CHILD-CENTERED PLAY THERAPY WITH CHILDREN EXHIBITING
AGGRESSIVE BEHAVIORS

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Aggressive behaviors in childhood currently serve as the leading cause of counselor referrals within the United States. Children exhibiting maladaptive aggressive symptomology are at an increased risk for highly externalized and problematic behaviors across the lifespan. Emotional self-regulation and empathy are two constructs currently believed to be closely related to aggression, but a lack of research exploring these variables currently exists in the counseling literature. In this study I examined the effect of child-centered play therapy (CCPT), is a manualized, developmentally responsive, and nondirective intervention, on these variables. Participants were 71 students from four Title 1 elementary schools in the southwest U.S. referred by teachers for aggressive behavior (12 females, 59 males; age range 5-10 years with mean age 6.28. The sample consisted of 52.1% ($n = 37$) children identified as African American, 21.1% ($n = 15$) as Latina/Latino, 19.7% ($n = 14$) as Caucasian, and 7% as multiracial ($n = 5$). Participants were randomly assigned to 8 weeks of a twice-weekly CCPT experimental group ($n = 36$) or a waitlist control group ($n = 35$). Results of descriptive discriminant analyses (DDA) of the Social Emotional Assets and Resilience Scale and the Children’s Aggression Scale scores revealed that parents perceived children’s group membership in CCPT as significant and reasonably predictive of improvement in children’s aggression, self-regulation, and empathy. However, teachers did not perceive a statistically significant difference between the two groups with respect to these variables. These results suggest the relevancy of CCPT for parents in providing children with a developmentally responsive intervention to reduce aggressive behaviors and support their healthy development.
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As yet we do not know when or how the process of faith evolves and is transmitted from one person to another. We are certain only that in the presence of another person who has faith in us, we somehow grasp that feeling and are able to face ourselves, to grow within ourselves, and to create more of ourselves so that we operate in terms of the people we really are.

Moustakas

As I think of those who had faith in me along this journey, I feel overwhelmed with gratitude. Above all, I give thanks to God for seeing me through every journey of my life and for providing me with the most unconditional love I will ever experience. To my husband, Jason- thank you for loving me through the long nights and tireless days, the tears of joy and exhaustion, my moments of doubt and insecurity, and for your unrelenting belief in me. You have truly taught me what it means to love well and I feel beyond blessed to call you my partner in our crazy, beautiful, life. To my Mom and Michael, thank you for giving me wings to fly in this world while always reminding me that home is never too far away. I am the person I am today because of your love. To Dad, Susie, and Kylie, thank you for your constant love, support, and encouragement. Having you all by my side has meant more to me than words could express. As I reflect on this journey I cannot help but feel immense gratitude towards my teacher, mentor, and supporter, Dee. You have given so much of yourself in helping me become the counselor and person I am today. Thank you for seeing me and for showing me that who I am will always be enough. To Casey, thank you for your continuous wisdom, guidance, and reassurance. To Leslie, thank you for your warmth, acceptance, and patience. For every child whose life I touch and student I have the privilege of working with, I will carry a piece of each of you with me. To Liz and Kay, this journey has led to so much more than a doctorate, it has led me to you, my two best friends. You have been my rock, my safe place, and my shoulder to cry on for the past four years and for that, I am eternally grateful. I love you both more than words and look forward of a lifetime of memories. Finally, to the clients who have so richly blessed my life, to my supervisees who have loved me through my imperfections every day for the past two years, and to my cohort who has endured every moment of this journey by my side, I love and thank you all. We did it!
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>ACKNOWLEDGMENTS</th>
<th>iii</th>
</tr>
</thead>
<tbody>
<tr>
<td>LIST OF TABLES</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vi</td>
</tr>
<tr>
<td>CHILD-CENTERED PLAY THERAPY WITH CHILDREN EXHIBITING AGGRESSIVE BEHAVIORS</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Purpose</td>
<td>8</td>
</tr>
<tr>
<td>Methods</td>
<td>9</td>
</tr>
<tr>
<td>Results</td>
<td>15</td>
</tr>
<tr>
<td>Discussion</td>
<td>19</td>
</tr>
<tr>
<td>Conclusion</td>
<td>28</td>
</tr>
<tr>
<td>References</td>
<td>30</td>
</tr>
</tbody>
</table>

## Appendices

| A. EXTENDED LITERATURE REVIEW                                                 | 36      |
| B. DETAILED METHODOLOGY                                                       | 70      |
| C. UNABRIDGED RESULTS                                                         | 89      |
| D. EXTENDED DISCUSSION                                                        | 99      |
| E. ADDITIONAL MATERIALS                                                       | 119     |
| COMPREHENSIVE REFERENCE LIST                                                  | 130     |
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Means and Standard Deviations for Measures at Pretest and Posttest</td>
<td>34</td>
</tr>
<tr>
<td>2</td>
<td>Wilks’ Lambda and Canonical Correlation for Function 1 of Parent Data</td>
<td>34</td>
</tr>
<tr>
<td>3</td>
<td>Standardized Discriminant Functions and Structure Coefficients for the Two Groups</td>
<td>35</td>
</tr>
<tr>
<td>4</td>
<td>Centroids and 95% Confidence Intervals for Each Group on the Discriminant Function Scores</td>
<td>35</td>
</tr>
<tr>
<td>5</td>
<td>Means and Standard Deviations on the Three Variables for Two Groups- Teacher</td>
<td>35</td>
</tr>
<tr>
<td>6</td>
<td>Wilks’ Lambda and Canonical Correlation on Function 1 for Teacher Data</td>
<td>36</td>
</tr>
<tr>
<td>A.1</td>
<td>Normative Trends in Childhood Aggression</td>
<td>45</td>
</tr>
<tr>
<td>B.1</td>
<td>Demographic Data for 3 Title 1 Elementary Schools</td>
<td>75</td>
</tr>
<tr>
<td>B.2</td>
<td>Demographic Descriptive Statistics for Participants</td>
<td>76</td>
</tr>
<tr>
<td>B.3</td>
<td>CAS Qualitative T-Score Descriptions</td>
<td>79</td>
</tr>
<tr>
<td>B.4</td>
<td>Reliability Estimates for the CAS-P and CAS-T Index Scores</td>
<td>80</td>
</tr>
<tr>
<td>B.5</td>
<td>Reliability Estimates for the CAS-P and CAS-T Cluster Scores</td>
<td>80</td>
</tr>
<tr>
<td>B.6</td>
<td>Qualitative Tier Descriptions for the SEARS-T and SEARS-P</td>
<td>82</td>
</tr>
<tr>
<td>B.7</td>
<td>Reliability Estimates for the SEARS-T and SEARS-P</td>
<td>93</td>
</tr>
<tr>
<td>C.1</td>
<td>Means and Standard Deviations for Measures at Pretest and Posttest</td>
<td>92</td>
</tr>
<tr>
<td>C.2</td>
<td>Means and Standard Deviations on the Three Variables for Two Groups- Parent</td>
<td>93</td>
</tr>
<tr>
<td>C.3</td>
<td>Wilks’ Lambda and Canonical Correlation</td>
<td>95</td>
</tr>
<tr>
<td>C.4</td>
<td>Standardized Discriminant Functions and Structure Coefficients for the Two Groups</td>
<td>96</td>
</tr>
<tr>
<td>C.5</td>
<td>Centroids and 95% Confidence Intervals for Each Group on the Discriminant Function Scores</td>
<td>97</td>
</tr>
<tr>
<td>C.6</td>
<td>Means and Standard Deviations on the Three Variables for Two Groups- Teacher</td>
<td>98</td>
</tr>
<tr>
<td>C.7</td>
<td>Wilks’ Lambda and Canonical Correlation</td>
<td>99</td>
</tr>
<tr>
<td>C.8</td>
<td>Standardized Discriminant Functions and Structure Coefficients for the Two Groups</td>
<td>99</td>
</tr>
</tbody>
</table>
LIST OF FIGURES

Page

B.1 Flow and design of intended study ................................................................. 88
CHILD-CENTERED PLAY THERAPY WITH CHILDREN EXHIBITING AGGRESSIVE BEHAVIORS

Introduction

Aggressive behaviors in childhood currently serve as the leading cause of counselor referrals within the United States (Abidin & Robinson, 2002; Bratton, Ceballos, Sheely-Moore, Meany-Walen, Pronchenko, & Jones, 2012). Absent of early intervention, children exhibiting aggressive behaviors are at an increased risk for highly externalized and problematic behaviors across the lifespan (Foulkrod & Davenport, 2010; Frick & White, 2008; Gathright & Tyler, 2014). Additionally, such problematic behaviors have been shown to contribute to serious social, emotional, and academic concerns impacting children’s future, academic, and personal success (Bratton et al., 2012; Cochran, Cochran, Nordling, McAdam, & Miller, 2010; Ray, Blanco, Sullivan, & Holliman, 2009). Although many turn to pharmacotherapy to treat challenging symptomology in children, including aggression, no FDA-approved pharmacotherapy exists for the use of aggressive behaviors in childhood (Gathright & Tyler, 2014; Hudak, 2005). However, early assessment and effective therapeutic intervention have been proven efficacious for the minimization of children’s maladaptive aggression (Boxer & Frick, 2008; Davenport & Bourgeois, 2008; Gathright & Tyler, 2014).

Developmental Patterns of Childhood Aggression

Aggression is understood as a typical and natural human response to various emotional states experienced throughout the lifespan and beginning in early infancy (Conner, 2002; Dodge et al., 2006; Foulkrod & Davenport, 2010). Research has shown that infants as early as three months old can recognize facial responses of anger and/or aggression in their caretakers (Conner, 2002; Dodge, 2006). Healthy levels of aggression are highly adaptive and may facilitate competence in assertiveness, competition, and success in meeting routine challenges beginning at a very young age (Conner, 2002). By the time children reach toddlerhood, acts of aggression
become far less ambiguous and increasingly explicit as compared to infancy. Between 12 to 18 months old, aggression tends to center around social interactions and peer exchanges (Dodge et al., 2006; Hay, 2005). Children in this developmental stage are increasingly aware of themselves and others. However, they generally lack the ability to verbally express feelings such as anger and frustration and instead act out physically as a means of self-expression. Thus, toddlers in this age range represent the peak of physical aggressiveness (Conner, 2002). Specifically, at least 50% of peer exchanges between children in this age range involve conflict of some sort, typically displayed through acts of physical aggression (Hay & Ross, 1982). Coinciding with language acquisition and increased expressive vocabularies, children between the ages of two and five tend to rely less on physical forms of aggression and more on their verbal abilities for emotional expression.

The elementary school years tend to bring a feeling of relief to parents and caretakers as acts of physical and verbal aggression significantly decrease between the ages of six and ten (Dodge et al., 2006; Foulkrod & Davenport, 2010; Hay, Payne, & Chadwick, 2004). Children’s increasing abilities to self-regulate their feelings and emotions appear to precede the notable decline in their aggressive behaviors (Dodge et al., 2006; Keenan & Shaw, 2003). Additionally, increasing abilities for delayed gratification allow children to substitute aggressive inclinations such as pushing and hitting, as seen in earlier years, with more socially appropriate behaviors. Children in this age range place increased value on peer relationships. This also allows for greater empathic understanding, or their ability to take on the perspectives of others, further alleviating overly aggressive acts. When aggression is observed in the elementary school years, it is more likely to be in the form of relational aggression characterized by alienation of other children, bullying, or even acts of retaliation (Dodge et al., 2014).
Although most children decline in acts of aggression during the elementary school years, some do not. It is at this particular developmental stage that children are most commonly referred for mental health services if their aggressive behaviors do not subside (Dodge et al., 2006). The elementary school years serve as a milestone for children on typical developmental trajectories in that aggressiveness should naturally decline with age. However, children exhibiting non-normative patterns of aggression beginning in this stage could demonstrate increased relational, academic, and emotional concerns across development (Foulkrod & Davenport, 2010).

Nonetheless, absent of early intervention, aggressive behaviors tend to remain stable across the lifespan leading to many social, emotional, academic, and relational impairments (Coie & Dodge, 1998; Comer, Chow, Chan, Cooper-Vince, & Wilson, 2013; Davenport & Bourgeois, 2008; Foulkrod & Davenport, 2010; Frick & White, 2008). Olson and colleagues (2011) noted the relevancy of high levels of aggressive behaviors in kindergarten as “warning signs” of increasingly severe problems across development (p. 253). Thus, researchers continue to emphasize the importance of early intervention for children demonstrating non-normative patterns of aggressive behaviors to alleviate prolonged consequences.

Aggressive behaviors exceeding those which are both expected and normative according to typical developmental trajectories and which bring children into considerable conflict with those in their environment are considered maladaptive (Dodge et al, 2006; American Psychiatric Association [APA], 2013). These behaviors include intentional acts of inflicting harm onto others. This may include deliberate acts of physical, emotional, or relational aggression. Ultimately, children demonstrating maladaptive aggressive behaviors tend to significantly struggle in: forming and maintaining relationships, demonstrating empathic understanding towards others, self-regulation, and in the successful navigation of academic endeavors (Conner, 2002; Davenport &
Bourgeois, 2008; Dodge et al., 2006; Foulkrod & Davenport, 2010; Frick & White, 2008). Across development, these maladaptive aggressive traits can lead to even greater psychopathology such as family dysfunction, criminality, comorbidity with other psychiatric disorders such as Conduct Disorder (CD) and Oppositional Defiant Disorder (ODD), and drug and alcohol abuse among others (Comer et al., 2013). After the point of entry into elementary school, if children’s aggressive behaviors do not subside and continue to fall outside the realm of developmental normalcy, they are “likely to be diagnosed with ODD and, still later, CD if the behaviors continue to escalate and increase” (Foulkrod & Davenport, 2010, p. 146). This could place children at risk for significant behavioral and relational struggles throughout elementary school and beyond. Connor (2002) noted that longitudinal studies indicate that children demonstrating early-onset and persistent aggression are at an increased risk for negative outcomes such as behavioral problems, academic underachievement, poor interpersonal functioning, trouble forming and maintaining relationships, and negative mental health outcomes.

Empathy and Self-Regulation as Components of Aggression

Empathy and self-regulation are identified components of aggression that theoretically contribute to a child’s inhibition and expression of aggressive acts. A child’s ability to experience and demonstrate empathy is directly related to his or her ability to take on the emotional experiences of another and thus is largely connected to acts of aggression. Empathy, defined as an affective response which is more appropriate to or congruent with someone else’s situation than to one’s own situation (Dadds et al., 2008), is theorized to play a “profound, complex, and fundamental role” in the healthy functioning of human relationships (Gordon, 2009, p. 30). Even so, empathy remains relatively understudied throughout counseling literature, particularly in relation to aggression. However, empirical support for a negative relationship
between empathy and aggressiveness does exist (Bjorkqvist, 2007). Absent of early intervention, a lack of empathy toward others has been found to remain relatively stable from late childhood into early adolescence and beyond (Blair, 2010). Nonetheless, in instances where individuals are able to experience empathy through both cognitive and interpersonal processes, aggressive behaviors tend to subside (Bjorkqvist, 2007). “The internal process that regulates aggression (in addition to simple fear) seems to be empathy or, perhaps, identification—the ability to feel the experiences or to adopt the viewpoint of another, respectively” (Peterson & Flanders, 2005, p. 136). Thus, many empathy researchers suggest the presence of empathy as an innate inhibitor to aggressive behaviors. “Conclusively, empathy appears to be a mitigator and in the best cases and inhibitor of aggression” (Bjorkqvist, 2007, p. 85).

Additionally, children struggling with their self-regulatory processes often lack the ability to control their feelings and emotions and therefore may display aggressive behaviors out of impulse. Conflicts related to self-regulation and aggression are most commonly characterized as highly impulsive in nature. As such, struggles with impulse control related to feelings of anger, frustration, and the like are often expressed through aggression in very young children. However, aggressive behaviors in children on typical developmental trajectories tend to subside with the development of more advanced abilities towards self-regulation (Olson et al., 2011). Keenan and Shaw (2003) suggested children's growth in self-control over their emotions, or self-regulation, was directly responsible for the decline in aggression during the elementary school years. Yet, a sizable subgroup of children continues to struggle with self-regulation and aggressive acting out behaviors from preschool into elementary school (Olsen et al, 2011). Specifically, children demonstrating high levels of anger, and low abilities for self-regulation, tend to demonstrate increased aggressive behaviors (Eisenberg et al., 2001). Thus, it is important to note that children
with overly aggressive symptomology tend to display deficits in both their empathic and self-regulatory processes to varying degrees.

Current Interventions for Childhood Aggression

Currently, there are several identified therapeutic interventions aimed at reducing children’s aggressive behaviors. However, among the most highly employed methods are various modalities stemming from cognitive behavioral therapy (CBT) (Glicken, 2009; Weisz & Kazdin, 2010). Clinicians frequently utilize these therapeutic interventions as methods to modify behaviors and reduce symptomology in children with highly aggressive behaviors. Two primary concerns currently exist in the literature regarding the cognitive strategies utilized by many clinicians. The first is the developmental appropriateness of cognitive approaches with young children (Grave & Blissett, 2004; Holmbeck, Devine, & Bruno, 2010). Despite the well-documented effectiveness of CBT with older populations, meta-analyses have shown “the main components of CBT and other cognitive therapies require more complex, symbolic, abstract, metacognitive, consequential, and hypothetical thinking consistent with the greater cognitive sophistication of adolescents” (Grave & Blissett, 2004; Holmbeck, et al., 2010, p. 30). A second documented concern is the reliance on parents as active participants in their children’s treatment, a critical component in many CBT interventions for children. Yet, parent involvement in therapy is not always possible. Thus, some researchers assert the effectiveness of child and adolescent psychotherapeutic interventions may be improved if treatment were tailored to the developmental needs of the child (Holmbeck, et al., 2010) and were effective even without parent involvement.

Child-centered play therapy (CCPT) is a developmentally responsive intervention for working with children and is based upon the understanding that play serves as children’s natural
medium of self-expression while therapeutic relationship is the primary therapeutic healing factor (Axline, 1974; Landreth, 2012; Ray, 2011). The basic tenets of CCPT can be conceptualized as a steadfast belief in a childlike innate tendency for positive growth and healing given the safety of an unconditional, empathic, and congruent relationship. Through the theoretical lens of CCPT, children’s externalized behaviors serve as a manifestation of their internal experiences and subsequent emotions. Thus, the child-centered play therapist does not seek to focus on or modify behaviors, but rather to fully and as completely as possible empathically understand the child’s internal frame of reference (Landreth, 2012; Ray, 2009; Ray, 2011). As it is only through understanding the underlying emotional experience of children that the play therapist can begin to recognize the purpose their aggressive behaviors are serving. Although counterintuitive, child-centered clinicians understand even aggressive behaviors as self-enhancing (Dorfman, 1951; Ray, 2011). Through the self-actualizing tendency, children are constantly striving to “preserve and enhance” themselves (Rogers, 1989, p. 404). As such, their behaviors serve as a means of satiating perceived needs from the environment.

Due to an inherent trust in children’s abilities, child-centered play therapists avoid directing children in the therapeutic process or sending messages of disapproval. Rather, in CCPT, therapists approach children with a sincere and unwavering belief in their ability to work out their own problems (Moustakas, 1953). This is in part based upon the understanding that as children’s aggressive behaviors continue to escalate, they often experience messages from people in the environment that their behaviors are unacceptable (Trotter & Landreth, 2003). Child-centered play therapists seek to convey a message and to demonstrate through their way of being that all aspects of a child is fully accepted. Such a relationship leads to children’s abilities to cease relying upon acts of aggression to communicate their feelings and allows them to adopt
increasingly acceptable means of self-expression. Within CCPT intervention, counselors provide reflection, encouragement, limit-setting, returning responsibility, and empathic responding, allowing for children to develop adaptive coping skills and self-enhancing ways of expressing their feelings and needs.

Purpose

Due to the prevalence rates of young children exhibiting aggressive behaviors and a lack of developmentally responsive evidence-based practices, a need exists for the exploration of interventions best meeting the needs of this population. CCPT may be an intervention effective in working with children who are aggressive. Despite the demonstrated effectiveness of child-centered play therapy (CCPT) with children exhibiting a range of behavioral and emotional concerns, CCPT is not currently considered an evidence-based practice for working with aggressive children (Bratton, Ray, Rhine, & Jones, 2005; Bratton; Bratton et al., 2013). Researchers have identified a need for increased empirical support within the field of play therapy specific to children exhibiting aggressive behavioral concerns (Foulkrod & Davenport, 2010). However, few researchers in the counseling field have explored the impact of CCPT on children’s aggressive behaviors (Ray, 2009). Furthermore, very few researchers have isolated the variables of empathy and self-regulation when assessing the impact of CCPT with aggressive children. Thus, the current study sought to explore the relationship between aggression, self-regulation, and empathy as they pertain to children participating in CCPT.

The purpose of the present study was to test the effectiveness of CCPT on children exhibiting maladaptive and non-normative levels of aggressive behaviors in an elementary school setting. The examined research questions were: (a) Do children referred for aggressive behaviors differ over time based upon group membership in either an experimental group
receiving CCPT or a waitlist control group, with respect to their overall levels of aggression, self-regulation, and empathy according to parent report? (b) Do children referred for aggressive behaviors differ over time based upon group membership in either an experimental group receiving CCPT or a waitlist control group, with respect to their overall levels of aggression, self-regulation, and empathy according to teacher report?

Methods

Because the purpose of this study was to explore the effectiveness of CCPT with regard to decreasing aggressive symptomology and increasing empathy and self-regulatory process in young children, a randomized controlled trial was selected as the most appropriate research design. This particular type of experimental design allowed for the direct comparison of a group of children receiving CCPT with a waitlist control group in relation to outcome. The current study was part of a larger randomized controlled trial exploring the effects of CCPT across four elementary schools.

Participants

Participants were recruited across four Title 1 elementary schools within the Southwestern region of the United States. The original sample for this study included a total of 76 children while the final sample consisted of 71 total participants, with 59 males and 12 females between the ages five and 10 years old ($M = 6.28$) ranging from kindergarten to fourth grade. The majority of participants (52.1%, $n = 37$) identified as African American, 21.1% ($n = 15$) as Latina/Latino, 19.7% ($n = 14$) as Caucasian, and 7% as multiracial ($n = 5$). 36 children participated in the intervention group and 35 participated in a waitlist control group. The sample consisted of 28 males and 8 females between the ages of five to 10 years old ($M = 7.03$) in the experimental group, and 31 males and 4 females between the ages of five to 10 years old ($M = 7.03$) in the waitlist control group.
6.63) for the control group. Post data was unable to be collected for a total of 5 (CCPT=3; Control=2) children who moved geographic locations during the course of this study.

In order to qualify for the present study, all participants had to meet a set of criteria including, children must have been: (a) between 5 and 10 years of age; (b) identified by teachers or school personal as demonstrating problematic aggressive behaviors; (b) able to understand and speak English (c) living with one parent who was willing to give consent for participation, and (d) have teachers and parents who were willing to complete both pre and post testing.

