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The Effectiveness of Promoting Alternative Thinking Strategies (PATHS) When Used Once per Week in Therapeutic Day Treatment

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This is to certify that the doctoral dissertation by

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Abstract

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by

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MS, Walden University, 2010

BS, Cal Poly Pomona, 2002

Proposal Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Promoting Alternative Thinking Strategies (PATHS) is an intervention program for children with behavioral and emotional deficits, designed for use, and shown to be effective when used in the classroom a minimum of 3 times per week. However, in some settings, as in the current study, PATHS is being used just once per week. The purpose of this quantitative study was to determine whether PATHS was beneficial in helping elementary school aged children improve their behavioral and emotional health when implemented once per week in a group therapy setting. PATHS was developed based on cognitive behavioral theory, which focuses on improving internalizing symptoms of mental health disorders (thoughts) as well as the externalizing symptoms (behaviors). A one-way, repeated measures ANOVA was utilized to analyze archival data of 193 scores, collected over a single school year. Results indicated that elementary school aged children who received PATHS once per week in a group setting showed a decrease in aggression and disruptive behaviors, and an increase in concentration and attention as well as social and emotional competence. Social change implications could involve the results of the study informing how we might promote overall emotional and behavioral well-being in children. At the organizational level, the expansion of the use of PATHS at reduced costs and time within other settings will extend these benefits to more children with behavioral and emotional deficits. Future studies are suggested to examine further the effectiveness of PATHS when implemented in other programs and alternative ways.

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Dedication

This research is dedicated to the therapeutic day treatment program of Central Virginia and the PATHS developers.

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I am thankful for the prayers and confidence of my husband, friends, and family. They pushed me to get my dissertation completed, and they saw in me something I did not see in myself when first starting the PhD process. I am thankful for my husband who stands by my side even through the most stressful days and continues to encourage me to get things done. All of my thanks go to God who gave me the strength to get through this time and the confidence to take this step in my academic and professional life.

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Chapter 1: Introduction to the Study

Teachers in general education and special education are not trained appropriately to help children in schools who display disruptive behaviors and show emotional instabilities (DuPaul & Carlson, 2005). Children displaying disruptive behaviors and/or suffering from emotional instabilities have difficulties with functioning appropriately in the school setting (Jerrott, Clark, & Fearon, 2010). Because of this, therapeutic day treatment services are being implemented in schools across the United States to help children who are suffering from both internalizing and externalizing mental health disordes. Therapeutic day treatment uses behavioral and counseling interventions to help decrease the negative behaviors expressed in school (Abraham & Michie, 2008).

Therapeutic day treatment is considered a partial hospitalization service that lasts 5-6 hours throughout the school day (Hicks, Munger, & Education & Treatment of Children 1990). Therapeutic day treatment is intended to help children and adolescents who have been diagnosed with a mental health disorder, usually leading to symptoms of disruptive behaviors in the classroom (Jerrott et al., 2010). Mental health professionals work in the classroom setting or in an alternative school placement and use therapeutic behavioral interventions to assist children with changing negative behaviors (Abraham & Michie, 2008).

Promoting Alternative Thinking Strategies (PATHS) is an evidence-based curriculum that has been used within some therapeutic day teatment programs. Numerous research studies since the 1980s have been conducted on this curriculum (Greenberg & Kusche, 2006). It has been shown to help children gain emotional stability and decrease

problematic behaviors when used as intended, a minimum of three times per week for 30 minutes in the classroom setting (Kam, Greenberg, & Kusche, 2004). Previous research has shown PATHS to be a preventative tool that helps children gain emotional and social competence while also reducing maladaptive behaviors (Kam et al., 2004). Different characteristics have been considered in studies on the effectiveness of PATHS (e.g., poverty level, base line of behaviors, and gender), but different amounts of time (below the minimum) have not been considered (Conduct Problems Prevention Group, 1999).

Preceding research has shown PATHS to be beneficial when used in the classroom a minimum of three times per week (Kam et al., 2004). One of the factors behind PATHS being so effective is the idea that interventions need to take place for all students in order to be the most beneficial (Greenberg, Weissbeg, O'Brien, Zins, Fredericks, Resnik, & Elias, 2003). This occurs with PATHS being taught in the classroom, by teachers, to the entire class. When being implemented as a therapeutic day treatment intervention in this research, it took place in a group therapy setting and only the children enrolled in the therapeutic day treatment program received the service, the entire classroom did not. Children who received therapeutic day treatment services were removed from their regular class setting once a week for group therapy where the PATHS intervention was implemented.

If findings from my study indicate that PATHS is beneficial in helping children gain emotional and behavioral competence when implemented only once per week, more children will be able to be served through this program. There are therapeutic day treatment programs throughout the United States that could implement PATHS as an

intervention. If the same benefits were seen using PATHS once a week in conjunction with a day treatment program, other programs could use this curriculum saving dollars and group time. PATHS trainers could be made aware of different implementation strategies used by other therapeutic day treatment programs interested in the curriculum.

Chapter 1 presents the background of PATHS, the problem statement and purpose of the study, and the research questions and hypotheses. The theoretical foundations and the nature of the study are also described along with definitions of terms used in this study. The chapter concludes with assumptions and deliminations and a summary.

Background of the Study

Children with behavioral and emotional problems are at risk of struggling in the academic environment (Jerrott et al., 2010). Children may display disruptive behaviors that lead to them getting into trouble in the classroom or to school failure. Depressive symptoms (e.g., social isolation, feeling sad, withdrawing from activities and interactions), social problems, attention problems, angry outbursts, and aggressive behaviors are all symptoms of children suffering from behavioral and/or emotional difficulties (Whitemore, Ford, & Sack, 2003). These children are in need of extra support to help them learn appropriate skills to improve their social and emotional competence (Hicks, Munger, & Education & Treatment of Children, 1990).

Therapeutic Day Treatment

Therapeutic day treatment is a program designed for children ages 3-18 who are suffering from emotional and behavioral problems. Though not every school uses therapeutic day treatment, it is a program being utilized nationwide (Payton, Wardlaw,

Graczyk, Bloodworth, Tompsett, & Weissberg, 2000). It is considered a partial hospitalization service due to the amount of time that is spent with the children and the severity of disorders that are seen (Hicks et. al, 1990). Qualified mental health professionals (QMHPs) working in the therapeutic day treatment program are assigned a caseload of four to six children whom they work with in the school setting on a daily basis.

There are different types of therapeutic day treatment programs (Pazaratz, 2001). In this study therapeutic day treatment was school based and took place in the mainstream schools where children who received the service stayed in the regular classroom setting. The other type of therapeutic day treatment service is when children are placed in an alternative school setting. This is an option when a child's maladaptive behaviors cannot be managed in the regular school setting (Pazaratz, 2001).

Children participating in therapeutic day treatment must meet certain criteria in order to be accepted into the program, per Medicaid regulations. Children must be displaying behavioral and emotional difficulty, and these behaviors must be getting worse over time. Previous interventions have to have been implemented before children are referred for therapeutic day treatment. Children must be referred for therapeutic day treatment by a professional (e.g., doctor, psychiatrist, therapist, teacher, or principal). Once a child is accepted into the therapeutic day treatment program, mental health counseling, behavioral modification, and social interventions take place to help the child develop emotional stability and display alternative, more appropriate behaviors.

PATHS

PATHS is a program that was developed in 1980 and has been used in numerous settings since that time (Greenberg & Kusche, 2006). It is a program designed to be implemented by teachers in the classroom, three to five times per week (Greenberg & Kusche, 2006). Researchers have found to be a reliable and valid program (Greenberg, Kusche, Cook, & Quamma, 1995). PATHS has been shown to be effective for a targeted age group of children from pre-kindergarten to sixth grade (Greenberg et al., 1995). There are different volumes of the program (turtle volume and volumes 1-5) that are used to relate to different age groups.

Research has been done indicating the benefits of PATHS when implemented as proposed (Greenberg et al., 1995; Greenberg et al., 2003; Greenberg & Kusche, 2006; & Kam, et al., 2004) . Children who have participated in the PATHS program have shown a decrease in aggressive and disruptive behaviors and an increase in concentration as well as emotional and social competence (Kelly, Longbottom, Potts, & Williamson, 2004). These behaviors are assessed by the evaluation instrument provided by PATHS. Emotional development, problem-solving skills, and self-regulation skills have been shown to increase in the children who participated in this program (Kam et al., 2004). Not all facilities using the PATHS program are implementing it the way was intended. For example, the therapeutic day treatment programs in Central Virginia are using the program one time per week.

The purpose of this research study was to determine whether a decrease in the amount of time PATHS is implemented leads to similar positive results in the children

served. Previous research indicated positive outcomes when PATHS was implemented a minimum of three times per week in the classroom environment (Domitrovich, Bradshaw, Greenberg, Embry, Poduska, & Ialongo, 2009). However, no studies have addressed the implementation of PATHS one time per week as a group therapy intervention.

PATHS is a program designed for teachers to use in the classroom, both regular and special education classrooms (Domitrovich, et al., 2009). There are 3 units that make up the PATHS curriculum (Greenberg & Kusche, 2006). The units are: self control, feelings and relationship, and interpersonal cognitive problem solving (Greenberg & Kusche, 2006). Teachers teach a lesson that is mapped out for them in the current unit being used in their classroom. The lessons focus on feelings, self-control, relationships, emotional understanding, self-esteem, problem solving, interpersonal problem-solving skills, and developing positive relationships (Greenberg & Kusche, 2060). There are assignments for children to take home and complete on their own or with their parents to reinforce skills learned (Riggs, Greenberg, Kusche, & Pentz, 2006). Teachers use the program to help children modify undesirable behaviors (e.g., poor social skills, lack of coping strategies, aggressive behaviors, poor emotional regulation, inability to develop appropriate relationships) and to encourage emotional health (Kelly et al., 2004).

Problem Statement

Promoting Alternative Thinking Strategies (PATHS) was developed to be used a minimum of three times per week in the classroom setting (Kelley et al., 2004). The research supporting PATHS has only addressed PATHS implented a minimum of three

times per week in the classroom (Greenburg & Kusche, 2006). Previous researchers looked at PATHS as a tool to help guide and support teachers with assisting their students in developing social and emotional learning skills (Domitrovich, Cortes, & Greenberg , 2007).

Research has not been done to determine whether PATHS is beneficial in helping children in the therapeutic day treatment program when used once per week, in a group therapy setting, implemented by a QMHP. It is important to determine the benefits because day treatment staff are working with children who suffer from mental health disorders, and the behavioral and emotional health of these children is the focus of the service provided. If PATHS is not beneficial, then the day treatment agency needs to be aware and a different curriculum needs to be found.

Purpose of the Study

The purpose of this quantitative study was to determine whether PATHS helps children improve their behaviors and emotional stability when implemented once per week in a day treatment group therapy setting rather than three times per week in a classroom setting. Secondary data collected from a facility using PATHS was used. Previous research outcomes were examined in comparison with the outcomes of this study to determine whether children benefit from PATHS used in the group therapy, day treatment setting. The independent variable was time with PATHS being implemented one time per week in each variable. The dependent variables were aggression/disruptive behaviors, concentration/attention, and social/emotional competence. The instrument used to score these behaviors was the PATHS student svaluation form. The evaluation is

part of the PATHS curriculum (Greenberg & Kusche, 2006), and QMHPs were taught how to use the evaluation in rating the participants.

Research Question and Hypotheses

Research Question: Is PATHS beneficial in helping children improve their behavioral and emotional health when implemented once per week in a group therapy setting?

Hypothesis 1: Children's aggressive and disruptive behaviors will decrease when PATHS is implemented once per week in a group therapy setting.

Null Hypothesis 1: Children's aggressive and disruptive behaviors will not decrease when PATHS is implemented once per week in a group therapy setting.

Hypothesis 2: Children's concentration and attention will improve when PATHS is implemented once per week in a group therapy setting.

Null Hypothesis 2: Children's concentration and attention will not improve when PATHS is implemented once per week in a group therapy setting.

Hypothesis 3: Children's social and emotional competence will increase when PATHS is implemented once per week in a group therapy setting.

Null Hypothesis 3: Children's social and emotional competence will not increase when PATHS is implemented once per week in a group therapy setting.

Related Theories

Social Learning Theory

Social learning theory is a cornerstone of multiple theories and interventions. It was derived from learning theory, which indicates that there are three main types of

learning: operant conditioning, classical conditioning, and social learning (Saddock & Saddock, 2003). Bandura (1961) explored whether individuals' reactions are innate or learned. Bandura (1973) found that individuals learn from their social environments, both positive and negative, rather than being driven by internal influences. Social learning theory has led to mental health workers focusing on the influence of an individual's environment (Bandura, 1973). Bandura (1973) argued that behaviors being learned from one's social environment is important.

PATHS is related to social learning theory because mental health workers are attempting to help children learn new ways to behave in the school environment. Individuals learn different behaviors according to repeated experiences and exposures (Bandura & Baer, 1963). PATHS was developed to be used three times per week so children are getting repeated exposure to the different skills and teachings in the curriculum. With this repeated exposure to the PATHS curriculum, children will learn to model healthy coping skills (Riggs et al.,2006). With children's exposure to PATHS decreased to one time per weekeek,, children may or may not realize the same benefits from the program.

Cognitive Behavioral Theory

Cognitive behavioral theory (CBT) was developed by Beck (1998). When using CBT, the mental health professional helps individuals understand their thoughts followed by understanding their behaviors (Beck, 1998). A relationship is made between thoughts and actions (Southam-Gerow & Kendall, 2000). PATHS is an intervention that impacts a child's cognition in order to help the child change his or her behavior. CBT is used to

look at the internalizing symptoms of mental health disorders (thoughts) as well as the externalizing symptoms (behaviors) that can be observed (Thompson, 2006).

