INDIVIDUAL AND GROUP CHILD-CENTERED PLAY THERAPY: IMPACT ON SOCIAL-EMOTIONAL COMPETENCIES

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A randomized controlled trial study was conducted to test the effectiveness of 16 sessions of the modalities of individual and group child-centered play therapy (CCPT) on improving social-emotional assets, including self-regulation/responsibility, social competence, and empathy. Participants were 56 students in four urban elementary schools in north central Texas, referred by teachers for disruptive or problematic behavior: 10 female and 46 male; ages 5 to 10 years with mean age 7.12; and 21 identifying as Hispanic, 17 as White, 8 as Multiracial, 1 as Asian, and 9 unspecified. Teachers and parents completed the Social and Emotional Assets and Resilience Scale (SEARS; Merrill, 2011) at pre- and post-treatment. With a significance criterion of $p < .05$, teacher reports provided no statistically significant results. However, parent reports indicated a statistically and practically significant interaction effect with a medium to large effect size, indicating a substantial improvement in children's scores from pre- to post-test attributed to group assignment. Mean differences indicated substantial gains in overall social-emotional assets, according to Total scores, in both individual and group treatment conditions as compared to the waitlist control group. Additionally, both individual and group play therapy was correlated with significant improvement with a large effect for the constructs of self-regulation/responsibility and social competence, with the group condition having a larger effect than the individual condition. Regarding empathy, neither modality resulted in significant improvement, though individual CCPT resulted practically in a large effect. These results indicate CCPT may provide a developmentally appropriate treatment for clinicians working with children in schools and in the community to foster their social and emotional competencies.
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by

Sarah M. Blalock
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# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>v</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>vi</td>
</tr>
<tr>
<td>INDIVIDUAL AND GROUP CHILD-CENTERED PLAY THERAPY: IMPACT ON SOCIAL-EMOTIONAL COMPETENCIES</td>
<td>1</td>
</tr>
<tr>
<td>Methodology</td>
<td>12</td>
</tr>
<tr>
<td>Results</td>
<td>18</td>
</tr>
<tr>
<td>Discussion</td>
<td>24</td>
</tr>
<tr>
<td>Conclusion</td>
<td>29</td>
</tr>
<tr>
<td>References</td>
<td>29</td>
</tr>
<tr>
<td>APPENDIX A. EXTENDED REVIEW OF THE LITERATURE</td>
<td>41</td>
</tr>
<tr>
<td>APPENDIX B. DETAILED METHODOLOGY</td>
<td>63</td>
</tr>
<tr>
<td>APPENDIX C. UNABRIDGED RESULTS</td>
<td>84</td>
</tr>
<tr>
<td>APPENDIX D. EXTENDED DISCUSSION</td>
<td>98</td>
</tr>
<tr>
<td>APPENDIX E. OTHER ADDITIONAL MATERIALS</td>
<td>115</td>
</tr>
<tr>
<td>COMPREHENSIVE REFERENCE LIST</td>
<td>126</td>
</tr>
</tbody>
</table>
LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>SEARS-P Total Scores: Pre- and Post-Test Scores by Group</td>
<td>19</td>
</tr>
<tr>
<td>2</td>
<td>Paired Samples t-Test Results for SEARS –P Subscales by Group</td>
<td>21</td>
</tr>
<tr>
<td>3</td>
<td>Number of Children Scoring in the High Risk Tier</td>
<td>22</td>
</tr>
<tr>
<td>4</td>
<td>SEARS-T Total Scores: Pre- and Post-Test Scores by Group</td>
<td>23</td>
</tr>
<tr>
<td>B.1</td>
<td>Participant Demographics</td>
<td>71</td>
</tr>
<tr>
<td>B.2</td>
<td>Reliability Estimates for SEARS-P</td>
<td>74</td>
</tr>
<tr>
<td>B.3</td>
<td>Reliability Estimates for SEARS-T</td>
<td>76</td>
</tr>
<tr>
<td>C.1</td>
<td>SEARS-P Total Scores: Pre- and Post-Test Scores by Group</td>
<td>86</td>
</tr>
<tr>
<td>C.2</td>
<td>SEARS-P Total Scores: Pre- and Post-Test Scores by Group</td>
<td>89</td>
</tr>
<tr>
<td>C.3</td>
<td>Paired Samples t-Test Results for SEARS –P Subscales by Group</td>
<td>90</td>
</tr>
<tr>
<td>C.4</td>
<td>SEARS-T Total Scores: Pre- and Post-Test Scores by Group</td>
<td>92</td>
</tr>
<tr>
<td>C.5</td>
<td>Tier Scores on the SEAR-P Total Scores for Intervention and Control Groups</td>
<td>96</td>
</tr>
<tr>
<td>C.6</td>
<td>Tier Scores on the SEAR-P Total Scores for Intervention and Control Groups</td>
<td>97</td>
</tr>
</tbody>
</table>
## LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>SEARS-P Pre- &amp; Post-Test Total Score Means</td>
<td>19</td>
</tr>
<tr>
<td>Figure 2</td>
<td>SEARS-T Pre- &amp; Post-Test Means</td>
<td>24</td>
</tr>
<tr>
<td>Figure A.1</td>
<td>Proposed theory: How impairment change occurs in CCPT</td>
<td>51</td>
</tr>
<tr>
<td>Figure A.1</td>
<td>Proposed theory: How impairment change occurs in CCPT</td>
<td>51</td>
</tr>
<tr>
<td>Figure C.1</td>
<td>SEARS-P Pre- &amp; Post-Test Total Score Means</td>
<td>87</td>
</tr>
<tr>
<td>Figure C.2</td>
<td>SEARS-T Pre- &amp; Post-Test Means</td>
<td>94</td>
</tr>
</tbody>
</table>
INDIVIDUAL AND GROUP CHILD-CENTERED PLAY THERAPY: IMPACT ON SOCIAL-EMOTIONAL COMPETENCIES

Facilitating the development of children’s social-emotional assets and resiliencies is an important task for elementary school counselors. Large numbers of children exhibit mental, emotional, and behavioral disorders. According to the Center for School Mental Heath (CSMH, 2012), up to 20% of children and adolescents exhibit such disorders each year. However, most of these children--about 70%--do not receive treatment. Of the children who do, 70-80% receive treatment in schools (CSMH, 2012). Additionally, whereas about 96% of children who receive services in schools follow through with treatment, only 13% of children who receive services through community mental health centers follow through (CSMH, 2012), indicating a need for in-school mental health treatment. School mental health providers are overwhelmed and in need of resources to meet students’ social-emotional needs.

School counselors are charged with both facilitating children’s emotional and social competence and with bullying and violence prevention (American School Counselor Association, 2012; Erford, 2015). These two tasks appear to be related. Lack of the social-emotional assets of empathy, self-regulation, and social competence appear to be factors in violence and aggression. Relatedly, the presence of these assets appears to protect children against the commission of violence. (Bandura, Bararanelli, Caprara, Pastorelli, 1996; Caprara & Zimbardo, 1996; Caspi, Moffitt, and Silva, 1995; Deluty, 1981; Dodge, Coie, & Lynam, 2006; Dodge, Murphy, & Buchsbaum, 1984; Eisenberg, Fabes, & Spinrad, 2006; Garner & Hinton, 2010; Hare, 2003 in Dodge et al., 2006; Gouze, 1987; Henry, Caspi, Moffitt, and Silva, 1996; Ladd & Oden, 1979; Lemerise & Arsenio, 2000; Lengua, West, & Sandler, 1988; Loeber, Trembly, Gagnon, & Charlebois, 1989; Mitsopoulou & Giovazolias, 2015; Mofitt and Caspi,
Bullying and school violence impact feelings of safety, absenteeism, and academic achievement; they can result in violence and even death (Centers for Disease Control and Prevention, 2013).

Problems with bullying and aggression are not limited to secondary schools and impact elementary children as well. Social and emotional deficits are evident at an early age, are likely to worsen without treatment (Costello, Angold, & Keeler, 1999; Dodge et al., 2006), and result in difficulties with aggression, relationships, academics, violence, and criminality. Treating children with lack of adequate social-emotional competencies, such as empathy, self-regulation, and social competence, is preferable to delaying treatment until adolescence or adulthood when problematic behaviors, legal issues, academic concerns, and substance abuse problems are likely to have already significantly affected their lives and the lives of others. Therefore, elementary school counselors are in a unique and critical position to identify and treat children of concern at an early age before larger problems emerge.

Social-Emotional Assets and Resiliencies

Currently, researchers are finding increasing evidence supporting a holistic view of child mental health that takes into account both disorder and wellness (Merrill, 2011), indicating a need to focus on childhood social-emotional competencies and resiliencies as well as childhood disorder. According to Merrill (2010), social and emotional assets and resiliencies are “a set of adaptive characteristics that are important for success at school, with peers, and in the outside world. They include facets such as friendship skills, empathy, interpersonal skills, social support, problem solving, emotional competence, social maturity, self-concept, self-management, social independence, cognitive strategies, and resilience” (p. 3).
Recent theory and research indicate the development of the social-emotional assets of empathy, self-regulation, and social competence may protect children against overall functional impairment (Cheng, 2015; Ray, Stulmaker, Lee, & Silverman, 2013; Stulmaker, Ray, Schottelkorb, & Lee, unpublished). Children’s impaired ability to function appropriately can be problematic to teachers, caregivers, peers, and the children themselves. Functional impairment refers to the inability of a child to function in a developmentally expected manner. It includes child behaviors that are problematic to adult authority figures, such as withdrawal, refusal to participate, having poor relationships with adults in authority, having poor relationships with peers, not achieving academically, engaging in criminal activity, or engaging in violence (Ray et al., 2013). Functional impairment is the reason most adults seek mental health services for children (Angold, Costello, Farmer, Burns, & Erkanli, 1999; Ray et al., 2013)

*Interventions for Treating Lack of Social and Emotional Competencies*

Several models of intervention for young children exist. Some models focus on working with parents or teachers (Dodge et al., 2006; Webster-Stratton & Hammond, 1997). For example, Child-Parent Relationship Training (CPRT; Bratton, Landreth, Kellum, & Blackard, 2006), Child-Teacher Relationship Training (Helker & Ray, 2009; Morrison & Bratton, 2011), and the Child Development Project (CDP; Eisenberg, Fabes, & Spinrad, 2006) are well-researched and effective interventions (Eisenberg et al. 2006; Morrison & Bratton, 2011), focused on treating children’s social and emotional problems. Unfortunately, although parent and teacher programs are effective, they are not usually practical and, therefore, not adequate. The reality is that parents or teachers of children with social-emotional deficits may not always be willing or able to avail themselves of treatment on behalf of their children or students (Dodge et al., 2006). According to Eisenberg et al. (2006), the variation in teachers and the application of
programs to varied or large populations sometimes limits the success of these programs. Also, it is my experience that school environments do not always support teachers taking time and energy away from their other myriad duties to gain or use such training. Convincing parents and teachers to take time away from their already busy lives to begin--no less complete--weeks of training and intervention tends to be an uphill battle. Therefore, interventions working directly with children may be more practical than interventions working with parents or teachers. By treating children in the school setting, where children are accessible 6-8 hours a day, school counselors do not have to rely on parents’ or teachers’ ability to participate (Ray, 2011).

