

2023

## The Student's Perspective of Therapeutic Day Treatment

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*Walden University*

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# Walden University

College of Psychology and Community Services

This is to certify that the doctoral dissertation by

Krystal G. Vaughan

has been found to be complete and satisfactory in all respects,  
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Walden University  
2023

Abstract

The Student's Perspective of Therapeutic Day Treatment

by

Krystal G. Vaughan

MA, Liberty University, 2015

BS, Liberty University, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

General Psychology

Walden University

May 2023

## Abstract

Attention deficit hyperactivity disorder (ADHD) has continued to be diagnosed in school-aged children at a high rate. Students with this diagnosis often display negative behaviors and poor academic performance, leading to the need for school-based interventions. Although the use of school-based interventions has shown to be moderately effective, the need to identify the student's perspective is warranted. The purpose of this general qualitative study was to explore the effectiveness of therapeutic day treatment from the student's perspective. While parents and teachers have found therapeutic day treatment useful, research to date from the student's perspective is lacking. Vygotsky's theory of cognitive development was the framework for this study. Vygotsky believed that a child's social interaction plays a significant role in the child's cognitive development, including their academic and behavioral performance. Data were collected through virtual semi structured interviews with eight elementary and middle school-aged, ADHD-diagnosed students to solicit accounts of their experience with therapeutic day treatment and its perceived impact on their academic experience. The findings of this study suggest that the therapeutic day treatment program, by supporting students behaviorally, academically, and socially, has the potential to effect positive social change by motivating ADHD-diagnosed students to prioritize schoolwork and, ultimately, graduate.

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## Acknowledgments

First, I like to thank my lord and savior, Jesus Christ for giving me the ability to endure this journey. I would also like to acknowledge my dissertation committee, Dr. Hedy Red Dexter and Dr. Valerie Worthington, both of them played a key role in my professional growth throughout this process. I would especially like to thank Dr. Dexter, as my dissertation chairperson, for her commitment and support throughout this process. Dr. Dexter extended a great deal of support, knowledge, and guidance personally and professionally throughout these last several years.

I would also like to thank my parents, siblings, and friends that walked with me through this entire journey. I appreciate you understanding when I missed gatherings or went several weeks without calling. Thank you for listening and standing with me when I had moments of doubt and encouraging me to continue when I wanted to quit. I would also like to give a special thank you to those friends that allowed me to cry and express my frustration, offering their home or a quick getaway as a place of escape when I needed a break. Lastly, I would like to acknowledge my pastors and church family, you all were with me when I started the journey and are still supporting, thank you!

## Table of Contents

List of Tables .....	v
Chapter 1: Introduction to the Study.....	1
Background of the Study .....	2
Problem Statement .....	3
Purpose of the Study .....	3
Research Question .....	4
Theoretical Foundation .....	4
Nature of the Study .....	5
Definition of Terms.....	5
Assumptions.....	6
Scope and Delimitations .....	7
Limitations .....	8
Significance of the Study .....	9
Summary .....	9
Chapter 2: Literature Review.....	11
Purpose.....	12
Establishing the Relevance of the Problem .....	12
Literature Search Strategy.....	17
Theoretical Foundation .....	17
Theoretical Propositions .....	18
Rationale for the Choice of Theory .....	25

Alignment Between the Theory and Study .....	26
Literature Review Related to Key Concepts.....	26
Problematic Behaviors Exhibited by ADHD Students in the Classroom .....	26
Academic Problems Exhibited by ADHD Students in the Classroom .....	32
Problems for Teachers Dealing with ADHD Students .....	35
Behavior Management Techniques and Interventions for ADHD Students in the Classroom Setting .....	37
Summary and Conclusion .....	42
Chapter 3: Research Method.....	44
Research Design and Rationale .....	45
Central Concept of Interest .....	45
Research Tradition .....	45
Role of the Researcher .....	46
Methodology .....	46
Participation Selection Logic .....	46
Instrumentation .....	49
Content Validity.....	50
Data Collection .....	50
Data Analysis Plan.....	51
Trustworthiness.....	53
Credibility .....	53
Dependability and Confirmability .....	54

Ethics	54
Summary	55
Chapter 4: Results	56
Setting	56
Demographics	57
Brief Summaries of Participants	58
Data Collection	60
Data Analysis	61
Familiarization of Data	62
Generating Codes	62
Categories	63
Defining Themes	68
Review Themes	69
Evidence of Trustworthiness	70
Member Checking	70
Validity	71
Transferability	71
Dependability and Confirmability	72
Results	73
Theme 1: Promoting Academic Performance	73
Theme 2: Promoting Good Behavior	74
Theme 3: TDT Counselor as Helpful Friend	75

Theme 4: Challenges in TDT Program.....	76
Summary.....	76
Chapter 5: Discussion, Conclusions, and Recommendations.....	78
Summary of Key Findings.....	78
Interpretation of the Findings.....	79
Theme 1: Promoting Academic Performance.....	79
Theme 2: Promoting Good Behavior.....	80
Theme 3: TDT Counselor as Helpful Friend.....	82
Theme 4: Challenges in the TDT Program.....	83
Limitations of the Study.....	84
Recommendations.....	84
Implications for Positive Social Change.....	85
Conclusion.....	86
References.....	88
Appendix: Interview Questions.....	101

## List of Tables

Table 1. Categories and Corresponding Codes..... 63

Table 2. Preliminary Themes..... 69

## Chapter 1: Introduction to the Study

Attention deficit hyperactivity disorder (ADHD) is a mental disorder commonly found in school-age children. School-age children diagnosed with ADHD are more likely to struggle with homework completion, classroom behavior, and academic failure as well as be more likely to drop out of school (Evans et al., 2015). Therapeutic day treatment (TDT) is a school-based intervention created to treat disruptive disorders like ADHD by teaching coping skills to reduce the symptoms of their diagnosis not contingent on the use of medication. TDT provides an intense psycho-social treatment by a qualified mental health professional (QMHP) or counselor in the classroom (Kanine et al., 2015). Although TDT has been found useful by parents and teachers, research to date from the students' perspective is lacking (Sibley et al., 2014). Without the perspective of the individual receiving the intervention, its effectiveness may not be adequately assessed or understood.

Although the perspectives of parents and teachers have been found informative for identifying the behaviors of students with ADHD, some findings have suggested that their perspectives on classroom behavior may not be the most insightful (Sibley et al., 2011). I conducted this study to gain insight into the students' perspectives of how effective TDT is at addressing classroom misbehavior, poor academic performance, and coping with ADHD symptoms. This study is unique, not only because it sheds light on a population of students who receive school-based treatment to improve academic and behavioral performance, but because the results provide an understanding of the treatment experience from the treatment recipients rather than from those who observe

them. These findings will aid in the development of future school-based interventions by identifying areas of need. The study also gives a voice to a population who may have been coerced into treatment that may or may not be beneficial in improving their classroom behavior and academic performance.

I begin this chapter with a description of the problem and its background, including a review of the data on ADHD in adolescents and TDT. The purpose, theoretical framework, definitions, assumptions, limitations, scope, and delimitations of the study are also discussed.

### **Background of the Study**

ADHD is a neurodevelopmental disorder estimated to affect 6%–7% of school-aged children (Molitor et al., 2016). This disorder negatively affects a child's developmental process and can cause myriad cognitive impairments, increasing students' impulsivity and hyperactivity as well as reducing their attentiveness (American Psychiatric Association, 2000; Gromely & Dupaul, 2015). The Centers for Disease Control and Prevention (CDC; 2011, 2018) reported an increase in children diagnosed with ADHD from 7.8% in 2003 to 9.5% in 2007, 11% in 2011, and 21.5% from 2015 to 2017. Without effective interventions, students with this disorder are more likely not to benefit from their education due to possible difficulties comprehending the information taught (Taylor et al., 2015).

The most common treatment for ADHD is the use of stimulant medication like Vyvanse or Adderall (CDC, 2017). However, cognitive behavioral strategies, such as behavioral coaching or redirection, have also been identified as effective interventions to

reduce ADHD symptoms (Clark & Jerrott, 2011). TDT is an alternative treatment to both costly in-patient treatment and less intensive outpatient services that are unable to provide the level of treatment necessary to support sustained changes for children with significant emotional and behavioral difficulties (Clark & Jerrott, 2011). While parents and educators view TDT favorably, no attempt has been made to explore the students' perceptions of how well it works to enhance their learning experience (Sibley et al., 2014).

### **Problem Statement**

The intent of this study was to explore what ADHD students believe about the school-based intervention of TDT and its effectiveness on their academics and behaviors in the classroom setting. This study differs from previous research because it focused on the student's perspective of their disorder, academics, and behavioral performance. Although the perspectives of parents and teachers have been found informative for identifying the behaviors of students with ADHD, some findings have suggested that their perspective on classroom behavior may not be the most insightful (Sibley et al., 2014). Sibley et al. (2014) identified the need to explore the lived experience of ADHD-diagnosed adolescents' perceptions of TDT effectiveness as a school-based alternative to medication.

### **Purpose of the Study**

In this qualitative study, I explored the perspectives and beliefs of fifth, sixth, and seventh-grade public school students with ADHD about the effectiveness of TDT on their academic and behavioral abilities in the classroom setting. To collect data, video

interviews were conducted with participants through virtual methods, like Zoom, Skype, and Google Duo. The student's level of participation in the TDT program was confirmed with their TDT counselor.

### **Research Question**

How do students diagnosed with ADHD perceive their experience while participating in a TDT program?

### **Theoretical Foundation**

Vygotsky's (1978) theory of cognitive development was used as the theoretical foundation to guide this study. Vygotsky believed that a child's social interaction plays a significant role in the child's cognitive development, including their academic and behavioral performance. Although student's cognitive ability, including comprehension and short-term memory, are negatively impacted by ADHD symptoms, their symptoms can be decreased or extinguished with adequate treatment. Other theorists, such as Alderfer (1969), Maslow (1943), and Herzberg (1959), have suggested change can be produced by creating or providing reinforcement to motivate students' desire to change; however, long-term change is unlikely to occur without developing effective coping skills to decrease or eliminate inappropriate behaviors, such as throwing objects across the classroom or interrupting the lecture period. Following Vygotsky's theory, an adolescent's cognitive development can be altered through their social interaction with adults and peers. The TDT modality begins with the QMHP's ability to (a) build a positive rapport with the student and (b) teach them how to develop positive social skills with their peers. After the student and QMHP develop a positive rapport, they can begin

to work toward improving academic performance, such as building positive communication skills.

### **Nature of the Study**

In this study, I used the general qualitative approach to explore the ADHD students' experience of TDT in the school setting. . Students diagnosed with ADHD by their physician, psychiatrist, licensed professional counselor, or an equivalent professional were asked to volunteer as participants. Only ADHD students who actively participate in a TDT program were included as participants in this study. I designed this study to add to the current body of research regarding school-based interventions as a method of change for adolescents with ADHD. Treatments for enhancing the learning experience of ADHD-diagnosed adolescents has been the topic of research for decades; however, the perspective of the students presents a new opportunity to explore areas that are needed but that may have been overlooked (Sibley et al., 2014). My hope is that the results of this study will help aid the development of future interventions.

### **Definition of Terms**

*ADHD*: A neurobiological disability categorized as a mental health disorder (Evans et al., 2016).

*Behavior management*: A method of behavioral modification that focuses on maintaining order. It is less severe than structured behavior modification and is focused on shaping and maintaining positive behaviors while discouraging negative behaviors.

*Cognitive development*: An explanation of how a child constructs a mental model of the world.

*Diagnostic and Statistical Manual of Mental Disorders, 5th Edition*: A manual regarded by health care professionals as an authoritative guide to the diagnosis of mental disorders (Inaba & Cohen, 2014).

*Evidenced-based interventions*: Treatments that have been proven effective (to some degree) through outcome evaluations. As such, they are treatments that are likely to be effective in changing target behavior if implemented with integrity.

*Mental illness*: A health conditions involving changes in emotion, thinking, or behavior (or a combination of these; American Psychiatric Association, 2018).

*More knowledgeable other (MKO)*: is an individual that guides and educate the child through their learning experience (Ogunnaike, 2015).

*TDT*: A school-based intervention created to treat disruptive behaviors associated with disorders such as ADHD by teaching coping skills to reduce the symptoms of their diagnosis; in TDT, ADHD-diagnosed students work directly with a QMHP (Kanine et al., 2015).

*Underachievement*: A discrepancy between a child's school performance and their actual ability.

*Zone of proximal development (ZPD)*: The distance between the child's current level of development and the level of development that can be obtained with the guidance or collaboration of the MKO (Guseva & Solomonovich, 2017).

### **Assumptions**

I made several assumptions related to this study. My first assumption was that the students with ADHD would have sufficient recall of their TDT experiences to describe

how they felt about it. Another assumption was that the students with ADHD would be able to identify any changes that TDT had on their academic or classroom behavior. I also assumed that my interview questions would prompt a recall of their TDT experiences, helping them provide detailed, honest accounts of their perceptions. I assumed that this study would also support further research on ADHD and school-based interventions. Another assumption was that this study would allow the students' voices to be heard and that the findings will be utilized in the treatment process. In reference to the sampling strategy, I assumed that I would be able to acquire an adequate number of participants to achieve data saturation. Regarding my role as researcher, it was assumed that I would be able to remain neutral and able to identify and set aside any biases, so that I could provide an objective interpretation of the data collected.

### **Scope and Delimitations**

The aim of the study was to gather the students' perceptions of their TDT experience, which was a needed perspective that has been noted as lacking in the literature (see Sibley et al., 2014). I conducted the study with this focus to address the gap in the literature specific to the identified demographic. The sample was limited to ADHD-diagnosed, school-aged children in elementary and middle school whose impairments were so significant that they needed additional support in the classroom setting. To be included in the study, the students must have currently or previously received TDT as a school-based intervention to improve their academics and behaviors in the classroom setting. Students who had attempted other interventions in addition to TDT (e.g., medication management or educational interventions such as a 504 behavioral plan)

were also included. Students with co-occurring disorders, such as autism or generalized anxiety disorder, were excluded because they may not have been able to distinguish between the symptoms of ADHD and those of the co-occurring disorder. Participants were limited to those who were able to participate through the entire interview process required to collect the rich data needed in the general qualitative analysis. This study was guided by Vygotsky's (1978) theory of cognitive development as the conceptual framework because it details the relationship between the student and the TDT counselor.