Cognitive behavior theory is used to look at how the perceptions of the world and the self impact behavior and emotion (Holtforth, Castonguay, Boswell, Wilson, Kakouros, & Borkovec, 2007). Behavioral theory is used to look at the environment and how it induces and maintains behaviors (Holtforth, et al., 2007). Theorists assert that helping individuals change their mental strategies as well as assisting them with changing behavioral responses leads to more consistent improvements (Southam-Gerow & Kendall, 2000). With PATHS being developed to be used a minimum of three times per week, children are able to get more assistance in changing their mental strategies leading to a change in their behaviors (Riggs et al., 2006).

If PATHS were implemented only once per week as opposed to three times per week, it is possible that the intervention may not be as effective. After reviewing the data, cognitive effects (the mind and thoughts) and behavioral effects (what is able to be observed) were analyzed This analysis determined what effects the implementation of PATHS had on children when used once per week in the therapeutic day treatment environment. The results will be discussed to evaluate the effectiveness of PATHS.

Nature of the Study

Archival data from a therapeutic day treatment program's PATHS intervention program were reviewed in this quantitative study. Data was collected from children ages 5-11 years who were involved in the therapeutic day treatment program for at least 6

months in a public school setting in Central Virginia, and who received the PATHS intervention one time per week.

A repeated measures analysis was appropriate for the study because evaluations were completed before and after PATHS treatment. The independent variable was time. The study included a pre-post design to assess the dependent variables before PATHS was implemented and again after PATHS was implemented. The dependent variables were the three levels of the PATHS student evaluation (aggressive/disruptive behaviors, concentration/attention, and social/emotional competence). These three categories in the assessment were used to measure different social/emotional and externalizing behaviors. All three variables were measured on the same participants prior to PATHS and then at the end of the school year. In a repeated measures analysis, the same subjects must be used (Conaway, 1999). In this study the archival data reviewed were of the same subjects throughout the school year.

The data reviewed in the analysis were the scores of the children who received PATHS one time per week in the therapeutic day treatment environment during group therapy implemented by a qualified mental health professional (QMHP) supervisor at 15 different sites throughout Central Virginia. The children were observed five days a week (Monday through Friday) by direct care QMHPs. The direct care QMHPs documented progress and regression throughout the study. All QMHPs (direct care and supervisors) were trained in completing the PATHS student evaluations and in implementing the PATHS curriculum. The direct care QMHP who observed the child throughout the study

was the one who completed the evaluation prior to PATHS starting and at the end of the school year. The QMHP remained the same throughout the study.

Definition of Terms

PATHS: A program used in a classroom setting that helps promote emotional health of children and helps children alter their behaviors (Kelly et al., 2004). PATHS is designed to be used at least three times per week (Greenberg & Kusche, 2006).

Evidence-based curriculum: Curriculum and practices that are scientifically supported to be used as an intervention (Howard, McMillen, & Pollio, 2003). To be considered evidence based, a curriculum must be followed in a research design and found to be valid and reliable.

Therapeutic day treatment: An alternative treatment that has been around for decades (Clark & Jerrott, 2012). It is designed to help children and adolescents who have been diagnosed with a mental health disorder, usually leading to symptoms of disruptive behaviors in the classroom (Jerrott et al., 2010).

Externalizing disorders: Mental health disorders that can be identified by symptoms observed from the outside (Brown, 2005). These symptoms include defiance, lack of concentration, impulsivity, poor social interactions, hostility, and aggression (Brown, 2005).

Behavioral interventions: Different strategies mental health professionals may use to decrease negative behaviors expressed by children in the day treatment program (Abraham & Michie, 2008). These interventions can take place one on one with the child, with the child and family members, in a group setting such as PATHS, and/or with

academic personnel involved with the child. Therapeutic behavioral interventions permit teachers and family members to assist the child with controlling problem behaviors with the hope that the presence of more positive behaviors will be increased (Abraham & Michie, 2008).

Assumptions

The main assumption in this study was that the changes in children's behavior were due to the implementation of the PATHS curriculum, not taking into consideration other treatment interventions that may have taken place throughout the course of the study. The PATHS student evaluations only addressed the targeted behaviors of the PATHS intervention and not the other aspects of treatment that may have been taking place concurrently (eg., therapeutic day treatment). The focus of the observations that took place daily by the direct care QMHPs was the dependent variables of the PATHS student evaluation and not other behavioral goals of the therapeutic day treatment program. I assumed that meaningful data was collected in this study.

Another assumption was that the perception of the QMHP was accurate. The information gathered for this study relied on QMHPs who gathered the information. It was also possible that data may not have been accurately entered.

Limitations

One limitation of this research study was that there was no control group. A control group could not be used because the data assessed was previously collected and all participants represented in the data set received intervention with the PATHS curriculum. The PATHS student evaluations were conducted by different QMHP

supervisors. The evaluations were subjective, but the data were collected in the same way by using the PATHS student evaluation.

Scope and Delimitations

The research problem addressed the benefits of PATHS when used one time per week in conjunction with day treatment services, compared to three to five times per week. This problem was chosen to be the focus because children in the day treatment program were there for therapeutic reasons to address issues such as anger management, aggression, depression, hyperactivity, coping skills, and social skills. It was necessary to determine whether PATHS was beneficial in helping children in the therapeutic day treatment program when implemented once per week compared to three days per week.

The population excluded from the study were those who did not receive intervention of the PATHS curriculum for over 6 months. The study applied to those who received PATHS coaching by QMHP supervisors and observations by direct care QMHPs for a minimum of 6 months in the therapeutic day treatment group therapy setting.

Significance of the Study

Previous researchers on PATHS looked only at populations who received the intervention three to five times per week in the classroom. In the therapeutic day treatment program in Central Virginia, PATHS was used one time per week. There may be other facilities using the PATHS curriculum less than intended. When PATHS is used three or more times a week, there have been significant improvements seen in children's behaviors (Greenburg & Kusche, 2006).

The managers and directors of the day treatment program using PATHS once per week during group therapy need to be made aware of the benefits or lack of benefits of this approach. If improvements were seen in children's behavior, this would help promote the use of PATHS as an intervention in other therapeutic day treatment programs. The PATHS developers will be notified of the benefits seen so they can expand the use of this curriculum to other therapeutic day treatment agencies throughout the United States.

Summary

Researchers have explored the benefits of the PATHS curriculum to help children develop emotional well-being and change problematic behaviors (Greenberg & Kusche, 2006). Use of PATHS promotes alternative ways for children to think about how they respond to different situations and the behaviors they display (Greenberg & Kusche, 2006). However, it is not known whether PATHS is effective when implemented one day per week as opposed to three to five days per week.

If findings indicate that PATHS did benefit children when used only once per week in the group therapy setting, then this curriculum could be used to benefit many children without being used a minimum of three times a week. The threapeutic day treatment program used PATHS in the group therapy setting with three to six children per session, not in the classroom setting as it was designed.

If this study indicates the PATHS curriculum was not effective when used in the therapeutic day treatment program once per week, it will be important to develop a new evidence-based curriculum for children to receive the full benefits of day treatment.

Another option will be to use PATHS more than once per week to promote the desired changes.

Chapter 2 presents at a review of existing literature of the PATHS program, including its intended use and the benefits of the program when used as recommended. I initially look at the content of the PATHS curriculum, how it was intended to be used, and how therapeutic day treatment programs have been implementing the curriculum. I examine previous research and explain the gap that was addressed in this study. I also present the research question and hypotheses and explain how cognitive behavioral theory relates to the study. I describe the independent variable (PATHS program) and the three dependent variables (aggressive/disruptive behaviors, concentration/attention, and social/emotional competence). Finally, I describe the method used for this study and address alternative methodologies that were considered.

Chapter 2: Literature Review

When conducting the literature review, I observed that research is necessary concerning the PATHS curriculum being used one time per week in a therapeutic day treatment program rather than a minimum of three times per week as intended. Previous researchers looked only at PATHS being implented a minimum of three times per week in the classroom (Greenburg & Kusche, 2006). The purpose of this study was to determine whether modification of the curriculum was effective.

This chapter presents the research strategies used in gaining information. I describe the dependent variables and review the effects on children when services are not implemented. I identify different service options provide a history of the PATHS curriculum as well as the theoretical foundations. I describe key variables and concepts and summarize previous research. The chapter concludes with an explanation of how previous research influenced the current study.

Literature Search Strategies

The PATHS curriculum and therapeutic day treatment services have been used for over 20 years. Because both aspects of this research have been used in different fields, I researched several databases in EBSCOhost through the Walden University library. The databases included PsycARTICLES, PsycINFO, Academic Search Premier, and Education Research Complete. Key search terms included *PATHS*, *Promoting Alternative Thinking Strategies*, *therapeutic day treatment*, *therapeutic day treatment and schools*, *benefits and PATHS*, *benefits and therapeutic day treatment*, *ABCD model*, *affective-*

behavioral-cognitive-dynamic model of development, *CBT*, *cognitive behavioral theory*, *origin and CBT*, and *quasi-experimental repeated measures design*.

For the therapeutic day treatment component, all articles containing the terms *day treatment* and *school* were examined. No restrictions were placed on articles pertaining to therapeutic day treatment. For the PATHS component of this review, all articles containing *PATHS* and *Promoting Alternative Thinking Strategies* were examined. Once again, restrictions were not applied when completing this research. Date restrictions were not applied on these searches because most of the articles were more than 5 years old.

Related Theories

Two theories relate to the PATHS curriculum and/or to therapeutic day treatment and how individuals learn. The first is social learning theory and the second is cognitive behavioral theory. The treatments and curricula in this study were based on theory. Cognitive behavioral theory (CBT) is derived from cognitive behavioral theory and is the action-oriented process used to assist individuals with what they do or how they think (Corey, 2005). CBT is used in therapeutic day treatment services and within the PATHS curriculum (Hughes & Adera, 2006). Social learning theorists identify different ways that individuals learn from exposure and environment.

Social Learning Theory

Social learning theory is derived from learning theory (Saddock & Saddock, 2003). Learning theorists focus on an individual's action in terms of how he or she goes about learning new skills (Wang, 2012). Bandura proposed that behaviors are learned from one's social environment (Bandura & Baer, 1963). This belief led to developing the

idea that how an individual learns is strongly related to ones social environment. Theorists included three types of learning in the social learning theory: operant conditioning, classical conditioning, and social learning (Saddock & Saddock, 2003).

Operant conditioning was described by Skinner, who supported the idea that learning can take place through reward or punishment for the behavior displayed (Lineros & Hinojosa, 2012). Classical conditioning was descrived by Pavlov, who observed that learning can take place through stimulus or deliberate reinforcement (Lineros & Hinojosa, 2012). One can replace an unconditioned response with a conditioned response if an incentive is provided (Lineros & Hinojosa, 2012). If an individual displays the desired behaviors more often, the undesirable behaviors will be descreased until extinguished. This will eventually lead to an individual changing his or her behaviors so the more desired behaviors are displayed (Lineros & Hinojosa, 2012).

Social learning theory principles are used in the PATHS curriculum because teachers and mental health workers are attempting to help children learn new ways to behave in the school environment. Individuals learn different behaviors according to repeated social experiences and exposures (Baer & Bandura, 1963). With PATHS being developed to be used at least three times per week, children receive the repeated exposure to learning new skills cognitively and behaviorally.

Social learning theory progressions have led to mental health workers focusing on the influence of one's environment (Bandura, 1973). Children are in the school environment for half of their waking hours; therefore, this is a place where repeated exposure to both positive and negative influences impacts a child (Southam-Gerow &

Kendall, 2000). When children are exposed to PATHS a minimum of three times per week during school hours, they are receiving multiple experiences with learning new techniques in displaying improved behaviors in the areas of attention, aggression, disruption, and social and emotional competence.

Professionals promote learning skills when using PATHS leading to cognitive and behavioral changes (Greenberg & Kusche, 2006). Social learning theorists assert that repeated exposure leads to change (Bandura et al., 1963). PATHS relates to this notion in that it is meant to be implemented a minimum of three times per week, leading children to display healthy coping strategies (Riggs et al., 2006). Children may not benefit from exposure to PATHS when the amount of time is decreased to once per week.

Cognitive Behavioral Therapy (CBT)

Cognitive behavioral therapy (CBT) is based on the principles of cognitive behavioral theory. The developers of CBT combine cognitive theory and behavioral theory to increase the results seen in individuals receiving the treatment (Southam-Gerow & Kendall, 2000). Cognitive behavioral therapists look at the internalizing symptoms of mental health disorders (thoughts) as well as the externalizing symptoms (behaviors) that can be observed (Thompson, 2007). Cognitive theorists focus on how the perceptions of the world and the self impact behavior and emotion (Holtforth et al., 2007). Behavioral theorists pay attention to the environment and how it induces and maintains behaviors (Holtforth et al., 2007). Theorists assert that helping individuals change mental strategies and assisting them with changing behavioral responses leads to more consistent improvements (Southam-Gerow & Kendall, 2000).

Therapeutic day treatment and PATHS both include cognitive behavioral therapeutic techniques (Hughes & Adera, 2006). When using CBT techniques, mental health professionals help individuals understand their thoughts followed by understanding their behaviors (Beck & Fernandez, 1998). When trained individuals implement the PATHS curriculum, they also help children make cognitive and behavioral changes with learning skills. When positive behaviors are practiced and implemented by children more often over a period of time, the change in behavior becomes more permanent.