Unlike parents and teachers, school counselors are specifically trained to treat children’s mental health problems. School counselors are charged with the responsibility to foster social-emotional competence in all children (ASCA, 2012; Dodge, et al., 2006; Garland, 2014; Schonert-Reichl, 2011; Svensson, 2013), typically through classroom guidance interventions. Although classroom interventions may be helpful to most children, these interventions may not be enough for some children who struggle with social and emotional issues. Classroom interventions typically focus on teaching pro-social behavior skills. According to one research team, interventions that target both emotions and behaviors have more impact than behavioral skills training alone (Batum & Yagmurlu, 2007). According to Eisenberg et al. (2006, p. 683), regarding school-based programs, “Most programs have involved relatively weak and short interventions that may not be adequate for some groups of children.” In short, while school based programs may benefit school children overall, some children may require more intensive intervention. Therefore, classroom or school-wide interventions may be inadequate.

Individual or group therapy addressing both social and emotional functioning may be better treatment options for children with severe deficits. Research supports individual and
group therapy as both effective and practical treatment options (Ray, Armstrong, Balkin, & Jayne, 2014).

Play Therapy

When treating young children with individual or group therapy, counselors will be most effective when they adopt developmentally appropriate interventions (Ray, 2011). Children naturally learn through play. As children’s verbal abilities are not fully developed, they are better able to communicate complicated issues through play than words. Play therapy is a counseling intervention developmentally appropriate for young children (Landreth, 2012; Ray, 2011). Child Centered Play Therapy (CCPT) is designed for use with younger children than typical interventions, making it a particularly promising intervention for primary grade students (Ray et al., 2014). Although many play therapy interventions exist, child-centered play therapy (CCPT) is the most widely used and researched approach to play therapy (Bratton, Ray, Rhine, & Jones, 2005).

Plentiful research supports the effectiveness of both individual and group CCPT with a wide-range of impairments. Bratton et al. (2005) analyzed 93 controlled studies in both group and individual play therapy. These researchers found play therapy had an overall large treatment effect of .80 standard deviation. They also found evidence that humanistic play therapy was more effective than non-humanistic play therapy, lending further support to the CCPT approach. Bratton et al.’s (2005) results were consistent with LeBlanc and Ritchie (2001) who reported an overall moderate effect size (.66 standard deviation) in their earlier play therapy meta-analysis. In 2013, Lin and Bratton conducted another meta-analysis of current play therapy research studies using child-centered approaches. They analyzed 53 published and unpublished controlled outcome studies conducted from 1995-2010. Using hierarchical linear modeling
techniques, the authors estimated CCPT treatment yielded a statistically significant and moderate
effect size of .47. Ray, et al. (2014) conducted a meta-analysis on 23 school-based studies
carried out between 1970 and 2011 evaluating CCPT effectiveness. These researchers found
statistically significant results for several outcome constructs: externalizing problems,
internalizing problems, total problems, self-efficacy, academic problems, and problems with
other behaviors, with Cohen’s $d$ effect sizes ranging from .21-.38 (small to small/medium). Ray
et al. (2014) concluded that “CCPT may produce effects in externalizing problem behaviors and
academic gains beyond those interventions typically accepted in schools, such as solution-
focused therapy” (p. 121). Meta-analyses indicate CCPT is an effective treatment for a variety
of student issues in the natural setting of the elementary school. Neither LeBlanc and Richie
(2001), Bratton et al. (2005), Lin and Bratton (2013), nor Ray et al. (2014) reported differences
between the effectiveness of group and individual play therapy treatments.

Researchers have found support that CCPT is not only effective with specific diagnoses
but also with overall child functional impairment – the impact a child’s symptoms have on the
child and people in contact with the child (Angold et al., 1999; Ray et al., 2013). This finding is
important because elementary school children who are referred to treatment often do not have
specific diagnoses (Angold et al., 1999). Thus, it appears appropriate for counselors to treat
children’s overall impairment (Angold et al., 1999; Ray et al., 2013).

Ray et al. (2013) reported CCPT appeared to be effective in treating childhood overall
functional impairment. The researchers developed a theoretical model examining the
relationship of CCPT with empathy, self-regulation, and overall functional impairment in
children. According to this model, CCPT specifically facilitates the development of empathy
and self-regulation, which serves to protect the child against functional impairment (Ray et al.,
In phase one of the study, 37 children in kindergarten through second grade were randomly assigned to either a group receiving CCPT or a delayed-start control group. Children participating in the CCPT intervention group exhibited decreased overall impairment with a medium effect (partial $\eta^2 = .06$), whereas the children participating in the control group demonstrated either steady or increased impairment. In phase two, both groups of children participated in CCPT, and both groups demonstrated statistically significant decreases in overall impairment with a large effect -- partial $\eta^2 = .40$ for the intervention group and .27 for the control group.

*Individual Play Therapy*

Research has supported the effectiveness of CCPT in both individual and group formats. Many studies support the effectiveness of individual CCPT with a myriad of childhood issues (Baggerly, Ray, & Bratton, 2010; Bratton et al., 2005; Ray & Bratton, 2010). Several researchers found child-centered individual play therapy (CCIPT) to be effective, specifically, with disruptive and aggressive behaviors in elementary school children – the population targeted in the current study (Fall, Navelski, & Welch, 2002; Garza & Bratton, 2005; Bratton et al., 2013; Ray, Blanco, Sullivan, & Holliman, 2009; Ray, Schottelkorb, & Tsai, 2007; Schumann, 2010).

As regards overall social and emotional competencies, consisting of the constructs of empathy, self-regulation, and social competence, only one recent research study targeted the impact of child-centered individual play therapy (CCIPT) on empathy (Stulmaker, Ray, Schottelkorb, & Lee, unpublished). In this study, 52 kindergarten to second grade children identified with empathy impairment demonstrated a statistically significant improvement in empathy scores at post-test after receiving CCIPT, as compared to pre-test, according to teacher report ($t_{[43]} = -3.26, p < .01$).
Stulmaker, Ray, Schottelkorb, & Lee, unpublished) found CCIPT was also correlated with a statistically significant increase in self-regulation scores, according to teacher report ($t_{42} = -2.99, p < .01$). In addition to Stulmaker et al. (unpublished), Muro, Ray, Schottelkorb, Smith, & Blanco (2006), Perez (1988), and Ray et al. (2007) investigated the impact of CCIPT on self-regulation (Ray & Bratton, 2010). CCIPT was related to decreased ADHD characteristics (Muro, et al., 2006), decreased emotional lability (Ray, et al., 2007), and increased self-mastery (Perez, 1988).

Ray and Bratton (2010) reviewed 25 research studies conducted on the effectiveness of individual and group play therapy from 2000-2009. Although no researchers reported in Ray and Bratton (2010) specifically used the words “social competence,” one study (Fall, Navelski, & Welch; 2002) reported CCIPT was related to reductions in social problems.

**Group Play Therapy**

As in CCPT with individuals, research also supports the effectiveness of child-centered group play therapy (CCGPT) with a multitude of childhood behavioral and emotional concerns (Bratton et al, 2005; Ray & Bratton, 2010; Sweeney, Baggerly, & Ray, 2014). Sweeney et al. (2014) reviewed the 32 group play therapy research studies conducted from 1940-2011 that used a pre-test/post-test design with randomized experimental and control groups. The majority of these studies – 23 – were conducted from 1947-1988. Sweeney et al., (2014) reported no studies conducted in the 13 years between 1988 and 2001. Sweeney et al. reported 9 recent CCGPT studies from 2001- 2011, indicating resurgence in interest in CCGPT. Although most early studies focused on the relationship between CCGPT and intelligence (Sweeney et al., 2014), several recent CCGPT researchers found support for the efficacy of CCGPT for children’s externalizing or disruptive behavior problems – the population targeted in the current study.

Similar to CCIPT, only two very recent CCGPT researchers have focused on the constructs of empathy, self-regulation, and social competence. As regards empathy, recent CCGPT research has had contradictory results. In a pilot outcome study of CCGPT using pre- and post-tests with 27 participants (Ray, Wilson, Taylor, Ener, & Godwin, 2015), researchers reported a statistically significant increase in self-regulation \( (p < .001, \eta^2 = .39) \) but not empathy \( (p = .95, \eta^2 < .01) \), according to teacher report. On the other hand, another study of CCGPT (Cheng, 2015), a randomized controlled trial with 43 kindergarten participants, reported a statistically significant increase in empathy \( (F [1.439, 51.79] = 4.592, p < .05, \eta^2 = .106) \) but not self-regulation \( (F [1.868, 67.248] = 1.776, p = .179, \eta^2 = .043) \). Therefore, research results on the relationship between CCGPT and empathy are currently ambiguous.

Of all 32 studies reviewed by Sweeney et al. (2014), two targeted self-regulation. Trostle (1988) found CCGPT was related to an increase of self-control and Perez (1988) found CCGPT was related to increased self-mastery.

According to Sweeney et al. (2014), several CCGPT researchers examined issues related to social competence from 1940-2010. CCGPT was related to gains in social maturity (Pelham, 1972), social position (Thombs & Muro, 1973), acceptance of others (Trostle, 1988), social adjustment when interacting with emotional disturbance (Elliott & Pumfrey, 1972), and social functioning (Newcomer & Morrison, 1974). In their pilot study, Ray et al. correlated CCGPT with moderately improved social competence \( (p = .087, \eta^2 = .11) \). Cheng’s randomized controlled trial found statistically significant improvement in social competence scores \( (F [1.696, 61.049] = 3.413, p < .05) \) with a medium effect size \( (\eta^2 = .079) \).
Comparison of CCIPT and CCGPT

Although research support exists for both CCIPT and CCGPT, very few studies have compared the effectiveness of nondirective CCIPT and CCGPT. Researchers have conducted four studies comparing CCIPT and CCGPT, but the results of these studies were mixed and inconclusive. Three researchers reported no difference in the effectiveness of CCIPT and CCGPT (Pelham, 1971; Perez, 1988; Tyndall-Lind et al., 2001), and one researcher reported CCIPT was more effective than CCGPT (Rennie, 2003). Some design limitations were apparent. Only one study utilized randomization (Pelham, 1971), but unfortunately no instruments with proven reliability and validity were available at the time (Pelham, 1971). Perez (1988) used rigorous design overall, but did not assign participants randomly, casting doubt on the equality of the three groups. Two studies (Rennie, 2003; Tyndall-Lind et al., 2001) compared participants from two different non-simultaneous studies. Rennie compared her sample of 14 kindergarten children receiving CCIPT with an earlier sample from McGuire’s (1999) study of 15 kindergarten children receiving CCGPT. Similarly, Tyndall-Lind et al. (2001) compared 10 children in sibling groups with participants from another study in which 11 children received CCIPT and 11 children were wait-listed (Kot, 1995). Additionally, Tyndall-Lind et al. (2001) investigated specifically sibling groups, and their findings may not be applicable to non-sibling groups. Only one of these studies was published (Tyndall-Lind et al., 2001), whereas the other three were doctoral dissertation studies (Pelham, 1971; Perez, 1988; Rennie, 2003). Furthermore, the most recent of these four studies was conducted 13 years ago, indicating the need for a more current study. To date, no study comparing CCIPT and CCGPT has specifically investigated the social-emotional assets of empathy, self-regulation, and social competence.
Regarding the decision to use CCIPT or CCGPT in school counseling, the standard recommendation is that group play therapy is preferable to individual play therapy with children’s social issues (Sweeney et al., 2014; Sweeney & Homeyer, 1999). School counselors tend to treat children in groups both for efficiency of service provision and because theory indicates group therapy is preferable for children with relational/behavioral problems (Sweeney et al., 2014). However, no research currently exists to support this recommendation, and two recent studies shed doubt on this theory (Ray et al., 2005, Cheng, 2015). Although Stulmaker et al. (unpublished) indicated CCIPT is effective with both empathy and self-regulation, Ray et al. (2015) and Cheng (2015) had contradictory results regarding the effectiveness of CCGPT on empathy and self-regulation. If, indeed, CCGPT is not as effective as CCIPT in treating empathy and self-regulation deficits, school counselors might choose to treat students with such deficits with CCIPT. Results from the current study could help inform school counselors, and all counselors, on the effective treatment of deficits in empathy, self-regulation, and social competence. In keeping with the positive and holistic philosophy of child-centered play therapy, in the current study, I investigated the effect of CCPT on children’s overall social and emotional competencies.