### **Limitations**

Although there were multiple participants in the study with the same diagnosis, their experiences differed and would not necessarily represent all ADHD-diagnosed adolescents who have experienced TDT. However, I provided sufficient detail of all study procedures (e.g., data collection, analysis, and interpretation) to allow other researchers to replicate this study. The literature suggests the accuracy of responses solicited from adolescents may be limited based on their level of maturity and comprehension ability and the trustworthiness of their perceptions (Sibley et al., 2014).

Another potential bias exists due to my professional experiences in working with ADHD students and those who receive TDT services because my experiences could have influenced my interpretation of participants' experiences. However, I addressed this limitation by using a reflexive journal to document and process my experience to eliminate any transference of my professional beliefs. There was also potential bias from my personal experience and sympathy toward adolescents with ADHD. I addressed this possible bias by keeping a reflexive journal while gathering and analyzing the data to

document my thoughts throughout the process. A reflexive journal is a tool used to document a researcher's account of the study, engaging critically and analytically with the content to identify any bias that may corrupt the data collection, analysis, and interpretation (University of Warwick, 2015). I also used the process of bracketing where I acknowledged and set aside any prior assumptions to represent faithful accounts of participants' own experiences.

### **Significance of the Study**

Although the perspectives of parents and teachers have been found informative for identifying the behaviors of students with ADHD, some findings have suggested that their perspectives on classroom behavior may not be the most insightful (Sibley et al., 2014). I conducted this study to gain insight into the students' experiences of TDT because it attempts to address classroom misbehavior, poor academic performance, and coping with ADHD symptoms. The results of this study provide an understanding of the treatment experience from the treatment recipients rather than from those who observe them. These findings will aid in the development of future school-based interventions by identifying areas of need. The study also gives voice to a population who may have been coerced into treatment that may or may not be beneficial in improving their classroom behavior and academic performance.

### **Summary**

In Chapter 1, I discussed the research problem, background of the social problem, theoretical framework, and nature of the study. The assumptions, limitations, and significance of the study were also presented. In Chapter 2, I will establish the relevance

of the problem, discuss and justify the choice of theoretical framework, and present an exhaustive review of the literature related to key concepts.

## Chapter 2: Literature Review

ADHD is defined as a mental disorder that negatively affects a child's developmental process causing inattention, impulsivity, and hyperactivity (American Psychiatric Association, 2000; Gromely & Dupaul, 2015). School-age children diagnosed with ADHD are more likely to struggle with homework completion, classroom behavior, and academic failure as well as be more likely to drop out of school (Evans et al., 2015). As the years continue, the severity of its symptoms and the number of children diagnosed has continued to rise (CDC, 2011). The CDC (2011) reported an increase in the percentage of children diagnosed with ADHD from 7.8% in 2003 to 9.5% in 2007 and 11% in 2011. Without effective interventions, students with this disorder are more likely not to benefit from their education due to possible difficulties comprehending the information taught (Taylor et al., 2015).

The most common treatment for ADHD is the use of stimulant medication like Vyvanse or Adderall (CDC, 2017). However, cognitive behavioral strategies, such as behavioral coaching or redirection, have also been identified as effective interventions to reduce ADHD symptoms (Clark & Jerrott, 2012). TDT is a school-based intervention formed to treat disruptive disorders such as ADHD by teaching coping skills to reduce the symptoms of their diagnosis not contingent on the use of medication. TDT provides an intense psycho-social treatment by a QMHP or counselor in the classroom (Kanine et al., 2015). For students with behavior problems, developmental delays, emotional issues, and possible medical problems, the QMHP teaches the student evidence-based coping and social skills to reduce their inappropriate behaviors and poor social skills (Kanine et

al., 2015). TDT is an alternative treatment to both costly in-patient treatment and less intensive outpatient services that are unable to provide the level of treatment necessary to support sustained changes for children with significant emotional and behavioral difficulties (Clark & Jerrott, 2012). Although TDT has been found useful by parents and teachers, research to date from the student's perspective is lacking (Sibley et al., 2014). Without the perspective of the individual receiving the intervention, its effectiveness may not be adequately assessed or understood.

### **Purpose**

In this qualitative study, I explored the perspectives and beliefs of fifth-, sixth-, and seventh-grade public school students with ADHD about the effectiveness of TDT on their academic and behavioral abilities in the classroom setting. To collect data, face-to-face interviews were conducted with the participants. The student's level of participation in the TDT program was confirmed with their TDT counselor.

### **Establishing the Relevance of the Problem**

ADHD is a neurodevelopmental disorder estimated to affect 6%–7% of school-aged children (Molitor et al., 2016). This disorder can cause myriad cognitive impairments, increasing students' impulsivity, hyperactivity, and reducing their attentiveness. In the *Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition*, the American Psychiatric Association (2013) stated an individual should be impaired with at least six characteristics to receive the diagnosis. The student who displays symptoms from one or all three of the main categories (i.e., hyperactivity, inattentiveness, and impulsivity) meets these diagnostic criteria. An inattentive student

may fail to give and sustain adequate attention to details, making careless mistakes on their assignments or activities (American Psychiatric Association, 2013). The student will not follow through with instructions, does not listen when spoken to directly, has difficulty with organization, avoids or is reluctant to engage in tasks that require sustained mental efforts, often misplaces or loses things necessary for tasks or activities, is easily distracted by extraneous stimuli, and forgetful in daily activities (American Psychiatric Association, 2013). Symptoms of hyperactivity include fidgeting with random objects or body parts, such as their hands and feet; randomly walking around the classroom or open area, running, or climbing excessively in inappropriate situations; restlessness; difficulty playing or participating in leisure activities quietly; or acting as if they are motorized (American Psychiatric Association, 2013). Finally, the impulsive student may blurt out statements or questions, have difficulty waiting their turn, interrupt others, not considering the consequences of their actions, and respond quickly to various stimuli (American Psychiatric Association, 2013). The student must display the symptoms for at least 6 months and display impairments in two or more settings, such as school or home (American Psychiatric Association, 2013)

Students with this disorder are more likely to experience adverse academic outcomes, including deficits in reading and mathematics throughout their academic career (Molitor et al., 2016). Wei et al. (2014) reported that students with ADHD are at higher risk for a long-term learning disability, following them throughout their academic career. They also found that students with ADHD have poorer reading and mathematics skills due to a lower cognitive ability. Compared to their peers, students with ADHD

often score lower on standardized testing, have a higher percentage of oral language deficits, struggle with performing routine academic tasks, receive lower grades in class, and commit more disciplinary infractions (Molitor et al., 2016). Their behaviors disturb the learning process of their peers, which decreases classroom functionality (Gaastra et al., 2016). The students often begin displaying these symptoms early in their academics, persisting through postsecondary education and causing significant impairments in their adult outcomes. Studies have also shown that over 70% of the population of students with ADHD also have a learning disability, increasing their inappropriate behaviors and reducing their probability of academic achievement (Evans et al., 2016). They are also more likely to be suspended or dropout from school (Gaastra et al., 2016). Recent studies have shown entry-level teachers do not believe they are adequately prepared to instruct students with ADHD (Gaastra et al., 2016). Teachers, irrespective of their age and years of experience, believe that teaching students with ADHD is a burden that disrupts the learning environment (Gaastra et al., 2016).

Teachers, parents, and mental health professionals have implemented interventions and treatment methods to improve the behavioral and academic success of students with ADHD. Some of the methods have been found to be effective with limitations, while other methods have not shown any improvement in students' behavior or academic progress. The most common treatment method is stimulant medication. Although medication has been found to increase on-task behaviors, its efficacy is limited for several reasons. Most medications, like Adderall, Vyvanse, and Ritalin, have major side effects such as loss of appetite and insomnia (Gaastra et al., 2016) and evidence of

their long-term effects is lacking. Furthermore, noncompliance and failure to show academic improvement have also been documented. It has also been noted that medication may not improve their ability to comprehend the information being taught, and because of these limitations there is a need for nonpharmaceutical interventions (Taylor et al., 2015).

Parental interventions (e.g., increased classroom participation and parental groups during the school day) have also been tried. Parental involvement has been found to increase student participation and reduce behavioral difficulties for some students diagnosed with ADHD (Taylor et al., 2015). With adequate parent-teacher communication, this method has improved on-task behaviors and academic performance (Jurbergs et al., 2010). However, like the use of pharmaceuticals, this intervention has had limited success. Studies have found that parental school involvement is inconsistent, which hinders the progress of the student (Taylor et al., 2015). For a variety of reasons (e.g., work obligations, fear of attending the parental groups, and lack of knowledge about ADHD), parents' participation is unreliable (Taylor et al., 2015). Lack of teacher-parent communication has also been found to limit the effectiveness of parental involvement as a treatment method (Jurbergs et al., 2010).

Teacher-school interventions have also been utilized to reduce problematic behaviors and increase academic performance (Jurbergs et al., 2010). Positive (e.g., reward systems and daily report cards) and negative (e.g., out-of-school suspension and in-school suspensions) reinforcers have been used (Jurbergs et al., 2010). However, because teachers lack sufficient knowledge of the symptoms and behaviors associated

with ADHD, most teacher interventions have not been found to improve academic success (Ghanizadeh et al., 2006). Despite the likelihood of having at least one ADHD-diagnosed student in every classroom, teachers report not knowing how to handle ADHD-diagnosed students' behaviors (Ghanizadeh et al., 2006). To improve teachers' ability to address ADHD students' special needs, studies have shown that special education courses are essential; however, only 5% of teachers report to having taken a special education course (Ghanizadeh et al., 2006).

TDT is a school-based intervention formed to treat disruptive behaviors associated with disorders such as ADHD by teaching coping skills to reduce the symptoms of their diagnosis; in TDT, ADHD-diagnosed students work directly with a QMHP (Kanine et al., 2015). This method has been found effective in decreasing negative classroom behaviors and increasing students' positive decision-making skills; however, lack of a specified treatment model has been found to limit TDT's effectiveness (Vanderploeg et al., 2010). Identifying and implementing a specific model will ensure effective and consistent service delivery across all programs (Vanderploeg et al., 2010). Utilizing a specific model will also foster the development of practice guidelines, advance the research on the program's effectiveness, and provide guidance to policy makers on how to promote program replication (Vanderploeg et al., 2010).

To increase the efficacy of TDT, Sibley et al. (2014) suggested the student's perspective can provide useful insights into their experience with this treatment modality. and convey to the students their centrality in the treatment process. As its potential

beneficiaries, input from the students themselves will provide direction for intervention development to modify or create an effective treatment model (Farahmand et al., 2011).

### **Literature Search Strategy**

In this chapter, I outline the existing literature on ADHD and the academic deficits that are found in school-aged children. The chapter contains a review of the literature discussing the most common school-based interventions utilized to reduce inappropriate behaviors and improve academic performance. To locate literature for the reviews, I searched the Psyc ARTICLES, PsycINFO, and ProQuest databases, accessed through Walden University Library, and the Google search engine. I obtained all the literature included in this study using the following keywords: *attention deficit hyperactivity disorder, school-aged children, evidenced-based interventions, behavior management, academic achievement, education, underachievement, mental illness, medication treatment, school-based interventions, teachers, attitudes, knowledge, teachers, day treatment, psycho-educational, community-based intervention, adolescence, therapeutic day treatment, and school-based day treatment*. The results made it clear that terms associated with ADHD are frequently searched; however, TDT was not commonly searched.

### **Theoretical Foundation**

I used Vygotsky's (1978) theory of cognitive development to guide the understanding of the developmental stages for school-aged children in this study. Vygotsky advanced the theory of cognitive development to address Piaget's (1932) omission of social interaction as a necessary component of cognitive development.

Vygotsky believed that social interaction plays a significant role in a child's cognitive development, including their academic and behavioral performance, such as peer-to-peer relationship development, comprehension, and problem-solving skills inside and outside of the classroom setting.

### **Theoretical Propositions**

Vygotsky's (1978) theory is centered on two factors: (a) the MKO to guide and educate the child through their learning experience and (b) the ZPD where the child can gain a higher level of learning through the help of the MKO. The ZPD is the socio-cultural component and a key factor in language and communication development.

Vygotsky emphasized that the development of knowledge is socially mediated, requiring the presence and interaction of a more knowledgeable adult having a profound impact on the advancement of the child's cognitive ability (Ogunnaike, 2015).

Cognitive development is enhanced through guided learning with a more knowledgeable adult offering insight as the adult and child co-construct knowledge (McLeod, 2015). The MKO's interaction with the student is a mechanism for the student's individual development, allowing them to progress from novice to expert as they internalize the MKO's strategic process for learning the task at-hand (Cardimona, 2018). Vygotsky believed that learning occurs when the MKO adjusts the amount of guidance needed to support a child's potential level of performance (Beloglovsky & Daly, 2015). The MKO can increase or decrease their level of support, guidance, and direction if they believe it will assist the student in increasing their knowledge in the skill that is being taught. This strategy is particularly helpful for ADHD-diagnosed students with task

performance deficits, given that traditional school-based methods of treatment, such as stimulant medication or teacher-delivered behavioral interventions, have not been effective (Sibley et al., 2014).

The ZPD is defined as the distance between the child's current level of development and the level of development that can be obtained with the guidance or collaboration of the MKO (Guseva & Solomonvich, 2017). Simply put, this is the area in which the child receives instruction, guidance, and encouragement through their interaction with someone who has a greater level of knowledge (Guseva & Solomonvich, 2017). Vygotsky (1978) believed that the ZPD allows the child to receive the most focused guidance and instruction, allowing the child to develop higher mental function, such as comprehension, perception, and completing goal-oriented tasks. The ZPD allows students to access emerging skills that identify their problem-solving ability and self-regulation as well as access their memory (Ogunnaike, 2015). Vygotsky believed the main function of education is to teach the student something new, and the ZPD, as it defines the area of transitioning from novice to expert, has more immediate significance for the student's intellectual development and success at teaching the desired task (Guseva & Solomonvich, 2017).