Instrumentation

Two instruments were utilized to assess parent and teacher perceptions of children’s aggression, self-regulation, and empathy; the Children’s Aggression Scale (CAS) and The Social Emotional Assets and Resilience Scales (SEARS).

The Children’s Aggression Scale (CAS) is an instrument developed for the purpose of evaluating the nature, severity, and frequency of children’s aggressive behaviors (Halperin & McKay, 2008). This instrument seeks to differentiate aggressive specific behaviors from the broader category of disruptive behaviors such as oppositional/defiant behaviors, hostility, and anger. The CAS includes two points of measurement, a teacher form and a parent form. Utilizing both the CAS-T and CAS-P allows clinicians to obtain a holistic and accurate portrayal of a child’s aggressive behaviors (Halperin & McKay, 2008).

The CAS-P, or parent form, contains 33 items to be completed by the child’s primary caregiver and scored on a 4-point Likert scale (Halperin & McKay, 2008). The CAS-T, or teacher form, contains 23 items to be completed by a teacher who is familiar with the child and has known him or her for a minimum of 4 weeks. Like the CAS-P, items on the CAS-T are also rated on a 4-point Likert scale (Halperin & McKay, 2008). The coefficient alphas for the Total Aggression Index across four normative groups ranged from .86 to .90 for the CAS-P and .78-.94
for the CAS-T. For the current sample, Cronbach’s alpha for total score at pretest was calculated at .88 for the CAS-P and .87 for the CAS-T.

The Social Emotional Assets and Resilience Scales (SEARS) is a strength-based assessment measuring the social-emotional competencies and assets of children and adolescents ages 5-18 across multiple settings (Merrell, 2011). The SEARS measures a set of adaptive characteristics important for success at school, with peers, as well as in the outside world. The SEARS contains four primary rating scales each targeting a specific rater and context. Assessment developers recommend assessing both parents and teachers to gain an increasingly holistic representation of a child’s current functioning (Merrell, 2011). For the purposes of this study, the SEARS-T and SEARS-P were utilized.

The SEARS-P is designed to be completed by parents, guardians, or other home-based caregivers of children in grades K-12. The SEARS-P consists of 39 items across three scales: Self-Regulation/Responsibility, Social Competence, and Empathy. The SEARS-P focuses more specifically on home and community environments as opposed to the school environment. Items are rated on a 4-point rating scale ranging from Never, Sometimes, Often, or Always.

The SEARS-T is designed to be completed by a child’s primary teacher in grades K-12 based on the child’s behaviors in the past 4-6 months. The SEARS-T is comprised of 41 items that make up four scales: Self-Regulation, Social Competence, Empathy, and Social Competence. Items are rated on a 4-point rating scale ranging from Never, Sometimes, Often, or Always. For the current sample, Cronbach’s alpha for total score at pretest was calculated at .96 for the SEARS-P and .94 for the SEARS-T.

In the current study, the Self-Regulation and Empathy subscales were used to operationalize constructs associated with aggressive behaviors exhibited by children. Because
Merrell (2011) reported strong reliability mean estimates for the SEARS-T Self-Regulation score ($\alpha = .95$; $r = .90$), SEARS-P Self-Regulation score ($\alpha = .95$; $r = .92$), SEARS-T Empathy score ($\alpha = .91$; $r = .84$), and SEARS-P Empathy score ($\alpha = .87$; $r = .90$), I chose to use the subscales independently in analyses.

Procedures

After receiving Institutional Review Board approval, teachers and school personnel were asked to identify children exhibiting highly aggressive behaviors across all four elementary schools. Once identified, parents of referred children were asked to give informed consent for study participation and complete the CAS-P, SEARS-P, and a demographic form.

Subsequent to receiving parental informed consent, teachers were also asked to give consent for study participation and to complete the CAS-T and SEARS-T. Once all pre testing was completed and all parents and teachers of informed children had given full consent for study participation, children were randomized by school using block randomization procedures into either an experimental group, or waitlist control group. Once randomized, children in the experimental group began receiving play therapy services in the school the following week. Children in the experimental group were scheduled to receive 30-minute play therapy sessions twice a week. Although it was originally intended for children in the treatment group to receive 16 sessions of CCPT over the course of eight weeks, this was not feasible for the entire sample due to holidays and child absences. Thus, play therapy sessions ranged from 8-16 sessions over ten weeks with a mean session count of 13.97 ($Mo=16$) sessions. Children in the waitlist control group received services following the 8-week intervention period. At the completion of the eight-week period, all parents and teachers were asked to complete the CAS-T and CAS-P respectively as a means of post-testing.
Experimental Group Procedures

Children in the CCPT group were provided play therapy according to protocol as defined in the CCPT treatment manual (Ray, 2011). Counselors in this study sought to provide an environment in which children felt safe in establishing a strong therapeutic relationship characterized by warmth, genuineness, and empathic understanding. In efforts of facilitating such a relationship, counselors employed intentional responses such as; reflections of feeling, meaning, and content, limit setting when appropriate, encouragement, and returning of responsibility. Each type of response is meant to provide children with an environment in which they can feel free to express themselves fully, further develop their internal locus’ of control, further develop their abilities to self-regulate, and better identify feelings and emotions of both themselves and others. The overall goal of the child-centered play therapist is to convey the message of, “I am here”, “I hear you”, “I understand”, and “I care” (Landreth, 2012, pp. 209-210).

The playrooms in this study were assembled and materials were selected in accordance with Landreth (2012) and Ray’s (2011) recommendations. Toys and materials were intentionally selected and were meant to facilitate a variety of emotional expressions including but not limited aggression. Specific to the current study, aggressive toys included plastic knifes and swords, a rope, toy guns, handcuffs and keys, a bop bag, and aggressive plastic animals such as lions, snakes, and dinosaurs. These toys provided children with an opportunity to express individual aggressive drives (Ray, 2011) while allowing them the opportunity to further develop their self-regulatory processes and appropriate means of self-expression in the presence of an empathic adult. A full list of playroom toys and materials included in this study can be referenced in Ray (2011).
In order to ensure treatment fidelity, I randomly selected and thoroughly reviewed one video for each participating child. The videos were reviewed in accordance to the Play Therapy Skills Checklist (PTSC; Ray, 2011) whereby responses from the play therapist were coded according to CCPT categories. Video review indicated that play therapists adhered to protocol in 96% of responses, exceeding Ray’s guideline of 90% adherence.

All play therapists in this study were doctoral level students. All participating counselors held a master’s degree or higher in counseling, successfully completed at least two play therapy courses, and successfully completed a counseling practicum with supervised play therapy experiences. Counselors included eight females (African American = 1; Caucasian = 6) and one Caucasian male. Finally, all counselors were required to attend a training prior to the study in which the CCPT PTSC was reviewed as well as all study protocols and procedures.

Although teacher consultation is a typically occurring aspect of play therapy in the school setting, I did ask that all play therapists refrain from communicating with teachers until the successful completion of the study. I incorporated this practice in efforts of increasing study validity in allowing for teachers’ genuine experiences of the children at pre and post testing absent of influence from knowledge of group placement.

Waitlist Control Group

Participants in the waitlist control group did not receive any treatment during the study. Upon the completion of data collection at pretest and posttest, participants in the waitlist control group received the same CCPT intervention that was implemented by the counselors with the intervention groups. Additionally, counselors followed the identical protocol as outlined for the intervention group.

Data Analysis
Two descriptive discriminant analyses were utilized to discover what variables contributed most to group differences between the experimental and control groups from pre to post testing according to both teacher and parent report. This multivariate approach to analyzing the data allowed for the simultaneous exploration of all three dependent variables as well as the shared relationship between them. Such an analysis closely mirrors the complexity of the variables of interest and promotes an increasingly accurate interpretation of results (Sherry, 2010). Regarding sample size, researchers suggest a sample of 10-20 participants per dependent variable in order to accurately interpret the results of a descriptive discriminant analysis (DDA) (Sherry, 2010). In order to meet the minimum recommendation of 10 participants per variable, sample size for the current study was sufficient with 71 participants, far exceeding the recommended 30 participants needed.

Results

Means and standard deviations for pre and posttesting for all measurements are provided in Table 1.

Parent Reports of Aggression, Self-regulation, and Empathy

The first descriptive discriminant analysis (DDA) was conducted using group membership, experimental or control, as predictors of children’s levels of aggression, self-regulation, and empathy. Specifically, a DDA was utilized to identify which variables best captured group differences between the experimental and waitlist control groups based upon parent report. Aggression was measured by the difference score between pre and post testing on the Total Aggression score on the CAS-Parent, Empathy was measured by difference scores on the Empathy subscale of the SEARS-Parent, and self-regulation was measured by difference.
scores on the Self-Regulation subscale of the SEARS-Parent. Means and standard deviations for all three variables are presented in Table 1.

According to Sherry (2010), seven assumptions for DDA should be met to ensure accurate interpretation of the analysis results. Upon initial data screening, measures were implemented to maintain the integrity of the data and subsequent analysis including checking for all necessary assumptions. Assumptions for DDA include: (a) two or more mutually exclusive groups must exist (b) there must be a minimum of two subjects per group (c) there may be any number of continuous variables, as long as the sample size of the smallest group exceeds the number of continuous variables (d) continuous variables must be measured at the interval level of scale (e) no continuous variables are a linear combination of any other continuous variables (f) each group is multivariate normal on the continuous variable, and (g) the covariance matrices for each group must be roughly equal (Sherry, 2010). All multivariate assumptions were met in the present analysis. Additionally, multivariate normality was examined employing a recommendation of Henson (1999) to utilize Mahalanobis ($D^2$) distance for each case of the data in efforts of detecting outliers. The dependent variables were determined to be multivariate normal using this method.

Parent Reports of Aggression, Self-regulation, and Empathy

Because there were two groups, experimental and control, one discriminant function was obtained ($k -1$). The statistical significance of the canonical discriminant function was then evaluated by examining the Wilks’ Lambda statistic. In examining the canonical discriminant function, it was determined that the degree to which the variables of interest contributed to the synthetic dependent variable was statistically significant at ($p<.01$) with a moderate canonical correlation ($R_c = .394$) and effect size of $R^2_c = .155$. This indicates approximately 16% of
variance is accounted for in Function 1. Specifically, aggression, self-regulation, and empathy can account for 16% of the differences between the two groups. Table 2 represents these findings.

In order to further evaluate the unique and shared contribution of each dependent variable in accounting for group differences, both standardized discriminant function and structure coefficients were consulted (Henson, 2002). On Function 1, the standardized discriminant function coefficients indicated aggression was primarily responsible for group differences (.819), followed by empathy (.290), and self-regulation (.221). Due to the multicollinearity of the three variables in the discriminant score, the absolute contribution of any one variable is not reflected by the standardized coefficients. Thus, aggression, self-regulation, and empathy all share contribution in the synthetic dependent variable as indicated by the standardized coefficients.

Examining structure coefficients further confirmed aggression accounted for the largest degree of variance in the composite dependent variable ($r_s = .900$). However, self-regulation also accounted for a considerable degree of variance ($r_s = .517$) followed by empathy ($r_s = -.513$). Specifically, aggression accounted for 81%, self-regulation accounted for 27%, and empathy accounted for 26% of the variance in scores on Function 1. This means aggression contributed the most to group separation although self-regulation and empathy were strong contributors as well. Additionally, it is important to note that both empathy and self-regulation were negatively related to group differences while aggression was positively related. In other words, as members of one group became more aggressive, they also became less self-regulated and less empathic. All standardized coefficients and structure coefficients are reported in Table 3.

Group centroids were also examined to determine which group, experimental or control, contributed to group differences as observed on Function 1 pertaining to aggression, self-
regulation, and empathy. It appears on Function 1 as noted by group centroids, that the control
group (.429) was comparable to the experimental group (-.417) with respects to the magnitude of
change. However, based upon the positive and negative valances associated with each group, it
appears as though the groups changed in differing directions. This indicates group differences on
Function 1 pertaining to aggression, self-regulation, and empathy were attributable to both the
control and experimental groups. More specifically, children in the control group were more
aggressive, less self-regulated, and less empathic from pre to post testing as compared to children
in the experimental group who were reported by parents to be less aggressive, more self-
regulated, and more empathic.

Additionally, a one-way ANOVA was performed between the composite dependent
variable and the grouping variable to examine the magnitude of group differences. The
confidence intervals indicated statistical differences between the control and experimental group.
Specifically, the differences between the control and experimental groups with respect to
aggression, self-regulation, and empathy were statistically significant at \( p < .01 \). Additionally,
the Cohen’s \( d \) effect size for centroid differences on the discriminant function score between the
two groups was determined to be large \( (d = .845) \). The Table 4 presents the centroids for each
group along with corresponding 95% confidence intervals from the one-way ANOVA.

Teacher Reports of Aggression, Self-regulation, and Empathy

The second descriptive discriminant analysis (DDA) was conducted using group
membership, experimental or control, as predictors of children’s levels of aggression, self-
regulation, and empathy. Specifically, a DDA was utilized to identify which variables best
captured group differences between the experimental and waitlist control groups based upon
teacher report. Aggression was measured by difference scores between pre and post testing Total
Aggression scores on the CAS-Teacher. Empathy was measured by difference scores on the Empathy subscale of the SEARS-Teacher, and self-regulation was measured by difference scores on the Self-Regulation subscale of the SEARS-Teacher. Table 5 lists the means and standard deviations for each group on these variables.

In examining the canonical discriminant function, there was a non-significant \( p = .413 \) and small canonical correlation \( R_c = .205 \) with an effect size of \( R^2_c = .042 \). This indicates approximately 4.2% of variance is accounted for in Function 1. Specifically, aggression, self-regulation, and empathy can account for 4.2% of the differences between the two groups based on teacher report. Table 6 represents these findings.

According to Sherry (2010), “if any function is found to be non-significant, no further evaluation of that function within the output can be done” (p. 670). As such, the standardized discriminant function coefficients, structure coefficients, and group centroids were non-interpretable for the teacher data.

Discussion

The current study sought to explore the degree to which differences in children’s scores per teacher and parent report, from pre to post testing on aggression, self-regulation, and empathy contributed to group differences between children receiving child-centered play therapy and those in a waitlist control group. Results indicated that parents perceived aggression, self-regulation, and empathy as strongly contributing to differences between children who received CCPT and those who did not. Additionally, parents not only perceived a difference between the two groups with respect to these variables, they perceived a significant difference between them. Specifically, parents identified the most meaningful change in children’s behaviors as contributable to their overall degree of aggressive symptomology followed by self-regulation and
empathy based upon whether or not they received CCPT. Teachers, however, perceived very little difference between children participating in CCPT and those who were not for the three variables of interest. These results hold important considerations and implications for further research as detailed below.

Parent Perceptions

Based upon the results of this study, it may be suggested that parents of children referred to counseling for aggressive behaviors perceived their children as less aggressive and increasingly self-regulated and empathic subsequent to their children receiving CCPT. While these findings are comparable to previous studies regarding positive changes in parent perceptions following CCPT, this study is unique in that the chosen statistical analysis allows for interpretations based upon prediction. Specifically, the results suggest that per parent report, it can be reasonably predicted that children became less aggressive, more self-regulated, and more empathic through participation in CCPT as compared to receiving no services at all. Furthermore, it can be reasonably predicted that children identified as displaying apparent or emerging struggles related to aggression who did not receive treatment likely became increasingly aggressive, less self-regulated, and less empathic over time in accordance with parent perceptions. Both the statistical and practical significance yielded from the parent data supports the premise that parents perceived aggressive symptomology as improving or declining based upon whether or not their child received CCPT.

Regarding aggressive symptomology, the results of this study suggest parents perceived their children’s participation in CCPT as highly predictive of a decrease in aggressive behaviors. This finding appears imperative to children’s healthy functioning and development over time related to behavioral symptomology, academic achievement, interpersonal functioning, ability to
form and maintain relationships, and overall sense of contentment (Conner, 2002; Cochran et al., 2010; Kingston & Prior, 1995; Risser, 2013).

Specific to CCPT, therapists seek to fully know and understand all aspects of a child, including their aggressive feelings and behaviors. Unlike other commonly utilized interventions, the child-centered counselor does not seek to correct thought patterns or emotional responses tied to aggressive acts. Rather, the counselor seeks to fully understand and accept the child as he or she is in order for them to more fully accept themselves. Such acceptance releases children to more readily identify their emotions as they arise as well as alternate methods of self-expression. As the structure coefficients and corresponding 81% of variance accounted for in group differences suggest, it can be reasonably assumed that the relationship formed between the children in this study and their play therapists likely contributed to children’s decrease in aggressive behaviors per parent report. Such shifts in behavioral manifestations of aggression may not only help children in their everyday functioning but also in their relationships with others.

Self-Regulation

Parents perceived their children’s participation in CCPT as predictive of their increased abilities to self-regulate. This finding may be particularly noteworthy as self-regulation is an essential tenet in the philosophy of child-centered play therapy. Founders of the person-centered philosophy from which CCPT emerges emphasize the drive towards self-regulation as an innate aspect of the human experience and that childhood motivations “tend naturally to harmonize into a complex and changing pattern of self-regulation” (Rogers, 1989, p. 405). Thus, the very nature of the skills and specific responses utilized by the play therapists in this study likely contributed to children’s increased abilities towards self-regulation. Specifically, as children acted out
aggressively in the playroom, they were not only met with empathic understanding, but also a sense of trust in their abilities to control their impulses and identify increasingly enhancing means of self-expression.

Furthermore, in order for parents to perceive notable differences in their children’s self-regulatory processes, these skills were able to transcend beyond the therapeutic environment and infuse into the child’s being beyond the structure of play therapy. Thus, these results suggest children participating in CCPT became better able to control their impulses and express themselves in increasingly beneficial ways both within the therapeutic setting and beyond.

Empathy

Finally, parents perceived their children’s participation in CCPT as predictive of an increased propensity towards empathy. This is of particular importance as very limited research currently exists with respects to children’s developed sense of empathy subsequent to receiving CCPT. Some researchers have suggested children are capable of conceptually understanding empathy although unable to emotionally experience it (Dadds et al., 2009). However, others starkly contrast this notion and have suggested providing children with an environment in which they may experience empathic understanding, such as in CCPT, may advance their ability to convey empathy towards others (Ray et al., 2013). Pertinent to this study, the structure coefficient for empathy coupled with the corresponding 26% of variance accounted for in group differences provides support for this supposition. Additionally, it provides preliminary evidence for supporting the use of CCPT on enhancing children’s empathy who are struggling with aggressive behaviors.

Empathy appears to be a crucial interpersonal ability that has been closely linked to both expressed and internalized frustration, anger, and aggression (Bjorkqvist, 2007; Peterson &
Flanders, 2005, Ray et al., 2009). Prior research supports the notion that as individuals are able to experience empathy through both cognitive and interpersonal processes, aggressive behaviors tend to diminish (Bjorkqvist, 2007). Peterson & Flanders (2005) suggested, “The internal process that regulates aggression (in addition to simple fear) seems to be empathy or, perhaps, identification—the ability to feel the experiences or to adopt the viewpoint of another, respectively” (p. 136). In accordance with CCPT philosophy, the therapists in this study sought to remain empathic towards all aspects of a child’s being, including their demonstrated aggression. Through the relationship established between a child and a play therapist, this study would support the notion that children not only experienced empathy from play therapists, but also further developed the ability to demonstrate empathy towards others. This is essential to the role of the play therapist in CCPT as the empathic understanding children experience from their play therapists is understood to be directly related to their ability to demonstrate empathy towards others in an effective manner (Ray, 2009). This increase in empathy often leads to a decrease in aggressive and acting out behaviors as further supported by results of the present study.

Relationship between Aggression, Self-regulation, and Empathy

An important aspect of this study and intentionality behind the specific data analyses employed, was to examine the shared relationship between aggression, self-regulation, and empathy. Theoretically, I inferred that based upon prior literature, developmental theories, and clinical experience, these three variables may be related in a meaningful way. Thus, I intentionally chose an analysis in which I could explore these constructs simultaneously to account for any shared variance between them. The results of this study did confirm that participation in CCPT was largely predictive of changes in aggression. However, results further
indicated the shared variance between self-regulation and empathy with respects to aggression. Specifically, as children became more or less aggressive dependent upon group membership, they also became more or less self-regulated and empathic. Results of this study suggest these constructs may in fact be related in meaningful ways as supported through both prior literature and the theoretical underpinnings of aggressive behaviors. Additionally, such results support the emphasis therapists place on self-regulation and empathy when working with children exhibiting aggressive behaviors from a child-centered philosophy.

Teacher Perceptions

Based upon the results of this study, teachers did not perceive children’s participation in CCPT as predictive of their overall levels of aggression, self-regulation, or empathy. Specifically, teachers noticed very little differences between children receiving CCPT and those who did not with respect to the three variables of interest. A lack of statistically significant results specific to teacher perceptions is consistent with previous research findings (Garza & Bratton, 2005). Despite such findings, results of the present study appear inconsistent with previous research specific to children demonstrating overly aggressive behaviors. In a pilot study conducted by Ray et al. (2009), teachers reported statistically significant decreases in aggressive behaviors among children who participated in CCPT over those assigned to a waitlist control group. The inconsistency between these two studies seems to reflect the need for further exploration of teacher perceptions of change with respect to children exhibiting aggressive behaviors.

Relational Considerations in Working with Aggressive Children

The population of focus for this study may be of importance when considering the non-statistically or practically significant results for teachers. Teachers face ongoing challenges and
demands in a classroom and considering the interference to classroom instruction a single disruptive child could cause, it is not entirely implausible to assume teachers may formulate negative perceptions of these children (Morrison & Bratton, 2010). Highly disruptive and aggressive children, as were the children referred for this particular study, often place increasing demands on teachers and school personnel. While it is understandable that these children may need increased focus and attention, these are often resources teachers are unable to provide given the magnitude of responsibility they face in balancing curriculum with classroom management.

Teacher perceptions of children referred for aggressive behaviors do however appear important in their ability to provide emotional and relational support to their students (Helker & Ray, 2009; Morrison & Bratton, 2010). Additionally, previous research findings suggest the relevancy of teacher’s emotional significance to children and their overall abilities to learn and grow in a classroom environment (Helker, Schottelkorb, & Ray, 2007; Morrison & Bratton, 2010).

Student-teacher relationships are one of many types of meaningful relationships into which aggressive children enter. Nonetheless, for children struggling with such symptomology, relationships are often taxing and difficult to maintain. These relational struggles highlight the appropriateness of CCPT with this population as the central premise of the child-centered philosophy is entering into relationships with children in which they feel authentically seen, understood, and accepted despite any emotional or behavioral struggles they may face. Child-centered therapists believe unconditional relationships are both healing and contagious. In other words, as children experience the conditions set forth in CCPT they become better equipped to demonstrate care and acceptance towards themselves and others. The relationship between the child and the therapist may be of particular relevancy when considering the population of children in this study. Aggressive children often face ongoing relational struggles as a result of
their externalized manifestations of anger, guilt, shame, and host of other emotional experiences. As aggressive children continue to face relational hardships as a consequence of their behaviors, messages such as “I am unlovable,” “I am bad,” or “I am not worthwhile” may become increasingly internalized. As children start to see themselves in this light, they will continue to display behaviors consistent with their internal experiences and dialogues. Thus, introducing a relational experience inconsistent with a child’s existing self-structure may be challenging, however, this may also lead to children changing the lens through which they view themselves and others. The therapeutic relationship then becomes the primary agent of change.