Purpose

The purpose of this randomized controlled trial was to test the comparative effectiveness of CCIPT and CCGPT for improving social and emotional assets and resiliencies. Specifically, the research questions were: (a) Do children who participate in CCIPT and CCGPT improve in overall social-emotional assets (i.e., Self-Regulation/Responsibility, Social Competence, and Empathy) over children who do not participate in CCPT as measured by parents? (b) Do children who participate in CCIPT and CCGPT improve in overall social-emotional assets (i.e.,
Self-Regulation, Responsibility, Social Competence, and Empathy) over children who do not participate in CCPT as measured by teachers? This study is the next logical step in the research.

Methodology

Participants

Participants were 58 children recruited from four Title 1 elementary schools --schools with large concentrations of low-income students-- in a southwestern state. Inclusion criteria were that: (a) teachers, parents, or the school counselor referred children who were exhibiting problematic or disruptive behaviors, including difficulty with empathy, self-regulation, and peer relationships; (b) children were at least 5 years old and in Grades K-4; (c) parents and teachers were willing to complete instruments; (d) participants did not receive play therapy or counseling from another source during the study; and (e) children understood and spoke English. In a priori power analysis using repeated measures within-between ANOVA, a medium effect size of .25, a probability of .05, power of .80, 3 groups, and 2 measures, G Power indicated a needed total sample size of 42 participants or 14 in each group, indicating the current study had an adequate number of participants.

Of the 58 participants, 14 were enrolled in kindergarten, 11 in first grade, 11 in second grade, 7 in third grade, and 13 in fourth grade. At the beginning of the study, 11 participants were 5 years old, 12 participants were 6 years old, 11 participants were 7 years old, 7 participants were 8 years old, 12 participants were 9 years old, and 3 participants were 10 years old. Most participants were male (46), and 10 were female. One participant identified as Asian, 17 identified as White, 21 identified as Hispanic, 8 identified as multiracial, and 9 did not identify an ethnicity. As the current study was one of three components of a larger study, no African
American children participated but, instead, participated in a co-occurring study on the impact of CCPT on African American children.

*Instruments*

The Social and Emotional Assets and Resilience Scale (SEARS; Merrell, 2011) is a strength–based assessment tool measuring social and emotional competencies of children aged 5-18. The SEARS is a self-administered assessment, using a four-point rating scale: 0=Never, 1=Sometimes, 2=Often, and 3=Always. Higher scores indicate higher levels of perceived functioning (Merrell, 2011).

The SEARS uses a 3 Tier rating system, and score interpretation involves placement of scores into one of three Tiers. Tier 1 indicates “Average to High” (p. 34) functioning and includes children scoring from the 21st to the 99th percentile. Children in Tier 1 appear to be functioning within the “normal” range and probably do not have need of intervention. Tier 2 indicates “At Risk” (p. 34) functioning. Tier 2 includes children scoring from the 6th to the 20th percentile, which is approximately one standard deviation below the mean. Children scoring in this range may have “emerging social-emotional deficits” (p. 35) and may benefit from intervention. Tier 3 indicates “High Risk” (p. 35) functioning. About 5% of children score in the Tier 3 range, indicating a high risk for serious impairment and a probable need for intervention (Merrill, 2011).

Validity measures indicate the SEARS is effective and useful. In order to ensure face validity, researchers used a nine-step procedure to develop test questions. A panel of experts validated the content and performed a readability analysis (Merrell, 2011). Researchers used factor analysis to support content validity. Intercorrelations among factors was moderate, ranging from .50 -.55. Fit indices, chi-square, the comparative index, the root mean square error
of approximation, and the standardized root mean square residual indicated good model fit. Additionally, researchers did analysis between SEARS scores and other strength-based social-emotional measures to ensure the SEARS accurately measures the intended constructs (Merrell, 2011). For the purpose of this study, I used both the SEARS-Parent and SEARS-Teacher to get a holistic perspective on each child, gaining two different perspectives from different environments (Merrill, 2011).

*Social Emotional Assets and Resilience Scale – Parent (SEARS-P)*

The SEARS-P is intended to gain the parent’s perspective of the child at home and in the community. It consists of 39 items and provides four scores: Total score and three subscales scores including the Self-Regulation/Responsibility (SR/R) subscale consisting of 22 items, the Social-Competence (SC) subscale consisting of 10 items, and the Empathy (E) subscale consisting of 7 items. Total raw scores range from 0-117. Raw scores below 58 indicate children are “at risk” and below 44 indicate children are at “high risk” (Merrell, 2011).

The SEARS-P has strong psychometric properties. Cronbach’s alpha coefficients range from .87 -.98 for the three scales and total score. Test-retest reliability coefficients are strong (ranging from .88-.93). To confirm convergent validity, researchers compared the SEARS-P with two strength-based assessments that had strong psychometric properties, were standardized, and were widely used: the SSRS-parent rating form (Gresham & Elliott, 1990) and the Home and Community Social Behavior Scales (HCSBS; Merrell & Caldarella, 2002). The Pearson product-moment correlations between the SEARS-T and the SSRS social skills scale (parent version) were statistically significantly positive, with coefficients ranging from .22-.75 with a correlation between total scores of .74. The Pearson product-moment correlation between the SEARS-T and the HCSBS was also statistically significantly positive, with coefficients ranging
from .38 to .87 with a correlation between total scores of .87 (Merrell, 2011). For the current study, Cronbach’s alpha for the total scale was .96 for the SEARS-P.

*Social Emotional Assets and Resilience Scale –Teacher (SEARS-T)*

The SEARS-T is intended to gain the teacher’s perspective of the child at school. It consists of 41 items and provides five scores: Total score and four subscales scores including the Self-Regulation (SR) subscale consisting of 13 items, the Social-Competence (SC) subscale consisting of 12 items, the Empathy (E) subscale consisting of 6 items, and the Responsibility (R) subscale consisting of 10 items. Total raw scores range from 0-123. Total raw scores below 48 indicate children who are “at risk” and below 28 indicate children who are at “high risk” (Merrell, 2011).

The SEARS-T has strong psychometric properties. Cronbach’s alpha coefficients are high and range from .91-.98 for the four scales and total score. Test-retest reliability coefficients are strong (ranging from .84-.94). To confirm convergent validity, researchers compared the SEARS-T with two strength-based assessments that are standardized, widely used, and have strong psychometric properties: the Social Skills Rating System (SSRS; Gresham & Elliott, 1990) and the School Social Behavior Scales (SSBA-2; Merrell, 2002). The Pearson product-moment correlations between the SEARS-T and the SSRS (teacher version) were statistically significantly positive, with coefficients ranging from .39-.82, a median of .70, and a correlation between total scores of .82. The Pearson product-moment correlation between the SEARS-T and the SSBS-2 Peer Relations scale was positive as well, with coefficients ranging from .76-.90, with a median of .80 (Merrell, 2011). For the current study, Cronbach’s alpha for the total scale was .94 for the SEARS-T.
Procedures

I received approval from the University of North Texas Institutional Review Board and from participating school districts prior to recruitment. I recruited participants by talking to administrators, teachers, school counselors, and parents in person. Additionally, I sent a recruitment letter to all teachers in the four selected schools, informing them of the study and asking them to refer children with disruptive or problematic behaviors to the school counselor. Once a participant was referred, I contacted parents/guardians through information letters regarding the study, and I collected parent and teacher permission forms and pre-test assessments. In accordance with randomized and controlled trial procedures, participants were stratified first by school and then were randomly assigned into one of three groups: (a) CCIPT treatment group, (b) CCGPT treatment group, and (c) waitlist control group. I placed children participating in CCGPT in two-person CCGPT groups, pairing children who were within 12 months of age, according to best practice (Sweeney et al., 2014).

Children in both the CCIPT and CCGPT groups participated in bi-weekly 30-minute sessions of CCPT for eight weeks, for a total of 16 sessions. Therapists provided treatment in accordance with the protocol outlined in the CCPT treatment manual (Ray, 2011), with modifications enacted as necessary and appropriate for CCGPT. In accordance with client-centered principles, therapists sought to be non-directive, genuine, non-judgmental, and empathetic. Therapists created a safe, warm, and permissive therapeutic environment. Therapists used responses such as tracking, reflection of content, reflection of feeling, reflection of meaning, limit-setting, returning responsibility, and facilitation of emotional expression (Landreth, 2012; Ray, 2011). Children participated in CCPT in playrooms on their elementary school campuses. In accordance with recommendations by Ray (2011), I equipped playrooms
with developmentally appropriate toys and materials selected to encourage maximum emotional expression and communication. Toys and materials were intended to facilitate expression of nurturance, aggression, mastery, control, imagination, and creativity.

To ensure uniformity and integrity of treatment, all therapists were doctoral-level counseling students with a master’s degree in counseling and at least one year of experience in providing play therapy. All therapists had completed at least two 3-hour master’s level university courses in play therapy, including a course dedicated to CCGPT. Most therapists (six of 10) provided both group and individual sessions. To further ensure integrity and uniformity of treatment, all therapists participated in a two-hour training on the protocols for conducting CCPIT and CCGPT in schools.

All therapists participated in weekly group supervision by a faculty member with advanced experience in play therapy. Additionally, I assessed protocol adherence by randomly reviewing one session per child using the Play Therapy Skills Checklist (PTSC; Ray, 2011) when the treatment was CCIPT or using the revised Group Play Therapy Skills Checklist (GPTSC; Ray 2011) as seen in Appendix E when the treatment was CCGPT. Sessions adhered to CCPT protocol with an average of 97.53% adherence to protocol per session.

After the eight-week intervention period, parents completed the SEARS-P, and teachers completed the SEARS-T. Participants in the waitlist control group did not participate in treatment until after data collection was completed, when they received the same intervention (either CCIPT or CCGPT). Therapists used their therapeutic judgment to determine whether children on the wait list received CCIPT or CCGPT.
Results

In order to address the research question exploring the impact of CCIPT and CCGPT on children’s social and emotional assets, I conducted two mixed between-within analysis of variance (ANOVA) tests with the pre and post-test Total Scores on the SEARS-P and SEARS-T as the within-subject factor, and treatment groups (CCIPT, CCGPT, and waitlist control group) as the between-subject factor. I tested and adequately met the assumptions necessary to conduct mixed between-within ANOVA, including independence of observations, normal distribution, homogeneity of variance, and homogeneity of intercorrelations (Pallant, 2013). I set the criterion for statistical significance at $p \leq .05$ and used Cohen’s (1988) cautious thresholds for practical significance of $\eta^2$: .01 for small, .06 for medium, and .14 for large effect.