In the ZPD, Vygotsky (1978) noted the importance of child play as a key element for the child's intellectual development, occurring primarily during their primary or preschool years. Play is critical to early childhood education because it allows them to learn social, cognitive, emotional, language, and physical skills essential to the child's overall development (Ogunnaike, 2015). Vygotsky believed that play techniques can

create or enhance the ZPD by allowing the child to practice their social skills and enhance their emerging cognitions (Ogunnaike, 2015). In particular, Vygotsky pointed out the socio-dramatic or imaginary play, which includes three features: (a) creating imaginary situations, (b) taking on various roles as they act them out, and (c) following a set of rules determined by those specific roles (Bodrova & Leong, 2015). For example, when a child plays “school” and imitates the role of the teacher performing duties of teaching a lesson, the child takes on the first feature by creating the imaginary situation, the second feature as they act out the role of the teacher, and the last feature of following the rules as they perform the role of the teacher instructing the class. Through make believe or imaginary play, children access emerging skills that allow them to create rules, develop boundaries, practice self-regulation, develop problem-solving techniques, and activate their prior memory (Ogunnaike, 2015).

Vygotsky also claims the child’s social-cultural environment is central to their cognitive development. A child’s culture and social environment can impact their cognitive function, beliefs, values, and tools of intellectual adaption. Their social and cultural context is where learning occurs, nurturing, expanding, and building the child’s knowledge and skill repertoire (Ogunnaike, 2015). To Vygotsky, a child’s development is inseparable from their culture and social environment; the child constructs knowledge and its construction is enhanced through cultural interactions. He also implies that an individual’s basic mental functions of memory mnemonics and mind maps are determined by their culture, referred to as the tools of intellectual adaption (Ogunnaike, 2015).

Cardimona (2018) used Vygotsky's theory of the MKO and the ZPD to identify interactive strategies American math teachers can use to allow non-English speaking students to develop ownership in their math problem-solving ability. The instructors operated as the MKO, creating a safe and supportive learning environment, considered to be the ZPD. The math teachers were tasked with teaching math vocabulary, and problem-solving skills in an optimal learning environment that supported the student's cultural difference while encouraging their interactive participation. Similar to students with ADHD, students who do not speak English as a first language are less likely to complete high school successfully (Cardimona, 2018). The students see their inability to complete their math course successfully as foreshadowing academic failure and choose to drop out of high school 30-40% more often than native English-speaking students (Cardimona, 2018).

In a 4-week qualitative observational study informed by Vygotsky's theory, Cardimona (2018) observed the interactions among eight students age 16 – 20 from urban schools in the eastern U.S. and five instructors, four females and one male. The results of this study showed that interaction between the student and the instructor increased the students' success rate in mathematics. The findings also noted that instructors who utilized reflective questions (e.g., What is  $-2X$  multiplied by  $-3x^2$ ?, Do you add the X components?, Is it positive or negative?) in their approach were more effective and improved the students' problem-solving skills overall (Cardimona, 2018). While the literature suggests that teachers do not have to abandon their current teaching style, they should increase the communication and interactive components between themselves and

their students (Cardimona, 2018). For example, instead of the instructor introducing a mathematics technique that has multiple steps by teaching the steps through oral instruction as the student listens and observes, the instructor should break the problem down into interactive components with guiding questions for the student; the student works with the instructor to complete the interactive component by answering the instructor's questions.

Offering collaborative interaction between the entire group and the instructor has also been proven an effective method to improve the student's cognition and enhance problem-solving skills (Cardimona, 2018). Using Vygotsky's theory of cognitive development, Lillekroken (2019) focused on the ZPD and MKO as the framework to explore nursing students' perception of learning from higher level clinical nurses in a simulated learning environment. In a qualitative study, 15 nursing students were observed in seven large specially equipped rooms functioning as training facilities, each equipped with hospital beds, smartboards, data, television screens, and video cameras for performance recording, observations, and debriefing sessions. The data were collected over a 7-week period using methods of participant observation and focus group interviews. The students utilized collaborative interaction, group sessions, and individual sessions with the clinical nurse to learn, and complete various tasks such as changing bed pans, sterilizing the rooms, and patient-nurse interactions. The clinical nurse operated as the MKO and the simulated learning environment was the ZPD. The results of this study revealed that the nursing students' achievement was dependent upon the nature of the support they received from the clinical nurse (MKO). The nursing students reported that

receiving instruction and guidance from a more knowledgeable other in the simulated environment supported and enhanced their comprehension of what was being taught (Lillekroken, 2019).

Minson et al. (2016) used Vygotsky's theory of cognitive development, focusing primarily on the ZPD, to offer an alternative assessment tool (i.e., a learning story) to gauge children's aged 0-5 developmental potential, and provide empirical evidence of the tool. A learning story assessment tool is a combination of observation and documentation written in narrative form. The story is primarily positive, exploring the child's strengths, good ideas, and dispositions for learning as the instructors watch and listens to the child explore through play. The research questions were: (1) What are the current pedagogical practices and theoretical underpinnings that are used in early childhood educational services to formulate a learning story as an assessment of the children's learning and development? (2) How can learning stories be redesigned to become a valid tool for measuring the ZPD (i.e., by indicating the actual level of development and indicating levels of development)? and (3) What are the indicators in the tool that shows the current and potential level of the child's development and how are they indicated?

Minson et al. (2016) used the ZPD to highlight the process of the of child's development, such as the child's reading ability, writing ability, and their ability to communicate. To analyze the development, the authors highlighted two purposes: (a) identifying the kinds of maturing psychological functions and the social interactions associated with them and (b) identifying the child's current state in relation to developing those functions. For example, if a child has a speech delay, the child's current level of

speech and the age or level that the child should be performing at would be identified. The findings show the potential to lead the way in how a child's developmental assessment is conceptualized. Although the tool has not been fully validated, there is a potential shift in the current beliefs on what is important to assess in a child's developmental level. The study's findings are useful to the proposed study, offering insight on the various learning styles of students as their experiences in the classroom are explored.

Vygotsky's (1978) theory of the ZPD was used by Murphy et al. (2015) to identify and explain the effectiveness of co-teaching as a method to improve teaching practices. Co-teaching is defined as multiple teachers sharing all aspects of educating the student, including the instructional time, planning the curriculum, formulating the assessment tools, and evaluating the progress (Murphy et al, 2015). Although there are several concerns with co-teaching (e.g., working with a less effective teacher or one who has poor teaching practices, not getting along with the co-teacher, or adapting from independent teaching to co-teaching), a lot of the pitfalls have been eliminated by the teachers acknowledging, and developing procedures to address their concerns. The researchers suggest that the ZPD offers reasoning on how and why co-teaching is effective, the conditions required for its effectiveness, and the tool that educators can apply to optimize the design and development of co-teaching as an educational model. The ZPD allows for a dual-learning process where all participants learn through their collaboration with each other. These findings are relevant to the proposed study as they

are similar to the relationship among the therapeutic day treatment QMHP, teacher, and the student.

A qualitative study was conducted with 10 teachers who were accustomed to co-teaching and 10 teachers who were new to co-teaching from six primary schools (Murphy et al., 2015). The participants were given three phases to complete: planning and preparation, practice, and solo practice to coincide with exploring co-planning, co-teaching, and co-reflection. The data were collected through pre- and post-questionnaires, and semi-structured interviews. The findings showed the program to be beneficial to the new teachers and the students. The model provided a framework for how teachers can effectively co-teach, providing tools and structures to implement this model. These findings are relevant to the proposed study as co-teaching is incorporated in the TDT intervention as TDT counselors and classroom instructors must co-teach designated students to facilitate behavior modification and improve academic performance.

### **Rationale for the Choice of Theory**

Vygotsky's theory of cognitive development was an appropriate foundation for this study as it gives substantial information on how the child's interaction with an MKO within the ZPD is pivotal to their cognitive development. This was an appropriate framework as therapeutic day treatment (TDT) models begin with the development of a positive relationship with a QMHP (i.e., MKO). The adult assists the student in improving their classroom behavior and managing the symptoms of their diagnosis through role modeling, encouragement, and behavior modification techniques. In particular, it shows how the child's lower function levels (i.e., attention, memory) and

higher functioning levels (i.e., on task-behaviors, perception, problem-solving abilities, and social skill development) are areas of weakness for children with ADHD, can be developed to achieve a higher level of expertise through the child and MKO's interaction. Findings from this study provided more knowledge on the effects of TDT from the students' perspective as they move through their treatment process with the MKO.

### **Alignment Between the Theory and Study**

In sum, a variety of studies using Vygotsky's (1978) theory of cognitive development was reviewed to demonstrate the theory's usefulness in understanding how someone can increase their comprehension in a specific area, develop and complete new tasks, change behaviors, and improve academic performance. Vygotsky explains that social interaction is a major component of an individual's ability to learn a skill or adjust their skill level and behavior. The theory highlights the importance of being taught higher skill levels through modeling or conversation, which are key concepts of TDT. His theory creates a foundation for how the proposed study will explore ADHD-diagnosed students' perception of their academic and behavioral performance while participating in a TDT program. The study reviewed the student's interaction with the QMHP (i.e., MKO) and their ability to improve their behavior in the ZPD. There will be further discussion of the theory in additional chapters as it is used to interpret the data.

## **Literature Review Related to Key Concepts**

### **Problematic Behaviors Exhibited by ADHD Students in the Classroom**

In order to adequately understand the need for classroom interventions it is important to know the behaviors that are displayed by ADHD students. ADHD behaviors

in the classroom are often used to predict the students' academic success (Imeraji et al., 2016). As previously noted, ADHD is a neurobiological disability categorized as a mental health disorder (Evans et al., 2016). It causes students to display an ongoing pattern of inattention, hyperactivity, and impulsivity that hinders their behavior and performance, especially when they are in a structured environment such as a classroom. Although students can share the same disorder, their symptoms are likely to differ. Performance from students with ADHD will vary with students and settings (Imeraji et al., 2016). A predominantly inattentive student is easily distracted, has poor concentration, and lacks organizational skills, whereas a predominantly impulsive student interrupts often and takes extreme risks, and the predominantly hyperactive student is constantly active, fidgety, and has difficulty completing tasks. These overt behaviors have been found to have a crippling impact on students' academic performance, possibly hindering their socially and emotional readiness for the academic setting (Abenavoli & Greenberg, 2016).

Palmu et al. (2018) examined the impact of negative external behavior, such as opposition, misconduct, aggression, and inattentiveness on the student's ability to obtain succeed academically. The researchers conducted a quantitative study of 311 female and male 6<sup>th</sup> grade students. The students were monitored throughout their 6<sup>th</sup> grade and 7<sup>th</sup> grade school year. The researchers noted the importance of differentiating between ADHD symptoms and symptoms of other conduct disorders (e.g., oppositional defiant disorder and intermittent explosive disorder) as they have a different and distinct relationship to the student's academic performance. The results showed that ADHD

symptoms have a unique negative effect on students' academic outcomes. If the ADHD symptoms can be identified earlier in the students' academic career, the student may be able to exhibit a positive behavior and academic cycle sooner, increasing their likelihood to succeed.

To identify effective behavior management, Geng (2011) conducted a qualitative study observing ADHD students' behaviors from three schools. The purpose was to demonstrate verbal and non-verbal strategies with the potential to enhance positive ADHD student behavior, ultimately improving their educational and behavioral outcomes (Geng, 2011). Six male students from three different schools were observed; two of the six students utilized medications. The observations were completed during various time frames, e.g., 9am-11am, 1pm-3pm, and during the lunch period. The researcher observed three sections, documenting (a) the ADHD student's behaviors, (b) the teacher's verbal and non-verbal strategies, and (c) the student's response to the teacher's strategies. The observed behaviors included restlessness, constantly moving around, being out of place during seated sessions, crawling on the floor, fidgeting with their classmates' desks and personal items, making noises, spitting wooden blocks, throwing items, refusing to complete assignments, writing letters or marking in the textbook, not following directions, copying words from the board with no coherent sentence structure, constantly talking to others during times for listening, constantly walking out of the classroom, swinging on chairs, and making rude comments to the researcher and teacher. The researcher determined that although each student was different their behaviors were similar and could be classified as distractibility, impulsivity, and hyperactivity. The

behavior management strategies were more effective when the strategy was individualized for the student; for example, the student being called by their names, using repeated one-on-one instruction or redirection. The researcher noted that the teacher must know the students and their diagnostic symptoms in order to provide an effective intervention.

Brown (2013) also examined the most common behaviors displayed by ADHD students in efforts to identify methods that will effectively curb their negative behaviors. Brown identified speaking out of class, off-task behaviors, and lack of self-control as typical behaviors of ADHD students, causing poor academic performance. Due to their poor performance and constant misbehavior, ADHD students are often mislabeled as having a lack of innate intelligence. However, Brown suggests that their poor academic performance should not be considered a reflection of their intelligence but rather a result of their ADHD symptoms; if their symptoms can be remedied, an improvement in their academic performance should follow. Brown hypothesized that by identifying and utilizing interventions to decrease ADHD symptoms, academic success could be achieved. Results from a single-subject experimental study supported the hypothesis. Brown identified positive interventions such as implementing a reward system and increasing positive teacher-student interactions as methods to assist the student improve their behavior.

Studies have also shown that there are other components, such as teacher-student interaction, classroom environment, and idle classroom time that can increase the ADHD symptoms and negative behaviors displayed in the classroom (Owens et al., 2018). The

intervention or management style utilized by the teacher can either increase or decrease the challenging behaviors. Studies suggest that teachers' classroom management style has a direct effect on the challenging behaviors displayed by ADHD students. Effective classroom management styles employ teacher-student boundaries, positive reinforcement, and appropriate redirection of challenging behaviors like maintaining a neutral tone or providing clear directions.

Honkasilta et al. (2016) investigated how teachers who utilize punitive or more aggressive classroom management styles can cause an increase in the negative behaviors displayed by ADHD students. Their study focused on teachers' poor classroom management styles contributing to students' misbehavior. Often the lack of teacher comprehension and the label of ADHD creates negative connotations, stereotypes, and stigma causing teachers to project the negative expectations onto the students, causing damaging effects on students' performance, motivation, and esteem. This study employed a narrative framework to answer their research questions: How do ADHD students narrate the reactive classroom strategies of their teachers? and how do they position their teachers and themselves in their narrative?