Although each participating play therapist expressed unique feelings related to their relationships with their clients, all therapists reported the emotional challenges associated with working with highly aggressive children to varying degrees. This point appears particularly important to teacher perceptions of aggressive children. Like the therapists in this study, teachers are likely to struggle to varying degrees in both forming and maintaining relationships with aggressive children. However, through knowledge of skills and increased understanding into children’s emotional experiences, it may be possible for teachers to form strengthened relationships with these students.

Study Limitations

Despite the current findings offering valuable information regarding the effectiveness of CCPT in decreasing aggression and increasing self-regulation and empathy, limitations are important to consider in accurately interpreting the results. Study limitations included the specified age range and geographic location, the use of a non-treatment control group as compared to a comparison group, and a possible overrepresentation of males and African American children. All limitations above contribute to a lack of generalizability of findings.
Additionally, the length of the intervention should be considered based upon the particular sample for this study. Children exhibiting aggressive behaviors, particularly those meeting criteria to be considered highly aggressive, may require a longer length of treatment than the 16 sessions allotted. Given the optimal effect of CCPT is approximately 30-40 sessions (Bratton et al., 2005; LeBlanc & Ritchie, 2001), CCPT with this population may need to be conducted over a longer period of time in order to stabilize findings and contribute to statistically significant results for teachers.

Recommendations for Future Research

Based upon the findings and limitations of the present study coupled with prior research findings, several recommendations for future research are presented. The first is the use of a true comparison group as opposed to a no treatment control group. Additionally, study implications may be strengthened given an additional criterion of meeting a clinical threshold for aggression as delineated by the CAS professional manual (Halperin & McKay, 2008). This would contribute to the overall rigor of a study and allow for further inferences regarding the use of CCPT with clinically aggressive children. Extended length of treatment may more accurately reflect the needs of this population and the recommendations of prior researchers regarding optimal effects of play therapy (Bratton et al., 2005; LeBlanc & Ritchie, 2001). Finally, as discussed in length above, including teachers in the intervention process may lead to teacher feeling increasingly connected with aggressive children and more reticent to notice and accept behavioral changes. Additionally, follow up measures may be helpful in monitoring the long range impacts of CCPT with aggressive children.

Study Implications
The current study brings hope and assurance for the application of CCPT with children demonstrating problematic aggressive behaviors. In CCPT, the relationship between the therapist and the child may be unlike any relationship in a child’s life. Through the permissiveness, acceptance, and necessary limits provided to children in the playroom, they may begin to release and identify their inner feelings underlying aggressive acts. This type of relational experience for an aggressive child may be fundamental in their ability to identify increasingly enhancing and socially acceptable means of expressing their needs to caretakers and peers alike.

In addition, CCPT appears to be a viable and practical option to further develop children’s empathy. Through the empathic understanding conveyed by the therapist, children feel both understood and accepted despite any displayed acts of aggression. Through intentional reflections made by the therapist, children also become better aware of their feelings and internal experiences. With more perceived experiences of empathy, children become increasingly capable of developing and displaying empathy towards others (Ray et al., 2013). Thus, as oppose to providing children with cognitive based interventions to develop empathy, CCPT may serve as an applicable intervention that allows aggressive children to first experience empathy promoting their subsequent ability to offer it to others. Furthermore, results of both the present study and prior literature support the notion that with increased empathy children may become decreasingly aggressive.

Conclusion

Children struggling with aggressive symptomology often face relational, academic, and emotional hardships. Additionally, aggressive behaviors in childhood serve as the leading cause of referrals to school counselors and mental health professionals across the United States (Abidin & Robinson, 2002; Bratton et al., 2012). Absent of early intervention, children exhibiting
atypical levels of aggression may be at an increased risk for highly externalized and problematic behaviors across the lifespan (Foulkrod & Davenport, 2010; Frick & White, 2008; Gathright & Tyler, 2014). Due to the relevancy of aggressive behaviors in childhood, the current study was meant to augment the current body of literature regarding CCPT with this population.

The predictive ability of aggression, self-regulation, and empathy with respects to group membership to either a waitlist control or experimental group was examined by comparing parent and teacher reports of children’s aggressive behaviors over time. The statistically significant findings between groups indicated that children’s aggressive symptomology, self-regulation, and empathy could be reasonably predicted based upon their participation in one group over another as reported by parents. Specifically, it could be soundly predicted that children participating in CCPT would become less aggressive and increasingly self-regulated and empathic. Concurrently, it could be predicted that children receiving no treatment at all would become increasingly aggressive while less self-regulated and empathic. However, teachers did not report predictive abilities of group membership based upon these three variables. This finding could be associated with a number of factors including teachers decreased sensitivity to behavioral changes among this population of students, external hardships to completing pre and post testing assessments, and a lack of teacher involvement in the intervention leading to increased feelings of frustration.

The conditions provided through the therapeutic relationship in the present study appeared to foster children’s increased abilities to self-regulate and demonstrate empathy leading to decreased aggressive and acting out behaviors, at least in terms of parent report. Thus, children in the current study appeared to benefit from participation in CCPT. Findings from this study demonstrate CCPT’s viability as a possible treatment option for young children displaying
struggles related to aggressive behaviors. Considerations should be made when working with teachers of this population as to enhance their relationships their students leading to greater academic and emotional student experiences. Due to the limitations previously discussed, it is important that future researchers replicate this study with attention to ways in which length of treatment, teacher-child relationships, clinical thresholds, and the use of a comparison group may impact CCPT outcomes.

References


Table 1

*Means and Standard Deviations for Measures at Pretest and Posttest*

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td><strong>CCPT Group (n=36)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy (SEARS-P)</td>
<td>43.92</td>
<td>12.36</td>
</tr>
<tr>
<td>Self-Regulation (SEARS-P)</td>
<td>36.39</td>
<td>8.75</td>
</tr>
<tr>
<td>Aggression (CAS-P)</td>
<td>69.14</td>
<td>17.35</td>
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<tr>
<td>Teacher</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy (SEARS-T)</td>
<td>40.31</td>
<td>8.01</td>
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<tr>
<td>Self-Regulation (SEARS-T)</td>
<td>41.40</td>
<td>6.06</td>
</tr>
<tr>
<td>Aggression (CAS-T)</td>
<td>59.72</td>
<td>13.97</td>
</tr>
<tr>
<td><strong>Control Group (n=35)</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent</td>
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<td></td>
</tr>
<tr>
<td>Empathy (SEARS-P)</td>
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<td>Self-Regulation (SEARS-P)</td>
<td>37.86</td>
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<td>Aggression (CAS-P)</td>
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<tr>
<td>Teacher</td>
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<tr>
<td>Empathy (SEARS-T)</td>
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<tr>
<td>Self-Regulation (SEARS-T)</td>
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<tr>
<td>Aggression (CAS-T)</td>
<td>60.94</td>
<td>17.08</td>
</tr>
</tbody>
</table>

Note: Higher scores on SEARS represent improvement; Lower scores on CAS represent improvement.
Table 2

*Wilks’ Lambda and Canonical Correlation for Function 1 of Parent Data*

<table>
<thead>
<tr>
<th>Function</th>
<th>Wilks’ Lambda</th>
<th>$X^2$</th>
<th>$df$</th>
<th>$P$</th>
<th>$R_c$</th>
<th>$R_c^2$</th>
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</thead>
<tbody>
<tr>
<td>1</td>
<td>.845</td>
<td>11.399</td>
<td>3</td>
<td>.010*</td>
<td>.394</td>
<td>16%</td>
</tr>
</tbody>
</table>

Note. * indicates statistical significance at $p < .05$.

Table 3

*Standardized Discriminant Functions and Structure Coefficients for the Two Groups*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Coefficient</th>
<th>$r_s$</th>
<th>$r_s^2$</th>
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</thead>
<tbody>
<tr>
<td>Function 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggression</td>
<td>.819</td>
<td>.900</td>
<td>81%</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>-.221</td>
<td>-.517</td>
<td>27%</td>
</tr>
<tr>
<td>Empathy</td>
<td>-.290</td>
<td>-.513</td>
<td>26%</td>
</tr>
</tbody>
</table>

Note. Coef = standardized canonical function coefficients; $r_s$ = structure coefficient; $r_s^2$ = squared structure coefficient.

Table 4

*Centroids and 95% Confidence Intervals for Each Group on the Discriminant Function Scores*

<table>
<thead>
<tr>
<th>Groups</th>
<th>Centroid</th>
<th>SD</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>-.417</td>
<td>1.02</td>
<td>.169</td>
<td>-.761</td>
<td>-.073</td>
</tr>
<tr>
<td>Control</td>
<td>.429</td>
<td>.983</td>
<td>.166</td>
<td>.091</td>
<td>.766</td>
</tr>
</tbody>
</table>
Table 5

Means and Standard Deviations on the Three Variables for Two Groups - Teacher

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>1.69</td>
<td>4.39</td>
</tr>
<tr>
<td>Empathy</td>
<td>1.23</td>
<td>7.08</td>
</tr>
<tr>
<td>Aggression</td>
<td>-3.34</td>
<td>11.51</td>
</tr>
</tbody>
</table>

Table 6

Wilks’ Lambda and Canonical Correlation on Function 1 for Teacher Data

<table>
<thead>
<tr>
<th>Function</th>
<th>Wilks’ Lambda</th>
<th>$X^2$</th>
<th>df</th>
<th>p</th>
<th>$R_c$</th>
<th>$R_c^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.958</td>
<td>2.862</td>
<td>3</td>
<td>.413</td>
<td>.205</td>
<td>4.2%</td>
</tr>
</tbody>
</table>
APPENDIX A

EXTENDED LITERATURE REVIEW
The following review is a synthesis of relevant literature and research regarding the following areas: (a) definitions and prevalence of childhood aggression, (b) negative outcomes of aggressive behaviors, (c) research exploring empathy and aggression, (d) research exploring self-regulation and aggression, (e) and research exploring the use of child-centered play therapy with children exhibiting aggressive behaviors. This chapter will conclude with a justification for continued research and exploration of the effectiveness of child-centered play therapy with children exhibiting aggressive behaviors.

Aggressive Behaviors in Childhood

Over the past 50 years, researchers have documented a steady increase in childhood aggression. So much so in fact, aggressive acts in childhood and adolescents are thought to be at historically high levels (Conner, 2002). According to the Substance Abuse and Mental Health Services Administration (SAMHSA), Oppositional Defiant Disorder (ODD) and Conduct Disorder (CD) are widespread concerns regarding children and adolescents today. In fact, SAMHSA researchers report prevalence rates of 2-16% and 6-9% for ODD and CD in youth respectively (Gathright & Tyler, 2014). Because the diagnosis of CD in particular “contains criteria for many varied acts of maladaptive aggression, prevalence surveys of CD can give a rough estimate of the prevalence of maladaptive aggression in youth…” (Conner, 2002, p. 31). Children with a diagnosis of ODD or CD, largely characterized by acts of aggression, demonstrate an increased risk for maladaptive behaviors into adulthood as compared to children with a diagnosis of almost any other emotional disorder (Halperin & McKay, 2008). Due to consistent findings of ongoing behavioral and relational struggles in children with the above diagnoses, the effective and timely treatment of atypical patterns of aggression is imperative.
Despite the popularity of the term aggression in social science research, researchers and clinicians alike have struggled over the years in narrowly defining this broad and multidimensional concept (Conner, 2002; Dodge, Coie, & Lynam, 2006; Hay, 2005). Conner (2002) stated, “First, given that aggression is a heterogeneous condition, no single term is adequate to capture all the variegated and diverse presentations of such behavior in youth” (p. 2). Other researchers have indicated, “Hardly any construct in psychology is more difficult to define than aggression” (Hay, 2005, p. 108). Such definitional ambiguity has historically led to measurement difficulties in experimental research focused on aggression. However, many have proposed the difficulty centers less on identifying an operational definition of aggression and more on deciphering whether or not an act qualifies as aggressive based upon intentionality (Hay, 2005). For example, Parke and Slaby offered a seemingly straightforward definition of aggression as “behavior that is aimed at harming or injuring another person or persons” (1983, p. 50). Despite its straightforward nature, some argue definitions such as this fail to place sufficient emphasis on one’s intentionality or motivation to harm (Dodge et al., 2006). Halperin and McKay defined aggression as “a myriad of actions- both verbal and physical- that occur within vastly diverse contexts and are prompted by equally diverse motivations. All aggressive acts…share the common consequence of physical or emotional damage, offense, or insult” (2008, p. 1). Halperin and McKay incorporated the concept of motivation, addressing a common
complexity in definitions of aggression. Nonetheless, an operational definition inevitably influences the manner in which professionals come to “understand, conceptualize, research, and intervene” on behalf of children exhibiting aggressive behaviors and thus holds a degree of relevancy (Conner, 2002, p. 3).

An additional consideration in defining aggression lies in the cultural context of aggressive behaviors. For example, in contemporary American culture, adults may interpret the acts of a boy as more aggressive as compared to the acts of a girl in childhood (Conner, 2002; Crick, Casas, & Mosher, 1997; Dodge et al., 2006; Stanger, Achenbach, & Verhulst, 1997). Some cultures may view certain gestures or acts as highly aggressive, while others view them as quite mundane. Thus, acts may be viewed as aggressive or not depending largely upon the social and cultural contexts in which they take place (Dodge et al., 2006). Identifying a universally accepted definition then becomes increasingly challenging. However, for the purposes of this study, I utilize Halperin and McKay’s definition of aggression due to the emphasis placed on a child’s motivation or intent to harm rather than a sole focus on the outcome of the aggressive act itself.

Reactive and Proactive Aggression

Aggression researchers have paved the way to a current conceptualization of two theoretically distinct types of aggression: reactive and proactive aggression (Crick & Dodge, 1996; Conner, 2002; Hubbard, Morrow, Romano, & Mcauliffe, 2010). Reactive aggression is rooted in frustration-anger theory (Conner, 2002; Dodge et al., 2006; Dollard, Doob, Miller, Mowrer, & Sears, 1939; Vitaro & Brendgen, 2005) and is categorized by a hostile, angry reaction to a perceived frustration or threat in the environment. The primary goal of reactive aggression is to defend oneself against a perceived threat or to inflict harm on an external source
of frustration. Reactive aggression is thus largely impulsive in nature and is typically accompanied by the expression of anger (Vitaro & Brendgen, 2005). It can be summarized as “defensive, retaliatory, and in response to real or perceived provocation” (Hubbard et al., 2010, p. 201).

Proactive aggression stems largely from the social learning theory of aggression based on the works of Bandura (1973). Bandura believed aggression to be an “acquired behavior governed by reinforcement” (Vitaro & Brendgen, 2005, p. 179). Thus, proactive aggression is increasingly “organized, patterned, and directed towards the promise of reward” as compared to reactive aggression (Conner, 2002, p. 15). Additionally, proactive aggression can be understood as controlled and deliberate, non-reactive, behaviors used as a means of obtaining an external reinforcement or reward (Dodge et al., 2006; Conner, 2002). It has been described as “driven by cool and deliberate purpose” (Hubbard et al., 2010, p. 201) and is therefore qualitatively different from reactive aggression. Important to note is the lack of agreement among researchers regarding social learning theory. Social learning theorists would assert that children become increasingly aggressive with age due to exposure to social influences such as violent television, video games, or aggressive peers. However, studies such as Archer and Cote’s (2005) lay in opposition to social learning theory suggesting children’s developmental trends tend to lead to decreased aggression over time with the exception of those already on high trajectories of physical aggression in kindergarten (Ray, 2011). This disagreement among social science researchers holds important implications for the interpretation of proactive aggression as it relates to therapeutic outcomes.

Researchers have found correlations between reactive and proactive aggression of .70 to .85, suggesting most aggressive children tend to display behaviors consistent with both reactive
and proactive forms of aggression (McAuliffe, Hubbard, Rubin, Morrow, & Dearing, 2007). Thus, the reactive/proactive distinction typically serves as an indicator of intentionality rather than as a descriptor of children themselves (Hubbard et al., 2010). “In other words, the subtypes of aggression can be conceptualized most accurately as continuous dimensions that exist to varying degrees in each aggressive child, rather than as exclusive categories in which children are placed” (McAuliffe et al., 2007, p. 366). Additionally, both reactive and proactive aggression can be displayed either overtly or covertly through acts of physical, verbal, or relational aggression. Physical aggression may include behaviors such as kicking, hitting, scratching, biting, or punching while verbal acts may include yelling or screaming. Aggression may become increasingly “person directed” and relational in nature such as targeted alienation, rejection, or retaliation (Dodge et al., 2014, p. 726). Increasingly covert acts of aggression tend to be less obvious in nature and may include acts such as lying, cheating, or stealing (Conner, 2002; Dodge et al., 2006). Most researchers agree that all aggressive acts, both overt and covert in nature, involve varying degrees of intentionality to harm.

Developmental Patterns of Normative Childhood Aggression

Aggression is understood as a typical and natural human response to various emotional states experienced throughout the lifespan and beginning in early infancy (Conner, 2002; Dodge et al., 2006; Foulkrod & Davenport, 2010). Research has shown that infants as early as three months old can recognize facial responses of anger and/or aggression in their caretakers (Conner, 2002; Dodge, 2006). Some researchers have noted angry responses in infants due to physical discomfort and the need for parental attention as scientific evidence of aggression from a very early onset (Hay, 2005). Still, others argue if intent to harm is a necessary consideration of aggressiveness, such displays of anger may not qualify as aggressive acts in infancy (Dodge et
al., 2006). Nonetheless, healthy levels of aggression are highly adaptive and may facilitate competence in assertiveness, competition, and success in meeting routine challenges beginning at a very young age (Conner, 2002).

By the time children reach toddlerhood, acts of aggression become far less ambiguous and increasingly explicit as compared to infancy. Between 12 to 18 months old, aggression tends to center around social interactions and peer exchanges (Dodge et al., 2006; Hay, 2005). Children in this developmental stage are increasingly aware of themselves and others. However, they generally lack the ability to verbally express feelings such as anger and frustration and instead act out physically as a means of self-expression. Thus, toddlers in this age range represent the peak of physical aggressiveness (Conner, 2002). Specifically, at least 50% of peer exchanges between children in this age range involve conflict of some sort, typically displayed through acts of physical aggression (Hay & Ross, 1982).

Coinciding with language acquisition and increased expressive vocabularies, children between the ages of two and five tend to rely less on physical forms of aggression and more on their verbal abilities for emotional expression. The most common acts of aggression in this developmental phase tend to result from struggles over material possessions and peer conflicts (Dodge et al., 2006). Additionally, acts of aggression towards siblings peak in toddlerhood as young children begin to compete for parental attention and physical resources such as toys and space (Dodge et al., 2006; Foulkrod & Davenport, 2010). Verbal aggression in this stage may include acts such as yelling and name-calling.

The elementary school years tend to bring a feeling of relief to parents and caretakers as acts of physical and verbal aggression significantly decrease between the ages of six and ten (Dodge et al., 2006; Foulkrod & Davenport, 2010; Hay, Payne, & Chadwick, 2004). Children’s
increasing ability to self-regulate their feelings and emotions appears to precede the notable decline in their aggressive behaviors (Dodge et al., 2006; Keenan & Shaw, 2003). Additionally, an increasing ability for delayed gratification allows children to withhold aggressive inclinations such as pushing and hitting, as seen in earlier years, for more socially appropriate behaviors. Children in this age range place increased value on peer relationships. This also allows for greater empathic understanding, or their ability to take on the perspectives of others, further alleviating overly aggressive acts. When aggression is observed in the elementary school years, it is more likely to be in the form of relational aggression characterized by alienation of other children, bullying, or even acts of retaliation (Dodge et al., 2014).

Although most children decline in acts of aggression during the elementary school years, some do not. It is at this particular developmental stage that children are most commonly referred for mental health services if their aggressive behaviors do not subside (Dodge et al., 2006). The elementary school years serve as a milestone for children on typical developmental trajectories in that aggressiveness should naturally decline with age. However, children exhibiting non-normative patterns of aggression beginning in this stage could demonstrate increased relational, academic, and emotional concerns across development (Foulkrod & Davenport, 2010). While all children are unique and may demonstrate aggressive behaviors in varied forms, Table A.1 represents a general trajectory for adaptive aggression in childhood.
### Table A.1

**Normative Trends in Childhood Aggression**

<table>
<thead>
<tr>
<th>Aspect of Aggression</th>
<th>Younger Children (1-5 yrs.)</th>
<th>Older Children (5-10 yrs.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Time Spent in Social Conflict</td>
<td>High</td>
<td>Low</td>
</tr>
<tr>
<td>Primary Form of Aggression</td>
<td>Physical</td>
<td>Verbal</td>
</tr>
<tr>
<td>Primary Type of Aggression</td>
<td>Overt</td>
<td>Covert</td>
</tr>
<tr>
<td>Triggers for Aggressive Behaviors</td>
<td>Environmental Demands</td>
<td>Social Threats</td>
</tr>
</tbody>
</table>

Note. Adapted from “Aggression and antisocial behavior in children and adolescents: Research and treatment” by D. F. Conner, 2002. Copyright by Guilford.

### Maladaptive Aggression

Aggressive behaviors in childhood currently serve as the most frequent presenting concern in counseling and play therapy (Davenport & Bourgeois, 2008; Foulkrod & Davenport, 2010). Parents and teachers are often troubled by aggressiveness in children and fear the distal consequences of these behaviors throughout development. Such concerns may be valid, as researchers have found the longer aggressive behaviors continue, the more challenging to modify and persistent they become (Dodge et al., 2006; Conner, 2002). Thus, early intervention may serve as a defense against prolonged aggression leading to decreased repercussions across the lifespan (Comer et al., 2013; Conner, 2002; Foulkrod & Davenport, 2010).

Researchers identified early childhood as a particularly impactful critical period of development in diminishing or significantly reducing non-normative levels of aggressive behaviors (Comer et al., 2013; Conner, 2002; Loeber & Hay, 1997; Olson, Lopez-Duran, Lunkenheimer, Chang & Sameroff, 2011). Although critical periods exist across numerous stages in development, “interventions during earlier critical periods of development may have proportionally greater treatment effects than inventions at later critical periods” (Conner, 2002, p. 45).
Despite consensus guidelines recommending psychotherapy as a first line of treatment for young children displaying overly aggressive behaviors, “the proportion of 2 to 5-year-olds receiving psychotherapy significantly decreased in recent years” (Comer et al., 2013, p. 27). Nonetheless, absent of early intervention, aggressive behaviors tend to remain stable across the lifespan leading to many social, emotional, academic, and relational impairments (Coie & Dodge, 1998; Comer et al., 2013; Davenport & Bourgeois, 2008; Foulkrod & Davenport, 2010; Frick & White, 2008). Olson and colleagues (2011) noted the relevancy of high levels of aggressive behaviors in kindergarten as “warning signs” of increasingly severe problems across development (p. 253). Thus, researchers continue to emphasize the importance of early intervention for children demonstrating non-normative patterns of aggressive behaviors to alleviate prolonged consequences.