CBT can be implemented in the home, clinic, or school (Elkins, McHugh, Santucci, & Barlow, 2011). Elkins et al. (2011) found that CBT used in the school setting was a preventative treatment and professionals could be effective in helping children with internalizing disorders and externalizing disorders improve their well-being and daily functioning. Professionals who implemented CBT interventions found it beneficial in helping children from different ethnic and socioeconomic backgrounds (Elkins et al., 2011).

The goal for children in the PATHS program is that their cognition will be impacted, helping them look at situations differently, implement appropriate coping strategies, socialize properly with others, and react in a more positive manner. These changes in cognition will lead to improvement in behaviors. In this study, the program was implemented one time per week. Because of this, the impact may have been minimal. If PATHS is implemented only one time per week as opposed to three times a week, it is possible that children will not benefit from the intervention. In this study,

cognitive effects (the mind and thoughts) and behavioral effects (what is able to be observed) were observed to determine the impact of PATHS on children when used once per week in the group therapeutic day treatment environment rather than three times per week.

Theories in Relation to the Research Question

The research question for this study was the following: Is PATHS beneficial in helping children improve their behavioral and emotional health when implemented once per week in a group therapy setting? CBT and social learning theory relate to this question in that cognition (thoughts and emotions) as well as behaviors are the focus of the PATHS curriculum. Professionals in therapeutic day treatment use interventions based on CBT (Hughes & Adera, 2006). Theorists assert that helping individuals change mental strategies and assisting them with changing behavioral responses leads to more consistent improvements (Southam-Gerow & Kendall, 2000). PATHS is used to impact children both mentally and behaviorally (Greenburg & Kusche, 2006).

Researchers argue that individuals acquire different behaviors due to repeated social experiences and exposures (Baer & Bandura, 1963). When implementing PATHS, professionals look at how emotional competence and behavioral improvements are made in children in the way they learn. PATHS is intended to be used a minimum of three times per week, giving children more exposure to what they are learning. Social learning theorists would conclude that due to children receiving repeated exposure to the curriculum, they are more likely to learn healthy cognitive and behavioral skills (Bandura, 1973). When PATHS is implemented one time per week, children's learning of

the skills taught may be limited. CBT and social learning theory are the most appropriate theories to use in relation to this study.

Mental Health and Children

Previous researchers made it evident that most of the negative effects on children who have a mental health disorder begin at ages 5-6 (Ford et al., 1999). Mental health disorders that are diagnosed in childhood and adolescence affect over 1 in 5 children (Skalski & Smith, 2006). There are numerous mental health disorders impacting school-age children. The most common are attention deficit/hyperactivity disorder (ADHD) and oppositional defiant disorder (ODD) (Ford et al., 1999). These disorders affect over 10% of children, impacting their daily lives.

Mental health issues become evident at school, where support should be offered for children (Skalski & Smith, 2006). Mental health disorders impact an individual's academic achievement and social life if interventions are not implemented (Skalski & Smith, 2006). Researchers have found that teachers are not trained to work with children who display symptoms of mental health disorders in an effort to help them succeed academically (DuPaul & Carlson, 2005).

Dependent Variables

Aggressive/Disruptive Behaviors

Disruptive and aggressive behaviors include an array of actions. In children disruptive behaviors include but are not limited to not staying seated, being unfocused, having poor social skills, talking back to and disrespecting adults, being aggressive, blurting out, constantly talking, touching peers, and running away (Burt, Krueger,

McGue, & Iacono, 2001). Aggressive behaviors are acts that hurt or intend to hurt others, including hitting, kicking, punching, spitting, slapping, tripping, pinching, pushing, chocking, and verbally threatening (Burt et al., 2001).

Risk factors. It is important to consider the background of individuals who display disruptive and/or aggressive behaviors. This will help to identify what type of risk factors may be contributing to their symptoms of mental health disorders (Sellers, Burns, & Guyrke, 1996). The background of a child is something that cannot be changed. Backgrounds of children include family/parenting, region where they live, place they go to school, and biological/genetic factors.

Numerous professionals argue that certain mental health problems in children begin with poor parenting (McMahon & Forehand, 2003). This position stems from the way difficult behaviors are handled in the home (McMahon & Forehand, 2003). Family dysfunction plays a major role in disruptive and aggressive behaviors that are evident in children (Frick et al., 1992). Family dysfunction includes frequent arguing, physical altercations between parents, abuse of a child and/or parent, and separation or divorce of parents (Erath et al, 2006). Research has led professionals to conclude that if children who have an abusive upbringing are at greater risk of displaying disruptive behaviors (Ford et al., 1999). Physical abuse has been associated with aggressive behavior in children (Ford et al., 1999).

The region where a child is raised, including where the child goes to school, is also a risk factor for aggressive and disruptive behaviors. Research has shown that the region of residence has an influence on children's behavior and education, which may

lead to the development of disruptive and aggressive behaviors (Sellers et al., 1996). In different regions (i.e., areas), there are different norms. This means there are different behaviors that people see as normal for children, and there are behaviors that people see as disruptive or disrespectful (Sellers et al., 1996). If a child is raised in a regioin where fighting, illegal activity, and violence are observed and accepted, children are more likely to mimic these behaviors at school, in the home, and in the community (Sellers et al., 1996).

Biological factors also play a role in the development of externalizing disorders. If an individual has a parent who suffers from a disorder in which aggressive and disruptive behaviors are evident, then the child is at higher risk displaying these same symptoms and suffering from the same disorder (Frick et al., 1992). A link between children with disruptive behaviors whose parents suffered from antisocial personality disorder and substance abuse/disorders has also been found (Lahey et al., 1989).

Problematic outcomes. When children struggle with the above behaviors they have difficulty succeeding in the academic setting. Children who show disruptive behaviors are more likely to be under the expected level of intelligence for their age leading to underachievement in school (Frick, Lahey, Kaphaus, Loeber, Christ, Hart, & Tannenbaum, 1991). It has been observed that individuals displaying aggressive and/or disruptive behaviors have difficulty focusing, waiting their turn, following directions, completing tasks, and some demonstrate aggression (Frick et al., 1991). The risk individuals put on their academic success due to the behaviors displayed becomes evident when looking at the symptoms mentioned above (Frick, et al., 1991).

Children displaying symptoms of aggressive and/or disruptive behaviors have difficulty getting along with family members, they may show a lack of respect towards authority, have angry outbursts, disregard rules, and aggression may be displayed towards siblings and even parents (Loeber et al., 1991). These behaviors put strain and stress on a family unit (Loeber et al., 1991). Researchers have found that children who display aggressive and disruptive behaviors also have difficulties socializing (Lambert, Wahler, Andrade, & Bickman, 2001). Other children do not always have a desire to play with someone who is aggressive or who does not want to share, and these are difficult things for children to do who struggle with displaying aggressive and disruptive behaviors.

Improving related behaviors. Families and professionals seek different ways to help children improve their behaivors (Hains, Jandrisevits, Theiler, & Anders, 2001). There are multiple treatments and interventions that are used to help decrease disruptive and aggressive behaviors children display (Hains, et al., 2001). These interventions include but are not limited to: psychotropic medication, therapeutic day treatment programs, behavior modification, intensive in-home therapy, outpatient therapy, and training for parents (Hains et al., 2001).

Parenting classes help parents learn new skills to engage more appropriately with their children, which may lead to positive changes in children and the ability to cope with mental health disorders (McMahon & Forehand, 2003). Intensive in-home therapy and outpatient therapies are known to be a supportive ways for children to express themselves and reveal what may be affecting their mental health status and the behaviors associated with their mental health disorders (Brown, 2005). Coping skills are taught in outpatient

and in-home therapy. These skills can be used as interventions in the home, at school, or in the community (Farmer, Compton, Burns, & Robertson, 2002). Different skills/interventions include: taking a mental time out, taking deep breaths, processing with someone, writing down how he/she is feeling, social skills training, recognizing triggers that lead to disruptive/aggressive behaviors, and having a reward system in place for the child (Farmer et al., 2002). When mental health professionals work with children in the school setting or in the home, they are likely to use therapeutic behavioral interventions to assist themselves and the child with changing negative behaviors (Abraham, & Michie, 2008). Through the changing of negative behaviors children will learn to replace negative behaviors with positive ones, which will eventually become more natural to the child and will lead to an extinction of the negative behaviors. These interventions include coping skills, anger management skills, alternative activities, behavior charts, incentive charts, and calming skills (Abraham, & Michie, 2008).

Concentration/Attention Deficits

When looking into poor concentration and attention, one must consider if a child is displaying the behaviors more often than other children their age. Poor concentration and attention deficits may be seen in children in the following ways: the inability to pay attention to details, making careless mistakes, having difficulty keeping attention on task, often does not follow through with directions given, often has difficulty with organization, often chooses not to participate in event that requires a lot of mental attention, often easily distracted, and often forgetful of daily activities (Waldman & Lilienfeld, 1991).

Risk factors. Biological factors play a role in concentration and attention deficits in children. If a child have a parent who struggled with concentration and attention issues, then the child is at higher risk, biologically, of developing the same deficits (Frick et al., 1992). Genetics are the biological makeup of an individual. They are the genes passed down from one generation to the next. Parents have no control over the genes that are passed to their children (Lahey et al., 1989). The mother and the father are both capable of passing down mental health disorders, with symptoms of concentration and attention deficits, to their children (Connell & Goodman, 2002). In a study completed in 2011, 36.4% of siblings displayed the same mental health disorders, such as ADHD (Li-Kuang, Chi, Yung, & Shur-Fen, 2011).

The region where children are raised has an impact on children developing deficits in concentration and attention as well as other symptoms of mental health disorders. Some people may see the way children behave as a way of life. Other people,who are from a different region, may see it as a deficit due to the difference of behaviors in children that same age who were raised elsewhere. In different regions (i.e., areas) there are different norms. This means there are different behaviors that people see as being normal for children and there are behaviors people interpret as children having deficits or as being a problem for children (Sellers, Burns, & Guyrke, 1996).

Problematic outcomes. The main problematic outcome for children displaying lack of concentration and attention is in the school environment (Frick et al., 1992). Children displaying concentration and attention deficits display many negative behaviors. Problematic outcomes in the school environment are related to the inability to pay

attention to details, making careless mistakes, difficulty paying attention, not following through with directions given, difficulty with organization, easily distracted, forgetful of daily activities, lack of impulse control, fidgety, inability to stay seated, often climbs on things when the atmosphere is inappropriate, has a difficult time being quiet when involved in activities, often "on the go", blurts out, and often interrupts others (American Psychiatric Association, 2013).

In the school environment, children displaying concentration and attention deficits are at risk of failure or ultimately their academic placement being changed (Frick et al., 1991). This change could be due to increased negative behaviors displayed, as mentioned above (Frick et al., 1991). A short term risk is put on a child's academic success due to the negative behaviors associated with different mental health disorders (DuPaul & Carlson, 2005).

A long term risk is placed on relationships. Children who display attention and concentration deficits may also have an antisocial tendency leading to the inability to connect with others and to develop friendships (Lambert, Wahler, Andrade, & Bickman, 2001). Researchers have found that those who suffered from Attention Deficit Hyperactivity Disorder as a child are at risk of failing in their occupation, may engage in criminal behaviors, and have an increased risk of developing personality problems (Young, 2000).

Improving related behaviors. Therapeutic day treatment has been founded to help children acquire strategies for coping through the symptoms of their mental health disorder (Farmer etal., 2002). When children participate in therapeutic day treatment

they learn alternate, more acceptable behaviors to display while in school in order to minimize negative behaviors (Farmer et al., 2002). When treating concentration and attention deficits, medication has been found to help increase attention, improve concentration, and increase the amount of time a child is able to spend on tasks, leading to an improvement in academics and the ability to stay in school (Gadow, 1991).

Social/Emotional Competence

Social and emotional competence refers to a child's self-awareness, self-management, social awareness, responsible decision making skills, and relationship skills (Domitrovich et al., 2007). Self-awareness is the ability for an individual to understand their feelings, values, and strengths. Self-management refers to regulating emotions, handling stress, controlling impulses/behaviors, and expressing emotions. Social awareness is the ability to understand others, display empathy, and recognize similarities and differences between individuals and groups. When an individual is able to make decisions responsibly, ethical considerations are made, respect for others is shown, and consequences of actions are considered. Relationship skills include the ability to develop and maintain healthy relationships while being able to manage and resolve interpersonal conflict, and asking for help when necessary. The most effective way for children to learn these skills is through the modeling and teaching by/from their parents (Domitrovich et al., 2007).

Risk factors. Family is the primary influence of a child's life, socially and emotionally (Bronfenbrenner, 1986). The way parents raise their children and the mental health of parents, also have impact on children developing poor social and emotional competence (Bronfenbrenner, 1986). Parent education level, parenting skills, and marital conflict are all familial factors. Parent education level is referring to how long parents went to school and if they were above or below grade level when attending. Parenting skills refer to the way parents interact with, discipline, and punish their children. Marital conflict is referring to parents, who may stay together but constantly argue, abuse may be involved, or families who are separated by divorce. When parents do not have the ability or willingness to model how to communicate and express emotions effectively, how to self-regulate, or how to socialize and make friends, a child will lack social and emotional competence (Denham, Ji, Hamre, 2010).

Through research on children's intelligence, it has been found that the education level of parents affects children's social and emotional health (Sellers et al., 1996). This lack of education can lead to behaviors that become a pattern for children and eventually end with the child developing an externalizing disorder (Sellers et al., 1996). Ford et al. (1999) found that family psychopathology and parent education held to influence the occurrence of mental health struggles in children.