Thirteen students ages 11-16 participated in this study, 2 females and 11 males, completing 90-minute semi-formal interviews. The narrative approach allowed the students to describe their experiences in the classroom setting, including their behaviors, their understanding of ADHD, and their teacher's classroom strategies. The results showed that yelling, lecturing, or becoming angry was mimicked by the students towards their teachers. For example, when the teacher screamed "stop, stop" the student screamed

back “I’m not stopping”. The study shed light on the importance of the teacher-student interaction. When the teacher did not assess and identify the students’ needs and executed poor classroom management styles, the students felt disrespected, and that educational care or support was lacking. If students are not stimulated or supported, their behavior can worsen; lack of structure or reward can cause negative emotional reactions (Imeraji et al., 2016).

Imeraj et al. (2016) analyzed idle time and how it can increase the negative behaviors displayed by ADHD students. Idle time has been identified as a trigger for problematic classroom behaviors due to the lack of stimulation and lack of structure; students learn to eliminate the negative experience of delay by displaying hyperactive or impulsive behavior. This study utilized a qualitative approach observing 31 ADHD students, 25 males and 6 females, age 6-12 years. They examined the patterns of idle time, versus control time, and its impact on disruptive behaviors displayed by ADHD students. Their results showed ADHD students’ behaviors and performance deteriorated when presented with extensive idle time. Compared to students without ADHD, ADHD students displayed an increase in socially inappropriate behaviors such as horse play, conversing with their peers, hyperactivity, and noisiness.

Schuck et al. (2016) conducted a pilot study evaluating the utility of a web-based application (I-self-control) designed to teach ADHD students how to improve their classroom behaviors. The study observed 12 fifth grade students’ attentiveness and behavior regulation for six weeks. The application prompted the students, every 30 minutes, to evaluate their ability to demonstrate adaptive behaviors necessary for

classroom achievement such as following directions and rules, remaining on task, and positive peer interaction. If their behaviors were favorable the student received points; however, if their behaviors were maladaptive points were removed. The application also offered mindfulness exercises to help them identify ways to improve their behavior and increase their performance. The results of the study identified several positive and negatives of the application; some ADHD students were unable to adequately evaluate their behaviors which hindered their ability to successfully use the application. However, the overall findings suggest that the application can support the improvement of self-regulation and self-awareness with challenges related to their executive functions (e.g., on-task behaviors and problem-solving skills). The proposed study aims to gather additional insight into how the students themselves perceive their classroom experience, including their behaviors and academic performance. This information added to students' perception of TDT may inform future research and program developers about how to develop and implement effective behavior management techniques.

### **Academic Problems Exhibited by ADHD Students in the Classroom**

ADHD students' difficulties with attention, impulse control, and activity modulation causes significant impairment in their academic and social behaviors in the school setting (Hart et al., 2011). In addition to the negative behaviors displayed in the classroom, ADHD students have cognitive deficits, causing a higher risk for academic impairment. Compared to their peers, ADHD students experience higher rates of special education, score lower on standardized achievement tests, and lower grade retention (Langberg et al., 2011). Lower comprehension, inability to effectively communicate,

memory impairments, poor written communication and mathematics are negatively impacted by the student's cognitive impairments (Costa et al., 2014). Studies have also shown that the working memory, short-term memory, processing speed, vigilance and response to variability impact the student's level of fluid intelligence, diminishing their academic performance (Costa et al., 2014). Fluid intelligence is defined as the cognitive functions related to solving new problems; having a lower level of fluid intelligence can directly affect the student's performance in subjects like language arts and mathematics. For example, ADHD students with higher levels of inattentiveness and a lower levels of fluid intelligence perform poorest in the language arts of spelling.

Tamm et al. (2016) analyzed ADHD students' cognitive ability (e.g., sluggish cognitive tempo) and its correlation to academic impairments and poorer academic performance. A sluggish cognitive tempo is defined as a pattern of behaviors characterized by inconsistent alertness and slowed thinking, such as daydreaming, forgetfulness, drowsiness, or unresponsiveness. They hypothesized that students who displayed lower cognitive tempo and apathetic behaviors will achieve lower academic scores and higher levels of academic impairment. The researchers conducted a quantitative study with 252 participants, 168 boys and 84 girls, ages 6-12. Multiple assessment tools were used (i.e., Kiddie Schedule for Affective Disorders and Schizophrenia for School Aged Children, Kaufman Brief Intelligence Test-2, Vanderbilt ADHD Diagnostic Parent Rating Scale and Teacher Rating Scale, Sluggish Cognitive Tempo Scale, and Wescheler Individual Achievement Test-Third Edition), to analyze the students' performance and impairments. The results showed that sluggish cognitive

tempos are associated with academic problems experienced by ADHD students. Their findings suggest, that further, that targeting the sluggish cognitive tempo for interventions or treatment, may decrease in the students' academic impairments. For example, if a student with a low cognitive tempo is offered additional time and assistance to complete assignments or tasks, the student's performance may improve.

Sciberras et al. (2014) examined how ADHD students' inability to effectively communicate hinders their social and academic functioning. ADHD students are three times more likely to have language deficits than students who are not diagnosed. They investigated the prevalence of language problems in ADHD students, frequency with which ADHD students access speech pathology, and the association between language problems and academic and social functioning. A quantitative study using 43 mainstream schools and 412 students was conducted. The findings suggested that ADHD students are at a much higher risk of having language problems than their counterparts and is associated with poorer academic functioning. However, there was little evidence to show that students' social functioning was adversely affected. The study also found that speech pathology is not a service often accessed by ADHD students as only a quarter of the students utilized it.

Other factors such as the classroom size, style, and structure have been identified as components that can negatively impact ADHD students on-task performance and work productivity. Studies have shown that larger classroom settings can be overly stimulating, increasing inattentiveness, hyperactivity, and disruptive behaviors due to the lack of attention and supervision provided to the student (Hart et al., 2011). Hart et al. (2011)

conducted a quantitative study with 33 students, 25 males and 8 females, to investigate the effects of instructional group sizes such as small groups, independent seat work, and whole group performance. The researchers hypothesized that the students would be more on tasks when placed in small groups versus independent work or entire classroom productivity (Hart et al., 2011). As hypothesized, their findings suggest that the classroom size is an important factor of ADHD students on-task behaviors during the instructional period; when placed in a smaller group the student received one-on-one instruction and remained attentive for longer periods of time. The proposed study will explore ADHD students' experiences in the classroom and their perceptions of TDT.

### **Problems for Teachers Dealing with ADHD Students**

For decades teaching students with ADHD has been identified as a stressful and conflicting task (Kapalka, 2008). In the school setting, the classroom is where most disruptive behaviors occur, causing additional hardships for the teachers (Imeraj et al., 2013). ADHD students are often considered special needs due to the additional assistance they require in the classroom setting (British Journal of School Nursing, 2014) Researchers suggest that students with ADHD can make teaching difficult, given that they require an active learning environment where they can explore and practice their skills (Voogd, 2014). Teachers are often directed to adapt their lessons and activities, incorporating various learning styles, to improve ADHD students' academic ability (Voogd, 2014).

However, studies have shown that teachers do not always have an accurate understanding of ADHD, rendering their teaching methods ineffective (Topkin et al.,

2015). Teachers have an overall knowledge of the general features associated with the disorder; however, they do not have in-depth understanding of, its symptoms, or effective interventions. Topkin et al. (2015) examined primary teachers' knowledge of ADHD, its symptoms, and their ability to manage the behaviors. A cross-sectional study was conducted with 200 teachers, 178 females and 22 males. Their findings suggest that primary teachers are supportive of ADHD students overall; however, they are not knowledgeable about effective interventions. The authors suggest that schools and teachers review the classroom structure, approaches to teaching, student grouping, and the school's ability to meet the diverse needs of all students (Topkin et al., 2015).

Moore et al. (2017) also indicated that adequate training and instruction for teachers on ADHD classroom symptomology and behavior management techniques is lacking. Moore et al. (2017) conducted a qualitative study to explore educators' experiences in managing ADHD in the classroom. They asked: How do educators respond to ADHD in the classroom and what are the barriers to and facilitators of the responses? The study included 42 teachers who worked with ADHD students. The findings noted interruptions to the instructional period to manage disruptive behaviors, causing the instructor to withdraw from their regular teaching. It was also noted that instructors were not using evidence-based programs designed for students with ADHD. The findings also identified several factors that hinder the teacher's ability to instruct ADHD students such as labeling, poor relationship with the student, and stigmatization.

Teachers' misunderstanding of the disorder can cause additional hardships in classroom management and their ability to instruct ADHD students (Bellanti, 2011).

Teachers should understand ADHD as a performance disorder rather than a skill deficit and should look at the process in whereby students manage their behaviors. Bellanti (2011) identifies several strategies to assist teachers in supporting ADHD students such as developing classroom structure by identifying rules, schedules, and rubrics, implementing methods to minimize distractions, and offer real-time support during the moments needed most. Teachers are often challenged by students' opposition and defiance, hindering their ability to provide adequate individualized instruction, not only to the ADHD student, but to the other students as well. The teacher is often seen as working against the student's progress by focusing on their negative behaviors, rather than working with the student to accommodate their needs (Medoff, 2016). The proposed study will explore the ADHD students' experiences with their teachers, and their perception of utilizing TDT intervention in the classroom.

### **Behavior Management Techniques and Interventions for ADHD Students in the Classroom Setting**

ADHD students do not have adequate control over their behaviors, thoughts, feelings and social interactions, suggesting a need for behavior management techniques in efforts to improve these maladaptive behaviors. Behavior management techniques (e.g., cognitive-behavioral techniques [CBT], medication management, parental-interventions, educational-interventions) use both positive and negative reinforcement to increase desirable and decrease problematic behaviors (Lessing & Wulfson, 2015). Levine and Anshel (2011) conducted a case study to explore CBT as a behavioral management technique. The case study identified an 8-year-old male ADHD student,

using parent-teacher and child-focused CBT methods. The authors determined that CBT core techniques helped the student identify poor thinking patterns that prohibit optimal functioning. The intervention emphasizes education, suggesting that adequate understanding of their diagnosis will encourage the ADHD student to create independent problem-solving skills. These findings support need for the CBT treatment method; however, its ability to address ADHD students' core symptoms is limited (Levine & Anshel, 2011)

Although the most effective behavior management intervention has not been identified, the use of medication is the most common. Van der Veen-Mulders et al. (2018) compared the effectiveness of a medication intervention (Methylphenidate) to the use of a parental-intervention (Parent-Child Interaction Therapy), using 35 ADHD female and male students ages 3.5 to 6 years. Parent-child interaction therapy (PCIT) is a method that targets the quality of the parent-child's relationship and interaction patterns. PCIT teaches parents specific skills (e.g., creating nurturing and secure relationships) with the potential to increase the child's prosocial behavior and eliminate the disruptive ones. Training for this treatment method takes place in two phases: The parent first learns to apply play therapy skills to strengthen theirs' and the child's relationship and then learns to use behavioral management techniques to enhance the child's compliance. For the medication intervention, Methylphenidate was safely administered three times a day, 1.25mg per dose; the medication was monitored for adverse effects throughout the study. The authors concluded that the use of medication was more effective in decreasing disruptive behaviors; however, both interventions were found to decrease disruptive

behaviors. Although the study showed a decrease in disruptive behaviors, Van der Veen-Mulders et al. (2018) suggest larger sample sizes are needed to determine the comparative effectiveness of the two interventions. The proposed study will explore students' perspective on the school-based intervention TDT.

Harazni and Alkaissi (2016) explored the parents' and teachers' experience with behavior management techniques by conducting a general qualitative study. Four ADHD students, four mothers and 12 teachers (3 teachers per student) were interviewed. The findings highlight parents' and teachers' use of positive and negative reinforcements in attempts to manage ADHD students' symptoms. The parents acknowledge achieving more desirable outcomes with positive rather than negative reinforcement; however, the ADHD students did not maintain the desired behaviors for significant periods of time. The teachers sometimes neglected the ADHD students' academic needs allowing them to occupy themselves with miscellaneous activities while instructing the other students. However, when teachers did use positive reinforcements, such as acknowledging when the student completes a desired task or displays appropriate behavior, the student felt happy, and the positive behaviors were enhanced. The authors suggest that greater emphasis be placed on supporting the teacher and parent with proper knowledge on caring for ADHD students as it is clear that with greater understanding, parents and teachers are better equipped to address ADHD students' specific needs. The proposed study will explore ADHD students' experience with TDT as a supportive service provided to them in the classroom environment.

There are a variety of teacher/educational strategies (i.e., peer to parent tutoring, tasks and instructional modification, self-monitoring, strategy training, classroom functional assessment strategy, strategy training, and homework-focused interventions) utilized by teachers to decrease ADHD symptoms in the classroom. Daley and Birchwood (2010) reviewed the literature to assess the comparative effectiveness of these educational/teacher interventions. Peer tutoring is defined as instruction from an identified peer to an ADHD student in the classroom setting, decreasing the student's inattentiveness by providing one-on-one assistance at the ADHD student's pace. Parent tutoring allows the parent to offer one-on-one tutoring in subjects such as reading, whereby the parent provides instructions, feedback, and active responding. Though findings are limited, the current literature has shown promising results (Daley & Birchwood, 2010).

Task/instructional modification involves altering the task to meet the need of the ADHD student, e.g., reducing task length, breaking down the task into smaller steps, providing specific instructions, or modifying the delivery to accommodate the student's specific learning style. Because the majority of the studies involved only single subjects, Daley and Birchwood's (2010) question the validity of the intervention. Classroom functional assessments identify student-specific interventions that facilitate the manipulation or removal of problematic behaviors that interfere with on-task skill acquisition. This intervention style has been found to reduce disruptive behaviors while improving on-task behaviors; however, there was no evidence that it improves academic productivity. Self-monitoring allows the ADHD student to develop specific goals for

classwork completion, working with the teacher to administer rewards upon completion. This intervention has been found most effective in increasing academic performance when combined with another intervention such as medication; however, no studies suggest that self-monitoring is effective when used alone. Strategy training teaches the ADHD student specific skills that when implemented in the academic setting may improve their performance. However, studies done to date are insufficient to suggest that this tool is an effective intervention (Daley & Birchwood, 2010). This study added to the current literature by exploring TDT as a behavior management technique from the students' experience.