Aggressive behaviors exceeding those which are both expected and normative according to typical developmental trajectories and which bring children into considerable conflict with those in their environment are considered maladaptive (Dodge et al, 2006; American Psychiatric Association [APA], 2013). These behaviors include intentional acts of inflicting harm onto others. This may include deliberate acts of physical, emotional, or relational aggression. Ultimately, children demonstrating maladaptive aggressive behaviors tend to significantly struggle in: forming and maintaining relationships, demonstrating empathic understanding towards others, self-regulation, and in the successful navigation of academic endeavors (Conner, 2002; Davenport & Bourgeois, 2008; Dodge et al., 2006; Foulkrod & Davenport, 2010; Frick & White, 2008). Across development, these maladaptive aggressive traits can lead to even greater psychopathology such as family dysfunction, criminality, comorbidity with other psychiatric disorders such as CD and ODD, and drug and alcohol abuse among others (Comer, et al., 2013).
After the point of entry into elementary school, if children’s aggressive behaviors do not subside and continue to fall outside the realm of developmental normalcy, they are “likely to be diagnosed with ODD and, still later, CD if the behaviors continue to escalate and increase” (Foulkrod & Davenport, 2010, p. 146). This could place children at risk for significant behavioral and relational struggles throughout elementary school and beyond.

Neuropsychological Factors of Maladaptive Aggression

One of the strongest neuropsychological correlates between maladaptive aggression and severe and persistent conduct concerns is a child’s verbal ability (Dodge et al., 2006). Correlations between non-normative patterns of aggressive behaviors and verbal abilities have been demonstrated across development. “Verbal deficits have been found in aggressive toddlers, conduct-disordered children, serious adolescent delinquents, and adult criminals” (Dodge et al., 2006, p. 737). Researchers continue to replicate this finding through robust research designs further solidifying this hypothesized correlation (Dodge et al., 2006). To date, the majority of research studies examining the constructs of children’s verbal abilities and their maladaptive aggressive behaviors have used verbal IQ tests as a measure of verbal ability. Park and colleagues (2005) conducted a longitudinal research study in which they monitored 207 children from preschool into the fifth grade. The researchers identified less developed verbal abilities in preschool as a risk factor for increased aggression through the fifth grade. Certainly, not all children with verbal deficits demonstrate maladaptive aggression. Furthermore, many children who demonstrate maladaptive aggression do not demonstrate struggles with verbal ability. However, this known correlate remains thought provoking to researchers and clinicians alike.

Problems with executive functioning such as sustaining attention and concentration, abstract reasoning, concept formation, planning abilities, purposive sequencing of behaviors, and
inhibition of inappropriate or impulsive behaviors have also been identified as correlates to maladaptive aggression in childhood (Dodge et al., 2006). Specifically, longitudinal studies have found executive functioning deficits to be strongly correlated with both stability and continuity of aggressiveness and conduct problems, particularly in males (Dodge et al., 2006; Seguin, Pihl, Harden, Tremblay, & Boulerice, 1995). Such concerns of executive functioning lead to problems typically associated with children’s abilities towards self-regulation. Children demonstrating frequent and persistent outbursts, physical aggressiveness, and a lack of concentration may be at an increased risk for later problems associated with non-normative aggression such as CD, ODD, and even antisocial personality disorder (ASPD) in adulthood (Comer, et al, 2013; Dodge et al., 2006).

Longitudinal Outcomes of Maladaptive Aggression

As previously mentioned, several negative outcomes can occur absent of early intervention for children exhibiting maladaptive aggressive behaviors. Connor (2002) noted that longitudinal studies indicate that children demonstrating early-onset and persistent aggression are at an increased risk for negative outcomes such as behavioral problems, academic underachievement, poor interpersonal functioning, trouble forming and maintaining relationships, and negative mental health outcomes. In one historical longitudinal study, Huesmann, Eron, Lefkowitz, & Walder (1984) concluded that children displaying overly aggressive behaviors at age eight, self-reported being overly aggressive and facing legal convictions at age 30. Replicated studies have found similar results further confirming the possible stability of unattended aggressive behaviors from childhood throughout development (Farrington, 1991; Lundy, Pfohl, & Kuperman, 1993).
One of the most concerning outcomes of prolonged maladaptive aggression is academic underachievement (Conner, 2002; Kingston & Prior, 1995). When aggressive behaviors exceed what parents and teachers feel they are capable of handling, children may be given the label of “emotionally disturbed” (ED) or “severely emotionally disturbed” (SED) and placed into special education or behavioral classrooms (Dodge et al., 2006). This presents an additional challenge in that children may begin to see and understand themselves as “bad” only further escalating their aggressive behaviors. Additionally, placing children in special education classrooms due to behaviors alone, absent of any cognitive deficits has the potential of slowing down their academic trajectories. If children are unable to self-regulate when upset or demonstrate a lack of empathy towards others their aggressive behaviors could potentially escalate to the point of being given a diagnostic label at school, being placed in a special education classroom, or being held back from progressing in school (Conner, 2002).

Children with serious emotional concerns, including aggression, struggle more academically compared to typically functioning children (Cochran et al., 2010). In a study of 1,721 Australian children, Kingston and Prior (1995) found that persistently aggressive eight-year-olds demonstrated lower reading skills and poorer adaptive functioning compared to nonaggressive children in the school setting. Recently, Risser (2013) studied a subset of 1,067 elementary school children included in the National Institute of Child Health and Human Development (NICHD) Study of Early Child Care and Youth Development and found relational aggression to be negatively correlated with school performance for girls and overt aggression to be negatively correlated with school performance for boys. Other longitudinal researchers have suggested a relationship between poor school performance and aggressive behaviors for children in the first grade and later delinquent behaviors at age 14 (Tremblay, Masse, Perron, Leblanc,
Schwartzman, & Ledingham, 1992). These and other studies provide empirical support of the possibility of longitudinal impacts of aggressive behaviors on academic performance.

The longer children progress with maladaptive aggression, the more serious the implications may be (Davenport & Bourgeois, 2008). Theorists and researchers alike (Cochran et al., 2010; Dodge et al., 2006; Ray et al., 2009) have concluded that the effects of aggression could become more severe as children get older. Additionally, children demonstrating overly aggressive behaviors may continue to struggle throughout development and into adulthood through increased occupational hardships (Conner, 2002). Farrington’s (1991) longitudinal research revealed early aggression identified in the third grade was predictive of prolonged periods of unemployment at age 32 for males. Other considerations such as home ownership were investigated in this study and were also found to be negatively correlated with aggressive childhood behaviors. Conner (2002) further concluded that longitudinal considerations such as lower SES and a lack of long-term stability have been found in adults who were identified in childhood as demonstrating maladaptive behavioral struggles.

Poor interpersonal relationships are an additional consequence of maladaptive aggressive behaviors (Cochran et al., 2010; Comer et al., 2013; Conner, 2002; Foulkrod & Davenport, 2010). Overly aggressive individuals tend to demonstrate higher levels of peer rejection across all ages as compared to typically aggressive individuals (Conner, 2002; Kazdin, 1996). In childhood, children demonstrating maladaptive aggression tend to be excluded from social circles, further contributing to academic hardships (Salehi, Noah, Baba, & Jaafar, 2013). In adulthood, overly aggressive individuals tend to struggle both socially, as well as in familial relationships. This sense of rejection could lead to increased risk for depressed mood and delinquent behaviors across the lifespan (Cochran et al., 2010). “Researchers consistently find
differences between aggressive and nonaggressive children, with chronically aggressive children attending to fewer social cues and being more sensitive to hostile cues” (Foulkrod & Davenport, 2010, p. 147). Crick and Dodge (1994) suggested that children with maladaptive aggressive behaviors tend to recognize more threats in social interactions, are slower in negotiations, and have fewer response options compared to typically aggressive children of the same age. This frequent misinterpretation of social cues leads to less accurate interpretations in social situations and increasingly problematic patterns of interaction with friends and family. Some researchers have attributed such misconceptions as resulting from a lack of empathic understanding towards others (Frick & White, 2008; Ray, Blanco, Sullivan, & Holliman, 2009). Dodge and colleagues (1990) conducted a study in which they observed 23 groups of five or six first and third grade boys engaging in 45 minutes of free play for five consecutive days. Following the free play, researchers conducted sociometric interviews with each child. Results indicated that rejected boys at both ages displayed significantly higher rates of angry, reactive aggression leading to poorer interpersonal relationships compared to non-aggressive children (Dodge, Coie, Peittit, & Price, 1990). This study remains highly referenced in the literature regarding the relationship between reactive aggression, interpersonal struggles, and peer rejection (McAuliffe et al., 2007).

Empathy and Self-Regulation as Components of Aggression

Empathy and self-regulation are both vital components of aggression in differing respects. A child’s ability to experience and demonstrate empathy is directly related to his or her ability to take on the emotional experiences of another and thus is largely connected to acts of aggression. For example, children demonstrating struggles with empathy often experience difficulty in understanding the emotional and physical consequences their aggressive acts may have upon another person. Therefore, lacking the ability to empathize, a child could push or
insult a person with very little care or understanding of the impact of such behaviors. Self-regulation on the other hand, is also closely tied to aggression in a differing respect. Children struggling in this capacity often lack the ability to control their feelings and emotions and therefore may display aggressive behaviors out of impulse. Conflicts related to self-regulation and aggression are most commonly characterized as highly impulsive in nature. Contrary to difficulties with empathy, children struggling with their self-regulatory processes may experience feelings of guilt or sadness following an aggressive act. As further detailed below, a great deal of overlap between these two constructs exists with respect to aggression. Thus, it is important to note that children with overly aggressive symptomology tend to display deficits in both their empathic and self-regulatory processes to varying degrees.

Empathy and Aggression

Empathy, defined as an affective response which is more appropriate to or congruent with someone else’s situation than to one’s own situation (Dadds et al., 2008), is theorized to play a “profound, complex, and fundamental role” in the healthy functioning of human relationships (Gordon, 2009, p. 30). Even so, empathy remains relatively understudied throughout counseling literature, particularly in relation to aggression. However, empirical support for a negative relationship between empathy and aggressiveness does exist (Bjorkqvist, 2007). Miller and Eisenberg (1988) conducted a meta-analysis in which 50 studies exploring the constructs of empathy and aggression were explored. The results of the meta-analysis indicated a statistically significant negative relationship between empathy and aggressive behaviors. Thus, the researchers suggested that empathy may both inhibit and mitigate aggressive behaviors. Additionally, multiple studies in the United States and abroad have demonstrated positive correlations between empathy and indirect or relational aggression (Bjorkqvist, 2007; Crick,
1995). Specifically, Crick (1995) observed 252 third- through sixth-grade children assessed on their levels of distress when presented with ambiguous situations involving both relational and instrumental forms of aggression. Results suggested empathy to be increasingly correlated with acts of relational aggression in females. In other studies, researchers have suggested a lack of empathy towards others may foreshadow increasingly pathological forms of aggression (Frick & White, 2008; Peterson & Flanders, 2005).

Researchers and clinicians alike identify aggressive and antisocial behaviors in children and adults as characterized by two distinct traits: a lack of empathy towards others and behaviors bringing the individual into significant conflict with others in their social environments (Blair, 2010; Frick & White, 2008). Absent of early intervention, a lack of empathy toward others has been found to remain relatively stable from late childhood into early adolescence and beyond (Blair, 2010). Frick and White (2008) conducted a review of literature specifically targeting the link between empathy (identified in their study as callus-unemotional traits [CU]) and aggressive childhood behaviors. Results suggested a lack of empathy to predicate increasingly maladaptive and severe behaviors in youth exhibiting both reactive and proactive forms of aggression (Frick & Dickens, 2006; Frick & White, 2008). Specifically, the results of the study found the presence of CU traits to predict a “more severe, aggressive, and stable pattern of antisocial behavior” across development (Frick & White, 2008, p. 369). However, over the years, theorists have come to propose proactive aggression as highly correlated with a lack of empathy in both children and adults. In fact, researchers have referred to the planned and thought-out acts associated with proactive aggression as “cold-blooded,” “predatory,” and “instrumental,” all reflective an assumed empathic deficiency (Hubbard et al., 2010, p. 206; Vitaro & Brendgen, 2005, p. 179). As previously detailed, proactive aggression is characterized by low physiological arousal, and a
deliberate attempt to gain societal and/or hierarchical rewards at the expense of others through the infliction of harm (Vitaro & Brendgen, 2005). Thus, although a lack of empathy may have roots in both reactive and proactive forms of aggression, some have hypothesized a stronger correlation between empathy and proactive aggression.

Nonetheless, in instances where individuals are able to experience empathy through both cognitive and interpersonal processes, aggressive behaviors tend to subside (Bjorkqvist, 2007). “The internal process that regulates aggression (in addition to simple fear) seems to be empathy or, perhaps, identification—the ability to feel the experiences or to adopt the viewpoint of another, respectively” (Peterson & Flanders, 2005, p. 136). Thus, many empathy researchers suggest the presence of empathy as an innate inhibitor to aggressive behaviors. “Conclusively, empathy appears to be a mitigator and in the best cases and inhibitor of aggression” (Bjorkqvist, 2007, p. 85). This notion is further supported across child-centered literature in that a child’s ability to perceive full empathic understanding from another individual, allows for his or her own increased empathy and decreased aggressive behaviors. Ray (2011) noted, “Empathic understanding is the essential ingredient in effectiveness with children who are aggressive” (p. 175). The empathic understanding children experience from their play therapists is subsequently related to their ability to demonstrate empathy towards others in an effective manner, often leading to a decrease in aggressive and acting out behaviors (Ray, 2009).

Self-Regulation and Aggression

Empirical support exists for the notion that “learning to regulate affective and behavioral impulses is a core adaptive task in early childhood” (Olson, Lopez-Duran, Lunkenheimer, Chang, & Sameroff, 2011, p. 253). As such, struggles with impulse control related to feelings of anger, frustration, and the like are often expressed through aggression in very young children.
However, aggressive behaviors in children on typical developmental trajectories tend to subside with the development of more advanced abilities towards self-regulation (Olson et al., 2011). While numerous factors may account for the negative relationship between self-regulation and aggression, many researchers point towards the development of executive functions between the ages of four to eight (Dodge et al., 2006). Rapid neural development in the brain has been hypothesized to be responsible for “the development of effortful control and, indirectly, decreases in aggressive behaviors” (Dodge et al., 2006, p. 725). Additionally, between the ages of four to eight years old, most children gain an understanding of delayed gratification and are better able to self-regulate in moments of intense emotions or desires rather than act out impulsively (Dodge et al., 2006).

By the time most children reach kindergarten, aggressive behaviors have become largely inhibited. This is in part due to children’s increasingly developed abilities to self-regulate rather than act out impulsively through aggressive acts when upset (Hay et al., 2004; Keenan & Shaw, 2003; Olsen et al., 2011). Keenan and Shaw (2003) suggested children’s growth in self-control over their emotions, or self-regulation, was directly responsible for the decline in aggression during the elementary school years. Yet, a sizable subgroup of children continues to struggle with self-regulation and aggressive acting out behaviors from preschool into elementary school (Olsen et al, 2011). When this occurs, caregivers tend to begin expressing concerns and children may be placed in counseling to improve their abilities to self-regulate thereby alleviating overly aggressive behaviors.

Additionally, several studies have suggested a lack of self-regulation as highly correlated with negative emotions such as anger in predicting aggression in school-aged children (Eisenberg, Cumberland, Spinrad, Fabes, Shepard, Reiser, et al., 2001; Olsen et al., 2011).
Specifically, children demonstrating high levels of anger, and low abilities for self-regulation, tend to demonstrate increased aggressive behaviors (Eisenberg et al., 2001). This is particularly true for reactive aggression, characterized by retaliatory, impulsive, and rash acts of aggressiveness (Hubbard et al., 2010).

In child-centered philosophy, the concept of self-regulation is emphasized. Philosophers such as Rousseau have heavily influenced current beliefs in child-centered literature that the drive towards self-regulation is an innate aspect of the human experience. Carl Rogers further popularized this belief in asserting that a person is

...basically trustworthy, member of the human species, whose deepest characteristics tend toward development, differentiation, cooperative relationships; whose life tends fundamentally to move from dependence to independence; whose impulses tend naturally to harmonize into a complex and changing pattern of self-regulation; whose total character is such as to tend to preserve and enhance himself and his species, and perhaps to move it toward its further evolution. (1989, pp. 404-405).

Thus, not only is the concept of self-regulation crucial in conceptualizing aggressive behaviors, it is equally important in understanding the philosophy of child-centered play therapy.

Current Interventions for Childhood Aggression

Current therapeutic interventions aimed at reducing children’s aggressive behaviors are vast. However, among the most highly employed methods are various modalities stemming from cognitive behavioral therapy (CBT). Weisz and Kazdin (2010) included a description of several psychotherapies in their edited book on evidence-based psychotherapies, all aimed toward symptom reduction in children exhibiting a range of behavioral and emotional concerns, including aggression. Interventions specific to externalizing concerns involving aggression

Kazdin (see Weisz & Kazdin, 2010) is recognized as a leading researcher in targeted interventions aimed at reducing children’s aggressive and disruptive behaviors through cognitive behavioral approaches. Kazdin is the pioneer of two heavily utilized and empirically supported approaches aimed at reducing aggressive behaviors in childhood known as Problem-Solving Skills Training (PSST) and Parent Management Training (PMT) (Dodge et al., 2006). Both PMT and PSST are cognitive based interventions and are currently considered evidence-based (Weisz & Kazdin, 2010). Because Kazdin is currently considered a leading researcher on childhood aggression and has developed programs specifically for this population, I will further describe these two programs below in detail.

PSST consists of weekly sessions with children ranging in age from 7-14 and involves teaching children problem-solving steps. Central to PSST is the belief that these problem-solving steps are used by children to target thoughts and actions that guide behaviors (Kazdin, 2010). The steps include: “introduction and learning the steps, applying the steps, applying the steps and role playing, parent-child contact, continued application to real-life situations, and wrap up and role reversal” (Kazdin, 2010, p. 214). The problem-solving steps consist of verbal statements, which guide children through various real life scenarios and are done through modeling, role-playing, and parent involvement. Over the course of counseling, the steps progress from overt
statements to increasingly nonverbal and covert statements. By the end of the therapeutic process, the use of steps should no longer be visible and should be an internal process for the child (Kazdin, 2010). When implemented with aggressive children in randomized controlled trials, PSST has demonstrated medium to large treatment effects in reducing children’s aggressive behaviors both at home and at school. Kazdin and colleagues (1987) conducted a randomized controlled trial with 56 aggressive children ranging in age from seven to 13 years old. The researchers found statistical and practical significance with children who received PSST demonstrating significantly reduced aggressive behaviors and increased prosocial behaviors. Additionally, effects of the treatment appeared to remain stable in a one-year follow up study (Kazdin, Esveldt-Dawson, French, & Unis, 1987a). Since that time, Kazdin has conducted at least four additional randomized controlled trials demonstrating support for PSST (Kazdin, Esveldt-Dawson, French, & Unis, 1987b; Kazdin, Siegel, & Thomas, 1989; Kazdin, Siegel, & Bass, 1992; Kazdin & Whitley, 2003).

Kazdin’s second method for working with aggressive children, PMT, is conducted primarily with the parents of children six years old and younger. The full course of treatment spans across 12 weeks whereby parents meet with a trained therapist once a week for a 45-60 minute sessions. Thus, there is typically no direct intervention with the children themselves. The treatment consists of teaching parents cognitive based skills such as “positive reinforcement (e.g., use of social praise and tokens or points for prosocial behavior), prompting, setting events, shaping, and mild punishment (e.g., use of time-out from reinforcement, loss of privileges)” (Kazdin, 2010, p. 215). The general purpose of each session is to deliver content, teach specified skills, and develop use of the skills at home through role-plays and practice. Times may also exist in which a parent brings in their child towards the end of the 12-week period to practice a
skill and get feedback from the therapist (Kazdin, 2005; Kazdin, 2010). Kazdin and colleagues (1987b; 1992; 2003) conducted at least three randomized controlled trials exploring the effects of PMT on children’s’ aggressive behaviors and demonstrated strong empirical support for the intervention. “PMT is probably the most well-investigated therapy technique for children and adolescents…and has led to marked improvements in child behavior” (Kazdin, 2003, pp. 261-262). However, Kazdin has also noted struggles related to the intervention including family participation and willingness to complete the course of treatment.

A few concerns currently exist in the literature regarding the use of these interventions. The first is the developmental appropriateness of cognitive approaches with young children (Grave & Blissett, 2004; Holmbeck, Devine, & Bruno, 2010). Despite the well-documented effectiveness of CBT with older populations, meta-analyses have shown “the main components of CBT and other cognitive therapies require more complex, symbolic, abstract, metacognitive, consequential, and hypothetical thinking consistent with the greater cognitive sophistication of adolescents” (Grave & Blissett, 2004; Holmbeck, Devine, & Bruno, 2010, p. 30). Thus, some researchers assert the effectiveness of child and adolescent psychotherapeutic interventions will be improved if treatment is tailored to the developmental level of the child (Holmbeck, Devine, & Bruno, 2010). This has led some to reject cognitive-based intervention strategies despite their known effectiveness, due in part to the necessary developmental considerations of working with children.

A further developmental consideration in working with young children demonstrating aggressive behaviors is the necessity of children to act out their aggressive impulses through means of physical expression. As previously detailed, young children lack the verbal abilities to articulate their internal experiences through language alone (Landreth, 2012; Ray, 2011). Thus, it
is developmentally appropriate for young children to display their feelings through acts of physical expression such as play and kinesthetic movement. Therapeutic interventions in which children can physically express themselves then seem to both highlight and accommodate this developmental need.

Additionally, a documented concern of many cognitive interventions is the reliance on parents as active participants in their children’s treatment. Although literature supports the involvement of parents (Bratton et al., 2005; Guerney & Ryan, 2013; Webster-Stratton, Rinaldi, & Reid, 2011) in the treatment of their children, many clinicians would agree this is simply not always possible. However, other counseling interventions exist which are empirically supported, developmentally responsive, and do not rely upon parental involvement in children’s symptom reduction. One such approach is child-centered play therapy described in detail below.

Child-Centered Play Therapy (CCPT)

Child-centered play therapy is conceptualized as a developmentally responsive intervention for working with children and is based upon the understanding that play serves as children’s natural medium of self-expression (Axline, 1974; Landreth, 2012; Ray, 2011). In CCPT, the therapist upholds a steadfast belief in children’s innate ability to self-direct each play therapy session in a healing and self-enhancing manner given the presence of a set of necessary conditions (Axline, 1947; Dorfman, 1951). Carl Rogers’ person-centered theory serves as the philosophical foundation to CCPT (Rogers, 1951). In 1947, Virginia Axline, student and colleague of Carl Rogers, adapted his theoretical framework to her work with children. Axline’s approach has been heavily utilized over the years and is currently known as child-centered play therapy. In order to understand the principles of CCPT, it is first necessary to understand the basic tenets of person-centered theory from which it is based upon.
Person-Centered Theory

Carl Rogers (1951) provided a theoretical framework of human development including the process of maladjustment and the necessary conditions for growth and healing to occur. Rogers outlined his beliefs in what he termed “The Propositions,” which are:

1. “Every individual exists in a continually changing world of experience of which he or she is the center.

