" 1:38 1:47 "I give up"	Gave the appropriate response Gave that response because one student got the question wrong
Talk to peers during lesson	1:45 holding up the letter L on fingers for loser to another student	
Off-task	When waiting for the game to start Texting between questions	
Engaged with lesson	Yes- completed all questions during Kahoot game	
Follow teacher directions	1:14 5 minutes 1:23 Kahoot 1:48 went back to work on review packet- now sitting in a desk instead of on a chair leaning on a table	Following teacher direction- sitting on stool and leaning on desk After 2 questions student had the lead in Kahoot
Fidgety behaviors- examples: tapping writing utensil, moving in seat	L symbol and playing with hands during the lesson Tapped a pen for 10-15 second intervals	Tapping pen lasted for 3 total minutes
Out of seat moving around the room	1:16 went to the trashcan	
Task completion	Completed Kahoot and was working on review packet	

Jen observation

Behavior	Time into lesson	Comment
Raise Hand		
Talk to peers during lesson		
Off-task	Side conversations 8:03 during group work time 8:14 side conversation as the group was finishing	
Engaged with lesson	Taking a test- 8:25 finished exam	
Follow teacher directions	Reading after test submitted	
Fidgety behaviors- examples: tapping writing utensil, moving in seat	Picking at lip 8:05, legs crossed moving foot, 8:09 picking at lip, took glasses on and off, 8:13 picking at lips	
Out of seat moving around the room	8:26 signed out for the restroom- 8:29 returned Got up to get calculator 8:17 Got up to get textbook 8:20	Calculator and textbook were in 2 different locations in the room
Task completion		
Assignments complete during lesson	Yes- quiz	

Pat observation

Behavior	Time into lesson	Comment
Raise Hand		
Talk to peers during lesson		
Off-task	Listening to music as he worked independently on binder	
Engaged with lesson	Progress monitoring	One reason why student was working on binder organization
Follow teacher directions	Placed material where directed by the teacher	
Fidgety behaviors- examples: tapping writing utensil, moving in seat	Scanned classroom for 10-15 second intervals- looking a windows, door and teacher	
Out of seat moving around the room	9:42 went to trashcan 3 times during binder organization 9:47 went to restroom 9:53 returned from restroom	Teacher moved the trashcan next to the student so he no longer needed to get up
Task completion	15 minutes working individually with teacher on binder organization	
Assignments complete during lesson		

Sam observation

Behavior	Time into lesson	Comment
Raise Hand		
Talk to peers during lesson		
Off-task	On phone teacher reminded 3 times during the period	
Engaged with lesson	On and off – on phone just as long as he was engaged with lesson	
Follow teacher directions		
Fidgety behaviors- examples: tapping writing utensil, moving in seat	Student had snacks Tapped a pen repeatedly over class period for 10-15 second intervals	
Out of seat moving around the room	Got up to get tissue, 9:55 left room to get material needed for class-9:57 student returned	
Task completion	Working on vocabulary	
Assignments complete during lesson	vocabulary	

Keri #2 Observation

Behavior	Time into lesson	Comment
Raise Hand	Asked questions about the novel 11:38	
Talk to peers during lesson	Conversation started about the novel but quickly changed to over topic- within first minute of discussion	
Off-task	Texting on phone 11:34 12:02, 12:11, 12:14	
Engaged with lesson	On and off throughout the period- would be on topic and would go off topic	Referenced in the talks to peers during lesson
Follow teacher directions		
Fidgety behaviors- examples: tapping writing utensil, moving in seat	Texting on phone 11:34 12:02, 12:11, 12:14	Sitting at a high top- standing desk
Out of seat moving around the room	Signed out to restroom 12:03-12:09	
Task completion		Was not able to complete the assignment
Assignments complete during lesson		

Erin #2 Observation

Behavior	Time into lesson	Comment
Raise Hand		Small classroom environment so student had access to the teacher
Talk to peers during lesson		
Off-task	Texting during class period On social media	While working with teacher was on-task during class period
Engaged with lesson	Completing individual probes	
Follow teacher directions	Yes, during 1:1 Did not complete assignments while working independently	
Fidgety behaviors- examples: tapping writing utensil, moving in seat	Tapped fingers as was watching and listening to phone Playing with pencil while completing probes	
Out of seat moving around the room	Went to trashcan 2 times 9:45 and 10:07	
Task completion	Individual probes	
Assignments complete during lesson		

Joe #2 Observation

Behavior	Time into lesson	Comment
Raise Hand		Small class environment student got up to ask questions or teacher as working with student
Talk to peers during lesson		Only 2 other students in the classroom- all seat at tables individually
Off-task		
Engaged with lesson	Completing an art project that they were not able to complete during the art class	Engaged with teacher and explained that he was off task and that was the reason why the project was not completed
Follow teacher directions	Teacher had student complete progress monitoring	The students was not able to complete the art project
Fidgety behaviors- examples: tapping writing utensil, moving in seat		
Out of seat moving around the room	11:37-11:45 signed out to restroom	When reentered the room announced I was not out for the 10 minutes
Task completion		
Assignments complete during lesson		

Sam #2 Observation

Behavior	Time into lesson	Comment
Raise Hand	9:47 asked teacher about assignment	Teacher was working with another student on completing probes
Talk to peers during lesson	Talking with 3 other students in the classroom	Students were all sitting at same table until moved by the teacher
Off-task		
Engaged with lesson	Was completing work for another class that he did not complete	
Follow teacher directions	Teacher responded to question and he immediately went to work on assignment	For an assignment outside of this class period
Fidgety behaviors- examples: tapping writing utensil, moving in seat		Listening to music while working
Out of seat moving around the room	Moved tables after redirected by the teacher	
Task completion	Completed assignment	Teacher did not get to student with individual probes
Assignments complete during lesson		

Jen #2 Observation

Behavior	Time into lesson	Comment
Raise Hand	12:47 during independent work time	
Talk to peers during lesson	12:44 turned to peer to ask a question-	After they did not receive the answer raised hand for teacher
Off-task		
Engaged with lesson	Completed independent worksheet	
Follow teacher directions	Took out homework Took out notebook for direct instruction Worked on worksheet	
Fidgety behaviors- examples: tapping writing utensil, moving in seat	Tapped pencil 10-15 seconds during direct instruction Tapped pencil 15-25 seconds during independent work time	
Out of seat moving around the room	Went to retrieve calculator 12:37 during direct instruction time	No sure why they needed they calculator at this time did not use it during the direct instruction time
Task completion	Completed worksheet	
Assignments complete during lesson	Completed worksheet	

Pat #2 Observation

Behavior	Time into lesson	Comment
Raise Hand	Asked question about homework 8:07	
Talk to peers during lesson		
Off-task		
Engaged with lesson	Took notes in notebook on information received for direct instruction	Direct instruction
Follow teacher directions	Worked on individual white board to complete problems	
Fidgety behaviors- examples: tapping writing utensil, moving in seat	Picking at face during direct instruction 8:02-8:21 15-20 second intervals would break for 2-3 minutes Crossed and uncrossed legs 5 times during class period	
Out of seat moving around the room	8:24 went to restroom 8:28 returned from restroom	
Task completion	Completed individual problems on white board	Did not volunteer to go to the main board to complete the work