Lessing and Wulfsohn (2015) also conducted a quantitative study to examine the effectiveness of behavior management interventions used by teachers. The study used ten 8<sup>th</sup> grade male ADHD students, each completing Conner's Teacher Rating Scale-Revised (CTRS-R) pre-test and post-test to determine their level of hyperactivity, inattentiveness, social skills, and opposition. The authors hypothesized the following: there will be a significant change in ADHD students' level of (a) attentiveness, (b) hyperactivity, (c) social skills, and (d) oppositional behaviors in the classroom setting after behavior management techniques have been applied. They utilized a behavior management technique that was enhanced by constant feedback and positive action-oriented tasks to provide ADHD students with opportunities for positive activity. For example, teachers used a positive and negative reinforcement approach applying a classroom token economy system such as, stickers, poker chips, and smiley faces to reward and reinforce positive behaviors such as remaining in their seats, remaining on-task, and self-control. If

the student displayed the negative behavior (e.g., excessive motor activity, inattention, and impulsive gestures or verbalizations), the teacher would reprimand the behavior using short phrases immediately.

Findings showed a significant reduction in hyperactivity, distractibility, and improved social skills; however, no statistical significance was found for reducing opposition. Lessing and Wulfsohn (2015) suggest that elements related to the oppositional behavior should be identified, and teachers' training should be refined to counteract it. Findings also suggest the advantages of using behavior management techniques in the classroom include sustained attention, decrease in disrupting the classroom, less inappropriate motor activity, and improved social skills. The proposed study will continue to address the effectiveness of behavior management techniques; however, it will focus on the student's perspective.

### **Summary and Conclusion**

There is a vast body of literature focused on ADHD students and behavior management methods utilized to decrease the negative behaviors and improve academic performance. Findings suggest that behavioral management strategies are effective in reducing negative behaviors (Lessing & Wulfsohn, 2015). However, each previously identified treatment method has noticeable limitations, with little to no input from the student. Studies found that the lack of understanding of the ADHD symptoms and effective strategies for managing students hinders their academic performance (Daley & Birchwood, 2009). The lack of the student's perspective represents a gap in literature that this study addressed by exploring their experience of the school-based intervention TDT

(Sibley et al., 2014). To increase the efficacy of TDT, Sibley et al. (2014) suggest the student's perspective can provide useful insights into their experience with this treatment modality; it will also convey to the students their centrality in the treatment process. The proposed qualitative study will use semi-structured interviews and observations to explore ADHD students' experience of TDT as a treatment model in the academic setting. The methodological design of the study is identified in chapter 3.

### Chapter 3: Research Method

ADHD is a mental disorder most commonly found in school-age children. School-age children diagnosed with ADHD are more likely to struggle with homework completion, classroom behavior, and academic failure as well as be more likely to drop out of school (Evans et al., 2015). TDT is a school-based intervention formed to treat disruptive disorders such as ADHD by teaching coping skills to reduce the symptoms of their diagnosis not contingent on the use of medication (Kanine et al., 2015). TDT provides an intense psycho-social treatment by a QMHP or counselor in the classroom (Kanine et al., 2015). Although TDT has been found useful by parents and teachers, research to date from the student's perspective is lacking (Sibley et al., 2014). Without the perspective of the individual receiving the intervention, its effectiveness may not be adequately assessed or understood.

In this qualitative study, I explored the perspectives and beliefs of fifth-, sixth-, and seventh-grade public school students with ADHD about the effectiveness of TDT on their academic and behavioral abilities in the classroom setting. Due to the COVID-19 pandemic, video interviews, via Skype, Zoom, and Google Duo, were conducted with the participants to collect data and all safety precautions were maintained. The students' levels of participation in the TDT program were confirmed with their QMHP.

In this chapter, I describe the research design and rationale; the role of the researcher; and the methodology, including the procedures for recruitment, participation, data collection, and the data analysis plan. Issues of trustworthiness and ethical procedures are also discussed.

## **Research Design and Rationale**

The purpose of this study was to explore ADHD students' perceptions of their academics and behaviors while receiving TDT. In all studies, the research question(s) shapes the direction of the study because they are open-ended, evolving, and nondirectional, identifying the purpose to the study (Creswell, 2013). The following research question guided this study: How do students diagnosed with ADHD perceive their experience of participating in a TDT program?

### **Central Concept of Interest**

The central concept of interest was the experience of TDT from the perspective of ADHD-diagnosed fifth-, sixth-, and seventh-grade public school students. Although parents and teachers found TDT useful, research from the student's perspective is lacking (Sibley et al., 2014). Studies have suggested that a QMHP working with students to develop coping strategies in the classroom setting may positively influence student performance (Sibley et al., 2014). However, for TDT as a treatment modality to be effective, the students' experiences must be explored.

### **Research Tradition**

A general qualitative methodology allows researchers to delve into the meaning of individuals' real-life experiences (Starks & Turale, 2008). The general qualitative approach is used to solicit the participants' truth of the experience lying at the heart of their realities (Jobin & Turale, 2019). Use of this approach permitted me to explore ADHD-diagnosed students' perceived changes in their academics and/or behavioral performance while receiving TDT.

## **Role of the Researcher**

The role of the researcher is to gather data about how the participants behave in their natural settings and make meaning out of their experiences (Starks & Brown-Trinidad, 2008). A qualitative researcher frequently relies on interviewing as the primary data collection strategy to elicit the participant's story. As the researcher, I was a listener and used probing questions to prompt the participants' responses. Although I was a therapist and assessor at the mental health agency study site that participants were recruited from, no prior relationships with participants were allowed. Only students who had not received direct services from me were permitted to participate in the study.

## **Methodology**

### **Participation Selection Logic**

#### ***Population***

The target population was ADHD-diagnosed elementary and middle school adolescents.

#### ***Sampling Strategy***

Patton (2015) noted that purposive sampling is used to gather insight and an in-depth understanding of an area. I used purposive sampling in this study to recruit participants who aligned with the purpose of the research, including those who have experiences relating to the phenomenon that is being researched (see Groenewald, 2004). In the case of this study, purposive sampling allowed me to recruit students most suited to offer rich information on the topic, which was pivotal because this study focused on a vulnerable population (i.e., ADHD-diagnosed elementary- and middle-school

adolescents). Bradshaw (2017) described that the advantage offered by purposive sampling is that participant selection will focus on qualities and/or experiences specifically required for the study.

### ***Participant Criteria***

To meet the inclusion criteria for this study, participants had to: (a) be diagnosed with ADHD; (b) be attending a public elementary or middle school in the fifth, sixth, seventh, or eighth grade; (c) have participated in the TDT program at their school; (d) display negative behaviors or have academic challenges; and (e) be residents of Virginia located in Hampton Roads area.

### ***Sample Size and Rationale***

Qualitative samples are not expected to be generalizable; therefore, they are smaller in size, typically between eight to 10 participants (Fusch & Ness, 2015). Smaller samples allow for more intensive contact with each participant, focusing on their unique experience until data saturation is achieved. Fusch and Ness (2015) stated data saturation is reached when no additional themes are provided and that achieving data saturation requires quantity combined with the rich quality of the data.

### ***Procedures for Recruitment***

I utilized both passive (e.g., developing a flyer posted in common waiting areas in the Keys to Success Family and Developmental Services building) and active (e.g., mailing or emailing parents who currently had a child in elementary or middle school and offering a \$5.00 gift card as an incentive to participate) forms of participant recruitment in efforts to develop and maintain a high participation rate. The incentive was provided to

all student participants whether they remained through the entire interview process. Written approval to recruit participants by posting flyers and contacting the parents of qualifying students at the mental health agency, Keys to Success Family and Developmental Services, was obtained from the executive director. Keys to Success Family and Developmental Services served as a facility for recruiting participants. Students did not have to qualify or receive services from this organization to participate in this study. The criteria for inclusion in the study was listed on the recruiting flyer posted in the visitor lobby and the employee workroom of Keys to Success Family and Developmental Services. This allowed employees and visitors to refer students to the study. To refer a student to the study, the parent's name and telephone number along with the student's name was provided to me. I contacted the parent or guardian prior to contacting the student to explain the purpose of the study and ask if they were interested in allowing the student to participate. At that time, I confirmed that the student met all inclusion criteria for participation. Once the participants had been identified, a consent form was emailed to each parent allowing the parent and student to review the document detailing the purpose of the study and their rights as participants. Parents indicated their consent and authorized their child's participation in the study by returning the consent form to me signed with "I consent." All participants received approval from their parent or legal guardian, and no one was forced to participate. There were no ethical issues identified specific to me as the researcher or any of the participants.

## **Instrumentation**

In most qualitative studies, the primary instruments used are semi structured, in-depth interviews; however, there are other methods that can be utilized, such as case studies or focus groups (Bradshaw, 2017). For this study, the semi-structured, in-depth interview was the instrument of choice. In-depth interviews support rapport building and openness necessary to access participants' lived experiences (Padget, 2012). The one-on-one, semi structured interview environment allowed the student the opportunity to speak openly and honestly offering a clear, comprehensive description of their experience. Each interview lasted 15–20 minutes and was audio recorded. I used a calendar to schedule interviews based on the flexibility of the student and their parent/guardian.

The development of interviews questions was guided by the literature and topics related to the students' academic experience, behavioral challenges, and TDT services. Examples of interview questions include: How do you feel about your academic performance? How do you behave in the classroom? How is your relationship with your teachers? Please describe a typical school day for you. What is/was the relationship with your TDT counselor like? Describe some of the obstacles you have faced while receiving TDT services. What are some changes you have experienced in your classroom behavior since receiving TDT? What are some of the changes you have experienced in your academic performance since receiving TDT? I followed all general interview questions with additional probing questions to gain more descriptive information, such as can you elaborate more on that? The interview protocol followed Yin's (2010) interview style to (a) identify the focus of the interview, (b) be nondirective (c) stay neutral, (d) and

maintain rapport with the student. Evans (2016) noted that open-ended questions assist the researcher in eliciting rich information because the participant does not feel limited and can share their experiences freely. To ensure the content validity of the interview questions, I submitted the interview guide to my chair and committee member and then had it vetted by TDT counselors to verify that the questions solicited the specific information sought.

### **Content Validity**

Content validity is central to the development of all scientifically sound instruments and assesses whether items are comprehensive and adequately reflect the participant perspective for the population of interest (Tesler & Christensen, 2009). In a qualitative study, one of the most effective ways to achieve content validity is through interviews (Tesler & Christensen, 2009). The interview process, with the use of the interview guide, captures the essence of each participant's perspective. The use of the interview guide assists the participants in providing a rich, detailed account of what was experienced, encapsulating their journey, which is usually presented as verbatim portions of their responses to the interview guide (Maxwell, 2013). Using detailed descriptions of the participants' accounts, in their terms, allows for any possible researcher bias to emerge as well as any biased responses from the participants in efforts to present themselves in a socially acceptable manner (Maxwell, 2013).

### **Data Collection**

The sample goal was eight to 10 participants, and students were selected on a first-come basis until data saturation was achieved. Once the student entered the study,

they were given an identifier to secure their identity and maintain confidentiality throughout the entire study. I also used the student's identification code while reporting and disseminating the results to protect their identities.

I gathered demographic information from the parent or guardian to determine if the participant met all inclusion criteria for the study, including the severity of their ADHD diagnosis, grade, if they have previously or currently participated in a TDT program, current treatment methods (e.g., medication), and current school grade. I alone conducted the 15- to 20-minute interviews. If the interview could not be completed in a single session, then an additional session was offered. Each interview was completed in my office via Zoom or Skype due to the current COVID-19 safety guidelines at the time of the study.

I audio recorded each session with an mp3 voice recorder and transferred all handwritten notes to a password-protected computer to ensure all valuable information was retained. After the interviews were complete, the students were offered the opportunity to debrief and ask any follow-up questions. I conducted the debriefing immediately following their interviews to allow the students to gain a better understanding of the study, review and clarify their responses, and ask any questions they would like.

### **Data Analysis Plan**

I conducted a content or thematic analysis, allowing the participant interviews to come alive (see Bradshaw et al., 2017). The process includes familiarization, coding, searching for themes, reviewing themes, defining and naming, and reporting (Lavender &

Smith, 2015, p. 224). Interview transcripts were then organized, reviewed, and coded for themes. The data were first coded to identify key concepts and relationships among the students' experiences. The coding process utilizes action-oriented words or labels suggested by the theory that guided the study (Colorafi & Evans, 2016). Participants' statements were categorized into clusters of meaning that reflected the phenomenon under study. This process allowed me to identify emergent themes guided by Vygotsky's theory (see Bradshaw et al., 2017). Using NVivo software, I wrote memos as I moved through the analysis process, allowing me to examine how my thoughts and ideas evolved. Memos are a reflexive practice, serving as an audit trail to keep track of emerging impressions of what the data mean, how they relate, and how they shape the researcher's understanding of participants' stories (Starks et al., 2007).

Microsoft Excel, Dropbox, NVivo, Microsoft Word, and myself as the researcher were the tools used for data analysis. I used frequent backups and Dropbox to store data and access information from multiple devices, such as my cellphone, tablets, and laptops, regardless of the location. The data stored in Dropbox are secure because it can be accessed only with my username and password.

NVivo is a software program that can be used to import, organize, and explore the data, offering a deeper insight into the participant responses. NVivo allows for a variety of formats, such as visualization, articles, interviews, social media, PDF, spreadsheets, and audio to be imported and utilized from any source. Additionally, NVivo offers features to express the data, including visual aids such as charts and graphs to allow

multiple ways to create and express the results for presentation to researchers, parents, or participants of the study (QSR International, n.d.).