Problematic outcomes. Emotions can facilitate or impede children's academic engagement, work ethic, commitment, and school success. Social and emotional processes affect how and what we learn (Elias et al., 1997). When children suffer from mental health disorders that are untreated, they are usually not successful academically

(DuPaul & Carlson, 2005). Researchers have found that one's ability to gain social and emotional competence is associated with greater well-being and better school performance (Guerra & Bradshaw, 2008). Failure to achieve social and emotional competence may lead to personal, social, and academic difficulties (Eisenberg, 2006). Many Children lack social and emotional competence, leading them to becoming less connected to school as they progress from elementary to middle to high school (Blum & Libbey, 2004). This lessened connection may lead to negative effects on their academic performance, behaviors, and overall health (Blum & Libbey, 2004). If parents have a low level of education, they may influence children according to their level of education, leading to an under-achieved academic level for the children and causing an impact on social and emotional stability (Mayes, & Calhoun, 2007).

Improving related behaviors. The education system plays a key role in raising healthy children by fostering not only their cognitive development, but also their social and emotional development (Association for Supervision and Curriculum Development, 2007). Schools and families must effectively address social and emotional aspects of the educational process for the benefit of all students (Elias et al., 1997). When children are able to receive interventions that help improve social and emotional competence, and decision-making skills, there are positive effects on their academics (Payton et al., 2000).

Therapeutic Day Treatment

Therapeutic day treatment services have been used in the school systems throughout the United States for years, serving children who suffer from mental health disorders and who have difficulty being maintained in the regular classroom setting

(Hicks et al., 1990). There is a wide range of diagnoses for children involved in therapeutic day treatment (Clark & Jerrott, 2012). The most common diagnoses are Attention Deficit Hyperactivity Disorder, Oppositional Defiant Disorder, Mood Disorder, Anxiety Disorders, and Adjustment Disorders (Weir & Bidwell, 2000).

Therapeutic day treatment is considered a partial hospitalization service that lasts for 5-6 hours throughout the school day (Hicks et al., 1990). There has been a gradual change in society moving away from residential services for children (Grimes, Gardner, & Weiss, 1983). Because of this, therapeutic day treatment is being used more (Grimes et al., 1983). Though many school systems take advantage of therapeutic day treatment, it has been known as a mental health service that has been neglected by a lot of school systems (Hicks et al., 1990). In order to develop an effective therapeutic day treatment program an evidenced based practice needs to be used (Hughes & Adera, 2006).

Children participating in therapeutic day treatment must meet certain criteria in order to be accepted into the program, per Medicaid regulations. Children must be displaying behavioral and emotional difficulty and these behaviors must be getting worse over time. Previous interventions must have been implemented before being referred for therapeutic day treatment and children have to meet specific criteria of a mental health disorder. Children need to be referred for Therapeutic Day Treatment by a professional (i.e. doctor, psychiatrist, therapist, teacher, and principal). A formal assessment will be completed to before a child can begin receiving the therapeutic service.

Therapeutic day treatment, in this study, is a service that takes place in the regular school setting. It is a service provided for children who are at risk of being removed from

the regular school setting. Children who participate in the service receive indirect and direct therapeutic support for a minimum of 6 hours during the school day. A minimum of 2 hours in direct support and 4 hours of indirect support takes place daily. Children stay in their classroom unless behaviors become too disruptive to the point that teachers ask them to be removed to receive interventions in order to decrease the disruptions in the classroom. Direct therapeutic support takes place in the form of behavior modification, modeling, role playing, processing, counseling, family therapy, play therapy, and cognitive behavioral therapy. Indirect therapeutic services include completing treatment plans, researching interventions to be used, talking with teachers and/or parents, and being available for children who may need direct therapeutic support due to unforeseen circumstances. Group therapy takes place one time a week. Children participating in the service are removed from the regular classroom and receive the PATHS intervention for group therapy with other children who also receive therapeutic day treatment services.

Benefits of Therapeutic Day Treatment

Individuals who suffer from mental health disorders and participate in a therapeutic day treatment program show improvement in coping with mental illnesses and improving overall wellbeing (Whitemore et al., 2003). This is accomplished by teaching children and adolescence new behaviors and correction of inappropriate behaviors (Hicks, et al., 1990). Professionals offering therapeutic day treatment services facilitate emotional, social, and behavioral growth of the individuals who are diagnosed with a mental health disorder and involved in the program (Hughes & Adera, 2006). With the development of interpersonal skills, and developing appropriate social-emotional

characteristics, individuals are more likely to succeed in society (Hughes & Adera, 2006). Through professionals of a therapeutic day treatment program, individuals suffering from mental illness are able to learn these skills leading to success (Clark & Jerrott, 2012).

In a study conducted in 2003 by Whitemore, Ford, and Sack, 129 children, who had experienced some form of abuse, participated in a day treatment program. Behavioral results were measured using the Child Behavior Checklist and the Teacher Rating Form (Whitemore et al., 2003). Cognitive results were gathered using the Battelle Developmental Inventory (Whitemore et al., 2003). All children involved were diagnosed with at least one mental health disorder. No stipulations were placed on the diagnoses of the participants. All participants had to be enrolled in the Hand in Hand program. Seventy- six percent of the children who started the day treatment program completed it successfully (meeting goals), and 16% of the children terminated services early (Whitemore et al., 2003). Results showed there was an increase in the stability of relationships in the home (Whitemoreet al., 2003). Withdrawn behaviors, social problems, attention problems, and aggressive behaviors all decreased (Whitemore et al., 2003). At the four-year follow-up, 75% of the children who had successfully completed the day treatment program remained in the regular school setting (Whitemore et al., 2003).

PATHS

PATHS is a teacher-taught program used in a classroom setting (Riggs et al., 2006). It can be used in the regular classroom or the special education classroom (Domitrovich, et al., 2009). The reason for use is for teachers to be able to help children

modify undesirable behaviors and to encourage emotional health (Kelly et al, 2004). PATHS was developed to be used a minimum of three times per week and up to five times, in the classroom setting in mainstream schools (Greenberg & Kusche, 2006). It is considered to be a universal curriculum to be used by any teacher and in any classroom setting: regular education, special education, and self-contained classrooms (Domitrovich, et al., 2009).

When trained individuals use the PATHS intervention three to five times a week in the classroom setting, the teaching of the PATHS curriculum has been proven to be beneficial in helping children gain emotional stability and improve behaviors (Kelley et al., 2004). Training includes an intense three a day training by a PATHS instructor that teaches individuals the different aspects of the curriculum, how to implement the materials, and how to complete the student evaluations. PATHS has been known as a tool to be used to help children gain social and emotional skills (Domitrovich et al., 2007).

The PATHS assessment measures improvements in three areas of competence that children with mental health disorders have difficulty with (Greenberg & Kusche, 2006; Brown, 2005). The competencies of the PATHS evaluation are the dependent variables for this study: aggression/disruptive behaviors, concentration/attention, and social/emotional competence. Mark T. Greenberg developed the aggressive/disruptive behaviors variable of the PATHS evaluation to include fifteen different behaviors. These include; taking other's property, yelling during conflict, fighting, being stubborn, loses temper, lies, breaking classroom rules, teasing others, harms others, easily irritated, disliked by classmates, rejects limits, stays excited or upset, handles disagreements

negatively, and gets angry when provoked (Kelly, et al., 2004). The concentration/attention section includes seven different behaviors: hard worker, works through distractions, ability to concentrate, stays on task, attentive, focused, and achieves grade level expectations (Kelly, et al., 2004). Social/emotional competence is the third dependent variable. Eight behaviors are included in this area. The behaviors are: feels at ease to talk to you, shows empathy and compassion, is liked by classmates, provides help/shares/is cooperative, takes turns/plays fair, listens carefully, initiates interactions in a positive way, recognizes and verbalizes feelings (Kelly, et al., 2004).

History of PATHS

The developers of PATHS began using the curriculum as an experiment in providing deaf children with the tools they needed in learning the processes involved with understanding, expression, and regulation (Kelly et al., 2004). PATHS is now used in regular education and special education classrooms for all students. It is now referred to as a preventitive intervention program (Kelly et al., 2004).

PATHS was developed in the 1980's by Mark T. Greenberg (Greenberg & Kusche, 2006). It was believed that teachers in mainstream schools needed help, through a curriculum, with how to manage problematic behaviors and in teaching children emotional skills. In 1995 Greenberg, Kusche, Cook, and Quamma conducted the first study on the PATHS curriculum. There were 130 participants, in the mainstream classroom, who received PATHS teaching and 156 in the control group. The results of the study were that those who participated in PATHS, taught by their teacher, and implemented during the regular school day a minimum of three times a week, showed

improvement in social skills and peer interactions as well as increased emotional understanding (Curtis & Norgate, 2007).

The PATHS evaluation allows teachers to rate children at the beginning of the school year in three categories, consisting of 7-15 subcategories. The three categories are: aggression/disruptive behaviors, concentration/attention, and social/emotional competence. Teachers also evaluate their students at the end of the school year. The scores are then compared in order to identify the progress made throughout the school year, with PATHS being implemented (Greenberg et al., 1995).

It has been identified that PATHS appears to be more useful when implemented for individuals who are diplaying externalizing behaviors (Kam et al., 2004). Externalizing behaviors tend to be the behaviors shown by children that eventually lead to them being removed from the regular school environment (Farmer et al., 2002). Examples of externalizing behaviors include but is not limited to: verbal aggression and threats, bullying, physical aggression, opposition, withdrawal, antisocial behaviors, hyperactivity, and disrespect (Farmer et al., 2002). When the emotional competence piece of PATHS is taught, children who display internalizing disorders benefit (Domitrovich et al., 2007).

Those teaching the PATHS curriculum help children identify their feelings and emotions and verbalize those feelings to adults and peers in order to help react in a more positive manner in situations (Curtis & Norgate, 2007). This also leads to less internalization of feelings (mostly seen in as shy, depressed, withdrawan, etc). The effects

of the teaching of PATHS that are more greatly seen are those on externalizing behaviors because the effects are observable (Kam et al., 2004).

There were four main principles that helped developers in creating the PATHS curriculum. The first was that to make changes to a child's emotional and social competence you must look at emotions, behaviors, and cognitions (Curtis & Norgate, 2007). The second principle was that the capability for a child to understand their own as well as others' emotions is necessary in order to foster problem-solving and social interactions (Curtis & Norgate, 2007). Next was that school plays a large part in a child's life and is an environment where a child spends most of their day, because of this it is a good place to encourage change (Curtis & Norgate, 2007). The fourth principle was, the capability a child has to understand and verbalize emotions is directly related to how capable the child is of inhibiting negative behaviors through verbal self-control (Curtis & Norgate, 2007).

During PATHS teaching, children listen to a lesson that focuses on one of the three categories of PATHS; aggression/disruptive behaviors, concentration/attenion, and social/emotional competence (Kam et al., 2004). Lessons are developed to last 20-30 minutes. The content includes: teaching self control, identifying feelings, how to build and maintain healthy realtionships, gaining emotional understanding, and developing interpersonal cognitive problem-solving abilities (Greenberg & Kusche, 2006).

At the beginning of each lesson, one student is chosen to be the PATHS student of the day. This individual is the teachers helper and uses leadership skills throughout the session. There is student involvement during the lesson and questions are asked

throughout in order to engage each child and help them stay focused. At the end of the lesson the PATHS child receives compliments from each child in the group (Kam et al., 2004).

Benefits of PATHS

The implementation of PATHS in the classroom has been proven to help children improve behavioral and emotional health (Domitrovich et al., 2007). Children benefit from the PATHS curriculum and are able to learn how to identify and verbalize feelings and emotions, learn to cope appropriately with feelings, and learn to react in a positive manner when faced with different situations and feelings (Kam et al., 2004). In 2002 Curtis and Norgate researched the impact of PATHS on two different schools (five schools involved with three schools being the control). 114 mainstream students received PATHS and 173 mainstream students were in the control group. Teachers were trained properly to implement the PATHS curriculum and the teachers completed the pre and post measures for the study (Curtis & Norgate, 2007). ANOVA was used to measure the results of the study and it was founded that emotional symptoms, conduct problems, hyperactivity, and peer problems all decreased in the children who received PATHS in the classroom in the regular school setting (Curtis & Norgate, 2007).

Children's aggressive and disruptive behaviors decrease when PATHS instruction is involved in their education (Kam et al., 2004). Peer reports and classroom evaluations were used to determine improvements in these areas. Concentration and attention are improved when children receive PATHS teaching (Kam etal., 2004). Evaluations showed

that social and emotional competence increase when children undergo the PATHS training during the school day (Kam et al., 2004).

In a study done by Bardon, Dona, and Symons (2008), it was found that children were able to engage with others more cooperatively after receving the PATHS instruction. Before PATHS was used in the classroom cooperative play was seen 40%-60% of the day (Bardon et al., 2008). After the implementation of PATHS cooperative play was observed 80%-96% of the time (Bardon et al., 2008).

The Conduct Problems Prevention Research Group (1999) conducted a study involving up to twelve schools from each of four different areas. The schools chosen were regular schools teaching mainstream children, in Tennessee, Pennsylvania, North Carolina, and Washington (Conduct Problems Prevention Research Group, 1999). For this study PATHS was taught in the regular classroom setting at all schools involved. The percentage of lower/middle socioeconomic status students in each school is what determined their eligibility to participate. The percentage of students receving free lunch at the school determined this status. A total of 7,560 children returned consents to participate in the study. The PATHS curriculum was used as the intervnetion at each school (Conduct Problems Prevention Research Group, 1999). At the end of the study it was found that aggression and hyperactive/disruptive behaviors decreased (Conduct Problems Preventions Research Group, 1999). Prosocial skills increased and children were more liked by peers (Conduct Problems Preventions Research Group, 1999).