2. The organism reacts to the field as it is experienced and perceived. This perceptual field is, for the individual, “reality.”

3. The organism reacts as an organized whole to this phenomenal field.

4. The organism has one basic tendency and striving- to actualize, maintain, and enhance the experiencing organism.

5. Behavior is basically the goal-directed attempt of the organism to satisfy its needs as experienced, in the field as perceived.

6. Emotion accompanies and in general facilitates such goal-directed behavior, the kind of emotion being related to the seeking versus the consummatory aspects of the behavior, and the intensity of the emotion being related to the perceived significance of the behavior for the maintenance and enhancement of the organism.

7. The best vantage point for understanding behavior is from the internal frame of reference of the individual.

8. A portion of the total perceptual field gradually becomes differentiated as the self.

9. As a result of the interaction with the environment, and particularly as a result of the evaluational interaction with others, the structure of the self is formed- an organized,
fluid, but consistent conceptual pattern of perceptions of characteristics and relationships of the “I” or the “me,” together with the values attached to these concepts.

10. The values are attached to experiences, and the values are part of the self-structure, in some instances are values experienced directly by the organism, and in some instances are values introjected or taken over from others, but perceived in distorted fashion, as though they had been experienced directly.

11. As experiences occur in the life of the individual, they are (a) symbolized, perceived, and organized into some relationship to the self, (b) ignored because there is no perceived relationship to the self-structure, or (c) denied symbolization because the experience is inconsistent with the structure of the self.

12. Most of the ways of behaving that are adopted by the organism are those that are consistent with the self-concept.

13. Behavior may, in some instances, be brought about by organismic experiences and needs that have not been symbolized. Such behavior may be inconsistent with the structure of the self, but in such instances the behavior is not “owned” by the individual.

14. Psychological maladjustment exists when the organism denies to awareness significant sensory and visceral experiences, which consequently are not symbolized and organized into the gestalt of the self-structure. When this situation exists, there is a basis for potential psychological tension.

15. Psychological adjustment exists when the concept of the self is such that all sensory and visceral experiences of the organism are, or may be, assimilated on a symbolic level into a consistent relationship with the concept of the self.
16. Any experience that is inconsistent with the organization or structure of the self may be perceived as a threat, and the more of these perceptions there are, the more rigidity the self-structure is organized to maintain itself.

17. Under certain conditions, involving primarily complete absence of any threat to the self-structure, experiences that are inconsistent with it may be perceived and examined, and the structure of self-revised to assimilate and include such experiences.

18. When the individual perceives and accepts into one consistent and integrated system all his sensory and visceral experiences, then he is necessarily more understanding of others and is more accepting of others as separate individuals.

19. As the individual perceives and accepts into his self-structure more of his organic experiences, he finds that he is replacing his present value system-based so largely upon introjections which have been distortedly symbolized-with a continuing organismic valuing process” (Rogers, 1951, pp. 483-524).

In 1947, Virginia Axline took Rogers’ philosophical approach to working with adults and adapted it into a more developmentally responsive modality to working with children. Axline first termed her therapeutic approach non-directive play therapy. In doing so, she created eight basic principles for enacting Rogers’ propositions and conditions with children.

1. “The therapist develops a warm relationship with the child,

2. The therapist accepts the child exactly as he or she is,

3. The therapist establishes a feeling of permissiveness,

4. The therapist is attuned to and reflects the child’s feelings,

5. The therapist respects the child’s ability to solve problems,

6. The therapist does not direct the child’s behavior,
7. The therapist does not attempt to rush therapy, and

8. The therapist sets only necessary limits” (Axline, 1947, pp. 73-74).

As delineated in Axline’s eight basic principles (1947), CCPT is based on an inherent and unwavering trust in children’s constant movement towards growth and healing in a self-enhancing manner. In CCPT, the therapist strives to facilitate all feelings experienced by the child, including aggression (Trotter & Landreth, 2003). Based on this assumption, in CCPT children are given freedom to fully express themselves with a broad range of toys facilitating their emotional expression, and can be trusted to direct the nature of their play in the context of a safe, empathic, and genuine relationship with a play therapist (Axline, 1947; Landreth, 2012; Ray, 2011). Over the years, an existing body of research has emerged supporting the use of CCPT as a developmentally responsive intervention for working with children exhibiting a range of mental health concerns, including aggression (Bratton, Ray, Rhine, & Jones, 2005; Leblanc & Ritchie, 2001).

Conceptualization of Childhood Aggression through CCPT

As previously mentioned, a broad range of underlying emotions may serve as the foundation to aggressive behaviors in childhood. Such emotions may include anger, lack of control, guilt, sadness, and many others. Although the link between anger and aggression is commonly referenced throughout the literature (Baumeister & Bushman, 2007; Dodge et al, 2006; Hubbard et al., 2010) it is also true that other emotions may precede aggressive behaviors in children (Ray, 2011). According to person-centered theory, emotions both accompany and facilitate children’s goal directed behaviors. Rogers promoted the emphasis “that humans are holistic organisms, moving forward affectively, cognitively, and behaviorally as one entity” (Ray, Stulmaker, Lee, & Silverman, 2013, p. 22). Thus, as emotions intensify, so do behaviors
(Rogers, 1951). In other words, children’s externalized behaviors serve as a manifestation of their internal experiences and subsequent emotions. Thus, the child-centered play therapist does not seek to focus on or modify behaviors, rather to fully and as completely as possible empathically understand the child’s internal frame of reference (Landreth, 2012; Ray, 2009; Ray, 2011). As it is only through understanding the underlying emotional experience of children that the play therapist can begin to recognize the purpose their aggressive behaviors are serving. Although counterintuitive, child-centered clinicians understand even aggressive behaviors as self-enhancing (Dorfman, 1951; Ray, 2011). Through the self-actualizing tendency, children are constantly striving to “preserve and enhance” themselves (Rogers, 1989, p. 404). As such, their behaviors serve as a means of satiating perceived needs from the environment. For example, if a child is experiencing a need for parental attention, aggressive behaviors may serve as a means of fulfilling that need as even negative attention may feel satisfying to the child in comparison to a lack of attention altogether. Unlike other theoretical underpinnings, the motivating forces, or emotions, driving behaviors are not conceptualized as maladaptive. Rather, they are seen as enhancing and constantly moving in a forward and positive direction, even if the behavioral manifestation of an emotion is considered troublesome.

All children form a sense of self or self-concept based upon their experiences, relationships, and need for positive regard (Rogers, 1951). At times, children may develop introjected values, or values which have been perceived from those in the environment and taken on as if they had been experienced directly, due to a need for unconditional positive regard. However, discrepancies may exist between children’s self-concepts and their sensory and visceral experiences. Specifically, when the way in which children view themselves based upon their relationships with others and introjected values begin to conflict with their experiences,
they become incongruent (Rogers, 1951). This incongruence leads to children feeling unsettled and often results in a range of behavioral and emotional responses. Such behaviors include, and are not limited to, aggressive behaviors (Ray, 2011).

Due to an inherent trust in children’s abilities, child-centered play therapists avoid directing children in the therapeutic process or sending messages of disapproval. Rather, the therapist approaches children with a sincere and unwavering belief in their ability to work out their own problems (Moustakas, 1953). This is in part based upon the understanding that as children’s aggressive behaviors continue to escalate, they often experience messages from people in the environment that their behaviors are unacceptable (Trotter & Landreth, 2003). However, children frequently interpret such messages as “you are unacceptable” rather than “your behavior is unacceptable” leading only to further incongruence. Therefore, play therapists seek to convey the opposite message and to demonstrate through their way of being that all aspects of the child are fully accepted.

Empathy then becomes as crucial concept in CCPT. As previously detailed, a known correlation between empathy and aggression exists (Bjorkqvist, 2007; Frick & White, 2008; Peterson & Flanders, 2005). However, in order for children to demonstrate increased empathy towards others they must first experience true empathic understanding themselves. In CCPT, children receive the constant message that all facets of who they are is fully accepted. Through the therapist’s total acceptance of children’s inner feelings, and the subsequent reflections of such feelings, children may begin to feel increasingly accepted and gain awareness to both their internal experiences and external behaviors (Axline, 1969; Trotter & Landreth, 2003). This awareness and acceptance frees the self-actualizing tendency and children may begin to develop increasingly enhancing means of self-expression. This understanding of the inherent power in the
self-actualizing tendency was expressed through Moustakas when he emphasized the primary goal of play therapy as a means to “reawaken the powers of self-direction and reactivate and strengthen the will, thus enabling children to find their own way” (1997, p. 10). As such, child-centered play therapists do not attempt to act upon a child by teaching strategies for self-improvement. Rather, they convey a steadfast belief in children’s innate propensities towards self-enhancement given a set of necessary conditions.

Through such an experience, children may become increasingly self-regulated, develop an increased capacity to both experience and demonstrate empathy, and learn to find alternate means of self-expression. Thus, the power in the therapeutic relationship in CCPT is forefront. Such a relationship is both unique and highly valuable in providing aggressive children with the necessary safety and security to explore their feelings and access their self-actualizing tendencies (Axline, 1969; Rogers, 1951).

CCPT and Aggression

To date very few researchers have explicitly explored the impact of CCPT on children exhibiting aggressive behaviors. Although limited research in this specific area of play therapy exists, the overall effectiveness of CCPT is well documented. In the recent 2015 meta-analytic review of 52 controlled outcome studies on CCPT from 1995-2010, Lin and Bratton found a statistically significant moderate effect size of .33 for CCPT. Additionally, in Ray, Armstrong, Balkin, and Jayne (2015)’s meta-analytic review of 23 studies evaluating the effectiveness of CCPT in the elementary school setting, both statistical and practical significance were found with a moderate effect size of .34 for externalizing behaviors. In 2005, Bratton, Ray, Rhine, and Jones conducted a meta-analysis exploring the effectiveness of play therapy across a wide range of behavioral and emotional concerns, including externalized and aggressive behaviors. Results
of the meta-analysis yielded a large, statistically significant effect size of .80 across 93 studies. Additionally, LeBlanc and Ritchie completed a meta-analysis in 2001 also exploring the effectiveness of CCPT with a range of concerns not limited to externalizing and aggressive behaviors. They also found a large, statically significant effect size of .66. All meta-analysis yielded strong results suggestive of CCPT as a beneficial treatment modality for both internalizing and externalizing behaviors in children.

Although low in frequency, studies were conducted on exploration of the direct impact of CCPT on children’s aggressive behaviors. Ray, Blanco, Sullivan, and Holliman (2009) completed an initial exploratory study examining the effects of CCPT with aggressive children across two elementary schools. The sample included 41 children assigned to either an experimental condition comprised of 14 sessions of CCPT or a waitlist control condition. The Child Behavior Checklist (CBCL) and Teacher Report Form (TRF) were both given at pre and post testing to assess for change across time. Although this was a quasi-experimental design due to lack of random assignment, the results presented preliminary evidence supporting the notion of CCPT as a viable treatment modality for children exhibiting aggressive behaviors. Specifically, children who participated in the treatment group demonstrated a decrease in aggressive behaviors with moderate effect size over children in the control group according to teacher report. Researchers suggested this study be replicated with a randomized sample in efforts to move towards evidence-based practice.

Schumann (2005) explored the effects of CCPT as compared to a nationally recognized and empirically supported guidance program on the behaviors of children referred to the school counselor for highly aggressive behaviors. Schumann found 14 sessions of CCPT were equally as effective in reducing student’s aggressive behaviors as the empirically supported curriculum.
Additionally, both statistical and practical significance were found further supporting CCPT as a potentially effective treatment for childhood aggression. Schumann recommended replication of the study with a larger sample to improve power and generalizability of results.

Finally, Bratton, Ceballos, Sheely-Moore, Meany-Walen, Pronchenko, and Jones (2013) conducted a pilot study exploring the effects of CCPT on preschool children’s disruptive behaviors. This study examined the larger category of disruptive behaviors including externalizing problems, aggressive behaviors, and attention problems as measured by the Teacher Report Form. Fifty-four children comprised the final sample and were randomly assigned into either an experimental or active control group. Children received a total of 17-21 sessions of CCPT or reading mentoring. The results of the study yielded statistical, practical, and clinical significance on the reduction of student’s aggressive behaviors and attention related problems. Although this study found promising results, generalizability did not extend beyond young children in preschool. Researchers recommended a randomized controlled trial to move CCPT closer to becoming an EBP for children exhibiting disruptive behaviors, including aggression. Furthermore, replication with older children extending beyond preschool would provide further support for CCPT as an effective intervention with a broader range of children.

To date, very few studies have explored the effects of CCPT specific to empathy or self-regulation. However, many well-known researchers have suggested the basic tenets of CCPT naturally align with an increase in self-regulatory process and empathy in children (Landreth, 2012; Ray, 2011; Rogers, 1951). In 2015, Cheng conducted a study comparing two versus three member groups employing child-centered group play therapy (CCGPT) on children’s social and emotional assets. The results of this study indicated preliminary support for the use of child-centered tenets with respects to increasing children’s empathic understanding.
Conclusion

To date, initial studies have demonstrated strong support for the effectiveness of CCPT with children exhibiting non-normative levels of aggression. However, limitations exist within each study regarding the generalizability of results. A randomized control trial with larger sampling and increased rigor in study design could lead to greater implications regarding CCPT with this population. Additionally, such a design would provide further consideration of CCPT as an EBP for aggressive behaviors in children.

Child counselors are ethically required to provide children with empirically supported treatment modalities (American Counseling Association, 2014). In order for CCPT to become recognized as an evidence-based treatment for children struggling with aggressive behaviors, increased effort and focus to conducting research in this area must be employed. Research utilizing true comparison groups, large sample sizes, randomization, and generally robust research designs should applied in efforts of furthering CCPT with respects to becoming an empirically supported treatment modality when responding to the emotional needs of children with aggressive behaviors.

Additionally, it may be efficacious for researchers to dedicate increased focus and attention to the constructs of empathy and self-regulation in relation to aggressive behaviors based upon empirical findings of prior research. Specifically, attention to these constructs in regards to the effects of CCPT may further support increased reliance upon this therapeutic modality when working with children exhibiting aggressive behaviors.
APPENDIX B

DETAILED METHODOLOGY
Because the purpose of this study was to explore the effectiveness of CCPT with regard to decreasing aggressive symptomology and increasing empathy and self-regulatory process in young children, a randomized controlled trial was selected as the most appropriate research design. This particular type of experimental design allowed for the direct comparison of a group of children receiving CCPT with a waitlist control group in relation to outcome. The current study was part of a larger randomized controlled trial exploring the effects of CCPT across four elementary schools. The following appendix will describe in detail the proposed methodology for this study including the research question, participant selection methods and descriptions, discussion of all employed instrumentation, proposed data collection methods, description of treatment conditions, rationale for the selected statistical analysis, and limitations.

Research Question

The study was developed based on the following two research questions: (a) Do children referred for aggressive behaviors differ over time based upon group membership in either an experimental group receiving CCPT or a waitlist control group, with respect to their overall levels of aggression, self-regulation, and empathy according to parent report? (b) Do children referred for aggressive behaviors differ over time based upon group membership in either an experimental group receiving CCPT or a waitlist control group, with respect to their overall levels of aggression, self-regulation, and empathy according to teacher report?

Operational Definitions

Several definitions will be provided for the purposes of the present study. Each definition is further supported with a measure of operationalization. Below are the definitions of self-regulation, empathy, aggression, and CCPT.
**Self-regulation:** Self-regulation is a child’s degree of self-awareness, metacognition, intrapersonal insight, self-management, and sense of direction when under stress (Merrell, 2011). For the purposes of the current study, scores on the Self-Regulation subscale of the Social Emotional Assets and Resilience Scales-Teacher form (SEARS-T) and Parent form (SEARS-P) were used to operationalize self-regulation.

**Empathy:** Empathy is conceptually understood as a vicarious emotional response to the perceived emotional experiences of others (Mehrabian & Epstein, 1972). For the purposes of the current study, scores on the Empathy subscale of the SEARS-T and SEARS-P were used to operationalize empathy.

**Aggression:** According to Halperin and McKay (2008):

The term aggression refers to a myriad of actions-both verbal and physical-that occurs within vastly diverse contexts and is prompted by equally diverse motivations. All aggressive acts, whether intentional or not and despite their heterogeneity, share the common consequence of physical or emotional damage, offense, or insult. (p. 1)

For the purposes of the current study, scores on all scales of the Children’s Aggression Scale-Teacher (CAS-T) and on the Children’s Aggression Scale-Parent (CAS-P) were used to operationalize aggression.

**Child-Centered Play Therapy:** CCPT is a developmentally responsive, nondirective intervention for children exhibiting a range of emotional concerns including aggressive behaviors. The basic tenets of CCPT can be conceptualized as a steadfast belief in children’s innate tendency for positive growth and healing given the safety of an unconditional, empathic, and congruent relationship. This relationship between the child and the therapist facilitates children’s increasingly appropriate emotional expression and socially appropriate behaviors
(Landreth, 2012). For the purposes of the current study, procedures outlined in the CCPT treatment manual were used to operationalize CCPT (Ray, 2011).

Participants

Young children between the ages of five and 10 exhibiting non-normative levels of aggressive behaviors represent the general population of interest for this study. Participants were recruited across four Title 1 elementary schools within the Southwestern region of the United States. Due to a lack of access to a broader population, a convenience sample comprised of children from these schools was utilized for this study. The demographic information for schools is reported by the Texas Education Agency (TEA) Public School Data for the 2014-2015 school year and is presented in Table B.1.
Table B.1

Demographic Data for 4 Title 1 Elementary Schools

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>School 1</th>
<th>School 2</th>
<th>School 3</th>
<th>School 4</th>
<th>Sample (n=71)</th>
</tr>
</thead>
<tbody>
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<td>African American</td>
<td>6.8%</td>
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<td>11.3%</td>
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<td>0.0%</td>
</tr>
<tr>
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</tr>
<tr>
<td>Pacific Islander</td>
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<td>0.6%</td>
<td>0.0%</td>
<td>0.0%</td>
<td>0.0%</td>
</tr>
<tr>
<td>Two or More Races</td>
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<td>1.8%</td>
<td>1.9%</td>
<td>2.3%</td>
<td>7.0%</td>
</tr>
</tbody>
</table>

| Economically Disadvantaged | 81.2% | 71.1% | 89.0% | 64.2% |

| Study Participants       | 25.4% | 31.0% | 33.8% | 9.9% |

Note: Texas Education Agency (TEA) Public School Data 2014-2015 School Year.

Regarding sample size, researchers suggest a sample of 10-20 participants per dependent variable in order to accurately interpret the results of a descriptive discriminant analysis (DDA) (Sherry, 2010; Kim & Sherry, 2010). In order to meet the minimum recommendation of 10 participants per variable, approximately 30 participants were needed. The final sample size for this study was 71 participants exceeding the increasingly robust recommendation of 20 participants per variable. The sample consisted of 28 males and 8 females between the ages of five to 10 years old (M = 7.03) in the experimental group, and 31 males and 4 females between
the ages of 4 to 10 years old (M = 6.63) for the control group. Post data was unable to be collected for a total of 5 (CCPT=3; Control=2) children who moved geographic locations during the course of this study. Thus, the original sample for this study included a total of 76 children while the final sample consisted of 71. Table B.2 presents the demographic information for the total sample.

Table B. 2

**Demographic Descriptive Statistics for Participants**

<table>
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<th></th>
<th>CCPT Group (n=36)</th>
<th>Control Group (n=35)</th>
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<td>Fourth</td>
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<td>7</td>
</tr>
<tr>
<td><strong>Age</strong></td>
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<tr>
<td>Multiracial</td>
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<td>2</td>
</tr>
</tbody>
</table>

In order to qualify for the present study, all participants had to meet a set of criteria including, children must have been: (a) between 5 and 10 years of age; (b) identified by teachers
or school personal as demonstrating problematic aggressive behaviors; (b) able to understand and speak English (c) living with one parent who was willing to give consent for participation, and (d) have teachers and parents who were willing to complete both pre and post testing.

Instrumentation

The Children’s Aggression Scale

The Children’s Aggression Scale (CAS) is an instrument developed for the purpose of evaluating the nature, severity, and frequency of children’s aggressive behaviors (Halperin & McKay, 2008). This instrument seeks to differentiate aggressive specific behaviors from the broader category of disruptive behaviors such as oppositional/defiant behaviors, hostility, and anger. The CAS includes two points of measurement, a teacher form and a parent form. Utilizing both the CAS-T and CAS-P allows clinicians to obtain a holistic and accurate portrayal of a child’s aggressive behaviors (Halperin & McKay, 2008). Both the CAS-T and CAS-P contain a series of global Index scores as well as increasingly precise Cluster scores.

The CAS-P, or parent form, contains 33 items to be completed by the child’s primary caregiver and scored on a 4-point Likert scale. Qualitative interpretations of the Likert scale ratings are as follows for items 1-20 and 23-26: 0 = Never, 1 = Once per month or less, 2 = Once a week or less, 3 = 2-3 times per week, 4 = Most days. For items 21-22 and 27-32 the items are rated as 0 = Never, 1 = Once or twice, 2 = 3-5 times, 3 = 6-10 times, and 4 = More than 10 times (Halperin & McKay, 2008).

The CAS-T, or teacher form, contains 23 items to be completed by a teacher who is familiar with the child and has known him or her for a minimum of 4 weeks. Additionally, this individual must have at least daily contact with the student for five days out of a seven-day week. Like the CAS-P, items on the CAS-T are also rated on a 4-point Likert scale. Qualitative
interpretations of the Likert scale ratings are as follows for items 1-22: 0 = Never, 1 = Once or twice, 2 = 3-5 times, 3 = 6-10 times, and 4 = More than 10 times. Item 23 has a “yes, no, or does not apply” format (Halperin & McKay, 2008).

Once items on both the CAS-P and CAS-T are complete, items are hand scored to reveal raw scores, then computed into T-scores. All T-scores are calculated with a mean of 50 and a standard deviation of 10. Qualitative T-score range descriptions are provided in Table B.3. Halperin & McKay (2008) provided 4 steps for interpretation of the CAS: (a) Interpretation of the Total Aggression Index (b) Interpretation of the CAS scale and cluster scores (c) Interpretation of the forms across raters and (d) Examination of critical items and integration with other relevant data.

The Index scores for the both the CAS-P and CAS-T are: (a) Verbal Aggression, which evaluates a range of verbal expressions typically associated with hostility and intentions to hurt, offend, or coerce others, (b) Aggression Against Objects and Animals, which assess a child’s explosive, mean spirited, or predatory actions towards both objects and animals, (c) Physical Aggression, which evaluates a child’s provoked and initiated physical aggression towards others, (d) Use of Weapons, which evaluates the extent to which a child carries a weapon for intended use on others and their propensity to use such weapons and (e) Total Aggression Index reflects an overall rating of the child’s T-Scores on the prior four indices.