### **Trustworthiness**

#### **Credibility**

To establish validity, member checking will be used; in this way, the participants themselves have the opportunity to review their transcribed accounts for accuracy and to confirm the absence of researcher bias (Harper & Cole, 2012). Another form of member checking is respondent validation allowing me to request feedback on how the questions were understood and after analyzing the data to receive feedback on the interpretation of the findings (Miles et al., 2014). Participants were provided with the results of the study.

Given that the researcher is solely responsible for collecting, analyzing, and interpreting the data, the process is inherently subjective and, therefore, prone to researcher bias (Starks et al., 2007). To ensure that researcher bias is minimized, the process of bracketing was utilized, whereby I acknowledged and set aside any prior assumptions to represent faithful accounts of participants' own experience. Any researcher biases were noted in a reflexive journal throughout the study and identified in the results. Due to my experience with TDT, bracketing was used to mitigate the potential deleterious effects of unacknowledged preconceptions related to the research (Tufford & Newman, 2010). Tufford and Newman (2010) identifies bracketing as a necessary process when there is a close relationship between the researcher and the topic that may both precede and develop while conducting qualitative research.

### **Dependability and Confirmability**

To achieve dependability, all participants followed the same procedures throughout the study (Miles et al., 2014). Additionally, an audit trail used to document all information needed for objective parties to confirm that the results are grounded in participant responses and do not reflect researcher bias. In the audit trail, procedures was sufficiently detailed (i.e., thick description), enabling researchers conducting future studies to apply the same methods in other settings with different populations (Levitt et al., 2018).

### **Ethics**

Bradshaw et al. (2017) emphasizes the researcher's responsibility to address all ethical principles relevant to their study, ensuring a level of professional, legal, and social accountability. It is the researcher's duty to guarantee a process to safeguard participants' rights and maintain a level of integrity. Permissions was obtained from the locality that the posters and flyers here posted and flyers, which were also provided to the IRB as a part of the application. To that end, I received approval from both the Walden University IRB and the mental health agency, Keys to Success Family and Developmental Services. Although I am contracted with Keys to Success Family and Developmental Services, conflict of interest is not a concern as no participants received direct services from me. The participants of the study were not offered any preferential treatment or services as an incentive to participate. Confidentiality was maintained throughout the study and identified in the consents to participate, signed by all parties; no one outside the study were given access to the information obtained. The students' identity was protected by

assigning each a code (e.g., P1), when reporting the study results, interpretations, and conclusions. Although the participants are vulnerable, their wellbeing and safety were ensured through the entire interview; for example, they were allowed to stop the interview at any time or have a guardian present for comfort, and participants were able to exit the study at any time without penalty. All recordings were placed on a password-protected flash drive secured in a locked file cabinet in my home office where it was accessible only by me. Hardcopies of all information were protected the same way.

### **Summary**

The purpose of this qualitative study was to identify ADHD students' perspective of their academic and behavioral performance while receiving a school-based intervention (TDT). Vygotsky's (1978) theory of cognitive development described the use of a *more knowledgeable other* (MKO) in the *zone of proximal development* ZPD to improve their ability to learn, aligning with the method used by TDT programs. Semi-structured interviews were conducted utilizing in-depth questions to explore the students' perception of their experience with TDT. Future studies and development of school-based interventions can be improved by gaining the students' perception of their TDT experience.

## Chapter 4: Results

The purpose of this study was to explore the experience of TDT from the participants' perspectives. Public school students in fifth, sixth, and seventh grades diagnosed with ADHD were interviewed about their experiences with TDT and whether they thought it helped their academic and behavioral performance in the classroom setting. Vygotsky's (1978) theory of cognitive development guided my interpretation of the participants' experiences.

In this chapter, I provide a description of the setting of the study, the demographics of the participant pool, each participant, and the data collection and analysis process. Any necessary deviation from the planned recruitment strategy is explained, and any unexpected changes are described. I also discuss the findings related to the research question.

### **Setting**

I conducted this study in the Hampton Roads area of Virginia. All interviews were completed virtually using Google Duo conferencing software on a laptop to adhere to all COVID-19 guidelines at the time of the study. All interviews were conducted in my home office to maintain the participants' privacy and rights to confidentiality. With the interviews being conducted virtually, the participants were able to select their preferred, private location to complete them from. The participants were responsible for finding a secluded location, and I advised each of them to find a location that they felt the most comfortable and safe. I also advised the participants to complete the interviews in a place they were alone and behind closed doors so there were no other visible parties. No

conditions or changes in evidence at the time of the interviews could have impacted data collection or interpretation.

### **Demographics**

The sample comprised male and female participants between 12 and 14 years of age in the sixth, seventh, and eighth grades. Each participant had a primary diagnosis of ADHD, moderate to severe according to the American Psychiatric Association (2013). I recruited the participants using the flyer indicating the inclusion criteria and contact information. The flyer was posted at Keys to Success Family and Development Center, which had agreed to be a community partner for the study. There were no changes to the initial recruitment strategy of posting the flyers and word of mouth. After I posted the flyer and spoke to several staff members, the staff were able to provide the parents with flyers about the study. However, the staff and executive director were not notified if the parents they contacted allowed their children to participate in the study to ensure that participants' identities and decision to participate remained confidential.

The initial recruitment process was insufficient to recruit the required number of participants; therefore, to increase the sample size, I spoke to several Keys to Success staff members, informing them of the study and its purpose and handing them the flyer directly. Ultimately this increased the number of participants from one to eight, and each participant was able to give a quality, detailed description of their experience receiving TDT in the academic setting, allowing saturation to be achieved. Dibley (2011) noted that saturation is not based on the number of interviews conducted but on the data quality. Saturation is achieved after new participant's responses yield no new, unique

information. At that point, the flyers were removed from Keys to Success, and the study was closed to any additional participants. To protect their confidentiality, I created participant identification codes based on the order in which they consented to participate in the study (e.g., P1 was the first to consent). To obtain consent, each participant was informed of the study's purpose and their role as a participant before beginning the interview. The confidentiality process was also discussed, and I instructed each participant that their identity would be protected throughout the process. The participants were notified that their participation was voluntary and that they could cease participation at any time without penalty.

### **Brief Summaries of Participants**

P1 was a 12-year-old African American male diagnosed with severe ADHD, preparing to enter the seventh grade. At the time of the interview, the participant was not receiving TDT services because school was on summer break but had received TDT during the last school year, ending his sixth-grade year.

P2 was a 12-year-old African American male diagnosed with severe ADHD. He was preparing to enter the seventh grade. He received TDT services during the last school year and acknowledged that he will continue services once school resumes. At the time of the interview, the participant was not receiving TDT services because school was released for summer break.

P3 was a 14-year-old African American male diagnosed with severe ADHD. He recently completed the eighth grade and received TDT services during that time. At the

time of the interview, the participant was not receiving TDT services because school was released for summer break.

P4 was a 14-year-old African American female diagnosed with moderate ADHD who has recently completed the eighth grade. The participant acknowledged receiving TDT service during the most recent school year and the year prior. At the time of the interview, the participant was not receiving TDT services because school was released for summer break.

P5 was a 12-year-old African American female diagnosed with moderate ADHD. She was preparing to enter the seventh grade. The participant acknowledged receiving TDT services during the school year and believed she would continue to receive services once she returns to school. At the time of the interview, the participant was not receiving TDT services because school was released for summer break.

P6 was a 13-year-old African American male diagnosed with moderate ADHD. He was preparing to enter the seventh grade. The participant acknowledged receiving TDT services during his most recent school year and the year prior. At the time of the interview, the participant was not receiving TDT services because school was released for summer break.

P7 was a 14-year-old African American male diagnosed with moderate ADHD. He was preparing to enter the eighth grade, having recently completed the 7th grade. He acknowledged receiving TDT services during his most recent school year and would continue to receive services during the upcoming school year. At the time of the

interview, the participant was not receiving TDT services because school was released for summer break.

P8 was a 14-year-old African American male diagnosed with severe ADHD. He was preparing to enter the eighth grade. He acknowledged receiving TDT services during the most recent school year and the year prior. At the time of the interview, the participant was not receiving TDT services because school was released for summer break.

### **Data Collection**

Data were collected through virtual interviews conducted solely by me, using an interview guide I created for this study. Each interview took place at a location of the participant's discretion, and I was located in my office during the interviews. I audio recorded each of the interviews on a digital recording in a single session. All interviews were completed over a span of 2 and a half weeks. The interview times ranged from 15 to 20 minutes in length. I transcribed the digitally recorded interviews verbatim into individual Microsoft Word documents and proofread the documents multiple times against the original recordings to ensure accuracy. All identifying data were redacted to protect the participants' legal rights and uphold the importance of confidentiality. Each document was saved as a Word file using the participants' code as the document name. The document was then uploaded into NVivo for analysis purposes.

I downloaded the interviews into a password-protected OneDrive and then uploaded them into Word, utilizing the transcription option to convert them to text documents. The initial drafts were saved as rough copies of the recordings to my

password-protected OneDrive. All interviews were completed and transcribed to a text document, and each was saved to OneDrive and on my laptop, which is also password protected. Each Word document was proofread several times while the audio files were playing. All errors were corrected, resulting in a verbatim transcription of the interviews. After the transcriptions were completed, all recordings were stored in a locked file cabinet and saved to my password-protected OneDrive. After I reviewed the transcribed Word documents to ensure accuracy, I created a copy of the document to redact all participant identifiers, including their names. The redacted documents were created for member checking and coding purposes. Member checking is a powerful strategy, requiring thoughtful and considered integration to support the research project's goals (Motulsky, 2021). In this study, member checking was completed during the interview process and after the interviews were transcribed, which is discussed further later in the chapter.

### **Data Analysis**

I analyzed the collected data using the thematic analysis method. The analysis was completed manually using NVivo software, a qualitative analysis system. More specifically, my analysis process was based on the six steps of thematic analysis identified by Braun and Clarke (2006): familiarization with data, code generation, themes searching, review of themes, definition, and naming of themes, and generation of a report.

### **Familiarization of Data**

In this step, the researcher seeks to gain insight into the data collected, which involves reviewing all the transcripts and listening to the recorded interviews to ensure that participant responses are clearly understood. In my case, I read and re-read the eight transcripts three times, comparing the content in the transcripts with the recorded interviews to ensure that the transcripts' content matched that of the recordings. As I read the transcripts and listened to the recordings, I made rough notes and wrote down early impressions.

### **Generating Codes**

Generating codes involved organizing the data in a systematic and meaningful way. Coding helps reduce the data into small chunks of meaning (Braun & Clarke, 2006). Utilizing the open-coding method, I generated the initial codes using quotes from the transcriptions. After reading and analyzing the data, the information was separated into sections based on the relationship between the interview questions and the participant's response. Pieces of data relating to the same subject were listed under the same code. For example, I grouped the interview questions that asked about the participants' beliefs about their academic performance before or after receiving a TDT counselor in the same code. I worked through each participant's transcript, coding every detail of the data by separating each interview question and the participant's response to help me understand how participants diagnosed with ADHD perceived their experience while receiving therapeutic day treatment services. This was continued until saturation was achieved, and no additional impressions were identified. Through this process, I identified five codes.

## Categories

Although creating categories is not a part of the process identified by Braun and Clarke (2006), I determined that categories would be essential. Categories are an intermediate step between identifying codes and naming themes, created as the researcher consolidates the many codes into conceptually similar categories from which the themes ultimately emerge (Morse, 2008). After reviewing the initial codes, I categorized the patterns identified within the data. Saldana (2013) noted that there are often repetitive action patterns within human behavior. While reviewing the data, I began to group the codes into different categories by identifying similar words and/or phrases repeated by the participants. Williams and Moser (2019) identified that the coding strategy enables a cyclical and evolving data loop where the researcher constantly compares and applies data reduction and consolidating techniques. This often leads to the development of multiple codes; however, after identifying its central concept for this study, each category only had one code aligned with it. The categories and corresponding codes can be found in Table 1, which identifies each category, the corresponding code, interview questions, and the participant's response. Identifying the interview question and the participants' responses offers an explanation of how the categories and codes were generated. Ellis (2018) maintained that creating codes and categories is a method that allows a broad portion of the data to be consolidated into segments that can be easily summarized.