Limitations of PATHS

A limitation of PATHS is that it targets children from pre-school through 5th grade. It has not been developed for older children. It is possible to use volume 5 if working with older children but it was not intended for that use (Kam et al., 2004). Another limitation in regard to the current study is that PATHS needs to be used 3-5 times per week. Within the therapeutic day treatment program this is difficult because group therapy is only one time a week, per age group. It is difficult for day treatment staff to remove children from the classroom for more time during the week.

All individuals implementing PATHS should be properly trained in using the curriculum (Kam et al., 2004). This can be seen as a limitation because funding may be an issue. Also, there may be a new teacher or day treatment staff who starts working in the middle of the school year and is not properly trained but must use PATHS immediately.

Summary and Conclusion

PATHS has been around for many years and therapeutic day treatment has as well (Greenberg at al., 1995; Hicks et al., 1990). Past researchers makes it clear that both of these interventions are beneficial when used apart from one another. The teaching of PATHS is beneficial in helping children decrease the display of disruptive behaviors as well as helping children with improving social skills and interactions (Curtis & Norgate, 2007). Professionals working in therapeutic day treatment also help make changes with these same defecits among children (Whitemore et al., 2003).

For the purpose of this study PATHS was tested in a different setting and used only one time a week. PATHS and therapeutic day treatment have both been found to be powerful interventions when used independently. This research study combined both interventions to see if PATHS was beneficial when the use was decreased to one time per week. From the studies talked about, the populations used were school aged children, in the mainstream school. That population remained as so for this study. I may use the results of this study to inform personnel of therapeutic day treatment programs all over the United States if PATHS was a beneficial, evidenced based practice, when used one time a week within the therapeutic day treatment program.

The following chapter will discuss the archival data that will be used and how it will be analyzed. The setting in which the data is collected will be described. The sample and eligibility criteria for use of the secondary data will be described. Included in the chapter will be the reasoning of why an analysis of existing data approach is fitting for this study. The methodology that will be used for this study will be considered from formerly conducted studies so results can be more accurately compared. The goal for the researcher of this study is to identify if PATHS being implemented one time a week isbeneficial. This question will be answered by comparing the secondary data with previous research data when PATHS is implemented a minimum of three times a week.

Chapter 3: Research Method

The purpose of this quantitative archival study was to determine whether PATHS benefits children by helping them improve their behaviors and emotional stability when implemented once per week in a therapeutic day treatment group therapy setting rather than used in a classroom setting a minumum of three times per week. This chapter presents the research methodology and procedures used in this study. I describe the instruments used to compile the information necessary to measure the effects of PATHS. The also present the rationale for the study, the population sample, archival data collection procedures, instrumentation, and the procedures for statistical analysis of the data.

Research Design and Rational

The study was a quantitative analysis of secondary data on the effects of PATHS on children's behaviors and social/emotional stability measured before and after treatment. The setting consisted of schools in Central Virginia where QMHPs implemented PATHS one time per week in a group therapy setting. The most effective analysis for this study was a repeated measures analysis of variance because assessments were available of the children pre and post treatment. All three dependent variables were measured prior to PATHS implementation and also at the end of the school year. The same participants were observed throughout the school year and were included in the pre and post measures. The independent variable was time. The dependent variables were aggressive/disruptive behaviors, concentration/attention, and social/emotional competence as measured by the PATHS student evaluation.

This study provided an opportunity to evaluate a preventative intervention that could be used as a group therapy technique through the therapeutic day treatment program. PATHS may be beneficial when only used one time per week if the secondary data showed a decrease in disruptive/aggressive behaviors and an increase in concentration/attention as well as social/emotional competence. This study also has the potential to impact other therapeutic day treatment programs by encouraging the use of PATHS as a group therapeutic intervention.

There is limited data supporting the benefits of PATHS being used once per week in a group therapy setting. Based on the study findings, researchers could create a group therapy intervention that could be adopted by therapeutic day treatment programs throughout the United States. It would also be important to determine whether no benefits were seen with a decrease in the amount of time PATHS is implemented.

Methodology

Setting

The secondary data for this study was collected in a therapeutic day treatment setting. The data was collected by QMHPs working for Horizon Behavioral Health in different mainstream schools in Lynchburg, Appomattox, Amherst, and Campbell counties in Central Virginia. All schools contained elementary children who participated in the therapeutic day treatment program and received PATHS teaching.

Sample and Population

Secondary data for this study was collected from PATHS student evaluations previously completed on elementary children who had been receiving therapeutic day

treatment services with Horizon Behavioral Health in Central Virginia. The children involved were between the ages of 5 and 12 years. They were all of low socioeconomic status. Ethnicities included Caucasian, African American, Hispanic, and multiracial. All children were in the regular classroom setting in the 2013-2014 school year. Each child involved in therapeutic day treatment had a mental health diagnosis. Attention deficit hyperactivity disorder was the most common, followed by oppositional defiant disorder and mood disorders (e.g., anxiety and depression). The study included children who received PATHS coaching and daily observations by QMHPs for a minimum of 6 months in the therapeutic day treatment group therapy setting. Data was collected on children who met the requirements of the study.

Sampling Procedure

The sampling strategy was convenience sampling including data that had been previously collected. Data for all participants who were enrolled in the therapeutic day treatment program and who received the PATHS intervention for a minimum of 6 months were used in the study. Data was obtained through the PATHS student evaluations of children who participated in the therapeutic day treatment program throughout Central Virginia. A list of archival data for all participants in each of the four localities was used.

The archival data included 193 children who received PATHS instruction while involved in the therapeutic day treatment program during the 2013-2014 school year. A sample size analysis was completed using G*Power 3.0.10 with statistical power set at .8 and alpha at .05. The effect sizes in previous studies were found to be .24, -.22, .35, .11, .30, and .40. The estimated effect size from these six studies was .27. I determined that

the sample size should include a minimum of 29 participants (Faul, 2008). Of the 298 measurements, 193 met the criteria for this study (received PATHS instruction for a minimum of 6 months). The archival data was reviewed and used for the 193 measurements although only 29 subjects were required for this study. The 193 subjects received therapeutic day treatment services to improve behavioral management in the regular classroom setting and decrease risk of out of school placement, in conjunction with the PATHS instruction as described in Chapter 2.

Procedures for Participation and Collection of Secondary Data

Secondary data of all participants involved in the therapeutic day treatment program for a minimum of 6 months were used. A letter requesting access to the archival data set was sent to Horizon Behavioral Health (see Appendix B). This letter was given to the Chief Executive Officer as instructed by the quality control department. With his approval, permission was granted to collect the archival data.

Excel documents were developed by QMHPs employed through Horizon Behavioral Health in each locality. The Excel reports included all PATHS evaluation measures, pre and post, for each child who had been enrolled in the therapeutic day treatment program. The best source of data was from the PATHS student evaluations completed by QMHPs because they were the individuals who were trained to conduct the PATHS evaluations. They also had the knowledge of those who received the intervention for a minimum of 6 months.

Instruments and Materials

The instrument used for this research was the PATHS student evaluation. The PATHS student evaluation and the PATHS curriculum were developed in 1980 by Greenberg (Greenberg, 2006). This instrument was appropriate for the study because the categories and subcategories were the core components evaluated to determine the effectiveness of PATHS. The components were aggressive/disruptive behaviors, concentration/attention, and social/emotional competence. The letter of cooperation from Mark Greenberg for use of this instrument can be found in Appendix C.

The aggressive/disruptive behaviors variable consisted of 15 subcategories that were considered to be externalizing behaviors. An example of an item in this category was rejects limits set by adults. Each subcategory was rated on a 0-5 Likert scale (0 being never or almost never and 5 being almost always). The 15 subcategories were averaged, for one total score, at the beginning of the implementation and at the end of the school year. A decrease in the average showed positive change. See Appendix A for subcategory information.

The concentration/attention category also consisted of externalizing behaviors and was made up of seven subcategories that were rated on a Likert scale from 0 to 5. An example of a subcategory within the concentration/attention category was stays on task. A score of 0 meant a child never or almost never displayed a behavior, and the highest score of 5 meanst a child almost always displayed the behavior. The scores for the seven subcategories were averaged for one total score. This was done when the PATHS intervention began and again at the end of the school year. Concentration and attention

were rated by QMHPs who had been trained in the PATHS curriculum and who worked with the child in the therapeutic day treatment program. An increase in average showed a positive change. See Appendix A for more information.

There were eight subcategories that constituted the social/emotional competence section. Each subcategory was ranked on a Likert scale from 0 to 5. This category consisted of internalizing behaviors. An example of an item in this category was shows empathy and compassion for others' feelings. A score of 0 indicated that a child almost never or never displayed the particular behavior, and the highest score of 5 indicated that a child always or almost always displayed the behavior. After each subcategory was rated, the scores were averaged. See Appendix A for all subcategories in this section.

The PATHS curriculum consists of three units and six volumes that include 131 lessons, pictures, posters, feeling faces, home activity assignments, and role play materials (Greenberg & Kusche, 2006). Unit 1 is the self-control unit involving two volumes: turtle volume and self-control volume. The focus of the 12 lessons in this unit is to teach and reinforce behavioral self-control through the turtle technique (Greenberg & Kusche, 2006). The turtle technique involves children who "go into their shell" by crossing their arms, lowering their heads, and taking three steps: stop, calm down, and identify how they feel (Greenberg & Kusche, 2006). The second unit is the feelings and relationship unit consisting of Volumes 3 and 4: emotional understanding and positive self-esteem. This unit consists of 56 lessons that help children gain emotional and interpersonal understanding. The interpersonal cognitive problem-solving unit, including Volumes 5 and 6 (relationships and interpersonal problem-solving skills), is the third unit

consisting of 33 lessons. This unit helps children develop positive relationships, identify problems, identify feelings, and come up with an appropriate solution (Greenberg & Kusche, 2006).

Children who received the PATHS intervention were monitored and observed daily in the school environment. The participants were observed during all aspects of the school day (in the classroom, cafeteria, outside, and during noncore classes). QMHPs talked with teachers and parents about the participants' behaviors to gain more information and to produce a more accurate score. All QMHPs who completed the student evaluations had gone through the -day PATHS training, which taught them how to implement the curriculum and score individuals pre and post intervention. When QMHPs completed the PATHS evaluation, they relied on situations and information they received and observed throughout the school year to determine the score given for each category.

Data Analysis

A repeated measures analysis of variance (rANOVA) was run using SPSS to answer the research question. This repeated measures analysis allowed for the assessment of change in the dependent variables (aggressive/disruptive behaviors, concentration/attention, and social/emotional competence) over a 6-month period. Pre and post analyses were completed. A two-tailed, $p < .05$ alpha level was used to determine significant change in PATHS evaluation scores. Confidence intervals, descriptive means, standard deviations, and ranges of pre and post test scores as well as

all relevant demographic data were reported. These scores were then compared with published scores from previous research.

Research Question and Hypotheses

Research Question: Is PATHS beneficial in helping children improve their behavioral and emotional health when implemented once per week in a group therapy setting?

Hypothesis 1: Children's aggressive and disruptive behaviors will decrease when PATHS is implemented once per week in a group therapy setting.

Null Hypothesis 1: Children's aggressive and disruptive behaviors will not decrease when PATHS is implemented once per week in a group therapy setting.

Hypothesis 2: Children's concentration and attention will improve when PATHS is implemented once per week in a group therapy setting.

Null Hypothesis 2: Children's concentration and attention will not improve when PATHS is implemented once per week in a group therapy setting.

Hypothesis 3: Children's social and emotional competence will increase when PATHS is implemented once per week in a group therapy setting.

Null Hypothesis 3: Children's social and emotional competence will not increase when PATHS is implemented once per week in a group therapy setting.

Threats to Validity

Threats to validity included different factors that came into play within the children's home and community environments. The lessons taught during group therapy may not have been consistently reinforced in the home setting, so children may not have

been able to make the improvements expected. A second threat to validity was crisis situations that may have arisen within the therapeutic day treatment program, resulting in lessons being missed or shortened. Children served within the therapeutic day treatment program tend to relocate, so there may have been times when a child moved away before the post test was completed.

Threats to internal validity may have occurred based on the relationship the participants had with the clinician implementing the intervention. Internal validity may have been compromised by the participants' desire or lack of desire to participate in the intervention and their bias toward the curriculum and/or their clinician. Another threat to internal validity was a child's self-efficacy. If a child did not feel he or she had the ability to make the improvement being taught and practiced by the intervention, then internal validity was threatened.

External validity was threatened by children receiving interventions other than day treatment during the period in which the PATHS intervention was implemented. For example, a child may have been placed on medication or may have received crisis intervention services at some point during the 6 months.

Construct validity may have been threatened by emotional and social competence being measured by observations of the participants' behaviors. Because these were not items that could be directly observed and identified, QMHP's had to relate the change in behaviors and different events to the social and emotional competence of the child. When observing the participants and completing evaluations, it is possible that the QMHPs were not measuring what they thought they were measuring.

Ethical Procedures

PATHS information of participants was gathered through a review of archival data. Anonymity was kept with no identification given on the compiled data of the PATHS evaluations. Charts and tables were used to describe statistical results. Necessary permission was granted to get the right to use archival data collected by Horizon Behavioral Health staff (Appendix B). Approval for the study was first obtained through Walden's Institutional Review Board (IRB). No data was reviewed or collected for this research project, prior to all appropriate authorizations.