Parent Results

Results of the mixed between-within ANOVA on the Total score of the SEARS-P indicated a statistically significant interaction effect between treatment group and time, $F(2,53) = 3.15, p = .05, \eta^2 = .11$ (a moderate to large effect; Cohen, 1988). Means and standard deviations are presented in Table 1. Results indicated that, following the intervention, parents of children in CCIPT and CCGPT reported statistically significant improvement in Total Social and Emotional Competencies Scores with a medium to large effect, compared to parents of children in the waitlist group. There was also a statistically significant main effect for time, $F(1,53) = 14.34, p < .05, \eta^2 = .21$ (a large effect), suggesting an increase in social-emotional assets across the two time periods when all groups are considered. The main effect for group was not statistically significant, $F(2.53) = .87, p = .43, \eta^2 = .03$ (a small effect size). Figure 1 provides a visual depiction of the improvement in scores from pre-test to post-test for all three groups.
Table 1  *SEARS-P Total Scores: Pre- and Post-Test Scores by Group*

<table>
<thead>
<tr>
<th></th>
<th>CCIPT (n = 17)</th>
<th>CCGPT (n = 21)</th>
<th>Control (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Score</strong></td>
<td><strong>Pre-Test</strong></td>
<td><strong>Post-Test</strong></td>
<td><strong>Pre-Test</strong></td>
</tr>
<tr>
<td></td>
<td><strong>Mean</strong></td>
<td><strong>Difference</strong></td>
<td><strong>Mean</strong></td>
</tr>
<tr>
<td><strong>M</strong></td>
<td>39.41</td>
<td>43.88</td>
<td>35.76</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>7.13</td>
<td>7.94</td>
<td>8.47</td>
</tr>
</tbody>
</table>

*Note:* An increase in score indicates an improvement in social-emotional assets

Figure 1. **SEARS-P Pre- & Post-Test Total Score Means**

*Figure 1:* Means between Individual, Group, and Waitlist Control conditions over time on the SEARS-P Total Scores. Graph obtained from SPSS software output.

*Note:* An increase in score indicates an improvement in social-emotional assets
Because SEARS-P Total scores yielded a statistically significant interaction effect, further analysis was conducted on SEARS-P scores to specifically examine the differences in the subscales comprising the Total score. In order to explore differences between groups, I conducted post hoc pairwise comparisons using paired sample t-tests, analyzing the mean differences between pre and post test scores for the Self-Regulation/Responsibility, Social Competence, and Empathy subscales based on group assignment. The following results should be interpreted with caution due to the number of analyses.

For Self-Regulation/Responsibility, t-test results indicated statistically significant improvements with large effects between pre- and post-testing for the CCIPT and CCGPT conditions. The CCIPT condition yielded a result of \( t(16) = -2.25, p = .04, \eta^2 = .24 \). However, the largest effect for Self-Regulation/Responsibility appeared to be for the CCGPT condition \( (t[20] = -3.89, p = .001, \eta^2 = .43) \). Although improvement was not statistically significant for the waitlist control group, results yielded a small to medium effect size on Self-Regulation/Responsibility: \( (t[17] = -.97, p = .35, \eta^2 = .05) \). For Social Competence, the results denoted statistically significant improvement with large effects between pre- and post-testing for the CCIPT \( (t[16] = -.2.2, p = .04, \eta^2 = .23) \) and CCGPT \( (t[20] = -2.18, p = .04, \eta^2 = .19) \) conditions. The CCIPT condition resulted in a slightly larger effect than the CCGPT condition. No statistically significant difference was found for the waitlist control group for Social Competence, and there was a small effect \( (t[17] = .55, p = .59, \eta^2 = .02) \). For the Empathy subscale, results indicated no statistically significant improvements or observable effects for the CCGPT \( (t[20] = .22, p = .83, \eta^2 = .002) \) and waitlist control \( (t[17] = .36, p = .73, \eta^2 = .73) \) conditions. Although the results for the CCIPT condition did not reach statistical significance,
effect size indicated that participants in CCIPT demonstrated improvement with large effect ($t[16] = -1.5, p = .14, \eta^2 = .13$).

Table 2

_Paired Samples t-Test Results for SEARS –P Subscales by Group_

<table>
<thead>
<tr>
<th></th>
<th>$t$</th>
<th>$df$</th>
<th>Sig. (2-tailed)</th>
<th>$\eta^2$</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Regulation/Responsibility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCIPT</td>
<td>-2.25</td>
<td>16</td>
<td>.04*</td>
<td>.24</td>
</tr>
<tr>
<td>CCGPT</td>
<td>-3.89</td>
<td>20</td>
<td>.001*</td>
<td>.43</td>
</tr>
<tr>
<td>Waitlist Control</td>
<td>-.97</td>
<td>17</td>
<td>.35</td>
<td>.05</td>
</tr>
<tr>
<td><strong>Social Competence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCIPT</td>
<td>-2.20</td>
<td>16</td>
<td>.04*</td>
<td>.23</td>
</tr>
<tr>
<td>CCGPT</td>
<td>-2.18</td>
<td>20</td>
<td>.04*</td>
<td>.19</td>
</tr>
<tr>
<td>Waitlist Control</td>
<td>.55</td>
<td>17</td>
<td>.59</td>
<td>.02</td>
</tr>
<tr>
<td><strong>Empathy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCIPT</td>
<td>-1.54</td>
<td>16</td>
<td>.14</td>
<td>.13</td>
</tr>
<tr>
<td>CCGPT</td>
<td>.22</td>
<td>20</td>
<td>.83</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Waitlist Control</td>
<td>.36</td>
<td>17</td>
<td>.73</td>
<td>.01</td>
</tr>
</tbody>
</table>

*Note: An increase in score indicates an improvement in social-emotional assets.  
*p < .05

In terms of clinical significance, parents of children in the CCIPT and CCGPT groups noted more improvement than parents of children in the waitlist group. Specifically, the number of children in the High Risk category decreased by 50% for children in CCIPT and CCGPT, as compared to 16.6% of children in the waitlist group. Table 3 presents the number of children scoring in the High Risk Tier level for the intervention group (both CCIPT and CCGPT) and control group at pre-test and post-test.
Table 3

*Number of Children Scoring in the High Risk Tier for Intervention and Control Groups*

<table>
<thead>
<tr>
<th>Tier</th>
<th>Intervention Group</th>
<th>Waitlist Control Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Post-Test</td>
</tr>
<tr>
<td></td>
<td>(n = 38)</td>
<td>(n = 38)</td>
</tr>
<tr>
<td>High-Risk</td>
<td>16</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

*Note:* SEARS software converted scores based upon participants’ raw score, T-score, and percentile.

*Teacher Results*

Results of the mixed between-within ANOVA on the Total score of the SEARS-T indicated no statistically significant interaction between treatment group and time, $F(2,52) = .76$, $p = .47$, $\eta^2 = .03$ (a small effect). Results indicated that teachers did not report statistically significant improvement after intervention for children in the CCIPT and CCGPT group as compared to children in the waitlist control group. The small effect size indicated only a small practical difference attributed to group assignment. As indicated by Table 4, teachers’ scores for children in CCGPT improved more (an average of 3.43 points) than teachers’ scores for children in the CCIPT and waitlist control group (an average of 1.87 and 1.34 points, respectively), but this difference was not large enough to be statistically significant. There was, however, a statistically significant main effect for time $F(1,52) = 8.71$, $p = .005$, $\eta^2 = .14$ (a large effect), suggesting teachers reported an increase in social-emotional assets across the two time periods for children in all three groups. The main effect for group was not statistically significant, $F(2,52) = 2.02$, $p = .14$, $\eta^2 = .07$ (a moderate effect size).
Table 4 presents pre- and post-test SEARS-P Total score means and standard deviations for the individual, group, and control conditions. Table 4 also presents the difference in means between pre- and post-test for the individual, group, and control conditions.

Table 4

SEARS-T Total Scores: Pre- and Post-Test Scores by Group

<table>
<thead>
<tr>
<th></th>
<th>CCIPT (n = 16)</th>
<th>CCGPT (n = 21)</th>
<th>Control (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Test</td>
<td>41.44</td>
<td>36.14</td>
<td>37.22</td>
</tr>
<tr>
<td>Post-Test</td>
<td>43.31</td>
<td>39.57</td>
<td>38.56</td>
</tr>
<tr>
<td>Mean Difference</td>
<td><strong>1.87</strong></td>
<td><strong>3.43</strong></td>
<td><strong>1.34</strong></td>
</tr>
<tr>
<td>SD</td>
<td>8.99</td>
<td>8.46</td>
<td>6.32</td>
</tr>
<tr>
<td></td>
<td>8.72</td>
<td>8.38</td>
<td>7.04</td>
</tr>
<tr>
<td></td>
<td>6.22</td>
<td>5.97</td>
<td>4.16</td>
</tr>
</tbody>
</table>

*Note: An increase in score indicates an improvement in social-emotional assets*

Figure 2 provides a visual depiction of the improvement in scores from pre-test to post-test for all three groups. Given that the ANOVA found no statistically significant difference with small effect between the individual, group, and control conditions, no further investigation was conducted.
Discussion

Parents of children in CCIPT and CCGPT reported significantly greater improvement in overall social-emotional competencies compared to parents of children in the waitlist group. Parents of children in CCIPT and CCGPT reported significantly greater improvement in self-regulation and responsibility when compared to parents of children in the waitlist group, with
parents of children in CCGPT reporting the largest improvement. Parents of children in CCIPT and CCGPT reported significantly greater improvement in social competence when compared to parents in the waitlist group. Parents of children in the CCIPT group reported improvement in empathy, when compared to parents in the CCGPT and waitlist groups. Teachers of children in CCIPT and CCGPT did not report statistically significant improvement in overall social-emotional competencies compared to teachers of children in the waitlist group.

*Parent Perceptions*

Parents of children in CCIPT and CCGPT reported statistically, practically, and clinically significant improvement with medium to large effect in overall social and emotional competencies when compared to parents of children in the waitlist group, indicating the positive impact of school-based CCPT with elementary students who display emerging or serious impairment in social-emotional development. The findings indicate that both CCIPT and CCGPT may be viable interventions for facilitating children’s social-emotional development.

Parents of children in CCIPT and CCGPT reported statistically significant improvement in Self-regulation/Responsibility subscale scores with a large practical effect, compared to parents of children in the waitlist group. These results indicate both CCGPT and CCIPT are effective for the development of self-regulation/responsibility.

Parents of children in CCIPT and CCGPT reported statistically significant improvement in Social Competence subscale scores with a large practical effect when compared to parents of children on the waitlist. These results indicate that either CCGPT or CCIPT is effective for treating social competence.

Parents of children in all three groups reported no statistically significant improvement in Empathy subscale scores. However, results from the individual condition yielded a large effect,
indicating CCIPT demonstrated practical effectiveness in facilitating empathy growth. According to these results, CCGPT appeared to have little to no effect on empathy.

Several possible explanations exist for the lack of results for development of empathy in the group condition. Children in a group condition may not receive as much empathy as they would in an individual condition as the therapist is focusing on more than one child. In a group condition including one or two aggressive participants, the children may not receive much empathy from each other. Empathy may be more difficult to impact with therapy than other constructs, and may require more long-term therapy, as indicated by Cheng (2015). Just as internalizing behaviors are harder to observe or measure than externalizing behaviors, empathy may be harder to observe or measure than either self-regulation/responsibility or social competence. Additionally, the Empathy subscale may be less sensitive than the Self-Regulation/Responsibility subscale as the Empathy subscale consists of one-third the number of items. In the present study, it appears that CCIPT shows promise for development of empathy, but results continue to be contradictory regarding CCGPT (Cheng, 2015; Ray et al., 2015).