Each of the above Index Scales is comprised of a set of cluster scales. Both the CAS-P and CAS-T contain cluster scales of Provoked Physical Aggression, Initiated Physical Aggression, Aggression Toward Peers, and Aggression Toward Adults. The CAS-P has an additional 2 cluster scales of Aggression Against Family Members and Aggression Against Non-Family Members (Halperin & McKay, 2008).
Table B.3

**CAS Qualitative T-Score Descriptions**

<table>
<thead>
<tr>
<th>T-Score Range</th>
<th>Qualitative Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>≤ 50</td>
<td>Normal Range</td>
</tr>
<tr>
<td>60-69</td>
<td>Mildly Elevated</td>
</tr>
<tr>
<td>70-79</td>
<td>Moderately Elevated</td>
</tr>
<tr>
<td>≥ 80</td>
<td>Very Elevated</td>
</tr>
</tbody>
</table>

Halperin & McKay, 2008

Reliability estimates for the CAS-P and CAS-T are considered strong. The coefficient alphas for the Total Aggression Index across four normative groups ranged from .86 to .90 for the CAS-P and .78-.94 for the CAS-T. For the CAS-P Cluster scales ranged from .53-.83 and .58-.86 for the CAS-T. The Cronbach’s alpha estimates, test-retest reliabilities, and interrater reliability estimates for each scale on the CAS-P and CAS-T are detailed in Table B. 4. Additionally, the Cronbach’s alpha estimates, test-retest reliabilities, and interrater reliability estimates for each cluster on the CAS-P and CAS-T are detailed in Table B. 5.

To assess validity, intercorrelations between the CAS scales and clusters were examined. Intercorrelations ranged from .39 to .88. Additionally, correlational analyses examining the relationship between the CAS-P, CAS-T, and other behavioral measures (CAB-P, CAB-T, BASC-2 Parent, and BASC-2 Teacher) indicated moderate convergent validity among aggression scales between the measures with coefficient alphas ranging from .34 - .64. Finally, the CAS-P and CAS-T demonstrated appropriate sensitivity among four clinical groups of children who differed in levels of aggressive behaviors. For the current sample, Cronbach's alpha at pretest was calculated at .88 for the CAS-P and .87 for the CAS-T.
Table B.4

*Reliability Estimates for the CAS-P and CAS-T Index Scores*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s Alpha</th>
<th>Test-retest (r)</th>
<th>Interrater Reliability (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAS-P</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal Aggression</td>
<td>.90</td>
<td>.90</td>
<td>.90</td>
</tr>
<tr>
<td>Agg Towards Obj/Anim</td>
<td>.58</td>
<td>.86</td>
<td>.85</td>
</tr>
<tr>
<td>Physical Agg</td>
<td>.83</td>
<td>.94</td>
<td>.89</td>
</tr>
<tr>
<td>Use of Weapons</td>
<td>.73</td>
<td>.99</td>
<td>-.02</td>
</tr>
<tr>
<td>Total Agg Index</td>
<td>.92</td>
<td>.96</td>
<td>.86</td>
</tr>
<tr>
<td><strong>CAS-T</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbal Aggression</td>
<td>.90</td>
<td>.89</td>
<td>.99</td>
</tr>
<tr>
<td>Agg Towards Obj/Anim</td>
<td>.72</td>
<td>.96</td>
<td>.99</td>
</tr>
<tr>
<td>Physical Agg</td>
<td>.85</td>
<td>.98</td>
<td>.96</td>
</tr>
<tr>
<td>Use of Weapons</td>
<td>.81</td>
<td>.99</td>
<td>.01</td>
</tr>
<tr>
<td>Total Agg Index</td>
<td>.94</td>
<td>.92</td>
<td>.95</td>
</tr>
</tbody>
</table>

Halperin & McKay, 2008

Table B.5

*Reliability Estimates for the CAS-P and CAS-T Cluster Scores*

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Cronbach’s Alpha</th>
<th>Test-retest (r)</th>
<th>Interrater Reliability (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CAS-P</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provoked Physical Agg</td>
<td>.61</td>
<td>.85</td>
<td>.91</td>
</tr>
<tr>
<td>Initiated Physical Agg</td>
<td>.77</td>
<td>.91</td>
<td>.87</td>
</tr>
<tr>
<td>Agg Against Fam Mem</td>
<td>.86</td>
<td>.91</td>
<td>.91</td>
</tr>
<tr>
<td>Agg Against Non Fam</td>
<td>.87</td>
<td>.69</td>
<td>.78</td>
</tr>
<tr>
<td>Agg Towards Peers</td>
<td>.88</td>
<td>.87</td>
<td>.90</td>
</tr>
<tr>
<td>Agg Towards Adults</td>
<td>.87</td>
<td>.93</td>
<td>.87</td>
</tr>
<tr>
<td><strong>CAS-T</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provoked Physical Agg</td>
<td>.70</td>
<td>.95</td>
<td>.97</td>
</tr>
<tr>
<td>Initiated Physical Agg</td>
<td>.75</td>
<td>.90</td>
<td>.94</td>
</tr>
<tr>
<td>Agg Towards Peers</td>
<td>.92</td>
<td>.84</td>
<td>.99</td>
</tr>
<tr>
<td>Agg Towards Adults</td>
<td>.87</td>
<td>.91</td>
<td>.99</td>
</tr>
</tbody>
</table>

Halperin & McKay, 2008

Social Emotional Assets and Resilience Scales (SEARS)

The Social Emotional Assets and Resilience Scales (SEARS) is a strength-based assessment measuring the social-emotional competencies and assets of children and adolescents ages 5-18 across multiple settings (Merrell, 2011). The SEARS measures a set of adaptive characteristics important for success at school, with peers, as well as in the outside world. The
SEARS contains four primary rating scales each targeting a specific rater and context including the SEARS-Adolescent, SEARS-Teacher, SEARS-Parent, and SEARS-short. Assessment developers recommend assessing both parents and teachers to gain an increasingly holistic representation of a child’s current functioning (Merrell, 2011). For the purposes of this study, the SEARS-T and SEARS-P were utilized.

The SEARS-T is designed to be completed by a child’s primary teacher in grades K-12 based on the child’s behaviors in the past 4-6 months. The SEARS-T is comprised of 41 items that make up four scales: Self-Regulation, Social Competence, Empathy, and Social Competence. Items are rated on a 4-point rating scale ranging from Never, Sometimes, Often, or Always.

The SEARS-P is designed to be completed by parents, guardians, or other home-based caregivers of children in grades K-12. The SEARS-P consists of 39 items across three scales: Self-Regulation/Responsibility, Social Competence, and Empathy. The SEARS-P focuses more specifically on home and community environments as opposed to the school environment. Items are again rated on a 4-point rating scale ranging from Never, Sometimes, Often, or Always. Parents are asked to rate a series of questions based on the child’s behaviors in the past 4-6 months.

The SEARS-T and SEARS-P are hand scored by the administrator. Raw scores are calculated and converted to T-scores, percentiles, and tiers. The Tiers are then interpreted by the examiner. Qualitative descriptions of the three tiers are provided in table B.6.
Table B.6

Qualitative Tier Descriptions for the SEARS-T and SEARS-P

<table>
<thead>
<tr>
<th>Tier Range</th>
<th>Qualitative Description</th>
<th>Percentiles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>Average to High Functioning</td>
<td>21-100%</td>
</tr>
<tr>
<td>Tier 2</td>
<td>At risk</td>
<td>6-20%</td>
</tr>
<tr>
<td>Tier 3</td>
<td>High Risk</td>
<td>1-5%</td>
</tr>
</tbody>
</table>

Reliability estimates for the SEARS-T and SEARS-P were considered strong with internal consistency ranging from .89 to .98. Additionally, Test-Retest reliability estimates were strong and ranged from .84-.94. The Cronbach’s alpha estimates and test-retest reliabilities for the SEARS-T and SEARS-P are reported in Table B.7. Regarding validity, intercorrelations among SEARS subscales were computed, and convergent construct validity was assessed to ensure sound validity of the instruments (Merrell, 2011). Strong convergent construct validity with other strength-based assessments was found, lending support to the claim that the content of the scales in the SEARS-T and SEARS-P accurately measures the constructs being measured. For the current sample, Cronbach’s alpha at pretest was calculated at .96 for the SEARS-P and .94 for the SEARS-T.

In the current study, the Self-Regulation and Empathy subscales were used to operationalize constructs associated with aggressive behaviors exhibited by children. Because Merrell (2011) reported strong reliability mean estimates for the SEARS-T Self-Regulation score (α=.95; r=.90), SEARS-P Self-Regulation score (α=.95; r=.92), SEARS-T Empathy score (α=.91; r=.84), and SEARS-P Empathy score (α=.87; r=.90), I chose to use the subscales independently in analyses.
Table B.7

Reliability Estimates for the SEARS-T and SEARS-P

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s Alpha</th>
<th>Test-retest (r)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>SEARS-T</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>.95</td>
<td>.90</td>
</tr>
<tr>
<td>Social Competence</td>
<td>.94</td>
<td>.92</td>
</tr>
<tr>
<td>Empathy</td>
<td>.91</td>
<td>.84</td>
</tr>
<tr>
<td>Responsibility</td>
<td>.95</td>
<td>.92</td>
</tr>
<tr>
<td>Total Score</td>
<td>.98</td>
<td>.94</td>
</tr>
<tr>
<td><strong>SEARS-P</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Reg/Responsibility</td>
<td>.95</td>
<td>.92</td>
</tr>
<tr>
<td>Social Competence</td>
<td>.89</td>
<td>.88</td>
</tr>
<tr>
<td>Empathy</td>
<td>.87</td>
<td>.90</td>
</tr>
<tr>
<td>Total Score</td>
<td>.96</td>
<td>.93</td>
</tr>
</tbody>
</table>

Procedures

Recruitment of Participants

Prior to the recruitment of participants for this study or any data collection methods, I obtained Human Subjects approval from the University of North Texas Institutional Review Board as well as from the Denton Independent School District. Subsequent to approval from both review boards, I recruited study participants based on referrals acquired from school personnel.

I then set up in person meetings with school personnel at all four schools and asked them to identify children exhibiting non-normative aggressive behaviors in school. I asked teachers to give referrals to the school counselor for possible inclusion in the study. I collected referrals through September 2015. Based on the recommended sample size for a DDA as reported above, I sought to recruit a total sample of 60 participants to allow for attrition and maximize the generalizability of my findings.

I provided school counselors at all four schools with a consent form, which delineated all details of the study including the purpose, study procedures, foreseeable risks, possible benefits,
confidentiality, and contact information should parents have had any questions or concerns (See Appendix C). I asked school personnel to send this consent form home with all referred children for parents or legal guardians to sign. Additionally, a demographic form was sent home to all parents of referred children with the informed consent in order to obtain children’s demographic information such as ethnicity, age, grade, and whether or not they were living in a single parent home. All consent forms were retained in the counselor’s office for me to pick up.

Data Collection Procedures

Following the collection of signed informed consent from parents, I met with all referred children to obtain assent (see Appendix C). Exceptions to obtaining assent from a child included children who were too young to understand the assent process, children lacking the maturity to understand the assent process, and children who were not in a psychological state that enabled them to give assent. Teachers of all referred children were given consent forms to participate in the research study. Once teacher consent forms were signed and returned, they were given the CAS-T and SEARS- T to complete on the referred child. Copies of all informed consent forms can be located in Appendix C. Collection of all pre-testing was completed prior to randomization.

Block randomization procedures were utilized to account for school and differences in time for when consent forms from teachers and parents were received. Children who had informed consent from both parents and teachers were randomly assigned into a treatment or waitlist control group utilizing electronic randomization software. Once randomized, children in the experimental group began receiving play therapy services in the school the following week. Children in the experimental group received 30-minute play therapy sessions twice a week.. Each of the four schools were fully equipped with a play therapy room supplied with
intentionally selected toys in accordance with the CCPT treatment manual (Ray, 2011). At the completion of the eight-week period, all parents and teachers were asked to complete the CAS-T and CAS-P respectively as a means of post-testing.

All information and data collected throughout the course of this study was confidential. Names of children, teachers, and counselors were excluded from any documentation or subsequent reports of the study. The name of each child was coded as a number at pretesting and remained in coded form throughout all data collection and analysis processes. Research study personnel were the only people with access to a document containing children’s names and corresponding numbers for record keeping purposes. This list, along with all clinical files, were retained in accordance to human subjects criteria. Figure B.1 presents a graphical representation of the study design and sequence of events. Because this study was a part of a larger study that concentrated on the recruitment of minority participants in play therapy, the sample included an overrepresentation of children who identified as African-American when compared to the population at the participating schools.

Experimental Group Procedures

As discussed in the literature review, CCPT is a manualized treatment thoroughly described by Ray (2011). CCPT uses children’s natural language of play to provide a developmentally appropriate therapeutic environment for young children. Counselors in this study sought to provide an environment in which children felt safe in establishing a strong therapeutic relationship characterized by warmth, genuineness, and empathic understanding. In efforts of facilitating such a relationship, counselors employed intentional responses such as; reflections of feeling, meaning, and content, limit setting when appropriate, encouragement, and returning of responsibility. Each type of response is meant to provide children with an
environment in which they can feel free to express themselves fully, further develop their internal locus’ of control, further develop their abilities to self-regulate, and better identify feelings and emotions of both themselves and others. The overall goal of the child-centered play therapist is to convey the message of, “I am here”, “I hear you”, “I understand”, and “I care” (Landreth, 2012, pp. 209-210).

The playrooms in this study were assembled and materials were selected in accordance with Landreth (2012) and Ray’s (2011) recommendations. The toys in the playrooms were appropriate for the participants’ developmental age and allowed for the expression of their emotions. Toys and materials were intentionally selected and were meant to facilitate a variety of emotional expressions including but not limited to aggression. Specific to the current study, aggressive toys included plastic knives and swords, a rope, toy guns, handcuffs and keys, a bop bag, and aggressive plastic animals such as lions, snakes, and dinosaurs. These toys provided children with an opportunity to express individual aggressive drives (Ray, 2011) while allowing them the opportunity to further develop their self-regulatory processes and appropriate means of self-expression in the presence of an empathic adult. A full list of playroom toys and materials included in this study can be referenced in Ray (2011) or Kottman (2003).

Although it was originally intended for all children to receive 16 sessions of CCPT over the course of eight weeks, this was not feasible for the entire sample due to holidays and child absences. Thus, play therapy sessions ranged from 8-16 sessions over ten weeks with a mean session count of 13.97 sessions. In order to ensure treatment fidelity, I randomly selected and thoroughly reviewed one video for each participating child. The videos were reviewed in accordance to the Play Therapy Skills Checklist (PTSC; Ray, 2011) whereby responses from the play therapist were coded according to CCPT categories. Video review indicated that play
therapists adhered to protocol in 96% of responses, exceeding Ray’s guideline of 90% adherence.

All play therapists in this study were doctoral level students. All participating counselors held a master’s degree or higher in counseling, successfully completed at least two play therapy courses, and successfully completed a counseling practicum with supervised play therapy experiences. Counselors included eight females (African American = 1; Caucasian = 6) and one Caucasian male. Finally, all counselors were required to attend a training prior to the study in which the CCPT PTSC was reviewed as well as all study protocols and procedures.

Although teacher consultation is a typically occurring aspect of play therapy in the school setting, I did ask that all play therapists refrain from communicating with teachers until the successful completion of the study. I incorporated this practice in efforts of increasing study validity in allowing for teachers’ genuine experiences of the children at pre and post testing absent of influence from knowledge of group placement.

Waitlist Control Group

Participants in the waitlist control group did not receive any treatment during the study. Upon the completion of data collection at pretest and posttest, participants in the waitlist control group received the same CCPT intervention that was implemented by the counselors with the intervention groups. Additionally, counselors followed the identical protocol as outlined for the intervention group.
Data Analysis

I selected the statistical analyses for this study based on the nature of the research questions. Prior to any statistical analysis, I scored and entered all assessment data into SPSS. I then utilized two descriptive discriminant analyses to discover what variables contributed most to group differences between the experimental and control groups from pre to post testing according to both teacher and parent report.

This multivariate approach allowed me to assess the effects of CCPT on all three dependent variables simultaneously while also uncovering which variables contributed most to group differences between children receiving CCPT and those on a waitlist. The theoretical underpinnings of multivariate statistics suggest correlations among dependent variables due to the complex reality in which we live, particularly in social science research (Sherry, 2010; Sherry & Henson, 2005). Sherry (2010) noted, “Multivariate techniques best honor the reality of social science research because they assume that human behavior has multiple causes and multiple effects and that these causes and effects exist simultaneously, not mutually exclusive.
from each other” (p. 664). This philosophy best mirrored my theoretical postulate that self-regulation, empathy, and aggression may be related in a meaningful way. Therefore, the examination of these three variables together appeared to be both practically and statistically justified. Finally, performing a DDA decreased the risk of Type I error compared to alternatives such as a series of univariate analyses. DDA is a way of minimizing Type I error by allowing the researcher to “pinpoint exactly where groups differ on given variables with one statistical procedure” (Sherry, 2010, p. 665).

In the DDA, group membership served as the independent variable (experimental or control) while difference scores from pre to post testing on aggression, self-regulation, and empathy measures, served as the three dependent variables. Two separate DDAs were conducted, one for parent data and one for teacher data.

I also calculated and analyzed effect sizes for both DDAs in order to assess whether the differences between groups, if they were found, mattered in a meaningful way (Henson, 2006). Effect size, or practical significance, allowed me to assess the magnitude of differences between the two groups and was interpreted by squaring the canonical correlation from Function 1.
APPENDIX C

UNABRIDGED RESULTS
The following results are intended to answer the succeeding research questions: (a) Do children referred for aggressive behaviors differ over time based upon group membership in either an experimental group receiving CCPT or a waitlist control group, with respect to their overall levels of aggression, self-regulation, and empathy according to parent report? (b) Do children referred for aggressive behaviors differ over time based upon group membership in either an experimental group receiving CCPT or a waitlist control group, with respect to their overall levels of aggression, self-regulation, and empathy according to teacher report? I will interpret the results of the above questions with respect to statistical and practical significance. Additionally, group means and standard deviations for all pre and post testing data are reported in Table C.1
Table C.1

Means and Standard Deviations for Measures at Pretest and Posttest

<table>
<thead>
<tr>
<th></th>
<th>Pretest</th>
<th></th>
<th>Posttest</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td><strong>CCPT Group (n=36)</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy (SEARS-P)</td>
<td>43.92</td>
<td>12.36</td>
<td>46.47</td>
<td>10.49</td>
</tr>
<tr>
<td>Self-Regulation (SEARS-P)</td>
<td>36.39</td>
<td>8.75</td>
<td>40.56</td>
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<tr>
<td>Aggression (CAS-P)</td>
<td>69.14</td>
<td>17.35</td>
<td>57.92</td>
<td>13.24</td>
</tr>
<tr>
<td>Teacher</td>
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</tr>
<tr>
<td>Empathy (SEARS-T)</td>
<td>40.31</td>
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<td>6.06</td>
<td>42.97</td>
<td>6.14</td>
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<td>Aggression (CAS-T)</td>
<td>59.72</td>
<td>13.97</td>
<td>55.92</td>
<td>12.51</td>
</tr>
<tr>
<td><strong>Control Group (n=35)</strong></td>
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<tr>
<td>Parent</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Empathy (SEARS-P)</td>
<td>44.60</td>
<td>11.02</td>
<td>43.63</td>
<td>10.63</td>
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<td>Self-Regulation (SEARS-P)</td>
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<td>9.23</td>
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<td>Aggression (CAS-P)</td>
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<td>16.06</td>
<td>59.86</td>
<td>12.85</td>
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<tr>
<td>Teacher</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Empathy (SEARS-T)</td>
<td>38.17</td>
<td>6.94</td>
<td>39.20</td>
<td>8.20</td>
</tr>
<tr>
<td>Self-Regulation (SEARS-T)</td>
<td>39.49</td>
<td>5.57</td>
<td>40.37</td>
<td>5.82</td>
</tr>
<tr>
<td>Aggression (CAS-T)</td>
<td>60.94</td>
<td>17.08</td>
<td>62.00</td>
<td>15.31</td>
</tr>
</tbody>
</table>

Research Question 1: Parent Reports of Aggression, Self-regulation, and Empathy

The first descriptive discriminant analysis (DDA) was conducted using group membership, experimental or control, as predictors of children’s levels of aggression, self-regulation, and empathy. Specifically, a DDA was utilized to identify which variables best captured group differences between the experimental and waitlist control groups based upon parent report. Aggression was measured by the difference scores of the Total Aggression score on the CAS-Parent, Empathy was measured by the difference scores on the Empathy subscale of the SEARS-Parent, and self-regulation was measured by the difference scores on the Self-Regulation subscale of the SEARS-Parent. All data was analyzed utilizing Statistical Package for the Social
According to Sherry (2010), seven assumptions for DDA should be met to ensure accurate interpretation of the analysis results. Upon initial data screening, measures were implemented to maintain the integrity of the data and subsequent analysis including checking for all necessary assumptions. Assumptions for DDA include: (a) two or more mutually exclusive groups must exist (b) there must be a minimum of two subjects per group (c) there may be any number of continuous variables, as long as the sample size of the smallest group exceeds the number of continuous variables (d) continuous variables must be measured at the interval level of scale (e) no continuous variables are a linear combination of any other continuous variables (f) each group is multivariate normal on the continuous variable, and (g) the covariance matrices for each group must be roughly equal (Sherry, 2010). All multivariate assumptions were met in the present analysis.

Additionally, multivariate normality was examined employing a recommendation of Henson (1999) to utilize Mahalanobis ($D^2$) distance for each case of the data in efforts of detecting outliers. The dependent variables were determined to be multivariate normal using this method. Post data was unable to be collected for a total of five children who moved geographic
locations during the course of this study. Thus, these children were excluded from the final analysis. This resulted in a final sample size of 71 participants, 36 in the experimental group and 35 in the control group.

Because there were two groups, experimental and control, one discriminant function was obtained ($k - 1$). The statistical significance of the canonical discriminant function was then evaluated by examining the Wilks’ Lambda statistic. In examining the canonical discriminant function, it was determined that the degree to which the variables of interest contributed to the synthetic dependent variable was statistically significant at ($p < .01$) with a moderate canonical correlation ($R_c = .394$) and effect size of $R^2_c = .155$. This indicates approximately 16% of variance is accounted for in Function 1. Specifically, aggression, self-regulation, and empathy can account for 16% of the differences between the two groups. Table C. 3 represents these findings.

Table C. 3

*Wilks’s Lambda and Canonical Correlation*

<table>
<thead>
<tr>
<th>Function</th>
<th>Wilks’ Lambda</th>
<th>$X^2$</th>
<th>df</th>
<th>$p$</th>
<th>$R_c$</th>
<th>$R^2_c$</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.845</td>
<td>11.399</td>
<td>3</td>
<td>.010*</td>
<td>.394</td>
<td>16%</td>
</tr>
</tbody>
</table>

Note. * indicates statistical significance at $p < .05$.