Summary and Conclusion

Chapter 3 describes the study of secondary data and how it will be used to measure the effects of PATHS when used one time a week, on a child's concentration/attention, disruptive/aggressive behaviors, and social/emotional competence. Research will display if decreasing the amount of time PATHS is implemented is shown to benefit children, based on the compiling of archival data. A summary of the archival data collected will be discussed and interpreted in chapter 4. Understanding will also be given into the efficiency of this intervention program.

Chapter 4: Results

Chapter 4 presents data collection procedures, demographic characteristics, and the analysis of archival data collected by QMHPs at Horizon Behavioral Health. The purpose of this quantitative study was to test the hypotheses that children who received the PATHS intervention one time per week would display a decrease in disruptive/aggressive behaviors, an increase in concentration/attention, and an increase in social/emotional competence. The three hypotheses were tested using repeated measure analyses in hopes of answering the research question: Is PATHS beneficial in helping children improve their behavioral and emotional health when implemented once per week in a group therapy setting? This chapter presents the results of the study.

Data Collection

The archival data were received through e-mail containing Excel files. The data included pre and post scores from the PATHS student evaluations of children in the therapeutic day treatment program. The sample size was 193. The goal of this study was to determine the effects of the independent variable (time) on the dependent variables (disruptive/aggressive behaviors, concentration/attention, and social/emotional competence). There were no discrepancies in data from the plan presented in Chapter 3.

Descriptive and Demographic Characteristics

Over a 6-month period during the 2013-2014 school year, data were collected for indivduals who participated in the PATHS intervention in the therapeutic day treatment program. The participants included students in kindergarten through 5th grade, between the ages of 5 and 12 years old who had received the PATHS intervention one time per

week for a minimum of 6 months while in the therapeutic day treatment program. The student evaluations were completed at the beginning of services and at the end of the school year (in August); the treatment period included at least 6 months and no more than 9 months. Ninety-eight percent of the children were of low socioeconomic status and were receiving Medicaid funding. Table 1 shows the demographic characteristics for the students represented in the archival data set.

Table 1

Demographic Characteristics of Study Sample (N=193)

Characteristic	N	%
Gender		
Girls	76	39.4
Boys	117	60.6
Ethnicity		
African American	106	54.9
Caucasian	72	37.3
Hispanic	4	2.1
Multiracial	11	5.7
Diagnosis		
Attention Deficit Hyperactivity Disorder	167	86.3
Mood Disorders	90	46.6
Adjustment Disorders	10	5.4
Psychotic Disorders	3	1.4

Of the 193 participants represented in the archival data, 76 were girls and 117 were boys. The ethnicities represented were African American (54.9%), Caucasian (37.3%), Hispanic (2.1%) and Multiracial (5.7%). The children receiving PATHS were experiencing various mental health disorders, and 42% had multiple diagnoses. Attention

deficit hyperactive disorder was the most common (86.3%). The second most common disorder was mood disorder(s) such as depression, anxiety, bi-polar, and dysthymia (46.6%). Adjustment disorders were observed in 5.4% of the children, and psychotic disorders were observed in 1.4%.

Assumptions of One-Way Repeated Measures ANOVA

There are five assumptions that must be satisfied when analyzing data using a one-way repeated measures ANOVA. The first assumption is for the measurement of the dependent variable to be at a continuous level (Hertzog & Rovine, 1985). The second assumption is the independent variable should consist of at least two categorical groups (Hertzog & Rovine, 1985). In the study, the same participants were represented in the results both before and after the PATHS intervention, indicating that the study consisted of two categorical related groups. Assumption three is that there should be no significant outliers in the data (Hertzog & Rovine, 1985). Tukey's test was used to determine outliers for each variable, pre and post PATHS intervention: Q3 + 1.5 (Q3-Q1) = Upper Boundary; Q1 – 1.5 (Q3-Q1) = Lower Boundary where Q1 = Lower quartile and Q3 = upper quartiles. The archival data used in this study displayed no significant outliers, with all data falling between the upper and lower bounds, as indicated in Table 2.

Table 2

Upper and Lower Boundaries using Tukey's Test (g=1.5)

Variable	Upper Boundary	Lower Boundary
AggDiss1	4.625	0.105
ConAtt1	3.52	0.605
SocEmoComp1	4.1	0.34
Agg/Diss2	4.255	-0.425
ConAtt2	4.775	0.335
SocEmoComp2	4.865	0.905

The fourth assumption is that there is an approximately normal distribution (Hertzog & Rovine, 1985). Normality was tested using the Shapiro-Wilk test of normality and reviewing skewness and kurtosis in SPSS. The Shapiro-Wilk test was accepted for aggressive/disruptive behaviors 1 (p = .694), aggressive/disruptive behaviors 2 (p = .053), and concentration/attention 1 (p = .135). The Shapiro-Wilk test was rejected for three variables: social/emotional competence 1 (p = .005), concentration/attention 2 (p = .004), and social/emotional competence 2 (p = .009). Due to Shapiro-Wilk being rejected for three variables, their normal Q-Q plots were reviewed to determine whether the violation was large enough for the transformation of data to be needed, as indicated in Figures 1.0, 1.1, and 1.2.

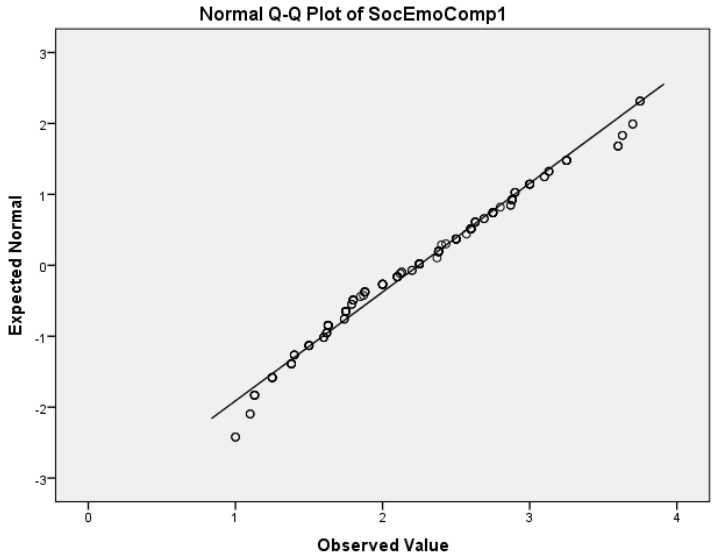

Figure 1.0. Normal Q-Q plot of social/emotional competence 1

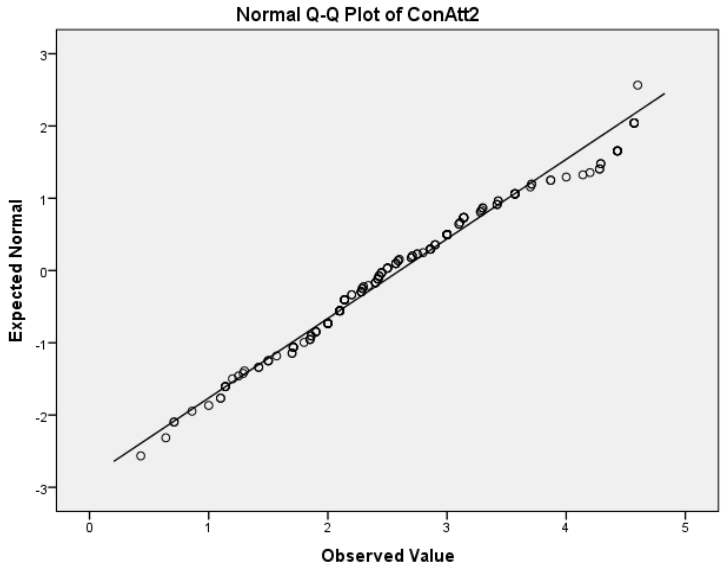

Figure 1.1. Normal Q-Q plot of concentration/attention 2

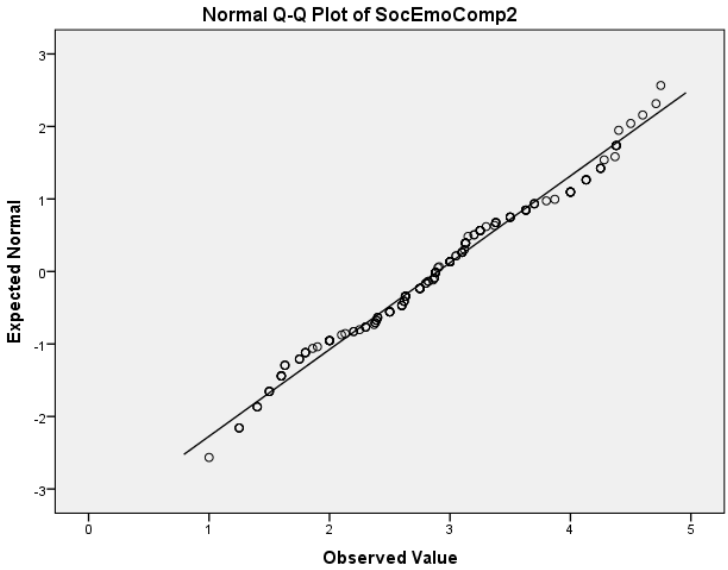

Figure 1.2. Normal Q-Q plot of social/emotional competence 2

I determined that the violation was small, as indicated by the close to normal distributions displayed in the normal Q-Q plots. Skewness was positive for all variables except aggressive/disruptive behaviors 1, which indicated a slightly left-skewed value while others indicated a slightly right-skewed value. Kurtosis was negative for all variables, indicating a flat distribution. Each value was divided by its standard error with results within the $\pm$ 1.96 limits, indicating that the departure from normality was not extreme. The final assumption is that the difference between all combinations of related groups must be equal, known as sphericity (Hertzog & Rovine, 1985). In this study, only one correlation could be made because there were only two time points (pre and post intervention). For this reason, the assumption of sphericity was satisfied.

Results

The following research question and hypotheses were tested.

Research Question: Is PATHS beneficial in helping children improve their behavioral and emotional health when implemented once per week in a group therapy setting?

Null and Alternative Hypothesis 1

Hypothesis 1: Children's aggressive and disruptive behaviors will decrease when PATHS is implemented once per week in a group therapy setting.

Null Hypothesis 1: Children's aggressive and disruptive behaviors will not decrease when PATHS is implemented once per week in a group therapy setting. A one-way repeated measures ANOVA was conducted with the within-subjects factor of time. Means, standard errors, and 95% confidence intervals are presented in Table 3.

Table 3

Means, Standard Errors, and 95th Confidence Intervals for Aggressive and Disruptive Behaviors

Measure	Time	M (SD)	Standard Error	Lower CI	Upper CI
Aggression/Disruption	1	2.366 (.814)	.059	2.250	2.481
Aggression/Disruption	2	1.915 (.813)	.061	1.800	2.031

Note. $N = 193$

Results of the one-way repeated measures ANOVA indicated that the difference in aggressive/disruptive behaviors displayed between the pre-score ($M = 2.366$, $SD = .814$) and post score ($M = 1.915$, $SD = .813$) were statistically significant, $F(1, 192) = 56.134$, $p < .005$. The effect size of the change in aggressive/disruptive behaviors was η_p^2

= .226. This is considered a large effect size (Morris & Fritz, 2013). The mean difference was .408. The null hypothesis was rejected. See Table 4.

Table 4

Test of Within-Subjects Contrasts for Disruptive/Aggressive Behaviors

Source	Measure	Time	df	Mean Square	*F*	Sig.
Time	Aggression/Disruption	Linear	1	19.577	56.134	.000
Error (Time)	Aggression/Disruption	Linear	192	.349		

Null and Alternative Hypothesis 2

Hypothesis 2: Children's concentration and attention will improve when PATHS is implemented once per week in a group therapy setting.

Null Hypothesis 2: Children's concentration and attention will not improve when PATHS is implemented once per week in a group therapy setting. A one-way repeated measures ANOVA was conducted with the within-subjects factor of time. Means, standard errors, and 95% confidence intervals are presented in Table 5.

Table 5

Means, Standard Errors, and 95th Confidence Intervals for Concentration and Attention

Measure	Time	*M* (*SD*)	Standard Error	Lower CI	Upper CI
Concentration/Attention	1	2.064 (.579)	.042	1.982	2.146
Concentration/Attention	2	2.602 (.908)	.065	2.473	2.731

Note. $N = 193$

Results of the one-way repeated measures ANOVA indicated that the difference in concentration and attention deficits displayed between the pre score (M = 2.064, SD = .579) and post score (M = 2.602, SD = .908) were statistically significant, F (1, 192) = 62.726, p <.005. The effect size of the change in concentration and attention was η_p^2 = .246. This is considered a large effect size (Morris & Fritz, 2013). The mean difference was .553. As a result, the null hypothesis was rejected and the alternative hypothesis was accepted with improvement being seen in concentration and attention. These results are presented in Table 6.

Table 6

Test of Within-Subjects Contrasts for Concentration/Attention

Source	Measure	Time	df	Mean Square	*F*	Sig.
Time	Concentration/Attention	Linear	1	27.978	62.726	.000
Error (Time)	Concentration/Attention	Linear	192	.446		

Null and Alternative Hypothesis 3

Hypothesis 3: Children's social and emotional competence will increase when PATHS is implemented once per week in a group therapy setting.

Null Hypothesis 3: Children's social and emotional competence will not increase when PATHS is implemented once per week in a group therapy setting. A one-way repeated measures ANOVA was conducted with the within-subjects factor of time. Means, standard errors, and 95% confidence intervals are presented in Table 7.