Teacher Perceptions

According to teachers, all three groups of children improved from pre- to post-test. Unlike parents, however, teachers of children in CCIPT and CCGPT did not report statistically significant improvement when compared to teachers of children in the waitlist group on overall social-emotional assets. Both the control and CCIPT groups improved an average of 1.3 points per participant, whereas participants in CCGPT improved 3.9 points on average--3 times the amount of improvement in either CCIPT or control groups, but not large enough to result in statistical significance.
Lack of statistically significant results based on teacher reports is consistent with previous research (Cheng, 2015; Garza & Bratton, 2005). This finding may be due, in part, to failure to provide a controlled environment for teacher evaluation (Cheng, 2015; Garza & Bratton, 2005). Results also may have been affected by factors relating to the time of year (Cheng, 2015; Garza & Bratton, 2005; Helker & Ray, 2009), specifically asking teachers to complete pre-testing before they have had time to know children well, and asking teachers to complete post-testing during the holiday season when they are busy, schedules are disrupted, and children are distracted. Additionally, teachers may not notice some differences in student behavior, particularly internalizing behavior (Helker & Ray, 2009). Additionally, the SEARS-T may not be a sensitive enough instrument for measurement of teacher perceptions.

Limitations and Recommendations

Some limitations in the current study existed: (a) I selected participants from a convenience sample in local area schools, limiting generalizability (b) parent and teacher knowledge of whether or not a child was receiving treatment, could have possibly resulted in rater bias or placebo effect (Bryman, 2008; Rubin & Bellamy, 2012) (c) because I used two forms of the same measurement, the possibility of mono-methods bias constituted a threat to construct validity (Trochim, 2006) (d) the current study lacked African American participants, due all African American children participating in a separate part of the larger study.

Recommendations for future research include: (a) replicating the current study with the inclusion of African American participants (b) comparing CCIPT and CCGPT to an already existing evidence-based treatment rather than a control group (c) using a second measurement instrument in addition to the SEARS (d) using school counselors as treatment providers (e) providing a controlled environment for teachers to complete assessments (Garza & Bratton,
2005), by providing substitute personnel to relieve teachers of class, lunch and/or recess duty, giving teachers the opportunity to complete assessments in an unhurried manner (f) providing a more thorough explanation of the rationale for pre- and post-assessment to parents and teachers (g) continuing to collect data from both teachers and parents due to the inconsistent findings between parents and teachers (h) the addition of an independent rater for a relatively unbiased observation of children (i) comparing long-term CCIPT and CCGPT which might result in even more substantial findings and (j) the development of a formal CCGPT manual as CCGPT requires different skills, training, materials, and responses than does CCIPT. Finally, the result of random assignment for this study was that children in the group condition were of various ages and grades, making it necessary to continue to recruit participants in order to find appropriate matches. Future researchers might avoid the difficulty I had in matching appropriate group members for CCGPT by utilizing a narrower age range of participants or blocking by grade when randomizing.

**Implications**

The results of the current study help to confirm the effectiveness of both CCIPT and CCGPT as viable interventions for the facilitation of children’s social and emotional competencies. Specifically, this study indicates CCIPT is effective for the development of overall social-emotional assets, including self-regulation/responsibility, social competence, and empathy; and CCGPT is effective for the development of overall social-emotional assets, including self-regulation/responsibility and social competence. This result is important for many reasons, not the least of which is that CCPT is one of few models of therapy developmentally appropriate for young children. Additionally, this study indicates the current
theory on the benefits of CCGPT may be valid, specifically with the constructs of self-regulation/responsibility and social competence.

Finally, the results of this study help to confirm the viability of CCPT (both group and individual) as an appropriate and effective treatment for use in schools. It appears it could be valuable for university programs to train school counselors in CCIPT and CCGPT. School counselors, in particular, need to become comfortable with CCGPT, as it appears effective, when appropriate, and is a more efficient use of school counselors’ time.

Conclusion

At this time, until more research is completed on the use of CCGPT with empathy, I recommend using CCIPT when treating children with obvious empathy deficits. However, it appears CCGPT would be the intervention of choice for those children needing treatment in self-regulation. Although CCIPT and CCGPT appear to be equally effective for social competence, CCGPT might be the more efficient treatment alternative.

The current study was only the second randomized controlled study to compare CCIPT and CCGPT, the last one (Pelham, 1971) having been conducted 45 years ago. Clearly, more current research is needed comparing CCIPT and CCGPT. As the current study was the first to compare CCIPT and CCGPT in the development of overall social-emotional competencies, it is important that future researchers replicate this study.

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Merrell, K. W. & Calarella (2002). *The Home and Community Social Behavior Scales (HCSBS)*


U.S. Department of Health and Human Services, Center for Disease Control and Prevention, Youth Risk Behavior Surveillance System (YRBSS), Adolescent and School Health.


APPENDIX A

EXTENDED REVIEW OF THE LITERATURE
The following review begins with a brief overview of the literature on the general effectiveness of child-centered play therapy (CCPT), the theory supporting the use of group play therapy for socio-behavioral issues in children, and the literature comparing individual child-centered play therapy (CCIPT) and group child-centered play therapy (CCGPT). Next, it includes a review of the literature regarding child functional impairment and relationship of child functional impairment to empathy, self-regulation, and social competence, as well as an exploration of the connection between CCPT and the constructs of empathy, self-regulation, and social competence. Finally, this review explores the literature on the effectiveness of both CCIPT and CCGPT in facilitating growth in social and emotional competencies, specifically empathy, self-regulation, and social competence.

This review of research literature points to this study as the logical next step in the progression of research on the topic of play therapy and overall social-emotional assets, including empathy, self-regulation, and social competence.

**General Effectiveness of Play Therapy**

Abundant research exists supporting the effectiveness of play therapy in general. Bratton and Ray (2000) reviewed both individual and group play therapy research from 1942-2000. The authors reviewed 82 experimental studies supporting the effectiveness of play therapy treatment for many issues including social maladjustment, conduct disorder, aggressive behavior, oppositional disorder, withdrawn behavior, school behavior problems, anxiety or fear, depression, learning problems, physical disabilities, academic achievement problems, emotional disturbances, self-concept, divorce, sexual abuse, trauma and PSTD, and domestic violence. The authors provided information on each study in a clear format, using charts for clarification. The authors also provided information on the limitations and strengths of various studies, enabling
the reader to evaluate the validity of each study. Although the researchers did an exhaustive search, Bratton and Ray found no studies researching empathy, highlighting the need for the current study.

Small sample size is a significant concern in counseling research in general and in play therapy research specifically. To address this problem, Bratton et al. (2005) conducted an exhaustive meta-analysis of 93 controlled play therapy outcome research studies (including both individual and group play therapy) conducted between 1953 and 2000. To control for quality, authors included only research that utilized controlled design, provided enough information to calculate effect size, and used an intervention the researchers defined as play therapy. Authors reported group versus individual therapy was not a predictor, and therefore, they were equal in effectiveness. The authors reported a moderate to large effect size for reducing internalizing behaviors, externalizing behaviors, and combined type behaviors. The authors reported a .80 standard deviation overall treatment effect for play therapy, using both individual and group conditions. Bratton et al.’s (2005) results were consistent with LeBlanc and Ritchie’s (2001) who reported an overall moderate effect size (.66 standard deviation) in their earlier play therapy meta-analysis. Again, Bratton et al. (2005) found no studies looking at the impact of play therapy on empathy.

Ray and Bratton (2010) updated their research review to include both individual and group play therapy studies conducted from 2000 to 2009. They reviewed 25 studies (not including studies on filial therapy) utilizing experimental design, a child-focused intervention (rather than a parent or teacher-focused intervention), and utilizing the term “play therapy”. All studies were either published in a peer-reviewed journal or in a book format. Ray and Bratton’s review analyzed the rigor of each study’s research design. They found most researchers focused
on externalizing and disruptive behaviors. Although moral reasoning was among the research variables, no studies looked at empathy. Studies showed positive results in all areas with the exception of sexual abuse, which showed mixed results. Ray and Bratton reported recent studies tended to be more rigorous than studies conducted before 2000 in that they identified and described treatment protocols and practitioner training. Ray and Bratton suggested future researchers use a manualized treatment protocol to further increase research rigor. Bratton and Ray (2000), Bratton et al. (2005), and Ray and Bratton (2010) analyzed both CCIPT and CCGPT studies.

In 2013, Lin and Bratton did a meta-analysis of current play therapy research studies. They analyzed 53 controlled outcome studies conducted from 1995-2010. To control for publication bias, authors included published and unpublished studies. Using hierarchical linear modeling techniques, authors estimated a statistically significant and moderate effect size of .47 for CCPT treatment. Authors also found statistically significant relationships between the magnitude of the effect size and certain study characteristics. For example, authors’ findings suggested better treatment outcome for younger children as opposed to children over age seven, for non-Caucasian children as opposed to Caucasian children, and for CCPT interventions involving caregivers as opposed to those not involving caregivers. Additionally, treatment integrity and the use of random assignment were related to larger treatment effect sizes. Not surprisingly, published studies tended to have more statistically significant results than non-published studies. In terms of presenting issue, CCPT appeared to be beneficial for various presenting issues. The effect sizes of CCPT treatment for global behavior problems, caregiver-child relationship stress, and self-efficacy were particularly strong.
Ray, Armstrong, Balkin, & Jayne (2014) conducted a meta-analysis specifically pertaining to school-based CCPT studies. The researchers analyzed 23 school-based studies evaluating CCPT effectiveness. Researchers found statistically significant results for the following outcome constructs: externalizing problems, internalizing problems, total problems, self-efficacy, academic problems, and problems with other behaviors, with Cohen’s d effect sizes ranging from .21-.38 (small to small/medium). Ray et al. (2014) suggested CCPT is an effective treatment for a variety of student issues in the natural setting of the elementary school. The researchers stated, “CCPT may produce effects in externalizing problem behaviors and academic gains beyond those interventions typically accepted in schools, such as solution-focused therapy” (Ray et al., 2014, p. 121). Additionally, unlike typical interventions, CCPT is designed for use with younger children, making it a particularly promising intervention for primary grade students. Researchers found no difference between the effectiveness of group and individual modalities.

Comparison of Individual and Group Play Therapy

Researchers have theorized group play therapy may have several advantages over individual play therapy, especially for externalizing behavior problems and social problems (Ray, 2011; Sweeney, Baggerly, & Ray, 2014). One major advantage of child centered group play therapy (CCGPT) is the therapist’s ability to observe and interact with behavior issues as they occur. In group therapy, relational issues emerge with the counselor present and able to respond. Often, children’s behavior problems do not arise in an individual play therapy session where the child does not have to share the therapist or toys, and where the absence of another child leads to less possibility of conflict. Similarly, group play therapy offers children a microcosm of the real world, where they can test new behaviors and practice responding to
limits. Many children feel more comfortable in the presence of another child and they participate more fully. They can benefit from positive interactions with their peers. They can learn from each other or discover other children have issues similar to their own, leading to increased self-esteem and sense of belonging. The work of other children can inspire them to work on their own issues. Additionally, group play therapy is a more efficient use of time for the therapist, who can treat multiple children at a time. This is especially important for school counselors who have limited time and are typically responsible for hundreds of children (Sweeney et al., 2014).

The above rationale is based on theory rather than data. Research comparing the effectiveness of child centered individual play therapy (CCIPT) to CCGPT has yet to provide support for this theory.

The following four studies provide data comparing the effectiveness of individual non-directive play therapy with group non-directive play therapy. Newcomer and Morrison (1974) also compared group and individual play therapy, but their study was not included because they used a mix of directive and nondirective play therapy, and CCPT is nondirective in nature.