In order to further evaluate the unique and shared contribution of each dependent variable in accounting for group differences, both standardized discriminant function and structure coefficients were consulted (Henson, 2002). The standardized coefficients are analogous to beta weights in regression analyses and convey the relative credit each variable gets in creating the synthetic dependent variable, or the discriminant score (Sherry, 2010). On Function 1, the standardized discriminant function coefficients indicated aggression was primarily responsible
for group differences (.819), followed by empathy (-.290), and self-regulation (-.221). Due to the multicollinearity of the three variables in the discriminant score, the absolute contribution of any one variable is not reflected by the standardized coefficients. Thus, aggression, self-regulation, and empathy all share contribution in the synthetic dependent variable as indicated by the standardized coefficients.

In DDA, the structure coefficients represent simple bivariate correlations between each variable and the composite dependent variable (Sherry, 2010). Unlike the standardized coefficients above, the structure coefficients do not account for shared variance and thus, represent the unique contribution of each variable. Examining structure coefficients further confirmed aggression accounted for the largest degree of variance in the composite dependent variable ($r_s = .900$). However, self-regulation also accounted for a considerable degree of variance ($r_s = -.517$) followed by empathy ($r_s = -.513$). Specifically, aggression accounted for 81%, self-regulation accounted for 27%, and empathy accounted for 26% of the variance in scores on Function 1. This means aggression contributed the most to group separation although self-regulation and empathy were strong contributors as well. Additionally, it is important to note that both empathy and self-regulation were negatively related to group differences while aggression was positively related. In other words, as members of one group became more aggressive, they also became less self-regulated and less empathic. All standardized coefficients and structure coefficients are reported in Table C. 4.
Table C. 4

*Standardized Discriminant Functions and Structure Coefficients for the Two Groups*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Coefficient</th>
<th>$r_s$</th>
<th>$r_s^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggression</td>
<td>.819</td>
<td>.900</td>
<td>81%</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>-.221</td>
<td>-.517</td>
<td>27%</td>
</tr>
<tr>
<td>Empathy</td>
<td>-.290</td>
<td>-.513</td>
<td>26%</td>
</tr>
</tbody>
</table>

Note. Coef = standardized canonical function coefficients; $r_s$ = structure coefficient; $r_s^2$ = squared structure coefficient.

Group centroids were also examined to determine which group, experimental or control, contributed to group differences as observed on Function 1 pertaining to aggression, self-regulation, and empathy. It appears on Function 1 as noted by group centroids, that the control group (.429) was comparable to the experimental group (-.417) with respects to the magnitude of change. However, based upon the positive and negative valances associated with each group, it appears as though the groups changed in differing directions. This indicates group differences on Function 1 pertaining to aggression, self-regulation, and empathy were attributable to both the control and experimental groups. More specifically, children in the control group were more aggressive, less self-regulated, and less empathic from pre to post testing as compared to children in the experimental group who were reported by parents to be less aggressive, more self-regulated, and more empathic.

Additionally, a one-way ANOVA was performed between the composite dependent variable and the grouping variable to examine the magnitude of group differences. The confidence intervals indicated statistical differences between the control and experimental group. Specifically, the differences between the control and experimental groups with respect to aggression, self-regulation, and empathy were statistically significant at $p < .01$. Additionally,
the Cohen’s $d$ effect size for centroid differences on the discriminant function score between the two groups was determined to be large ($d = .845$). The Table C.5 presents the centroids for each group along with corresponding 95% confidence intervals from the one-way ANOVA.

Table C.5

*Centroids and 95% Confidence Intervals for Each Group on the Discriminant Function Scores*

<table>
<thead>
<tr>
<th>Groups</th>
<th>Centroid</th>
<th>SD</th>
<th>Std. Error</th>
<th>Lower Bound</th>
<th>Upper Bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experimental</td>
<td>-.417</td>
<td>1.02</td>
<td>.169</td>
<td>-.761</td>
<td>-.073</td>
</tr>
<tr>
<td>Control</td>
<td>.429</td>
<td>.983</td>
<td>.166</td>
<td>.091</td>
<td>.766</td>
</tr>
</tbody>
</table>

Research Question 2: Teacher Reports of Aggression, Self-regulation, and Empathy

The second descriptive discriminant analysis (DDA) was conducted using group membership, experimental or control, as predictors of children’s levels of aggression, self-regulation, and empathy. Specifically, a DDA was utilized to identify which variables best captured group differences between the experimental and waitlist control groups based upon teacher report. Aggression was measured by the difference scores of the Total Aggression score on the CAS-Teacher. Empathy was measured by difference scores on the Empathy subscale of the SEARS-Teacher, and self-regulation was measured by difference scores on the Self-Regulation subscale of the SEARS-Teacher. All Table C. 6 lists the means and standard deviations for each group on these variables.
Like the DDA on parent data, the teacher data also yielded one discriminant function due to the use of two groups ($k = 1$). The statistical significance of the canonical discriminant function was then evaluated by examining the Wilks’ Lambda statistic. In examining the canonical discriminant function, there was a non-significant ($p = .413$) and small canonical correlation ($R_c = .205$) with an effect size of $R_c^2 = .042$. This indicates approximately 4.2% of variance is accounted for in Function 1. Specifically, aggression, self-regulation, and empathy can account for 4.2% of the differences between the two groups based on teacher report. Table C.7 represents these findings.

Table C.7

<table>
<thead>
<tr>
<th>Variable</th>
<th>Experimental Group</th>
<th>Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
</tr>
<tr>
<td>Self-Regulation</td>
<td>1.69</td>
<td>4.39</td>
</tr>
<tr>
<td>Empathy</td>
<td>1.23</td>
<td>7.08</td>
</tr>
<tr>
<td>Aggression</td>
<td>-3.34</td>
<td>11.51</td>
</tr>
</tbody>
</table>

According to Sherry (2010), “if any function is found to be non-significant, no further evaluation of that function within the output can be done” (p. 670). As such, the standardized discriminant function coefficients, structure coefficients, and group centroids were non-
interpretable for the teacher data. Although non-interpretable, all standardized discriminant functions and structure coefficients are presented in table C. 8.

Table C. 8

*Standardized Discriminant Functions and Structure Coefficients for the Two Groups*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Coefficient</th>
<th>$r_s$</th>
<th>$r_s^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Function 1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Aggression</td>
<td>.916</td>
<td>.975</td>
<td>95%</td>
</tr>
<tr>
<td>Self-regulation</td>
<td>-.246</td>
<td>-.454</td>
<td>21%</td>
</tr>
<tr>
<td>Empathy</td>
<td>.063</td>
<td>-.074</td>
<td>.55%</td>
</tr>
</tbody>
</table>

Note. Coef = standardized canonical function coefficients; $r_s$ = structure coefficient; $r_s^2$ = squared structure coefficient.
APPENDIX D

EXTENDED DISCUSSION
The current study sought to explore the degree to which differences in children’s scores per teacher and parent report, from pre to post testing on aggression, self-regulation, and empathy contributed to group differences between children receiving child-centered play therapy and those in a waitlist control group. Results indicated that parents perceived aggression, self-regulation, and empathy as strongly contributing to differences between children who received CCPT and those who did not. Additionally, parents not only perceived a difference between the two groups with respect to these variables, they perceived a significant difference between them. Specifically, parents identified the most meaningful change in children’s behaviors as contributable to their overall degree of aggressive symptomology followed by self-regulation and empathy based upon whether or not they received CCPT. Teachers, however, perceived very little difference between children participating in CCPT and those who were not for the three variables of interest. These results hold important considerations and implications for further research as detailed below.

Parent Perceptions

Based upon the results of this study, it may be suggested that parents of children referred to counseling for aggressive behaviors perceived their children as less aggressive and increasingly self-regulated and empathic subsequent to their children receiving CCPT. While these findings are comparable to previous studies regarding positive changes in parent perceptions following CCPT, this study is unique in that the chosen statistical analysis allows for interpretations based upon prediction (Bratton et al., 2013; Ray, 2009; Schumann 2005). Specifically, the results suggest that per parent report, it can be reasonably predicted that children became less aggressive, more self-regulated, and more empathic through participation in CCPT.
as compared to receiving no services at all. Furthermore, it can be reasonably predicted that children identified as displaying apparent or emerging struggles related to aggression who did not receive treatment likely became increasingly aggressive, less self-regulated, and less empathic over time in accordance with parent perceptions. Both the statistical and practical significance yielded from the parent data supports the premise that parents perceived aggressive symptomology as improving or declining based upon whether or not their child received CCPT.

Aggression

Regarding aggressive symptomology, the results of this study suggest parents perceived their children’s participation in CCPT as highly predictive of a decrease in aggressive behaviors. This finding appears imperative to children’s healthy functioning and development over time related to behavioral symptomology, academic achievement, interpersonal functioning, ability to form and maintain relationships, and overall sense of contentment (Conner, 2002; Cochran et al., 2010; Kingston & Prior, 1995; Risser, 2013). Researchers suggest lacking early intervention, children exhibiting non normative patterns of aggression are susceptible to prolonged struggles spanning their developmental trajectories (Farrington, 1991; Lundy, Pfohl, & Kuperman, 1993; Ray et al., 2009). Furthermore, findings of this study appear consistent with prior research as it pertains to parents’ perceptions of their children’s externalizing behaviors decreasing after participation in CCPT (Lin & Bratton, 2015; Bratton et al., 2005).

Specific to CCPT, therapists seek to fully know and understand all aspects of a child, including their aggressive feelings and behaviors. Unlike other commonly utilized interventions, the child-centered therapist does not seek to correct thought patterns or emotional responses tied to aggressive acts. Rather, the therapist seeks to fully understand and accept the child as he or she is in order for them to more fully accept themselves. Such acceptance releases children to
more readily identify their emotions as they arise as well as alternate methods of self-expression. As the structure coefficients and corresponding 81% of variance accounted for in group differences suggest, it can be reasonably assumed that the relationship formed between the children in this study and their play therapists likely contributed to children’s decrease in aggressive behaviors per parent report. Such shifts in behavioral manifestations of aggression may not only help children in their everyday functioning but also in their relationships with others. Specifically, some researchers have noted the relevancy of including parents in the intervention process in efforts of alleviating stress within the parent-child relationship (Lin & Bratton, 2015). While parental inclusion has been shown to be efficacious in prior research (Bratton & Landreth, 1995; Cornett & Bratton, 2014; Holt & Bratton, 2014; Sheely, 2008), the results of the present study may suggest parents’ ability to notice significant changes in their children’s behavioral patterns absent of any direct involvement in the intervention process.

Self-Regulation

Parents perceived their children’s participation in CCPT as predictive of their increased abilities to self-regulate. This finding may be particularly noteworthy as self-regulation is an essential tenet in the philosophy of child-centered play therapy. Founders of the person-centered philosophy from which CCPT emerges emphasize the drive towards self-regulation as an innate aspect of the human experience and that childhood motivations “tend naturally to harmonize into a complex and changing pattern of self-regulation” (Rogers, 1989, p. 405). Thus, the very nature of the skills and specific responses utilized by the play therapists in this study likely contributed to children’s increased abilities towards self-regulation. Specifically, as children acted out aggressively in the playroom, they were not only met with empathic understanding, but also a
sense of trust in their abilities to control their impulses and identify increasingly enhancing means of self-expression.

Furthermore, in order for parents to perceive notable differences in their children’s self-regulatory processes, these skills were able to transcend beyond the therapeutic environment and infuse into the child’s being beyond the structure of play therapy. Thus, these results suggest children participating in CCPT became better able to control their impulses and express themselves in increasingly beneficial ways both within the therapeutic setting and beyond.

Empathy

Finally, parents perceived their children’s participation in CCPT as predictive of an increased propensity towards empathy. This is of particular importance as very limited research currently exists with respects to children’s developed sense of empathy subsequent to receiving CCPT. Some researchers have suggested children are capable of conceptually understanding empathy although unable to emotionally experience it (Dadds et al., 2009). However, others starkly contrast this notion and have suggested providing children with an environment in which they may experience empathic understanding, such as in CCPT, may advance their ability to convey empathy towards others (Ray et al., 2013). Pertinent to this study, the structure coefficient for empathy coupled with the corresponding 26% of variance accounted for in group differences provides support for this supposition. Additionally, it provides preliminary evidence for supporting the use of CCPT on enhancing children’s empathy who are struggling with aggressive behaviors.

Empathy appears to be a crucial interpersonal ability that has been closely linked to both expressed and internalized frustration, anger, and aggression (Bjorkqvist, 2007; Peterson & Flanders, 2005, Ray et al., 2009). Prior research supports the notion that as individuals are able
to experience empathy through both cognitive and interpersonal processes, aggressive behaviors tend to diminish (Bjorkqvist, 2007). Peterson & Flanders (2005) suggested, “The internal process that regulates aggression (in addition to simple fear) seems to be empathy or, perhaps, identification—the ability to feel the experiences or to adopt the viewpoint of another, respectively” (p. 136). In accordance with CCPT philosophy, the therapists in this study sought to remain empathic towards all aspects of a child’s being, including their demonstrated aggression. Through the relationship established between a child and a play therapist, this study would support the notion that children not only experienced empathy from play therapists, but also further developed the ability to demonstrate empathy towards others. This is essential to the role of the play therapist in CCPT as the empathic understanding children experience from their play therapists is understood to be directly related to their ability to demonstrate empathy towards others in an effective manner (Ray, 2009). This increase in empathy often leads to a decrease in aggressive and acting out behaviors as further supported by results of the present study.

Relationship between Aggression, Self-regulation, and Empathy

An important aspect of this study and intentionality behind the specific data analyses employed, was to examine the shared relationship between aggression, self-regulation, and empathy. Theoretically, I inferred that based upon prior literature, developmental theories, and clinical experience, these three variables may be related in a meaningful way. Thus, I intentionally chose an analysis in which I could explore these constructs simultaneously to account for any shared variance between them. The results of this study did confirm that participation in CCPT was largely predictive of changes in aggression. However, results further indicated the shared variance between self-regulation and empathy with respects to aggression.
Specifically, as children became more or less aggressive dependent upon group membership, they also became more or less self-regulated and empathic. Results of this study suggest these constructs may in fact be related in meaningful ways as supported through both prior literature and the theoretical underpinnings of aggressive behaviors. Additionally, such results support the emphasis therapists place on self-regulation and empathy when working with children exhibiting aggressive behaviors from a child-centered philosophy.

Teacher Perceptions

Based upon the results of this study, teachers did not perceive children’s participation in CCPT as predictive of their overall levels of aggression, self-regulation, or empathy. Specifically, teachers noticed very little differences between children receiving CCPT and those who did not with respect to the three variables of interest in this study. A lack of statistically significant results specific to teacher perceptions is consistent with previous research findings (Garza & Bratton, 2005). Despite such findings, results of the present study appear inconsistent with previous research specific to children demonstrating overly aggressive behaviors. In a pilot study conducted by Ray et al. (2009), teachers reported statistically significant decreases in aggressive behaviors among children who participated in CCPT over those assigned to a waitlist control group. The inconsistency between these two studies seems to reflect the need for further exploration of teacher perceptions of change with respect to children exhibiting aggressive behaviors.

Relational Considerations in Working with Aggressive Children

The population of focus for this study may be of importance when considering the non-statistically or practically significant results for teachers. Teachers face ongoing challenges and demands in a classroom and considering the interference to classroom instruction a single
disruptive child could cause, it is not entirely implausible to assume teachers may formulate negative perceptions of these children (Morrison & Bratton, 2010). Highly disruptive and aggressive children, as were the children referred for this particular study, often place increasing demands on teachers and school personnel. While it is understandable that these children may need increased focus and attention, these are often resources teachers are unable to provide given the magnitude of responsibility they face in balancing curriculum with classroom management. Teacher perceptions of children referred for aggressive behaviors do however appear important in their ability to provide emotional and relational support to their students (Helker & Ray, 2009; Morroson & Bratton, 2010; Sepulveda & Garza, 2011). Additionally, previous research findings suggest the relevancy of teacher’s emotional significance to children and their overall abilities to learn and grow in a classroom environment (Helker, Schottelkorb, & Ray, 2007; Morrison & Bratton, 2010; Pianta & Stuhlman, 2004).

Student-teacher relationships are one of many types of meaningful relationships into which aggressive children enter. Nonetheless, for children struggling with such symptomology, relationships are often taxing and difficult to maintain. These relational struggles highlight the appropriateness of CCPT with this population. As previously detailed, the central premise of the child-centered philosophy is entering into relationships with children in which they feel authentically seen, understood, and accepted despite any emotional or behavioral struggles they may be facing. Child-centered therapists believe unconditional relationships are both healing and contagious. In other words, as children experience the conditions set forth in CCPT they become better equipped to demonstrate care and acceptance towards themselves and others. The relationship between the child and the therapist may be of particular relevancy when considering the population of children in this study. Aggressive children often face ongoing relational
struggles as a result of their externalized manifestations of anger, guilt, shame, and host of other emotional experiences. As aggressive children continue to face relational hardships as a consequence of their behaviors, messages such as “I am unlovable,” “I am bad,” or “I am not worthwhile” may become increasingly internalized. As children start to see themselves in this light, they will continue to display behaviors consistent with their internal experiences and dialogues. Thus, introducing a relational experience inconsistent with a child’s existing self-structure may be challenging, however, this may also lead to children changing the lens through which they view themselves and others. The therapeutic relationship then becomes the primary agent of change.

Children referred for the present study often entered into the playroom for the first time very unsure of what to expect and untrusting of the play therapists. As mentioned above, past experiences lead many of these children to see themselves as generally bad or unlovable children. Thus, children frequently displayed behaviors in the playroom and attitudes towards the play therapists consistent with their self-concepts at the time. For example, the majority of referred children displayed aggression towards the play therapist through physical or emotional acts. Physical acts of aggression included hitting, kicking, or shooting play therapists with dart guns while emotional acts of aggression included verbal responses such as “I hate you,” or other forms of name calling. Some children acted out their aggression symbolically by utilizing a figure or toy in the room to represent a certain person as they acted upon the toy aggressively. Many play therapists reported these experiences as emotionally taxing leading to their own feelings of doubt and insecurity in their relationships with these children.

Additionally, it typically took several sessions before children with highly aggressive behaviors appeared to trust the empathic responses and acceptance the therapists conveyed. In
fact, some children remained largely unresponsive to the therapists for the entirety of the ten week intervention period. As such, therapists noted an increase in time to establish therapeutic relationships as compared to working with children of differing presenting concerns in the past. Some therapists in this study also utilized a child’s observed level of trust as an informal means of assessment to the severity of their emotional experiences. More specifically, two therapists noted children with more severe emotional struggles tended to take longer in trusting their therapists and displayed increasingly aggressive play behaviors as compared to children with less severe emotional struggles. Another therapist noted feeling particularly bonded with her client as she became increasingly aware of the child’s internal experience and the degree of negative feedback she routinely took in from her environment. Although each participating play therapist expressed unique feelings related to their relationships with their clients, all therapists reported the emotional challenges associated with working with highly aggressive children to varying degrees. This point appears particularly important to teacher perceptions of aggressive children. Like the therapists in this study, teachers are likely to struggle to varying degrees in both forming and maintaining relationships with aggressive children. However, through knowledge of skills and increased understanding into children’s emotional experiences, it may be possible for teachers to form strengthened relationships with these students.

Teacher Involvement in Working with Aggressive Children

Several researchers have directly explored the impact of involving teachers in interventions specific to children exhibiting disruptive behaviors (Helker & Ray, 2009; Morrison & Bratton, 2010; Sepulveda & Garza, 2011). The results of these studies are suggestive of the relative importance of including teachers in the therapeutic process when working with children exhibiting disruptive symptomology. Child Teacher Relationship Training (CTRT) is a 10
session model proposed by Bratton and Morrison (2010) in which the basic tenets of Parent Child Relationship Training (CPRT) are revised for the specific intentions of promoting positive relationships and interactions between teachers and students (Morrison & Bratton, 2010). Prior studies have investigated the impacts of CTRT on children’s disruptive classroom behaviors and found positive results (Helker & Ray, 2009; Morrison & Bratton, 2010; Sepulveda & Garza, 2011). Other models such as Teacher Child Relationship Building (TCRB) combine filial and kinder training methods to strengthen the teacher-child relationship and enhance children’s academic success, social behaviors, and overall effective learning processes (Lindo et al., 2014).

In 2014, Lindo and colleagues utilized a phenomenological approach to examine teachers’ perceptions of the initial implementation of TCRB and found that most teachers reported feeling increasingly bonded to children after participation in the intervention. Such findings appear promising and may suggest including teachers in the intervention process could be efficacious in promoting positive teacher-student relationships. Furthermore, these relational improvements may lead to teacher’s increased sensitivity to behavioral changes in aggressive children.

Teachers often express a desire to be involved in the therapeutic interventions being provided to their students. However, rigor in study design commonly calls for direct intervention with children only until the successful completion of the treatment phase. Excluding teachers from interventions, while understandable for research purposes, may lead to further feelings of frustration and ultimately decreased sensitivity to behavioral changes in students. For example, in the present study teachers routinely approached myself and other participating counselors asking for direct feedback on the progress of their students. Additionally, teachers often requested assistance from play therapists regarding classroom intervention strategies and immediate skills to use with acting out children. The inability of play therapists to provide such
instant assistance was often frustrating for both the therapists and the teachers alike. Furthermore, this may have left teachers feeling excluded from the process and discouraged regarding behavioral changes in the children they referred for the study. Although all teachers were offered consultations at the end of intervention, many expressed feeling the delay in teacher consultation services was taxing on their relationships with aggressive children.

Based on feedback from the present study and prior research endeavors, interventions in which the teachers of aggressive children are included may lead to stronger and more positive results on measures of teacher perceptions. Teacher involvement may include the teaching of skills in a structured format such as through CTRT, TCRB, or increasingly informal methods such as a set number of teacher consultations or check-ins throughout the duration of the intervention period. Involving teachers in the intervention process may lead to lessened feelings of frustration and ultimately increased sensitivity to behavioral changes in aggressive children.

Other Considerations in Working with Aggressive Children

Additionally, the current study was impacted by several end-of-the-year and beginning-of-the-year factors that might have limited teachers’ sensitivity to individual child changes in challenging classroom environments. For example, teachers were asked to complete pre testing within the first several weeks of the school year, a time that is often taxing on teachers and conducive to increased stress and pressure. Post testing was also collected during the final days of the fall semester and the beginning of the spring semester. This too is often a challenging time for both teachers and students and may have impacted the ways in which teachers completed the assessments. Specifically, this process may have impeded the teachers from attending carefully to each item, recalling each student’s performance throughout the 8 weeks of CCPT, and completing the assessments with a consistent and stress-free perspective.
It may also be plausible that the differences between parent perception of change and teacher perception of change is closely tied to relationship. Specifically, parents generally think highly of their children and view them in a mostly positive light despite challenges in their children’s behavior. However, this may not always be the case for teachers. Upon starting the semester with an aggressive child, teachers may not have the opportunity to establish close bonds with children who cause particular challenges in the classroom. Taking into consideration parental relationships with their children as compared to teacher relationships with their students, it may be reasonable to infer that parents are more likely to notice changes in their children’s behaviors, particularly positive changes, as compared to teachers.