Table 7

Means, Standard Errors, and 95th Confidence Intervals for Social and Emotional Competence

Measure	Time	Mean	Standard Error	Lower CI	Upper CI
Competencies	1	2.246 (.652)	.047	2.154	2.339
Competencies	2	2.899 (.835)	.060	2.780	3.017

Note. $N = 193$

Results of the one-way repeated measures ANOVA indicated that the difference in social/emotional competence displayed between the pre score ($M = 2.246$, $SD = .652$) and post score ($M = 2.899$, $SD = .835$) were statistically significant, $F\ (1, 192) = 96.635$, $p < .005$. The mean difference was .643. The effect size of the change in social/emotional competence was $\eta_p^2 = .335$. This is considered a large effect size (Morris & Fritz, 2013). Therefore, the null hypothesis was rejected and the alternative hypothesis was accepted. See Table 8.

Table 8

Test of Within-Subjects Contrasts for Social/Emotional Competence

Source	Measure	Time	df	Mean Square	*F*	Sig.
Time	Competencies	Linear	1	41.123	96.635	.000
Error (Time)	Competencies	Linear	192	.426		

Summary and Conclusion

The results indicated a significant change in all three variables; therefore, the three null hypotheses were rejected. Significant improvements were found in concentration and attention, social/emotional competence, and disruptive/aggressive behaviors. There was an increase in concentration and attention and social/emotional competence displayed by the children. In addition, there was a decrease in disruptive/aggressive behaviors displayed. Chapter 5 presents an analysis of the findings and limitations of the study, and includes recommendations for future research and implications for social change.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this study was to determine whether PATHS was beneficial when used one time per week as opposed to three times per week as it was intended (Greenberg, 2006). PATHS was designed to be used by teachers to help children modify undesirable behaviors and improve emotional health (Kelly et al., 2004). PATHS was intended to be used a minimum of three times per week and up to five times, in the classroom setting (Greenberg & Kusche, 2006). PATHS is considered to be a universal curriculum to be used by any teacher in any classroom setting, including regular education, special education, and self-contained classrooms (Domitrovich et al., 2009).

This study was completed using archived data that consisted of pre and post scores from the PATHS student evaluations retrieved from Horizon Behavioral Health. The participants were children who received therapeutic day treatment services in mainstream schools located in Lynchburg City and the Central Virginia counties of Amherst, Campbell, and Appomattox. The PATHS lessons were taught to the participants one time per week during group therapy. Due to the curriculum being intended to be used a minimum of three times per week, this study was needed to determine whether PATHS was beneficial when used one time per week.

Summary of Findings

A repeated measures analysis was completed on data from the PATHS evaluation containing results on 193 students with mental health disorders including attention deficit hyperactivity disorder, mood disorders, adjustment disorders, and psychotic disorders. The repeated measures ANOVA showed that there was a significant improvement in

children's behavior. Attention and concentration increased, social and emotional competence increased, and aggressive/disruptive behaviors decreased.

Interpretation of the Findings

The findings from this study indicate that the PATHS intervention can be beneficial even when used one time per week. Effect sizes were computed to quantify the effectiveness of the PATHS intervention. The effect size is the strength of association identified by what proportion of the variance is a representation of the factor in question (Brown, 2008). Partial eta squared is a measure of variance that was used to determine the effect size for each variable. The recommendation for use of partial eta squared is when the same individuals participate in each variable being measured (Brown, 2008). This study was a within-subjects design with the same participants in all measurements. A small effect for partial eta squared is η_p^2 =.01, a medium effect is η_p^2 = .06, and a large effect is η_p^2 = .14 (Morris & Fritz, 2013). There were large effects in aggressive/disruptive behaviors (η_p^2 = .226), concentration/attention (η_p^2 = .246), and social/emotional competence (η_p^2 = .335).

After children had received PATHS one time per week in conjunction with day treatment services, there was a decrease in mean aggressive and disruptive behaviors by 17.69%. The decrease in mean indicates that children displayed fewer aggressive/disruptive behaviors at the end of the study when compared to the beginning. There was an increase in mean concentration and attention by 25.67% and mean social and emotional competence by 27.85%, indicating that children displayed greater ability to concentrate and an improvement in understanding emotions and socializing with

others. The results of this study indicate that the PATHS intervention may have helped children display improvements in the areas of concentration/attention, disruptive/aggressive behaviors, and social/emotional competence when implemented in conjunction with therapeutic day treatment services.

There are different examples of behavioral improvements that would have been observed to produce the changes in evaluation scores seen in this study. Children who participated in the PATHS intervention displayed a change in cognitive and behavioral functioning and social abilities as indicated by the change in scores on their evaluations before and after the intervention. Children showed a greater ability to get along with others and not revert to aggressive behaviors as a means of communication and social interaction. The majority of children were able to remain in their classrooms due to the decrease in disruptive behaviors and their increased ability to focus, leading to more exposure to what was being taught in the classroom and increasing the likelihood of learning taking place. The children who participated began to interact with others in an appropriate manner and build healthy friendships. Children learned to be more self-aware and express their feelings and emotions in an appropriate manner.

Findings in Context of Theoretical Framework

Social learning theorists predict that when there is repeated exposure to different social experiences, children will learn to acquire the behaviors related to those exposures and experiences (Baer & Bandura, 1963). Social learning theorists would conclude that due to children receiving repeated exposure to the PATHS curriculum, they are more likely to learn healthy cognitive and behavioral skills (Bandura, 1973). The results of this

study indicate that repeated exposure to the PATHS curriculum once a week helped children display more desirable behaviors. CBT theorists assert that helping individuals change mental strategies and assisting them in changing behavioral responses leads to more consistent improvements (Southam-Gerow & Kendall, 2000). The results of this study support this theory. Results show that children receiving the PATHS intervention in conjunction with therapeutic day treatment displayed changes in their mental processes and behaviors. By adopting evidence-based practices such as PATHS that nurture positive mental and behavioral practices, children increase their ability to learn and use the skills needed to promote success in the school setting.

Comparison of Findings

Previous studies showed the benefits of the PATHS interventions when implemented a minimum of three times per week. In a study in 1991 by the Conduct Problems Prevention Research Group, 6,715 children in 12 different schools and 311 classrooms in mainstream schools throughout the United States received the PATHS intervention three times per week. Over 75% of the classrooms were considered high-risk with children displaying severe disruptive/aggressive behaviors (Conduct Problems Prevention Research Group, 1999). Although the children in this study were not in special education classrooms, 75% of the children were considered high risk, implying that these children required more support and interventions throughout the study (Conduct Problems Prevention Research Group, 1999). The teachers who implemented the interventions in these schools received the same training as the QMHPs with Horizon Behavioral Health (Conduct Problems Prevention Research Group, 1999). However, the

children in the 1999 study were scored using a different rating scale, not the PATHS student evaluation. The researchers in this study used teacher interviews (assessing concentration and cognitive abilities), peer nominations (assessing social skills, emotional competencies, and likeability), and observer ratings (assessing aggression, disruption, and hyperactivity) to determine the effects of PATHS (Conduct Problems Prevention Research Group, 1999). Although the assessment used was different, the three behavioral categories assessed relate to the three dependent variables assessed in the current research study. For all three variables examined by the Conduct Problems Research Group (1999), effect size was measured using Cohen's *d*. When measuring effect size using Cohen's *d*, 0.2 is a small effect, 0.5 is a medium effect, and 0.8 is a large effect (Lakens, 2013). There was a small effect size for each variable: observer ratings (aggressive/disruptive behaviors, $d = .22$), teacher interviews (concentration/attention, $d = .079$), and peer nomination (social/emotional competence, $d = .052$). The magnitude of effect between the pre and post measures of the Conduct Problems Prevention Resarch Group study was lower than what was observed in the current study, which showed large effects in aggressive/disruptive behaviors ($\eta_p^2 = .226$), concentration/attention ($\eta_p^2 = .246$), and social/emotional competence ($\eta_p^2 = .335$).

In 2004 Kam, Greenberg, and Kusche conducted a follow-up research trial to determine how PATHS was benefiting children after 3 years. The evaluation design was a randomized study involving special education students and a control group. PATHS was implemented 3-5 times per week in the classroom, and teachers completed the evaluations (Kam et al., 2004). The teachers received the same training as the QMHPs

who implemented the PATHS intervention in the current study. Kam et al. measured the three categories of behaviors using multilevel modeling, which is a statistical technique designed to manage more than one observation of a person. Kam et al. collected data through teacher observation and self-report. The three rated categories included externalizing behaviors relating to aggressive/disruptive behaviors (e.g., aggression, disruption, blurting out), internalizing behaviors relating to concentration/attention (e.g., lack of focus, lack of concentration, lack of motivation), and competencies relating to social/emotional competency (e.g., social skills, peer interactions, likeability, managing emotions) (Kam et al., 2004). Effect size for this study was measured using Cohen's *d* with 0.2 being a small effect, 0.5 a medium effect, and 0.8 a large effect (Lakens, 2013). After 3 years of the PATHS intervention, changes continued to be seen with a medium/large effect size of internalizing behaviors ($d = .49$) and competencies ($d = .54$). There was a small effect of externalizing behaviors ($d = .18$).

My study showed strong similarities with the study conducted by Kam, et al. (2004). In both studies children were in mainstream classrooms. In my study, children received more support from day treatment staff, and in Kam et al.'s study children experienced the presence of special education teachers. The daily support offered by special education teachers was similar to what day treatment staff implemented for the participants of my study. In 1999 the Conduct Problems Prevention Research Group explained that 75% of the participants in their study were considered high risk, implying that more support was needed even though the children were in regular classrooms. It is assumed that the children in the study conducted by the Conduct Problems Prevention

Research Group received more support throughout the school day, similar to the suport the children in therapeutic day treatment received in my study. There has been previous research that relates to this current study involving methods that help children improve in areas of aggressive/disruptive behaviors, concentration and attention, and social and emotional competence. L

In 2013, Liber, De Boo, Huizenga, and Prins found that CBT was the most beneficial treatment intervention in helping children decrease disruptive/aggressive behaviors. Liber et al.'s study included 173 students who displayed aggressive/disruptive behaviors and received school-based CBT interventions other than PATHS. The implementation of school-based interventions assisted in leading children to positive effects related to aggression and disruption (Liber et al., 2013). All participants showed a decrease in disruptive and aggressive behaviors with a large effect size ($\eta_p^2 = .39$). PATHS is a school-based intervention related to CBT that involves similar techniques for impacting behaviors and thinking (Greenberg & Kusche, 2006).

In 2006 Ogden performed a study that focused on how to help children improve their concentration and attention in school. Students rated the impact of counseling on their ability to be motivated, to concentrate, and to pay attention in the classroom. Of the 264 students interviewed, 60-70% stated that counseing helped (Ogden, 2006). Ogden reported that guidance counselors helped children focus better on their work and stay more motivated. The interventions from guidance counselors were beneficial because they were able to talk with children about their feelings and how their lack of focus impacts their academics (Ogden, 2006). The QMHPs in my study acted as counselors in

the school setting and had discussions with children to help them focus and concentrate and learn techniques to assist them with improving concentration and attention in the school setting (Hicks et al., 1990).

In United States schools today, more than 20% of children and adolescents display dysfunctional behavior relating to social and emotional competence (Goodman, 2001). Lizuka, Barrett, Gillies, Cook, and Marinovic completed a study in 2014 in which 47.4% of children were considered "high difficulty" due to their lack of appropriate social and emotional competence. This lack of understanding led to difficult behaviors and interactions at school (Lizuka, Barrett, Gillies, Cook, & Marinovic, 2014). A school-based intervention was implemented to determine whether it would benefit children in developing social and emotional competence (Lizuka et al., 2014). The FRIENDS for Life program was implemented and students' social and emotional competence was enhanced (Lizuka et al., 2014). The FRIENDS for Life program is similar to PATHS because it focuses on the student's social and emotional competency as well as behavioral and emotional health (Lizuka et al., 2014). At the end of the study, no students were considered "high difficulty" (Lizuka et al., 2014). It is important for children to learn social and emotional competency skills at an early age in order to be more successful in school and to develop appropriate relationships (DuPaul & Carlson, 2005).

Limitations of the Study

It is suggested from the results of this study that children observed after using PATHS one time a week in conjunction with the therapeutic day treatment program showed significant changes in behaviors, attention, and social/emotional competence.

Other variables may have played a part in this finding, limiting the validity of this study. It is difficult to pinpoint whether or not the PATHS intervention used one time a week in conjunction with the therapeutic day treatment service was as beneficial as described. Some of the children had received other services while receiving therapeutic day treatment and the PATHS intervention. The most common service children were involved in was psychiatry. If children saw a psychiatrist, the intervention began before PATHS was implemented and before the rating period started. Although assumptions can be made it would be beneficial to hear from the children who received the intervention to identify what they feel about the PATHS intervention and if there were specific life events, relationships with their QMHP's, or other interventions implemented that helped lead to improvements made.

A possible reason for the large effect size when implementing PATHS in a therapeutic day treatment program is that therapeutic interventions and behavior modification techniques were implemented daily to help the children in making gains related to their behavior goals in the therapeutic day treatment program. Therefore, the conclusion that can be drawn from this study is that PATHS can be beneficial when implemented one time a week as a group therapy intervention in a day treatment program and therefore these results only generalize to similar treatment programs. An unavoidable limitation to the current study is that there were no previous assessments of children in a similar setting receiving the PATHS intervention.