Pelham conducted the first comparison research study in 1971, using a pre-post test randomized controlled design. The study included 35 kindergarten participants identified by teachers as being socially immature. Pelham randomly assigned participants to either an experimental or control condition and then non-randomly divided the experimental group into either an individual or group play therapy condition. Participants in the experimental group participated in six to eight play therapy sessions. Statistically significant results were mixed in that children in the experimental group improved to a statistically significant extent on the complexity scale of the Children’s Self-Social Constructs Tests (CSSCT), but declined on the maturity scale of the Missouri Children’s Picture Series (MCPS). However, children in either
the group play or individual play therapy treatment group improved to a statistically significant degree in the Total Adjustment Scale on the Behavior Problem Checklist (BPC), indicating teachers saw improvement in classroom adjustment in the experimental group over the control group. Pelham found no statistically significant differences between the individual and group play therapy conditions. Clinically, results indicated participation in either individual or group play therapy was related to improved classroom behavior for socially immature kindergarteners, as perceived by teachers. One limitation to Pelham’s study was the unavailability, at the time, of instruments with proven reliability and validity (Pelham, 1971). Pelham’s (1971) study was a doctoral dissertation study, rather than a published study.

In 1988, Perez compared the effectiveness of group play therapy, individual play therapy, and a control group in influencing the self-concept and self-mastery of 55 child sexual abuse victims aged four to nine. The overall design was rigorous. However, participants were pre-selected by social services, constituting a limitation of the study. Practitioner equivalence was a strength of the study in that each of the four therapists saw children in both groups and received identical training. However, researchers did not control for treatment fidelity by using independent quality control, and the study was not randomized. Control participants were chosen from a group of children who could not participate in therapy immediately. This method for selecting control participants, while being a way of ethically not delaying treatment, had the unfortunate consequence of casting doubt on the similarity of the three groups. Perez reported that group and individual play therapy were equally effective in her study. Clinically, results indicated sexually abused children’s participation in both individual and group play therapy was related to gains in children’s self-concept and self-mastery. Although Perez never published her
dissertation study, Bratton and Ray (2000) included Perez’ dissertation study in their comprehensive review of play therapy literature.

Tyndall-Lind, Landreth, and Giordano (2001) conducted the only published study comparing CCIPT and CCGPT. Additionally, the researchers specifically used the word “child-centered” when describing their approach to play therapy. The researchers compared the effectiveness of CCIPT with sibling CCGPT and a wait-list group for children who had witnessed domestic violence. The researchers compared 10 children in sibling groups with participants from another study in which 11 children received CCIPT and 11 children were wait-listed (Kot, 1995). Randomization was impossible, resulting in the possibility of non-comparable groups and the threat of history to validity. Researchers did not mention strategies to ensure practitioner equivalence or treatment fidelity. According to the researchers, the children from both individual and sibling groups improved in the following areas as compared to the control group: total behavior problems, self-concept, and externalizing behaviors. Neither individual nor sibling groups improved over the control group in the area of internalizing behaviors. Additionally, the sibling group play therapy participants improved in aggression and anxiety/depression as compared to the control group. Although researchers found no statistically significant differences between the individual and sibling group play therapy groups, they observed some differences. Researchers noted that children in the sibling group treatment tended to improve more than the individual group in the areas of total behavior problems, internalizing and externalizing behaviors, anxiety, depression, aggression, delinquency, somatic complaints, social problems, and withdrawal. On the other hand, researchers noted the individual group improved more than the sibling group in the areas of attention problems. Researchers did not report effect sizes, which would have helped the reader in determining the importance of these
differences. Researchers recommended further research to determine whether or not group play therapy was more effective than individual play therapy for social and emotional problems, as well as whether or not individual interventions are more helpful than group for attention and thought problems. Tyndall–Lind et al.’s findings are not directly applicable to research comparing group with individual play therapy unless one is using sibling groups.

Although the previous three studies comparing group and individual play therapy noted no significant differences, Rennie (2003) concluded CCIPT was more effective than CCGPT for kindergarten children with adjustment problems in the area of helping children maintain acceptable levels of classroom behavior as reported by teachers and measured by the Early Childhood Behavior Scale. Rennie found no statistically significant differences between the children receiving CCIPT and CCGPT on self-concept, self-control, filial problems, total behavior, externalizing behavior, internalizing behavior, or self-control outcomes. Additionally, Rennie found a statistically significant reduction in total behavior problems and externalizing behavior problems, as measured by the Child Behavior Checklist–Parent Form, for children in CCIPT as opposed to children in the control group. However, several threats to internal validity made Rennie’s conclusions regarding CCIPT versus CCGPT doubtful. Rennie did not randomly assign participants to groups, giving no assurance of group equivalence. Rennie compared her sample of 14 kindergarten children receiving CCIPT with an earlier sample from McGuire’s (1999) study of 15 kindergarten children receiving CCGPT. The pretest scores for participants receiving CCGPT were higher than those of the CCIPT sample. History was a threat to validity, as CCIPT took place in the fall semester, and the CCGPT took place in the following spring semester. Additionally, problematic behavior scores increased rather than decreased for children receiving both CCIPT and CCGPT, although negligibly for CCIPT and statistically significantly
for CCGPT, casting doubt on Rennie’s conclusion. Rennie’s (2003) study was a dissertation study, rather than a published study.

As stated earlier, research has not yet established the benefit of CCGPT over CCIPT for children’s social and emotional problems. However, as the next section indicates, research has established that CCPT, in general, whether group or individual, is related to benefits in social and emotional functioning.

Play Therapy Link to Empathy and Self-Regulation

Children’s inability to function appropriately can be problematic to teachers, caregivers, peers, and the children themselves. Although the presence of a diagnosis alone does not indicate poor prognosis for children, a diagnosis combined with the presence of significant impairment, does predict later severe emotional disturbance (Costello, Angold, & Keeler, 1999). Functional impairment refers to the inability of a child to function in a developmentally appropriate manner. It includes child behaviors that are problematic to adults in charge, such as withdrawal, refusal to participate, having poor relationships with adults in authority, having poor relationships with peers, not achieving academically, engaging in criminal activity, or engaging in violence (Ray, Stulmaker, Lee, & Silverman, 2013). Most adults seek mental health services for children because of functional impairment. According to Angold, Costello, Farmer, Burns, and Erkanli (1999), treatment addressing specific symptoms is less effective than treatment addressing overall functional impairment. However, most current treatments continue to address specific diagnoses (Silverman & Hindshaw, 2008) rather than overall impairment. CCPT does address overall impairment (Ray et al., 2013). In CCPT, therapists focus on the relationship and on the whole child, rather than on the impairment. Ray et al. (2013) developed a model explaining the link of CCPT to overall childhood functional impairment.
Ray et al. (2013) conducted a randomized controlled pilot study with 40 children in kindergarten through second grade experiencing high levels of overall functional impairment. Although not a statistically significant result, the researchers found children who received CCPT treatment decreased in overall impairment, with a medium level of practical significance ($\eta^2 = .06$), compared to a control group whose impairment levels remained either stable or increased. These researchers developed a theoretical model explaining how CCPT affects empathy, self-regulation, and functional impairment in children.

According to CCPT tenets, positive growth can occur in a therapeutic environment where the child receives empathy from the therapist and has the opportunity to express emotion. In CCPT, counselors’ responses fit into nine categories. These categories include reflection of feeling, reflection of content, reflection of meaning, facilitating the relationship, setting limits, returning responsibility, tracking, facilitating creative expression, and building esteem (Ray, 2011). Reflecting feeling, content, and meaning, as well as facilitating relationships specifically target empathy. Setting limits and returning responsibility specifically target self-regulation. Figure A.1 is a model explaining this theoretical process. Although theoretical (Ray, et al., 2013), the model is supported by recent research (Stulmaker et al., unpublished).

![Figure A1: Proposed theory: How impairment change occurs in CCPT](image)

Theoretically, CCPT appears to be an appropriate treatment for overall functional impairment because it encourages children’s development of empathy and self-regulation. Children’s development of empathy is related to their experiences of receiving empathy from parents, and children’s development of self-regulation is related to early experiences of parent responsiveness to meeting their needs (Lovett & Sheffied, 1997). Similarly, development of empathy, self-regulation, and social competence are related to quality of daycare or preschool (Howes & Olenick, 1986 in Eisenberg et al., 2006; Vandell, Henderson, & Wilson, 1988 in Eisenberg et al., 2006). Experiencing empathy and the ability to self-regulate protect children against impairment (Anastopoulas et al., 2011; Ezpeleta, Granado, De La Osa, & Guillamon, 2000). CCPT targets both empathy and self-regulation, which protect children against functional impairment (Ray et al., 2013).

In addition to addressing holistic dysfunction, CCPT is a developmentally appropriate choice of treatment for young children. While most childhood interventions are designed to treat children who are at least eight years of age (Silverman & Hinshaw, 2008), CCPT is designed for young children, aged 3 to 10 (Ray, 2011). If left untreated, children’s behavior problems tend to get worse over time (Angold, Costello, & Erkanli, 1999; Cunningham & Boyle, 2002; Jensen, Martin, & Cantwell, 1997). Therefore, early intervention with behavior problems is important, and CCPT is designed to treat young children.

Stulmaker et al. (unpublished) conducted a study to determine whether or not the Ray et al. (2013) model was viable. The researchers conducted a pre and post-test clinical trial study with 52 participants in grades K-2, who were identified by their teachers as struggling with empathy. Children who participated in individual CCPT demonstrated a statistically significant improvement in empathy scores at post-test after receiving CCIPT, as compared to pre-test,
according to teacher report ($t[43] = -3.26, p < .01$) and a statistically significant increase in self-regulation scores, according to teacher report ($t[42] = -2.99, p < .01$). The results of this study indicated higher empathy and self-regulation scores were correlated with lower impairment scores, thus supporting the theoretical model proposed by Ray et al. (2013). Researchers proposed deficits in empathy and self-regulation are related to overall childhood impairment. They suggested CCIPT was an appropriate and effective treatment for working with children’s levels of empathy and self-regulation, resulting in decreased overall impairment.

Although Ray et al.’s (2013) model does not include the construct of social competence; overall impairment necessarily includes the area of social relationships. Children with functional impairment often have difficulty in relationships with adults and peers (Ray et al., 2013).

Individual Play Therapy Research Related to Social and Emotional Assets

Many studies support the effectiveness of CCIPT with a myriad of childhood issues (Baggerly, Ray, & Bratton, 2010; Bratton et al, 2005; Ray & Bratton, 2010). Because the current study specifically targeted participants with aggressive, disruptive, or problematic behaviors, it is important to mention CCIPT research related to aggression and disruption. Several researchers found CCIPT to be effective specifically with disruptive and aggressive behaviors in elementary school children (Garza & Bratton, 2005; Bratton et al., 2013; Ray, Blanco, Sullivan, & Holliman, 2009; Schumann, 2010). Garza & Bratton (2005) conducted a study with 29 elementary aged Hispanic children in which CCIPT was related to a statistically significant improvement in externalizing behavior with a large effect size ($d = .76$). In a research study involving 54 low-income preschoolers with clinical levels of disruptive behaviors, Bratton et al. (2013) found CCIPT was related to a statistically significant decrease in disruptive behavior with a large treatment effect size range ($\eta^2 = .17-.34$). In terms of practical significance, 50% of participants
improved from clinical levels of behavioral problems to levels that are more normative. In their research study involving 41 elementary school age children with aggressive behavior problems, Ray et al. (2009) found 14 sessions of CCIPT were related to a significant decrease in aggression. Although not statistically significant, parents reported a decrease in aggressive behaviors that yielded a moderate effect size for change over time ($\eta^2 = .11$) and for change between groups ($\eta^2 = .09$). Teachers reported a statistically significant improvement for the main effect of time with a moderate effect size ($\eta^2 = .12$) and a non-statistically significant improvement for the interaction effect with a moderate effect size of ($\eta^2 = .06$). Schumann (2010) also reported a statistically significant decrease in the main effect for time in aggressive behaviors for 20 aggressive kindergarten through 4th grade children receiving either CCIPT or an evidenced-based violence prevention guidance program with medium effect sizes ranging from $\eta^2 = .016 - .049$, depending on the reporter.