**Table 1***Categories and Corresponding Codes*

Categories	Open code	Interview question	Participants' responses
Academic performance: Negative or positive grade performance	Grades	<p>Researcher: "Like, how would you say your grades and stuff were before you got a counselor?"</p> <p>Researcher: "After you received the day treatment counselor, what would you say your grades were like in school? Your academic performance in school since receiving a counselor?"</p>	<p>Participant 2: "I was not doing good. Like probably Ds and Es."</p> <p>Participant 3: It was OK, but not that great. Like Cs, and Ds</p> <p>Participant 4: "Umm good. Oh umm As and Bs."</p> <p>Participant 6: It did kind of improve, you know I would say it was pretty average. You know Cs and Ds, but you know then afterward she came along, you know, Ah, my grades improved a little bit, you know. I be getting Bs and As now. So you know it did improve.</p> <p>Participant 7: "uhh like below Cs."</p> <p>Participant 8: "I mean, I was doing OK. But it wasn't like I was getting As or Bs. Oh umm about Cs some Ds</p> <p>Participant 2: "I got. I got Bs, Cs"</p> <p>Participant 3: "Yeah, she worked with me with that too, so my grades are better."</p> <p>Participant 4: "Uhh four As and two Bs You said you got more As, oh OK, cool."</p> <p>Participant 6: "Uh, with counselors you know if I need help, I'd go to her you know she's helped me out you know and also, uh you know with the behavior and also you know got me a better connection with my teacher. So you know I was also able to get more help from my teachers as well, so you know. It did boost my grades. You know, uh, getting better grades, making honor roll, you know. So, it was definitely an overall boost."</p> <p>Participant 7: "Yeah, my grade really improved, and I wasn't talking back as much to my teachers or nothing like that."</p>

Categories	Open code	Interview question	Participants' responses
Behavioral performance	Behavior	<p>Researcher: "Before you started day treatment. Like how was your behavior in school like how we behave in school?"</p> <p>Researcher: "Before you started day treatment, like how was your behavior in school how did you behave in school?"</p>	<p>Participant 8: "I started getting Bs and As"</p> <p>Participant 1: "Bad. Was getting in trouble, where we get suspended, where we getting in fights, or anything like that. Fights... I was getting into a lot of fights"</p> <p>Participant 2: "Ohummm I talked a lot. Like get in trouble a lot"</p> <p>Participant 3: "Well, I was kind of like acting out. Well just, I don't know being in class. Uhm, screaming and yelling at teachers and stuff and hanging around the wrong crowd."</p> <p>Participant 4: "Umm I was fighting."</p> <p>Participant 5: "It was a little bit bad. Talking, uhhh not doing my work."</p> <p>Participant 6: "Uhh I would, I would say I wasn't the best participant you know. I always try to be on good behavior, but you know here and there. I'd always, you know, mess up, you know, talk back, you know, get into it with other participants you know fighting and such."</p> <p>Participant 7: "Umm not so good. It was not so good, like fights and stuff."</p> <p>Participant 1: "Oooh, it was good."</p> <p>Participant 2: "Yeah, I don't get in trouble no more, I do my work, I don't get in trouble and I communicate all my teachers."</p> <p>Participant 3 "Yes, it is way much is way much better. I get less with acting out and more of listening."</p> <p>Participant 4: "Not fighting as much."</p> <p>Participant 5: "Yeah it helped with my behavior, grades and some issues I got."</p> <p>Participant 6: "Uh, with counselors you know if I need help, I'd go to her you know she's helped</p>

Categories	Open code	Interview question	Participants' responses
			me out you know and also, uh you know with the behavior and also you know got me a better connection with my teacher. So, you know, I was also able to get more help from my teachers as well, so you know. It did boost my grades. You know, uh, getting better grades, making honor roll, you know. So, it was definitely an overall boost.”
			Participant 7: “I found it helpful for me, they helped me focus more, the mentors that helped me focus more in school, my grades improved, and my behavior improved too.”
		Researcher: “OK, so are we not fighting as much but we're still fighting just not the same amount?”	Participant 8: Oh, like I was still kind of talkative, but it's not like how it was before. So, it did get better.
Interactions with TDT counselor	Relationship with counselors	Researcher: “Once you started once you started day treatment. Uhm, what is yours? What was your relationship like with your day treatment counselor? Did you like them? Did you not like them?”	Participant 1: “I liked them. Some of them I liked them.”
			Participant 2: “Oh, it's fine like. Yeah he teaches about things. Things like help with schoolwork.”
			Participant 3: “So we get along. We get along when we're together. We have conversations about what is bothering me.”
			Participant 4: “Yea it was alright. He just like come help me and stuff”
			Participant 5: "We get along well. Like, we be joking."
			Participant 6: “Uh, she was cool. You know, I didn't really see her as a counselor though I saw her as a helpful friend. You know we had a cool a nice bond.”
			Participant 7: “The one at school, oh uhh we got along yeah we got along, yeah.”
Negative impact of TDT	Challenges/obstacles	Researcher: “Since you, since receiving the day treatment services, have you had any troubles or difficulties? While	Participant 8: “It was good” Participant 2: “No, maam.”
			Participant 3: “No, not really.”

Categories	Open code	Interview question	Participants' responses
		receiving the day treatment.”	<p>Participant 6: “Uh, you know from here and there it, you know the few people who picked on me and was like oh, you know, he's slow, you know he needs someone else to come to help him. But other than that, there wasn't much, you know so.”</p> <p>Participant 7: “It seemed to help, I still got suspended but not as much.”</p> <p>Participant 8:”No, not really.”</p>
Positive impact of TDT	Experience with TDT	<p>Researcher: “Tell me what would you say your overall experience was with having day treatment?”</p> <p>Researcher: “is it something that you feel like has helped you or not really helped you?”</p> <p>Researcher: “Did you like receiving day treatment or no?”</p> <p>Researcher: “Do TDT counselor help you in any way?”</p>	<p>Participant 2: “It's good, it's yeah it's good. Its help me”</p> <p>Participant 3: “It was good. It still is good.”</p> <p>Participant 4: “Good,”</p> <p>Participant 4: “Uhh helped”</p> <p>Participant 5: “I like it. I mean it has helped me. Yeah it helped with my behavior, grades and some issues I got.”</p> <p>Participant 6: “The overall I liked it for the most part. It was a really nice. You know it really helped me overall. You know with school wise, academic wise and also my behaviors. So it was just overall pretty good.”</p> <p>Participant 7: “I found it helpful for me, they helped me focus more, the mentors that helped me focus more in school, my grades improved, and my behavior improved too.”</p> <p>Participant 8: “yeah”</p> <p>Participant 5: “Yeah they help me.”</p> <p>Participant 7: “Yeah yeah, they help me.”</p> <p>Participant 1: “Did they offer you any assistance with that? Yes”</p>

## Defining Themes

After reviewing the transcribed data, I conceptualized the codes and categories by identifying the similarities, allowing themes to emerge. Castleberry and Nolen (2018) expressed that themes are necessary to capture the essence of participants' experience in relation to the research question, patterned responses, and meaning within the data set. Table 1 lists the categories and codes as they function to develop each theme, while Table 2 provides participant responses as evidence that reflects the development of each theme. Ryan and Bernard (2018) stated that themes are created by reviewing the literature with a variety of techniques to complete the process, including but not limited to an analysis of the words, reading of larger blocks of text, intentional analysis of linguistic features, and physical manipulation of texts. In this study, I used two of these methods. First, I created the themes by reviewing a larger block of the text and highlighting word repetitions, key indigenous terms, and keywords in the context. Then, I read through the codes closely, examining the relationships among the categories, open codes, interview questions, and the participants' responses, allowing themes to emerge as they related to the theoretical framework that guided this study.

Vygotsky's (1978) theory of cognitive development asserts that a child's interaction with a *more knowledgeable other* (MKO) can alter their cognitive development. For example, the themes Impacts of TDT on Academic Performance, Impacts on Behavior Performance, and Impacts of TDT on Relationship support Vygotsky's (1978) theory as they describe the adolescent's cognitive responsiveness to their social environment. The encounters that students had with the TDT counselors

mirrored his theory of social development. Vygotsky (1978) maintained that the development of knowledge is socially mediated, requiring the interaction of a more knowledgeable other (MKO). The TDT counselor operated as the more knowledgeable other (MKO) in the zone of proximity. This interaction allows the student to advance in learning a new task and potentially increase their performance level (Beloglovsky & Daly, 2015). Based on this framework and research question, four themes emerged. Table 4.2 shows the preliminary themes along with the categories and codes conceptually linked with each of them.

### **Review Themes**

In this step, I reviewed the preliminary themes identified in Table 4.2. The review allowed each code and the phrases or quotations associated with it to be compared, ensuring that the emergent theme was justified. Morgan (2018) states themes are the typical format for reporting results; therefore, the need to be clear and concise is essential. It also allowed the number of themes to be reduced by reviewing and consolidating each category cluster. Originally, I created five themes but after reviewing them determined that some could be combined. For example, the theme of positive academic performance and negative academic performance was combined into *academic performance*. Thomas and Harden (2008) acknowledge the need to go beyond the content and create descriptive and analytical themes in a rigorous way, facilitating transparency in reporting. To determine if the preliminary themes were useful and accurately represented, I returned to the transcribed data and compared my themes with the code and

category clusters, reviewing for similar phrases and repeated words. I also reviewed the foundational framework and ensured that it aligned with Vygotsky's (1978) theory.

**Table 2**

*Preliminary Themes*

Theme	Categories	Codes
Impacts of TDT on academic performance	Academic performance: Negative or positive grade performance	Grades
Impacts of TDT on behavior	Behavior performance	Behaviors
Impacts of TDT on relationships	Interactions with TDT counselor	Relationship, counselor help, experience with TDT
TDT program obstacles/challenges	Negative impact of TDT Positive impact of TDT	Challenges/obstacles

**Evidence of Trustworthiness**

**Member Checking**

Member checking allows the participants to review their transcribed interviews to confirm their accuracy and ensure that only their experience is represented without any research bias; they can request the removal of any inaccurate and/or identifying information (Harper & Cole, 2012). At the conclusion of each interview, I debriefed the participants, ensuring they understood and were comfortable with the questions and the process. After all interviews were transcribed, I emailed the transcriptions to participants, requesting that they review it for accuracy and to indicate if any corrections were needed. Participants made no requests for corrections.

**Validity**

Thakur and Chetty (2020) recognize that validity establishes the soundness of the methodology, sampling process, analysis, and conclusion of the study. A qualitative method was chosen to share the experience of those who receive TDT. Several studies have been completed on TDT services, sharing the parent and teachers' perspectives; however, few studies were sharing the student's perspectives. Sibley et al. (2004) maintained that the student's perspective was needed as the impact of the school-based interventions continues to be explored. The qualitative approach allowed a deeper view of the school-based study allowing new thoughts and views to be discovered.

According to Creswell and Poth (2013), validation in a qualitative study is needed to assess the accuracy and emphasize a process that is to be carried out throughout the entire study. Directly after the initial interview, the participants were also debriefed to ensure they were not distressed from expressing their experiences. This added 2-5 minutes to each interview. The debriefing portion also allowed the participants to confirm their understanding of the interview questions. The interviews were also recorded, transcribed, and reviewed multiple times throughout the coding process, ensuring an in-depth data analysis. For this study, the steps listed above were essential to ensuring sufficient attention to the process and product, contributing to the validity and, therefore, quality of this research (Whittemore et al., 2001)

**Transferability**

Transferability is the degree to which the results of qualitative research can be transferred to other contexts, settings, and populations (Trochim, 2022). Lincoln and

Guba (1985) state that the researcher must provide a database, detailing all aspects of the research process, that makes transferability judgments possible. Connections to the cultural and social contexts that surround the data must be identified. This study explored the experiences of participants diagnosed with ADHD who received therapeutic day treatment services in the school setting. The participants were eight students from 5<sup>th</sup> to 8<sup>th</sup> grade who attended several different schools in the Hampton Roads, VA, area, limiting the generalizability of the findings to participants in the same grades with the same medical diagnosis who experienced therapeutic day treatment in their school setting.

### **Dependability and Confirmability**

To ensure dependability and confirmability, a rich accounting of data collection, analysis, reporting, and interpretation must be documented, so that anyone who reviews the results can confirm its accuracy and arrive at similar interpretations (Nassaji, 2020). The use of an audit trail established dependability and confirmability, which I created by recording and rationalizing the steps taken during the data coding and analysis process (Nassaii, 2020). This was done using the NVivo software and included the transcripts, codes, and memos. The audit trail can be accessed by going into the software, opening the file created for the participants, and following each step completed. The audio-recorded interviews were also included in the audit trail. Interview protocols were the same for all participants, who were also debriefed in the same manner directly following their interview. My reactions to the interviews were documented in a reflexive journal in an effort to bracket any biases and/or preconceptions that I might have held. The journal

was maintained throughout the study, recording my reaction to the interviews and analysis process in an effort to guard against bias. This step is necessary in efforts to achieve researcher reflexivity, allowing the researcher to place themselves in the positive to process and offset any biases or assumptions (Billups, 2021). All methods of data collection followed the protocol approved for this study design.

## **Results**

### **Theme 1: Promoting Academic Performance**

The review of the findings showed that participants diagnosed with attention deficit hyperactive disorder perceive their experiences of participating in the TDT program as vital to their academic performance. More specifically, the TDT program helps the participants to get better grades. For example, participant 2 shared that the TDT program helped her improve in academics. He noted that before the TDT program, his grades were not good. Specifically, before the TDT program, his grades were Ds and Es, but after receiving the TDT, his grades improved to Bs and Cs. This perception was shared by all participants.

Participant 7: "Yeah, my grade really improved, and I wasn't talking back as much to my teachers or anything like that."

Participant 8: "I started getting Bs and As."

Additionally, Participant 6 acknowledged that the TDT counselor helped him to establish a better connection with his teacher, resulting in more teacher assistance and improved grades.

Participant 6: Uh, with counselors you know if I need help, I'd go to her you know she's helped me out you know and also, uh you know with the behavior and also you know got me a better connection with my teacher. So, you know, I was also able to get more help from my teachers as well, so you know. It did boost my grades. You know, uh, getting better grades, making honor roll, you know. So, it was definitely an overall boost.

Furthermore, the findings suggested that participants diagnosed with ADHD perceive TDT programs as helpful. Seven out of eight participants involved in the current study shared that the program was good and it was helpful to them. Participant 5 shared that the TDT program helped him with behaviors and grades improvement. Similarly, participant 6 reported that TDT helped him improve in academics and abandon bad behaviors.

Participant 6: The overall I liked it for the most part. It was a really nice. You know it really helped me overall. You know with school wise, academic wise and also behavioral. So it was just overall pretty good.

Participant 7 shared that the TDT mentors helped him to focus more in school, and his grades and behaviors improved. Participant 7: "I found it helpful for me, they helped me focus more, the mentors that helped me focus more in school, my grades improved, and my behavior improved too."

## **Theme 2: Promoting Good Behavior**

The review of the findings revealed that participants perceived that the TDT program promoted good behavior. All participants agreed that the TDT program helped them to abandon bad behaviors and embrace good behaviors. For example, Participant 4

noted that before he started the day treatment, he would get into fights with other participants. After receiving the treatment, the fighting behavior declined. On the other hand, participant 2 shared that before he started the day treatment, he talked a lot and he got into trouble a lot. However, after receiving the day treatment, he no longer gets in trouble and he did not talk a lot. Other participants with similar views about the experience of TDT with regard to participants' behavior include:

Participant 7: "I found it helpful for me, they helped me focus more, the mentors that helped me focus more in school, my grades improved, and my behavior improved too."

Participant 5: "Yeah it helped with my behavior, grades and some issues I got."

Participant 3: "Yes, it is way much is way much better. I get less with acting out and more of listening."

### **Theme 3: TDT Counselor as Helpful Friend**

The review of the findings showed that for participants diagnosed with ADHD, the TDT counselors played a vital role in their experience of participating in that program. The participants viewed the counselors as strategic factors in their school life. Participant 6 shared that he had a nice bond with his counselor, viewing her as a counselor and helpful friend. Additionally, participant 3 shared that she got along well with the counselor and shared with the counselor what is bothering her. Participants 2, 4, and 5 also shared the opinion that TDT counselors are helpful friends who help ADHD participants cope and enjoy the school life.