Study Limitations

Despite the current findings offering valuable information regarding the effectiveness of CCPT on decreasing aggression and increasing self-regulation and empathy, limitations are important to consider in accurately interpreting the results. Participants in the current study represent a specified age range, six to 10 years old, and were enrolled in four Title 1 local elementary schools. Additionally, 83% of the sample for this study were males, and 52% identified as African American. This represents a limited setting, population, and sample size relative to the larger population. Thus, the results may not be generalizable to children across varying ages, genders, geographical, or demographic backgrounds (Heppner, 2008; Rubin & Bellamy, 2012).

While the location of the current study supports the practicality of utilizing CCPT in a school setting, it also contributed to several study limitations. It may be possible that when the participants displayed highly aggressive behaviors in schools, teachers and school personnel provided immediate learning opportunities to correct the behaviors. This additional exposure
might have influenced study results. Additionally, it is likely that teachers and perhaps parents knew which group children were assigned. If this occurred, it could have contributed to rater bias (Rubin & Bellamy, 2012).

The use of a non-treatment group is another limitation of the present study. The statistical differences detected between the CCPT group and the waitlist control group in the follow up analysis might be due to the use of any intervention rather than the specific use of CCPT. Therefore, a larger replication study including a treatment comparison group may be needed to validate the findings of the current study as directly related to CCPT with aggressive children.

Additionally, the length of the intervention should be considered based upon the particular sample for this study. Children exhibiting aggressive behaviors, particularly those meeting criteria to be considered highly aggressive, may require a longer length of treatment than the 16 sessions allotted. Given the optimal effect of CCPT is approximately 30-40 sessions (Bratton et al., 2005; LeBlanc & Ritchie, 2001), CCPT with this population may need to be conducted over a longer period of time in order to stabilize findings and contribute to statistically significant results for teachers.

Recommendations for Future Research

Based upon the findings and limitations of the present study and prior research findings, I present several recommendations for future research:

1. The present study was limited in its findings regarding the degree to which researchers could predict a child’s scores on aggression, self-regulation, and empathy as a direct result of participation in CCPT. Specifically, it is reasonable to infer based upon the current findings that researchers could predict child outcomes on these
measures as a result of participation in CCPT only as compared to receiving no treatment at all. However, study implications could be strengthened through the use of a true comparison group. In such an instance if results were comparable to the current study, researchers could more accurately attribute the predictive ability of these variables to participation in CCPT as compared to an alternate form of intervention.

2. An additional consideration for future research is adding a clinical threshold to study inclusion criteria. In the current study, all children who were referred for aggressive behaviors were included in the sample assuming the necessary study incision criteria were met. However, study implications may be strengthened given an additional criteria of meeting a clinical threshold for aggression as delineated by the CAS professional manual (Halperin & McKay, 2008). This would contribute to the overall rigor of a study and allow for further inferences regarding the use of CCPT with clinically aggressive children.

3. As detailed above, an additional recommendation for future research is the involvement of teachers in interventions with aggressive children. Previous research indicated the impact of teacher-child relationships with both children’s behaviors as well as teacher perceptions. Therefore, it may be worthwhile to investigate variables such as the teacher-child relationship as potential mediators or influencers of teachers’ ratings regarding the effects of CCPT on children’s aggressive behaviors. This could aid in determining the true, direct, and independent effects of CCPT. Additionally, to ensure integrity regarding data collection procedures, future researchers are advised to control for the environments in which teachers complete
instruments and to be mindful about timing within the school year for instrument
distribution and collection.

4. A consideration in the present study was the length of treatment for children referred
for highly aggressive behaviors. It may be that the provision of 16 play therapy
sessions did not allow adequate time for the full benefits of CCPT to be assessed by
teachers. Thus, a further recommendation is to extend the length of treatment to more
accurately reflect the needs of this population and the recommendations of prior
researchers regarding optimal effects of play therapy (Bratton et al., 2005; LeBlanc &
Ritchie, 2001). Perhaps offering students closer to 20 sessions over 10 weeks as
opposed to 16 sessions over 8 weeks could allow for increased exposure to the tenets
of CCPT leading to greater results.

5. A final recommendation is including follow up measures to assess the long-range
effects of CCPT with children exhibiting aggressive behaviors. The results of the
present study can only make conclusions regarding the predictive ability of group
membership on aggression, self-regulation, and empathy variables immediately
following the completion of CCPT. However, results may be strengthened if follow
up measures were employed regarding the sustainability of these results overtime.

Implications

CCPT is currently a manualized treatment practice with several studies supporting its
benefits with children exhibiting a range of emotional struggles (Lin & Bratton, 2015; Ray et al.,
2015). More specifically, many studies support the use of CCPT with children exhibiting
externalizing behaviors (Bratton et al., 2013; Bratton et al., 2005; Ray et al., 2015). However, to
date, very few studies have explored the direct influence of CCPT with children demonstrating
aggressive specific behaviors. Ray and colleagues conducted an initial pilot study in 2009, recommending study replication with a larger sample size and random assignment. However, the results of this study also offered promising results supporting the effectiveness of CCPT with this population. Findings of the present study point to differences in aggressive behaviors, self-regulatory processes, and demonstrated empathy between children who receive play therapy and those who do not, at least in terms of parent report. These findings appear meaningful in that parents reported their ability to notice significant behavioral changes in their children. For parents of children in the control group, they reported their children becoming increasingly aggressive while less self-regulated and empathic. Concurrently, for children receiving CCPT their parents reported less aggression and increased self-regulation and empathy. These results seem to support the notion that it may be reasonable to predict the ways in which an aggressive child’s behaviors could improve or decline based upon whether or not he or she receives CCPT. At this point it would be difficult to attribute predictive ability solely to CCPT given the lack of a comparison group in this particular study. However, study results do suggest that CCPT contributes to the predictive ability of these variables as compared to no intervention at all.

Current researchers and clinicians suggest children’s mental health needs often go overlooked. If children receive counseling services it is more likely to occur in the school environment than any other setting (Foster, Rollefson, Doksum, Noonan, & Robinson, 2005; Ray et al., 2015). As such, it is imperative school counselors and other mental health providers are knowledgeable regarding the types of counseling services available to young children in a school setting. Specific to children with aggressive behaviors, these children are often faced with ongoing consequences of their behaviors and may fail to receive preventative services aimed at thwarting further behavioral, emotional, and academic hardships. As such, the results of this and
prior research suggest CCPT may be a viable option in alleviating children’s aggressive symptomology.

The current study brings hope and assurance for the application of CCPT with children demonstrating problematic aggressive behaviors. In CCPT, the relationship between the therapist and the child may be unlike any relationship in a child’s life. Through the permissiveness, acceptance, and necessary limits provided to children in the playroom, they may begin to release and identify their inner feelings underlying aggressive acts. This type of relational experience for an aggressive child may be fundamental in their ability to identify increasingly enhancing and socially acceptable means of expressing their needs to caretakers and peers alike.

In addition, CCPT appears to be a viable and practical option to further develop children’s empathy. Through the empathic understanding conveyed by the therapist, children feel both understood and accepted despite any displayed acts of aggression. Through intentional reflections made by the therapist, children also become better aware of their feelings and internal experiences. With more perceived experiences of empathy, children become increasingly capable of developing and displaying empathy towards others (Ray et al., 2013). Thus, as oppose to providing children with cognitive based interventions to develop empathy, CCPT may serve as an applicable intervention that allows aggressive children to first experience empathy promoting their subsequent ability to offer it to others. Furthermore, results of both the present study and prior literature support the notion that with increased empathy children may become decreasingly aggressive.

Finally, the subjective experiences of the therapists in this study provide hope that despite the challenges of working with highly aggressive children, meaningful changes do occur as a result of the relationship formed between the child and the therapist. Working with this
population may expose play therapists to their own limitations, vulnerabilities, and sense of humanness. Yet, the faith in children’s propensities towards growth and healing conveyed through the therapist’s attitudinal conditions appears central. Moustakas (1953) conveyed, “Faith is an intangible quality. It is something which is known largely through feelings, not through intellectualizations, and it is essential to emotional organization and growth” (p. 3). Thus, the very being of a child-centered therapist who genuinely cares for the personhood of an aggressive child appears healing.

Conclusion

Children struggling with aggressive symptomology often face relational, academic, and emotional hardships. Additionally, aggressive behaviors in childhood serve as the leading cause of referrals to school counselors and mental health professionals across the United States (Abidin & Robinson, 2002; Bratton, Ceballos, Sheely-Moore, Meany-Walen, Pronchenko, & Jones, 2012). Absent of early intervention, children exhibiting atypical levels of aggression may be at an increased risk for highly externalized and problematic behaviors across the lifespan (Foulkrod & Davenport, 2010; Frick & White, 2008; Gathright & Tyler, 2014). Due to the relevancy of aggressive behaviors in childhood, the current study was meant to augment the current body of literature regarding CCPT with this population.

The predictive ability of aggression, self-regulation, and empathy with respects to group membership to either a waitlist control or experimental group was examined by comparing parent and teacher reports of children’s aggressive behaviors over time. The statistically significant findings between groups indicated that children’s aggressive symptomology, self-regulation, and empathy could be reasonably predicted based upon their participation in one group over another as reported by parents. Specifically, it could be soundly predicted that
children participating in CCPT would become less aggressive and increasingly self-regulated and empathic. Concurrently, it could be predicted that children receiving no treatment at all would become increasingly aggressive while less self-regulated and empathic. However, teachers did not report predictive abilities of group membership based upon these three variables. This finding could be associated with a number of factors including teachers decreased sensitivity to behavioral changes among this population of students, external hardships to completing pre and post testing assessments, and a lack of teacher involvement in the intervention leading to increased feelings of frustration.

The conditions provided through the therapeutic relationship in the present study appeared to foster children’s increased abilities to self-regulate and demonstrate empathy leading to decreased aggressive and acting out behaviors, at least in terms of parent report. Thus, children in the current study appeared to benefit from participation in CCPT. Findings from this study demonstrate CCPT’s viability as a possible treatment option for young children displaying struggles related to aggressive behaviors. Considerations should be made when working with teachers of this population as to enhance their relationships their students leading to greater academic and emotional student experiences. Due to the limitations previously discussed, it is important that future researchers replicate this study with attention to ways in which length of treatment, teacher-child relationships, clinical thresholds, and the use of a comparison group may impact CCPT outcomes.
APPENDIX E

ADDITIONAL MATERIALS
July 14, 2015

Supervising Investigator: Dr. Dee Ray
Student Investigator: Brittany Wilson
Department of Counseling and Higher Education
University of North Texas

Re: Human Subjects Application No. 15293

Dear Dr. Ray:

As permitted by federal law and regulations governing the use of human subjects in research projects (45 CFR 46), the UNT Institutional Review Board has reviewed your proposed project titled "Effectiveness of Play Therapy for children with Disruptive Behaviors." The risks inherent in this research are minimal, and the potential benefits to the subject outweigh those risks. The submitted protocol is hereby approved for the use of human subjects in this study. Federal Policy 45 CFR 46.109(e) stipulates that IRB approval is for one year only, July 14, 2015 to July 13, 2016.

Enclosed is the consent document with stamped IRB approval. Please copy and use this form only for your study subjects.

It is your responsibility according to U.S. Department of Health and Human Services regulations to submit annual and terminal progress reports to the IRB for this project. The IRB must also review this project prior to any modifications. If continuing review is not granted before July 13, 2016, IRB approval of this research expires on that date.

Please contact Shelia Bourns, Research Compliance Analyst at extension 4643 if you wish to make changes or need additional information.

Sincerely,

Chad R. Trulson, Ph.D.
Professor
Department of Criminal Justice
Chair, Institutional Review Board
CT/sb
June 23, 2015

Dr. Dee Ray
University of North Texas
1155 Union Circle, Box 310829
Denton, TX 76201

Dr. Ray:

I have reviewed and approved your research proposal, “Effectiveness of Play Therapy for Children with Disruptive Behaviors”. The principals at Hodge Elementary, Rivera Elementary and Evers Park Elementary have agreed to participate in the project.

Best wishes with your research.

Sincerely,

[Signature]

Dr. David Hicks
Executive Director Secondary Academic Programs
Denton ISD

Cc: Dr. Patty Jensen
Ms. Roshunda Thomas
Ms. Linda Tucker
Title of Study: Effectiveness of Play Therapy for Children with Disruptive Behaviors.

Principal Investigator: Dee Ray, Ph.D., LPC-S, NCC, RPT-S, University of North Texas, Department of Counseling and Higher Education.

Student Investigators: Sarah Blalock, M.Ed., LPC-S, RPT-S, University of North Texas, Department of Counseling and Higher Education.

LaKaavia Taylor, M.A., LPC-Intern, NCC, University of North Texas, Department of Counseling and Higher Education.

Brittany Wilson, M.A., LPC-Intern, NCC, University of North Texas, Department of Counseling and Higher Education.

Purpose of the Study:
You are being asked to allow your child to participate in a research study which involves determining if play therapy is effective in helping children improve the way they act, feel, and interact with others at school. The study will also look at whether play therapy for children helps decrease disruptive behavioral problems at home as observed by parents.

Study Procedures:
Your child will be asked to participate in either individual play therapy or group play therapy. Play therapy is designed for children to express themselves in their natural way of playing with toys. Some elementary-age children have difficulty working through problems with words, so play therapy can help facilitate the process by providing a play environment from which they can work through those issues that may limit their academic progress. Through interactions with the therapist (and another group member if your child is placed in group play therapy), we hope your child will become increasingly aware of his or her own and others’ feelings, thoughts, and needs, as well as learn to interact in socially appropriate ways.

Your child decides what materials to play with and what to discuss in play therapy. Your child will not be asked any questions that are not intended to facilitate his/her awareness or growth. Your child will not be forced to play. The play sessions will be video-recorded. The research team will observe the recordings to ensure the quality of play therapy services and the integrity of the study.

For this study, your child will be placed in one of three groups:
Group 1: Children in this group will begin group play therapy immediately and will receive two 30-minute sessions of group play therapy each week for 8 weeks.

OR

Group 2: Children in this group will begin individual play therapy immediately and will receive two 30-minute sessions of individual play therapy each week for 8 weeks.

OR

Group 3: Children in this group will not receive any intervention during the 8 weeks of the study. Children in this group will begin either individual or group play therapy in January and will receive at least 8 sessions of play therapy.

You will be asked to complete one or two brief assessments (depending on whether your child is selected for group or individual play therapy) which require approximately 10 minutes each to complete. The assessment/s will be sent home to you through your child for you to complete. The assessment/s will need to be completed at two points in the study, the beginning and end of the 8 week period. The entire study will require approximately 20-30 minutes of your time to complete assessments.

Your permission allows your child to fill out two assessments which ask them to report their perceptions of their feelings of anger and their level of self-esteem. These assessments will require approximately 10 minutes each to complete. The assessments will need to be completed at two points in the study, the beginning and end of the 8 week period. The entire study will require approximately 40 minutes of your child’s time to complete assessments.

Your permission also allows your child’s homeroom teacher to fill out two assessments which ask the teacher to report perceptions of your child’s social and emotional development, and your child’s level of aggression within the classroom environment. The assessment will be delivered to your child’s teacher by the therapist. Your child’s teacher will be asked to complete this instrument before and after the 8 week period.

**Foreseeable Risks:**
There are no significant personal risks foreseen as likely from involvement in this study. Your child's participation is completely voluntary. You may withdraw your child at any time during the course of the study. However, possible risks may include one or more of the following:

1. Anything that is said or done during group play therapy is considered confidential, meaning that the therapist will not reveal anything that happens in the session to another school official or adult. However, if your child discloses child abuse, neglect, exploitation or intent to harm another person, the therapist is required by law to report it to the appropriate authority.

2. When your child participates in play therapy, he or she will be pulled from another school activity upon the approval of the teachers. It is possible that your child might miss an academic or extracurricular experience. However, if you or your child’s teacher observes any academic
concerns due to your child’s participation in play therapy, you or your child’s teacher may request to withdraw your child from the study at any time.

3. Because play therapy is a counseling method, your child may experience emotions that could be strong for him or her. The therapist will help your child express and work through these emotions. If any harmful effects upon your child are noted, the therapist will consult with the principal investigator, discuss with you and the child’s teacher, and then stop therapy for your child following your agreement. Harmful effects would include inability to maintain self-control or being so upset that your child is unable to behave appropriately in the play therapy environment.

Benefits to the Subjects or Others:
Possible positive outcomes for children participating in the project may include being more aware of their own and others’ feelings, thoughts, and needs; learning to interact in appropriate ways; increasing ability to develop a sense of responsibility; forming and maintaining relationships; and exhibiting less problematic behaviors. The results of this study may provide school counselors across the nation with knowledge that helps them enhance children’s social, emotional, and behavioral development so that children are happier and more successful in public school.

Procedures for Maintaining Confidentiality of Research Records:
All information will be kept in a locked cabinet in the clinic of the Counseling Program at the University of North Texas. Only the research team will have access to the locked cabinet. Names of parents and children will not be disclosed in any publication or discussion of this material. Information obtained from the instruments will be recorded with a code number. Only the research team will have a list of the participants’ names. The play sessions will be video-recorded. The research team will observe the recordings to ensure the quality of the study. At the end of this study, the videos may possibly be shown in professional presentations for educational purposes. Identity information such as name, place of living, and other specific information will not be revealed when video recordings are shown in educational settings. However, you may choose to withdraw your consent at any time and the video recordings of your child will not be used.

Questions about the Study: If you have any questions about the study, you may contact Dr. Dee Ray at (940) 565-2066 or Dee.ray@unt.edu.

Review for the Protection of Participants: This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 for any questions regarding the rights of research subjects.

Research Participants’ Rights: Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- You understand the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to allow your child to take part in this study, and your refusal to allow your child to participate or your decision to withdraw him/her from the study will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your child’s participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as the parent/guardian of a research participant and you voluntarily consent to your child’s participation in this study.
- You have been told you will receive a copy of this form.

__________________________  Printed Name of Child

__________________________  Printed Name of Parent or Guardian

Signature of Parent or Guardian          Date
Child Assent Form

You are being asked to be part of a research project being done by the University of North Texas Department of Counseling and Higher Education.

This study involves looking at whether play therapy is helpful to you. Play therapy is a time when you will come to a playroom either by yourself or with one other child, and a counselor will ask you to play with the toys in lots of the ways you like. Sometimes for children it is hard to share feelings with words and it helps to play with toys to express how you feel.

You will be asked to come to play therapy two times a week for 8 weeks, which will take about 1 hour per week, or you might be asked to come to play therapy one time a week later in the school year.

If you decide to be a part of this study, please remember you can stop participating any time you want to and nothing bad will happen.

If you would like to be part of this study, please sign your name below.

________________________
Printed Name of Child

________________________    ______________________
Signature of Child     Date

________________________    ______________________
Signature of Principal Investigator     Date

Waiver of Assent

The assent of [insert name of child] was waived due to:

_________ Age
_________ Maturity
_________ Psychological State

________________________    ______________________
Signature of Parent/Guardian     Date
Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the purpose, benefits and risks of the study and how it will be conducted.

**Title of Study:** Effectiveness of Play Therapy for Children with Disruptive Behaviors

**Investigator:** Dee Ray, PhD, LPC-S, NCC, RPT-S, University of North Texas (UNT) Department of Counseling and Higher Education.

**Student Investigators:** Sarah Blalock, M.Ed., LPC-S, RPT-S, University of North Texas, Department of Counseling and Higher Education.

LaKaavia Taylor, M.A., LPC-Intern, NCC, University of North Texas, Department of Counseling and Higher Education.

Brittany Wilson, M.A., LPC-Intern, NCC, University of North Texas, Department of Counseling and Higher Education.

**Purpose of the Study:**
You are being asked to participate in a research study which involves determining if play therapy is effective in helping children improve the way they act, feel, and interact with others at school. Through interactions with other group members and/or the therapist in individual or group play therapy, children may have opportunities to become aware of their own and others’ feelings, thoughts, and needs, as well as learn to interact in a socially appropriate ways. This study aims to explore whether participating in play therapy helps children develop higher levels of empathy and self-regulation and decrease problematic behaviors at school as observed by teachers and parents.

**Study Procedures:**
After parents provide permission for their child’s participation in this study, each participating child will be assigned to one of three groups:

Group 1 - Children in this group will begin group play therapy immediately and will receive two 30-minute sessions of group play therapy each week for 8 weeks or
Group 2 - Children in this group will begin individual play therapy immediately and will receive two 30-minute sessions of individual play therapy each week for 8 weeks or
Group 3 - Children in this group will not receive any intervention during the 8 weeks of the study. Children in this group will begin group or individual play therapy in January and will receive at least 8 sessions of group or individual play therapy.

Depending on which group your students are assigned to, you will be asked to complete either one or two brief assessments for each participating child in your classroom at two points in the
study: the beginning of the 8-week period and the end of 8-week period. Each assessment takes approximately 10 minutes to complete, totaling 20-40 minutes per child of your time for the entire study.

**Foreseeable Risks:** No foreseeable risks are involved in this study.

**Benefits to the Subjects or Others:** Possible positive outcomes for children participating in the project may include becoming increasingly aware of their own and others’ feelings, thoughts, and needs; learning to interact in socially appropriate ways; increasing ability to develop a sense of responsibility; forming and maintaining relationships; and exhibiting less problem behaviors. The results of this study may provide school counselors across the nation with knowledge that helps them enhance child’s social, emotional, and behavioral development so that children are happier and more successful in public school.

**Compensation for Participants:** You will receive $10 cash at the end of the study when you have completed the assessment instruments (pre and post).

**Procedures for Maintaining Confidentiality of Research Records:** All information will be kept in a locked cabinet in the clinic of the Counseling Program at the University of North Texas. Only the research team will have access to the locked cabinet. Names of teachers, parents, and children will not be disclosed in any publication or discussion of this material. Information obtained from the instruments will be recorded with a code number. Only the research team will have a list of the participants’ names. You may choose to withdraw your consent at any time and the data you provided will not be used.

**Questions about the Study:** If you have any questions about the study, you may contact Dr. Dee Ray at (940)565-2066 or dee.ray@unt.edu.

**Review for the Protection of Participants:** This research study has been reviewed and approved by the UNT Institutional Review Board (IRB). The UNT IRB can be contacted at (940) 565-3940 with any questions regarding the rights of research subjects.

**Research Participants’ Rights:** Your signature below indicates that you have read or have had read to you all of the above and that you confirm all of the following:

- You understand the possible benefits and the potential risks and/or discomforts of the study.
- You understand that you do not have to take part in this study, and your refusal to participate or your decision to withdraw will involve no penalty or loss of rights or benefits. The study personnel may choose to stop your participation at any time.
- You understand why the study is being conducted and how it will be performed.
- You understand your rights as a research participant and you voluntarily consent to participate in this study.
- You have been told you will receive a copy of this form.
Printed Name of Participant

________________________________ ____________
Signature of Participant  Date

For the Investigator or Designee:

I certify that I have reviewed the contents of this form with the subject signing above. I have explained the possible benefits and the potential risks and/or discomforts of the study. It is my opinion that the participant understood the explanation.

______________________________________ ____________
Signature of Investigator or Designee  Date