Although many studies give general support to CCIPT, and some give support for CCIPT in treating children’s disruptive or aggressive behaviors, few researchers have specifically targeted the efficacy of CCIPT in facilitating the social and emotional assets of empathy, self-regulation, and social competence. Only one recent research group targeted the impact of CCIPT on empathy (Stulmaker et al. unpublished) as discussed in an earlier section. After receiving CCIPT, these K-2 children demonstrated decreased levels of impairment, correlated with increased scores in empathy and self-regulation (Stulmaker et al., unpublished). Currently, little evidence exists currently regarding the impact of CCIPT on empathy.

Relatively more research exists regarding the impact of CCIPT on self-regulation. In addition to Stulmaker et al. (unpublished), three other research teams have conducted studies looking at the impact of CCIPT on self-regulation (Bratton & Ray, 2000; Ray & Bratton, 2010;
Schmukler & Nevah, 1985). Bratton and Ray (2000) reviewed both individual and group play therapy research from 1942-2000. Of 82 experimental studies reviewed, Bratton and Ray (2000) included a study by Shmukler and Nevah (1985) who found “unstructured play training” related to increased concentration in economically disadvantaged children. Ray and Bratton (2010) updated their study to include 25 additional play therapy research studies conducted from 2000-2009. Of the 25 studies they reviewed, only 15 were conducted specifically using CCIPT, and only two of 15 targeted self-regulation. Long-term CCIPT (32 sessions) was related to statistically significant decreases in ADHD characteristics, [t(22) = 2.77, p. = .01], in 23 children with behavioral and emotional problems with a large effect size of $\eta^2 = .26$. (Muro, Ray, Schottelkorb, Smith, & Blanco, 2006). Ray, Schottelkorb, and Tsai (2007) conducted a study with 60 elementary school aged children with ADHD symptoms. After 16 sessions of CCIPT, children demonstrated decreased ADHD symptomology, as indicated by a statistically significant main effect for time \[F(1,58) = 12.09, p< .01\] with a large effect size ($\eta^2 = .18$). Children also demonstrated decreased emotional lability, as indicated by a statistically significant interaction effect \[F(1,58) = 6.70, p = .01\] and a moderate effect size ($\eta^2 = .10$). Therefore, at least four research teams have conducted studies showing CCIPT is related to improved self-regulation.

Bratton and Ray (2000) also reviewed play therapy literature demonstrating the effectiveness of group play therapy with children exhibiting problems in social competence (Cox, 1953; Newcomer & Morrison, 1974; Oualline, 1975; Pelham, 1972; Quayle, 1991; Schmidtchen & Hobrucker, 1978; Shmukler & Nevah, 1985). Cox (1953) found 10 sessions of individual play therapy was related to improved social adjustment in 3-year-olds. Pelham (1972) found 6-8 sessions of individual play therapy was related to improvement in social maturity in kindergarten children. According to a study conducted by Schmidtchen and Hobrucker (1978, in
Bratton & Ray, 2000), CCIPT was related to improvement in social flexibility. Shmukler and Nevah (1985, in Bratton & Ray, 2000) found “unstructured play training” related to increased social interaction and cooperation among economically disadvantaged children. Quayle (1991) found 20 sessions of CCIPT related to improved social skills (both assertive skills and peer skills). According to Newcomer and Morrison (1974) 30 weeks of individual play therapy was related to increased social functioning in mentally challenged children. Oulline (1975) found 10 sessions of nondirective individual play therapy was related to increases in social maturity among deaf children. None of these studies is recent; all were conducted between 24 and 62 years ago. Recent studies tend to be more rigorous than older studies (Ray & Bratton, 2010).

More recently, Ray and Bratton (2010) reviewed one CCIPT research study measuring social competence. Although none of the studies reviewed by Ray and Bratton (2010) specifically used the words “social competence,” Fall, Navelski, and Welch (2002) reported CCIPT was related to a statistically significant reduction in social problems \([t(50) = 4.18, p = .05]\). Therefore, several older studies and one recent study have demonstrated the effectiveness of individual play therapy in improving social competence. As indicated in the following section, group play therapy is also related to improvement in the constructs examined in this study.

Group Play Therapy Research Related to Social and Emotional Assets

Similar to individual play therapy research, group play therapy researchers have conducted studies that support the effectiveness of group play therapy, specifically, with a multitude of childhood behavioral and emotional concerns (Sweeney et al., 2014; Bratton et al, 2005; Ray & Bratton, 2010). Sweeney et al. (2014) reviewed the 32 group play therapy research studies conducted from 1940-2011 that used a pre-test/post-test design with randomized
experimental and control groups. The majority of these studies – 23 – were conducted from 1947-1988. Sweeney et al., (2014) reported no studies conducted in the 13 years between 1988-2001. Sweeney et al. reported 9 recent group play therapy studies from 2001-2011, indicating resurgence in interest in group play therapy. Although most earlier studies focused on the relationship between group play therapy and intelligence (Sweeney et al., 2014), several recent group play therapy researchers found support for the efficacy of group play therapy for children’s externalizing or disruptive behavior problems (Karcher & Lewis, 2002; Ojiambo & Bratton, 2014; Packman & Bratton, 2003; Tyndall-Lind, Landreth, & Giordano, 2001). This finding is pertinent because the current study targeted children with disruptive and aggressive behaviors.

Similar to CCIPT, only a few CCGPT researchers have focused on the social-emotional assets of empathy, self-regulation, and social competence. As regards empathy, CCGPT research has been contradictory. A pilot outcome study of CCGPT (Ray, Wilson, Taylor, Ener, & Godwin, 2015) demonstrated a significant increase in self-regulation, but not empathy, while another study of CCGPT (Cheng, 2015) demonstrated a statistically significant increase in empathy, but not self-regulation. These two studies will be reviewed in greater detail when discussing CCIPT versus CCGPT effectiveness in treating empathy, self-regulation, and social competence. Research results on the relationship between CCGPT and empathy are currently ambiguous.

Sweeney et al. (2014) reviewed the group play therapy literature conducted from 1940-2010 that used pretest/posttest design with randomized experimental and control groups. Of the 32 studies reviewed, only two targeted self-regulation. Trostle (1988) found CCGPT was related
to an increase in self-control, and Perez (1988) found group play therapy was related to increased self-mastery.

Several group play therapy researchers examined issues related to social competence. Regarding group play therapy research conducted on social competence from 1940-2010, Sweeney et al. (2014) mentions five studies. In a study of 52 kindergarten children, six to eight sessions of group play therapy were related to gains in social maturity (Pelham, 1972). Thombs & Muro (1973) researched the effect of “relationship theory-based” group play therapy in a study of 36 second graders and found 15 therapy sessions were related to increases in social position. Trostle (1988) conducted a study of the impact of nondirective group play therapy on 48 Puerto Rican children between the ages of three and six. She reported children were more accepting of others after 10 play therapy sessions. According to Elliott and Pumfrey (1972), nondirective group play therapy was related to improved social adjustment (when interacting with emotional disturbance). Newcomer and Morrison (1974) reported group play therapy with nondirective leadership resulted in improved social functioning. Although none of the researchers specifically used the words “social competence” several studies indicated group play therapy was effective in working with issues related to social competence. However, none of these studies were recent.

Thus, research has indicated both individual and group play therapy are correlated with improvement in the constructs of empathy, self-regulation, and social competence, individually. The next section explores recent CCPT research conducted on overall impairment and its relationship to these constructs. Researchers explored both individual and group conditions, although none compared individual to group conditions.
Effectiveness of CCIPT versus CCGPT with Social and Emotional Assets

**CCIPT**

As mentioned earlier, Ray et al. (2013) conducted a randomized controlled pilot study with 40 children in kindergarten through second grade experiencing high levels of overall functional impairment. Although not a statistically significant result, the researchers found children who received CCIPT treatment decreased in overall impairment, with a medium level of practical significance ($\eta^2 = .06$), compared to a control group whose impairment levels remained either stable or increased. The results of this study indicated CCIPT may be an appropriate intervention for problems with empathy, self-regulation, and overall impairment in children.

Also mentioned earlier in detail, Stulmaker et al. (unpublished) conducted a pre and post-test clinical trial study with 52 participants in grades K-2, who were identified by their teachers as struggling with empathy. Children who participated in CCIPT demonstrated a statistically significant improvement in empathy scores at post-test after receiving CCIPT, as compared to pre-test, according to teacher report ($t[43] = -3.26, p < .01$) and a statistically significant increase in self-regulation scores, according to teacher report ($t[42] = -2.99, p < .01$). Researchers found higher levels of empathy and self-regulation were correlated with lower levels of overall impairment.

**CCGPT**

Ray et al. (2015) also conducted a pilot study with pre- and post-testing to determine the efficacy of CCGPT in addressing children’s social and emotional competencies. Twenty-seven children, aged 5-10, participated in CCGPT in groups consisting of two children each. Researchers found CCGPT was related to improvement in self-regulation, social competence, and responsibility, but not empathy, according to scores on the Social Emotional Assets and
Resilience Scale–Teacher. More specifically, children’s scores on both the Total Score and the Self-Regulation subscale yielded statistically significant results with large effect sizes (\( \eta^2 = .16 \) and \( \eta^2 = .39 \), respectively). Although none of the other subscales yielded a statistically significant result, the Social Competence subscale demonstrated a medium to large effect size (\( \eta^2 = .11 \)), and the Responsibility subscale demonstrated a small to medium effect size (\( \eta^2 = .06 \)). The Empathy subscale demonstrated an inconsequential effect size (\( \eta^2 < .01 \)). In terms of clinical significance, children who received CCGPT services improved significantly in social-emotional competencies according to teacher perception. Specifically, children improved in the areas of self-regulation and social competence, but not empathy.

Additionally, Cheng (2015) conducted a randomized controlled trial to research the efficacy of both two and three member CCGPT with social and emotional assets in kindergarten children. Cheng demonstrated that children receiving CCGPT benefitted from increased empathy. For the construct of empathy, the result for interaction effect for empathy was statistically significant with a medium effect size of \( \eta^2 = .106 \). For the construct of social competence, the results for interaction effect between treatment group and time and the results for main effect for time were both statistically significant, both with a medium effect size, \( \eta^2 = .079 \) and \( \eta^2 = .085 \), respectively. Cheng did not find a benefit for self-regulation. In terms of clinical significance, children receiving CCGPT services at school tended to improve in overall social-emotional assets, as well as social competence and empathy, as perceived by parents. Children did not improve in self-regulation, however. Cheng’s findings appear to be in contradiction to the findings of Ray et al., (2015).

Thus, results are ambiguous as to whether or not group play therapy is effective with empathy. Several variables might explain the apparent contradiction between Ray et al., (2015)
and Cheng (2015). Ray et al. reported on the results using the SEARS-Teacher, while Cheng reported on results of the SEARS-Parent. Perhaps the contradiction was due to the differing perspectives of parents and teachers. Also, the SEARS-T and SEARS-P assessments differ – especially in measuring the construct of self-regulation. In the SEARS-T, self-regulation and responsibility are measured as separate constructs, but in the SEARS-P, they are measured together as one construct. Additionally, developmental levels could explain some of the contradiction, as Ray et al. had participants ranging from age 5-10, while Cheng’s participants were all kindergarteners. Finally, neither Ray et al. (2015) nor Cheng (2015) compared CCGPT with CCIPT. Thus, this comparison would be the next logical step in the progression of the research.