A limitation related to validity of this study is there was no control group. This study was not able to have a control group because it was an assessment of previously

collected data. Not having a control group is a limitation because it was not made evident if the individuals in therapeutic day treatment could have had the same outcomes as the individuals who received the PATHS instruction along with therapeutic day treatment. All QMHP's collected the data in the same way but the PATHS student evaluations are subjective, and this is seen as a limitation as well. A limitation being a problem of generalizability is the study completed in 1999 by the Conduct Prevention Research Group does not show but implies that participants had extra support throughout the school day. This implication was made because children considered high risk usually need more support in mainstream schools, though the study did not report this. This study included only one specific sample, so the effectiveness of PATHS cannot be based on this one study.

Recommendations for Future Research

A recommendation for future researchers is to look into programs where the PATHS curriculum is being implemented in the classroom environment, as intended, but less than three times a week, with a control group used in the study. If there is evidence of benefits with implementation as mentioned above, the intervention may be used by more schools and programs. Another recommendation is for researchers to conduct studies with PATHS being implemented 3-5 times a week, as intended, with the data being collected using the PATHS student evaluation rather than other rating scales and observations. The use of the same rating scale will allow for a more accurate comparison of data across studies. A follow-up to this study is essential in identifying the true benefits of the PATHS program one time a week. A future study should be conducted

with children not participating in a therapeutic day treatment program while receiving the PATHS intervention one time per week. Another recommendation is for researchers to have children and parents complete surveys to identify what they have gained from the PATHS intervention and how they have responded to the curriculum. A follow-up qualitative study asking the evaluators what they think about the PATHS intervention would also be beneficial.

A short-term recommendation is to continue collecting data on the individuals who receive the PATHS intervention during group therapy in the therapeutic day treatment program, to continue to identify benefits. A long-term recommendation is to make other therapeutic day treatment programs throughout the United States aware of the benefits of PATHS being used, as an evidence-based practice, as a weekly group therapy intervention.

Implications for Social Change

This study shows the PATHS curriculum could be effective when used in the therapeutic day treatment program once per week. The PATHS curriculum can grow to reach many children due to not being limited to only being used in the classroom a minimum of three times per week.There are hundreds of therapeutic day treatment programs throughout the United States that could benefit from using the PATHS curriculum as a group therapy intervention.

Positive social change can happen at many levels. It requires research-based interventions, such as PATHS, by promoting personal accountability at the individual level, then expanding into the family units, and also to the organizational level (school

environment). There is help for children who suffer from different mental health disorders such as ADHD, ODD, adjustment disorders, mood disorders, and psychotic disorders by receiving the PATHS intervention. Use of the PATHS intervention will lead to minimizing problematic behaviors that children with mental health disorders display leading to children becoming good citizens and positive contributors in society (Abbassi, & Aslinia, 2010; Van Acker, 2007).

Due to the lack of empirical research of PATHS used one time a week in conjunction with therapeutic day treatment, it is predicted that this model could significantly change how PATHS is promoted and used. PATHS may be implemented in more day treatment programs to help children improve classroom behaviors, decrease aggressive behaviors, increase concentration and attention, establish positive friendships, reduce antisocial behaviors, and increase social and emotional competence. These real world applications produce positive change by concentrating on concepts that promote the development of self-regulatory strategies. The results of this study will help to justify the need for the continuance of this program within the therapeutic day treatment program, which will allow for the collection of further data that could influence other programs throughout the United States.

Recommendations for Practice

It would be beneficial for schools to adopt a school-based intervention model, such as the PATHS intervention. PATHS helps children change their behaviors and gain social and emotional abilities. If it is an intervention implemented on a school-wide scale, the change may be abundant. Change takes place by giving children self-regulatory skills,

aiding in identifying and implementing coping strategies, and helping children become more self-aware of their behaviors and choices and how they impact their lives as well as others.

Future Implications

Using programs like PATHS as a group therapy intervention can lead to positive change in a child's behavior and social/emotional competence. The PATHS program is making positive changes within the Central Virginia therapeutic day treatment program. Improving PATHS research practices could provide the potential for more funding in more day treatment programs. In the future schools may implement PATHS less than 3 times a week to help increase use by teachers.

Summary and Conclusion

This research has shown that there were significant improvements in children's behaviors when PATHS was implemented one time per week in a therapeutic day treatment environment. There was a decrease in aggressive/disruptive behaviors, an increase in concentration/attention, and an increase in social/emotional competence. Through this study, it has been identified that implementing PATHS within day treatment programs has significant benefits. It is important for children to suppress problematic behaviors for a sensible amount of time for the desired behaviors to be strengthened (Greenberg et al., 2003). PATHS allows this process to take place.

Therapeutic day treatment services are being used more in today's society, servicing children who suffer from mental health disorders (Clark & Jerrott, 2012). Therapeutic day treatment programs must use evidenced based intervention models that

can address the challenging behaviors manifested within this population of students (Hughes & Adera, 2006). By using an evidence-based intervention (PATHS) children will learn to cope with different struggles and symptoms of mental health disorders in order to help lead to academic success and becoming positive contributors to society (Abbassi, & Aslinia, 2010; Van Acker, 2007).

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Appendix A: PATHS Evaluation

PATHS Student Evaluation

Student's name: _____ Date of birth: _____

Grade level: _____ Race/Ethnicity: _____Sex: __

Teacher: _____ School year: _____

Part I
Use this scale at the beginning and the end of the school, year to assess how often the child exhibits each behavior listed below. Compare to other students of the same grade level and gender:

0=never or almost never; 1=rarely; 2=sometimes; 3=often; 4=very often; 5=almost always
Write the number in the space provided in the appropriate column.

A. Aggression/Disruptive behavior	**Beginning of school year** (pre-curriculum)	**End of school year** (post-curriculum)	**Total change**
1. Takes others' property			
2. Yells at others during conflict			
3. Fights			
4. Stubborn			
5. Loses temper when there is a disagreement			
6. Lies			
7. Breaks classroom rules			
8. Teases classmates			
9. Harms others			
10. Easily irritated when he/she has trouble with some task			
11. Is disliked by classmates			
12. Rejects limits set by adults			
13. Stays excited or upset			
14. Handles disagreements in a negative way			
15. Gets angry when provoked by other children			
	Average score	Average score	Average change in score

Part I, Continued

0= never or almost never; 1=-rarely; 2=sometimes; 3=often; 4=very often; 5=almost always

B. Concentration/Attention	**Beginning of school year (pre-curriculum)**	**End of school year (post-curriculum)**	**Total change**
16.Works hard			
17.Works through distractions			
18.Concentrates			
19. Stays on task			
20. Pays attention			
21. Maintains focus			
22. Performs at grade level			
	Average score	Average score	Average change in score

0= never or almost never; 1=rarely; 2=sometimes; 3=often; 4=very often; 5=almost always

C. Social and emotional competence

23. Feels at ease to talk to you			
24. Shows empathy and compassion for others' feelings			
25. Is liked by classmates			
26. Provides help, shares materials, and acts cooperatively with others			
27. Takes turns, plays fair, and follows rules of the game			
28. Listens carefully to others			
29. Initiates interactions and joins in with others in a positive manner			
30. Recognizes and labels his/her feelings and those of others appropriately			
	Average score	Average score	Average change in score

Appendix B: Permission Letter from Horizon Behavioral Health

Letter of Cooperation from Horizon Behavioral Health

Horizon Behavioral Health

Damion Cabezas

7/25/2014

Dear Beth Hall,

Based on my review of your research proposal, I give permission for you to conduct the study entitled The Effectiveness of PATHS (Promoting Alternative Thinking Strategies) When Used in Therapeutic day treatment within Horizon Behavioral Health. As part of this study, I authorize you to use archival data from outcome results with names of participants being anonymous for purposes of the study.

We understand that our organization's responsibilities include: archival data being used to measure the benefits of PATHS in the therapeutic day treatment setting. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,
Damien Cabezas
Damien.cabezas@horizonbh.org
CEO
4410 Old Forest Rd., Lynchburg, VA 24501
434-455-1000

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically. Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. Walden University staff verify any electronic signatures that do not originate from a password-protected source (i.e., an email address officially on file with Walden)

Appendix C: Permission Letter from PATHS

Letter of Cooperation from PATHS

PATHS

Mark Greenberg

Date 7/15/2014

Dear Beth Hall,

Based on my review of your research proposal, I give permission for you to conduct the study entitled The Effectiveness of PATHS (Promoting Alternative Thinking Strategies) When Used in Therapeutic day treatment. As part of this study, I authorize you to use the PATHS Student Evaluation for the measures being tested.

We understand that our organization's responsibilities include the use of the PATHS Student Evaluation and the archival data correlated to this evaluation for each participant of the study. We reserve the right to withdraw from the study at any time if our circumstances change.

I confirm that I am authorized to approve research in this setting.

I understand that the data collected will remain entirely confidential and may not be provided to anyone outside of the research team without permission from the Walden University IRB.

Sincerely,
Mark T. Greenberg
mxg47@psu.edu

Walden University policy on electronic signatures: An electronic signature is just as valid as a written signature as long as both parties have agreed to conduct the transaction electronically. Electronic signatures are regulated by the Uniform Electronic Transactions Act. Electronic signatures are only valid when the signer is either (a) the sender of the email, or (b) copied on the email containing the signed document. Legally an "electronic signature" can be the person's typed name, their email address, or any other identifying marker. Walden University staff verify any electronic signatures that do not originate from a password-protected source (i.e., an email address officially on file with Walden University).

Curriculum Vitae

Beth C. Wilson, MS

347 Windy Pine Dr.
Lake Wylie, SC 29710
Telephone: 704-516-2394
E-mail:bcherish@gmail.com

Academic Experience:

8/14
Received licensure for professional counseling in state of North Carolina

12/12
Received licensure for professional counseling in state of Virginia

3/06-5/10
Received a M.S. and license in Mental Health counseling
Walden University
Minneapolis, Minnesota

6/01-12/02
Bachelor of Arts in behavioral sciences
California State Polytechnic University Pomona, California

Relevant Professional Experience:

5/12-10/14
Therapeutic Day Treatment Program Manager
Horizon Behavioral Health
Managed and helped develop an alternative program for children who had been removed from the regular school setting and needed extra therapeutic support. Supervised a clinical team of supervisors in the day treatment program. Provided supervisions for individuals completing their master's degree in counseling or a related field. Was part of the leadership team in the agency. Completed assessments for individuals in need of therapeutic day treatment services.

12/08-5/12
Therapeutic Day Treatment Site Supervisor
Central Virginia Community Services
Conduct weekly individual therapy for children in the day treatment program within the school setting and provide weekly group therapy for the children in the program. Build therapeutic rapport with children and their families. Work closely with parents and school staff in order to help children achieve goals set in their individual service plans. Create individual service plans for clients, collaborate with psychologist, psychiatrist, case managers, and outpatient therapists about client's progress or regression in the school setting.

2/08-10/08
Crossroads Program Manager/Scholarship Case Manager
Olive Crest Treatment Center
Assist with developing program guidelines and proposals to better assist homeless youth within Orange County. Work directly with homeless individuals to help them

develop independent living skills in order to be able to live on their own. Also work with former foster youth of Olive Crest by financially helping them with education expenses in order to encourage them to continue schooling.

12/06- 2/08
Mental Health Coordinator
Mental Health Worker
Olive Crest Treatment Center
Supervised 7 staff in the mental health division. Create training manuals and train staff in the "Therapeutic Behavioral Services" realm. Conduct weekly treatment team meetings and collaborate with staff about cases and services being offered to the clients. Complete county paper work and audit client charts. Provided direct care supports as a mental health worker for emancipated youth in need of independent living help.

12/04-10/06
Clinician
Central Virginia Community Services
Used therapeutic techniques to intervene when children, ages 3-18, were misbehaving and needed assistance and redirection. Helped Create individual service plans and implemented these service plans for the children who were served. I counseled with the families of clients and helped with discipline and consequence techniques to be used in the home. I assisted with conducting group therapy for the children served. Documented for Medicaid, daily, on every encounter with children, talking about behaviors displayed that correlated with behaviors on child's ISP and explained interventions implemented in their daily treatment.

12/05-10/06
Child Care Counselor
New Alternatives Interim Care Facility
Worked with severely emotionally disturbed adolescents age 12-18 in a residential treatment facility. Intervened with negative behaviors and helped clients with achieving their treatment goals. Worked closely with Orange County mental health and social workers in order to collaborate about services offered to the clients. Was a primary counselor to one client and helped with developing goals, discovering behaviors that will help in achieving those goals, and assistance with implementing the behaviors that needed to be seen.

Associated Professional Experience:

6/01-11/06
Pharmaceutical marketer/ Health Screener
Med Specialties Compounding Pharmacy
Worked as a pharmaceutical marketer for a new pharmacy. Created notebooks and marketing tools then went to meet with different facilities in order to increase business by gaining clientele. Also helped complete medication orders, package medications, deliver medications to patients, answer phone calls, and file paperwork. Conducted health screenings for senior citizens including; glaucoma, glucose, cholesterol, bone density, and skin screenings.

7/98-9/00

Assistant manager
Beach Access
Helped supervise 6 staff within the company. Conducted interviews for people interested in a position at the store. Used my professional and excellent people skills in helping shoppers find what they needed and giving them ideas to help make decisions with what to buy. Counted the money at the end of the work day and helped keep track of bank statements. Had monthly staff meetings and did inventory checks every 3 months throughout the store.

References:

Genevieve Whittemore, Previous supervisor
434-944-8024

Amber Duff, Coordinator at Central Virginia Community Services
Amber.duff@cvcsb.org
434-426-3823

Vikki Booth, Friend, teacher
vikkibooth@gmail.com
714-693-1944