P2: "Oh, it's fine like. Yeah he teaches about things. Things like help with schoolwork."

P4: "Yeah it was all right. He just like come help me and stuff."

P5: "We get along well. Like, we be joking."

#### **Theme 4: Challenges in TDT Program**

The review of the findings showed that participants diagnosed with ADHD perceived the TDT program as smooth. Seven out of eight participants reported that since they started receiving the day treatment services, they have not experienced problems or hardships from participating in the program, such as bullying or aggressive behaviors. Six out of eight participants shared that they have never experienced hardships while receiving day treatment. Participant 6 shared that he had been teased and bullied by his peers and some were reluctant to interact with him due to him participating in therapeutic day treatment, citing that he is slow.

P6: Uh, you know from here and there it, you know the few people who picked on me and was like oh, you know, he's slow, you know he needs someone else to come to help him. But other than that, there wasn't much, you know so.

#### **Summary**

As previously stated, the purpose of this study is to explore the experiences of participants who receive TDT services. This chapter has identified the data collection process, the creation and review of its themes, evidence of trustworthiness, and the results. Chapter 5 will include the interpretation of the results influenced by the theoretical framework that structures the study. The limitations and strengths will also be

reviewed, and recommendations for future research will be suggested. The study's impact on social change will be presented at the end of the chapter.

## Chapter 5: Discussion, Conclusions, and Recommendations

In this study, I explored the experiences of ADHD students who have received TDT services. The study addressed a gap in the literature by providing insight into how the school-based service known as TDT is perceived by ADHD students. Sibley et al. (2004) acknowledged that teachers and parents find TDT adequate; however, the student's perspective is necessary to gain a deeper understanding of this school-based service.

A qualitative approach was necessary to capture the students' experiences with TDT. I used a general qualitative approach to understand how the students make meaning of their lived experiences. A general qualitative approach study gives the researcher and readers a glimpse into the essence of participants' lived experiences (Bryne, 2001). Data were collected through semistructured, open-ended interview questions.

### **Summary of Key Findings**

Four key themes emerged from the data. The first theme to emerge was promoting academic performance. Most students acknowledged that their participation in the TDT program supported their academic performance. The second theme was promoting good behavior. After participating in the program, the students perceived that the TDT program promoted good behavior. All participants agreed that the TDT program helped them identify the importance of displaying positive behaviors instead of negative behaviors in the academic setting. The third theme to emerge was the TDT counselor becoming a helping agent or friend to the student. In reviewing the findings, all students acknowledged that their TDT counselor's assistance was a strategic and essential factor

in their school performance. The students acknowledged that the counselor allowed them to have an outlet as well as learn ways to cope with their diagnosis and find enjoyment in their school life. The final emergent theme was challenges in the TDT program, with most participants reporting no challenges while they took part in the day treatment program. All participants valued their participation in the TDT program and found it to be an asset. All participants also valued their relationship with the counselor and found their support to be an asset.

### **Interpretation of the Findings**

I explored students' perceptions of TDT in the classroom by examining the participants' firsthand experiences. Using Vygotsky's (1978) theory of social development as a guiding framework, the students' participation in the TDT program was explored from the participants' perceptions of their interactions with the TDT counselor mirroring the MKO. I organized my interpretation of findings related to the emergent themes.

#### **Theme 1: Promoting Academic Performance**

Abenavoli and Greenburg (2016) suggested that the symptoms of ADHD have a crippling impact on the academic performance of students with ADHD and their emotional readiness in the academic setting. Wegmann et al. (2017) also found that the inattentiveness, impulsivity, and hyperactivity associated with ADHD have a negative impact on a student's academic success. The findings from both studies and those from the current study indicated that ADHD-diagnosed students, who acknowledged having academic difficulty, reported that participating in TDT was vital to their improved

academic performance. All participants in the current study acknowledged a positive impact on their academic performance, with some noting a specific grade increase. For example, P6 stated, “ It did boost my grades. You know, uh, getting better grades, making honor roll, you know, it was definitely an overall boost.” P7 noted their progress, stating, “Yeah, my grades really improved, and I wasn’t talking back as much to my teachers or nothing like that.” P2 stated, “before receiving a counselor, I was not doing good, I was probably getting Ds and Es.” After receiving a TDT counselor, P2 stated, “I got Bs and Cs.” P3 stated that before they received TDT, their grades were “Okay, like Cs and Ds.” After receiving a TDT counselor, P3 stated, "so my grades are better.”

Additionally, P6 acknowledged that the TDT counselor helped him to establish a better connection with his teacher, resulting in more teacher assistance and improved grades. This participant’s response is consistent with Topkin et al. (2015) and Moore et al. (2017) who found that while the teacher-ADHD student connection is often poor, the TDT services improved this relationship. Findings from the current study also align with Geng (2011) who indicated that receiving individualized support, equivalent to an MKO, positively impacts the academic performance of students with ADHD. Participants in the current study reported no negative impact on their academic performance after receiving TDT services.

## **Theme 2: Promoting Good Behavior**

In addition to poor academic performance, Sibley et al. (2014) found that ADHD negatively impacted students’ classroom behavior. Findings from the current study aligned with Sibley et al., such that participants acknowledged behavioral problems

before participating in TDT. For example, P2 stated, “I talked a lot. Like, get in trouble a lot.” P3 stated, “Well, I was kind of like acting out. Well, just... screaming and yelling at teachers and stuff and hanging around the wrong crowd.” P6 shared that they would “always, you know, mess up, you know, talk back, you know, get into it with other students.” Some participants acknowledged that they had engaged in multiple physical altercations, resulting in suspension. These findings align with Barkley et. (2006) who reported that students with ADHD were suspended multiple times for disciplinary incidents. These findings also align with Palmu et al. (2018) who identified that students with ADHD displayed negative external behaviors, such as opposition, misconduct, aggression, and inattentiveness, impacting their ability to perform in the academic setting. P1 expressed that prior to TDT, their behaviors were “bad...I was getting into many fights.” P4 stated, “umm, I was fighting.” P7 identified their behavior as “It was not so good, like fights and stuff.”

After receiving a TDT counselor operating as the MKO, the participants in the current study perceived that the TDT program promoted good behavior, supporting the findings of Geng (2011) who reported that students with ADHD who receive positive one-on-one support showed an improvement in their behavioral outcomes. Participants in the current study acknowledged that while participating in the program, they could decrease or abandon negative behaviors and embrace positive ones. For example, P2 expressed that after participating in the program, “I don’t get in trouble no more, I do my work, I don’t get in trouble.” P3 stated that their behavior “is way much better. I get less with acting out and more of listening.” P6 acknowledged, “with counselors, you know, if

I need help, I'd go to her, you know she's helped me out you know and also, uh you know with the behaviors." P7 also stated that they saw an improvement in their behaviors, saying, "I found it helpful for me, they helped me focus more, the mentors that helped me focus more in school...and my behavior improved too."

### **Theme 3: TDT Counselor as Helpful Friend**

Ziomek-Daigle (2016) found that school-based mental health professionals who form partnerships and utilize evidence-based practices in the school setting positively impacted students academically and behaviorally. Consistent with those findings, the participants in the current study acknowledged that receiving the support of a school-based mental health professional positively impacted their performance. All participants in this study reported a positive relationship with their TDT counselor, viewing them as supportive and as strategic factors in their school life. The findings of this study align with those of Cardimona (2018) who suggested that interaction with the MKO is a mechanism for the student's individual development, allowing them to progress from novice to expert. The current study findings also align with Mcleod (2015) who found that cognitive development is enhanced through the support of an MKO by offering insight as the student and adult co-construct knowledge. While the TDT counselor operating as the MKO for the student is not a dynamic that has been previously highlighted in the literature, the findings from the current study suggest that the student-MKO interaction had a positive impact.

For example, when asked about the relationship with his counselor, P6 stated, "Uh, she was cool. You know, I didn't really see her as a counselor though I saw her as a

helpful friend. You know, we had a cool a, nice bond.” P2 acknowledged that her TDT counselor was able to “teach me about things. Things like help with schoolwork.” P4 also maintained that their counselor was a support to them, stating “He would just like come to help me and stuff.” P5 reported having a positive rapport with their TDT counselor as well, stating “We get along well, we are always joking.”

#### **Theme 4: Challenges in the TDT Program**

From the interview question, “While receiving day treatment services, have you had any troubles or difficulties?,” the theme challenges in the TDT program emerged. This question allowed the participants to identify negative or positive experiences while participating in the TDT program, creating two categories. The findings showed that participants diagnosed with ADHD perceived the TDT program as smooth, identifying few to no challenges within the program. The results also showed that most participants did not experience any hardships while participating. Seven out of eight participants reported that since they started receiving the day treatment services, they had not experienced troubles or hardships from participating in the program, such as bullying or aggressive behaviors. Six out of eight participants shared that they have never experienced hardships while receiving day treatment. For example, P7 stated that the program had a positive impact, saying, “It seemed to help; I still got suspended but not as much.” After being asked if they experienced hardships, P2, P3, and P8 each stated, “No, not really.” However, one participant (P6) shared that he had been teased and bullied by his peers, with some reluctant to interact with him because he participated in TDT, citing that he is slow:

Uh, you know, from here and there it, you know, the few people who picked on me and was like oh, you know, he's slow, you know he needs someone else to come to help him. But other than that, there wasn't much, you know so.

### **Limitations of the Study**

I identified several limitations in this study. Although a qualitative study offers insights into the essence of participants' lived experience, the findings from a small sample, characteristic of qualitative research, apply only to those few participants. Vasileiou et al. (2018) maintained that a smaller sample size allows for a more introspective view; however, that view reflects only a limited perspective. Because of COVID-19 restrictions, I conducted the interviews for this study virtually. Conducting interviews with adolescents virtually limited my ability to clearly hear their responses; frequently, the participant was asked to repeat the answer, interrupting their concentration and the flow of the conversation. It was also impossible to ensure that the participants were in a safe place with the ability to focus on the interview. The auditory limitations of the virtual platform, coupled with the inattentiveness of the students with ADHD, made it challenging to keep the participants engaged throughout the interview process. Most participants gave minimal answers, although they were asked to elaborate.

### **Recommendations**

Findings from this study suggest several recommendations to expand research on TDT, starting with a replication study that uses in-person rather than virtual interviews. Due to the impairments of ADHD, multiple participants were easily distracted while completing a virtual interview; an in-person interview would allow the researcher a better

opportunity to keep the student engaged in the process. I also recommend that the study be replicated to determine if ADHD-diagnosed students experience TDT in different settings, such as students from a rural or urban academic setting. Lastly, the findings indicate a need for further research to explore the student-teacher relationship from the perspective of students with ADHD who participate in a TDT program because some participants in the current study acknowledged that taking part in the TDT program assisted them in improving their relationships with their teachers. Additional insight in this area would assist in improving the teacher-TDT student relationship and enhance the academic experience for all TDT students.

### **Implications for Positive Social Change**

This study has multiple implications for positive social change. For example, given the academic and behavioral problems experienced by ADHD-diagnosed students, the positive perception of the TDT experience could have a positive impact on their academic performance. Most participants shared that their positive TDT experience motivated them to work harder in school. By improving their behavioral and, in turn, academic performance, the student is more likely to complete school and qualify for good paying jobs (Chetty et al., 2011). Research has shown that students who display problematic classroom behaviors resulting in poor academic performance are more likely to drop out of school, experience poverty, and participate in criminal behavior (Christeson, 2008). Although the participants in the current study were adolescents, each student could articulate how the program's support enhanced their academic performance and increased their sense of self-efficacy, which were made possible by working with a

school-based mental health professional, such as a TDT counselor. By improving their educational experience, the student is more likely to graduate and have a positive impact on society.

Additionally, participants perceived an improvement in their classroom behavior, allowing them to build a positive relationship with their TDT counselor and teacher while participating in the program. Prior to participating in TDT, participants acknowledged disrupting the classroom setting, engaging in physical altercations with peers, and disrespecting the administration. Ziomek-Daigle (2016) indicated that students with poor academic performance and harmful behaviors are at a higher risk of dropping out of school and negatively impacting their community. Results from the current study can inform school administrators and community partners of the challenges faced by students with ADHD and the potential for successful outcomes when they are provided with adequate support. These findings could also educate school administrators about the positive impact supportive relationships with school personnel, such as a TDT counselor, has on students. Each participant expressed how their counselor was an asset to their academic experience, referring to them as supportive friends.

### **Conclusion**

The purpose of this study was to explore the experience of students with ADHD who receive TDT services from the student's perspective. Sibley et al. (2014) noted the lack of the student's perspective on the topic as a gap in the literature because previous studies only explored the experiences of teachers and parents. This study addressed that gap by capturing the students' voices and noting their experience. I employed a general

qualitative approach with semi structured interviews to collect data from the fifth-through eighth-grade students with ADHD. Using Vygotsky's (1978) theory of cognitive development as the lens through which to view the data, four themes emerged from analysis that addressed the research question. Participants overwhelmingly expressed the positive impact TDT had on their behavioral and academic performance. Participants also specifically reported that the support of their TDT counselor was an asset that contributed to their success. The findings of this study align with the research of Ziomek-Daigle (2016) who indicated that school-based mental-health professionals effectively support the student's behavioral and academic needs by offering interventions necessary to achieve positive change. Overall, the findings of this study suggest that the TDT program, by supporting students behaviorally, academically, and socially, has the potential to effect positive social change through motivating ADHA-diagnosed students to prioritize schoolwork and, ultimately, graduate.

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## Appendix: Interview Questions

1. How do you feel about your academic performance?
2. How do you behave in the classroom?
3. How is your relationship with your teachers?
4. Please describe a typical school day for you.
5. What is/was the relationship with your TDT counselor like?
6. Describe some of the obstacles you have faced while receiving TDT services.
7. What are some changes you have experienced in your classroom behavior since receiving therapeutic day treatment?
8. What are some of the changes you have experienced in your academic performance since receiving therapeutic day treatment?