Because researchers have had inconsistent results regarding the effectiveness of CCGPT with empathy and self-regulation, one could make an argument for using CCIPT with children who have empathy and/or self-regulation deficits. However, CCGPT is potentially more efficient than CCIPT. CCGPT allows school counselors to treat two or more students in the same time it takes to see one child in CCIPT (Ray, 2011). Efficiency is of utmost importance to school counselors, who typically have a heavy caseload. Currently, one in five children exhibits a diagnosable emotional or behavioral condition, and one in 10 children have a serious emotional disorder (United States Department of Health and Human Services, 1999). Although the maximum recommended school counselor to student ratio is 250:1 (American Counseling Association, 2011; American School Counselor Association, 2012), the actual average school counselor to student ratio is 457:1, and as high as 814:1 in California (American Counseling Association, 2011). With proper training, screening, and space, school counselors could
potentially be more efficient by using CCGPT instead of CCIPT for children who lack empathy and self-regulation, but only if CCGPT is actually effective.

In conclusion, CCPT appears to be effective with children’s functional behavioral deficits. Children’s level of overall functioning appears to be correlated with levels of empathy and self-regulation. CCIPT appears to improve empathy and self-regulation deficits (Stulmaker et al., unpublished). However, play therapy research is inconclusive on whether or not CCGPT is effective for empathy or self-regulation (Ray et al., 2015; Cheng, 2015). Until now, no researcher has compared the impact of CCIPT and CCGPT on the social-emotional assets of empathy, self-regulation, and social competence. This study fills that gap, and is the next logical step in the research. Clinically speaking, if CCGPT is as effective with empathy, self-regulation, and/or social competence as CCIPT, CCGPT would be the treatment of choice for school counselors due to efficiency. Therefore, it is imperative for researchers to compare the efficacy of CCGPT with CCIPT in terms of their impact on empathy, self-regulation, and social competence.
APPENDIX B

DETAILED METHODOLOGY
This appendix is a description of the methodology and procedures of the current study. Included are the design selection, research assumptions, participant selection process and criteria, instrumentation description, data collection procedure, treatment description, statistical analysis approach, and limitations review. The current study was part of a larger randomized controlled trial exploring the effects of CCPT across four elementary schools.

The purpose of this randomized controlled trial study was to test the effectiveness of CCIPT and CCGPT at improving social-emotional assets (including empathy, self-regulation, and social competence) for 56 participants in four elementary schools in a north Texas public school district. CCIPT, CCGPT, and a wait list constituted the independent variable of group/treatment. Overall social-emotional assets (also broken down by measures of empathy, self-regulation, and social competence) were the dependent variables, measured by scores on the Social and Emotional Assets and Resilience Scales (SEARS; Merrell, 2011). Counselors followed the CCPT treatment manual throughout the intervention (Ray, 2011), using modifications as necessary and appropriate for CCGPT.

Research Questions

I attempted to answer two questions.

1. Do children who participate in CCIPT and CCGPT improve in overall social-emotional assets (i.e., Self-Regulation/Responsibility, Social Competence, and Empathy) over children who do not participate in CCPT as measured by parents?

2. Do children who participate in CCIPT and CCGPT improve in overall social-emotional assets (i.e., Self-Regulation, Responsibility, Social Competence, and
Empathy) over children who do not participate in CCPT as measured by teachers?

Definition of Terms

Child-Centered Play Therapy (CCPT)

Child-centered play therapy is defined as a developmentally appropriate intervention for young children aged three to 10 that utilizes a nondirective modality of play. This evidence-based treatment is effective with a multitude of mental health diagnoses and problems. Treatment was operationalized in accordance with Ray’s (2011) Child-Centered Play Therapy Treatment Manual.

Child-Centered Individual Play Therapy (CCIPT)

Individual CCPT is defined as CCPT with a single child. It involves an active and interdependent interpersonal relationship between a child and a therapist (Sweeney et al., 2014).

Child-Centered Group Play Therapy (CCGPT)

Group CCPT is defined as CCPT with two or more children. It is a union of play therapy and group therapy (Sweeney & Homeyer, 1999). It involves an active and interdependent interpersonal relationship between two or more children, as well as a relationship between the children and a therapist (Sweeney et al., 2014). In this study, all groups contained two children. The rationale for using groups of only two children is included in the methods section.

Social-Emotional Assets and Resiliencies

Social-Emotional Assets and Resiliencies are defined as adaptive characteristics important for children’s success at home, in school, and in the community. These assets include “friendship skills, empathy, interpersonal skills, social support, problem-solving, emotional competence, social maturity, self-concept, self-management, social independence, cognitive
strategies, and resilience” (Merrill, 2011, p. 3). In this study, child functional impairment was operationalized as the Total score on the SEARS-T and the SEARS-P. Higher scores indicate higher levels of socio-emotional functioning.

**Empathy (E)**

Empathy is defined as “the child’s ability to understand and relate to others’ situations and feelings” (Merrill, 2011, p. 4). In this study, empathy was operationalized as the Empathy score on the SEARS-T and the SEARS-P. Higher scores indicate higher levels of empathy. Examples of SEARS items related to empathy include statements such as “Cares what happens to other people”, and “Tries to help others when they need help.”

**Affective Empathy**

Affective Empathy is defined as a “tendency to feel and care about what other people feel” (Dadds et al., 2009, p. 599).

**Cognitive Empathy**

Cognitive Empathy is defined as an ability “to describe what and why other people feel, even if he does not share or care about those feelings” (Dadds et al., 2009, p. 599).

**Self-Regulation (SR)**

Self-Regulation is defined as the child’s “self-awareness, metacognition, intrapersonal insight, self-management, and direction” (Merrell, 2011, p. 4). In this study, self-regulation was operationalized as the Self-Regulation score on the SEARS-T and the Self-Regulation/Responsibility score on the SEARS-P. Higher scores indicated higher levels of self-regulation. Examples of SEARS items related to self-regulation include statements such as “Stays in control when he/she gets angry,” and “Good at settling disagreements.”
Emotional Regulation

Emotional Regulation is defined as the ability to inhibit one’s emotional reactions and manage one’s emotions by enhancing or maintaining them (Batum & Yagmurlu, 2007; Merrell, 2011).

Behavioral Regulation

Behavioral Regulation is defined as the ability to manage and inhibit one’s own behaviors. Behavioral regulation requires an ability to be thoughtful rather than impulsive in choosing behaviors. (Batum & Yagurlu, 2007; Merrell, 2014).

Social Competence (SC)

Social Competence is defined as an ability to feel comfortable in peer relationships, maintain peer relationships, and communicate effectively in peer relationships (Merrell, 2011). In this study, social competence was operationalized as the Social Competence score on the SEARS-T and the SEARS-P. Higher scores indicate higher levels of social competence. Examples of SEARS items related to social competence include statements such as “Makes friends easily,” and “Is well-liked by other people.”

Research Design

Experimental designs are appropriate for investigating the effectiveness of a treatment while controlling for other factors (Creswell, 2014; Rubin & Bellamy, 2012). This research study utilized a randomized control trial experimental design with pre- and post-testing and a control group to compare the effectiveness of CCIPT, CCGPT, and a waitlist control group for facilitating development of social and emotional assets, including empathy, self-regulation, and social competence. Experimental design enables researchers to examine quantitative
relationships among measurable variables, analyzing data through statistical measures (Creswell, 2014).

First, teachers, parents, or school counselors referred children due to concerns about problematic or disruptive behaviors. For example, adults referred children, who they perceived as uncooperative, experiencing behavior problems at home or school, having difficulty getting along with adults or peers, or demanding excessive attention. Once parents and teachers had returned permission forms and had completed pre-testing, participants were randomly assigned to one of three groups, using block randomization to determine whether children participated in CCIPT, CCGPT, or the wait list group. Children in both experimental groups, the CCIPT group and the CCGPT group, began treatment as soon as possible in the fall 2015 semester. For children in the wait list control group, treatment was delayed until the spring semester of 2016.

Participants randomly selected for the CCGPT condition were further grouped into two-member groups based on age. Children were grouped with other children who were within 12 months of the same age. This decision was in accordance with best practices (Sweeney et al., 2014). The rationale for two-member groups was related in part to the referral criteria. A play therapy group with more than two children with problematic or disruptive behavior could prove to be difficult for the therapist and unhelpful to the children. The decision to have two participants per group was also based on limited playroom space. Additionally, some playrooms were located in close proximity to classrooms, and the researcher was concerned about the possibility of noise disrupting these classrooms. Finally, the decision to have two-participant groups was proven necessary by the randomization process. It was challenging to find even two children who randomized into the group intervention and were within 12 months of each other’s age.
Because aggressive children can have above average potential for physical and verbal conflict, I made the decision ahead of time to disband any group where children displayed extremely aggressive behaviors toward each other. This measure proved unnecessary, due perhaps to using well-trained and experienced therapists.

Participants

Participants were recruited from four Title 1 elementary schools (schools with large concentrations of low-income students) in a southwestern state. Inclusion criteria included the following:

- Teachers, parents, or the school counselor referred children who were exhibiting problematic or disruptive behaviors, including difficulty with empathy, self-regulation, and peer relationships.
- Children were at least five years old and in grades K-4.
- Parents and teachers were willing to complete instruments.
- Participants did not receive play therapy or counseling from another source during the duration of the study.
- Children understood and spoke English.

In a priori power analysis using repeated measures within-between ANOVA, a medium effect size of .25, a probability of .05, power of .80, 3 groups, and 2 measures, G Power indicated a needed total sample size of 42 participants or 14 in each group. Initially, 67 parents and teachers gave permission for their child to participate in the study. Five children moved early in the course of treatment, and parent/teacher post-data were not collected. One child in the control group was removed from the study due to a high need for immediate counseling services. One child received only eight sessions instead of 16 sessions of therapy, and was removed from the
study. One child received a new teacher midway through the study, so this child was removed due to researcher inability to collect accurate teacher post evaluation. Three children were statistical outliers and were removed from the study. A total of 56 participants completed the study. Specific demographic are presented in Table B.1.

This study was a part of a larger study, including a study exploring the impact of play therapy specifically with African-American children. Therefore, all African American children participated in another study, resulting in a sample for this study that did not include African American children. Thus, the sample included an underrepresentation of children who identified as African American when compared to the population at the participating schools. Additionally, the participants were predominately male, presumably due to the inclusion criteria of problematic behavior. Young boys are more often the recipients of disciplinary action both at home and at school, than are girls (Kindlon & Thompson).
Table B.1

*Participant Demographics*

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<td>16.1</td>
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<tr>
<td><strong>Total</strong></td>
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Instruments

Social Emotional Assets and Resilience Scale (SEARS): General Information.

The Social and Emotional Assets and Resilience Scale (SEARS; Merrell, 2011) is a strength–based assessment tool measuring social and emotional competencies of children aged 5-18. A strength-based assessment is consistent with the philosophy of CCPT in its emphasis on positive attributes, and its attention to the child’s wellness as well as the child’s difficulties (Merrill, 2011). A strength-based assessment provides a means for connecting strengths to treatment planning. It enables professionals, parents, teachers, and children to collaborate in an optimistic, satisfying, and empowering manner by focusing attention on strength rather than weakness. Social and emotional competencies are qualities that help children succeed in multiple natural environments, such as school, home and community. The SEARS is a self-administered assessment. For the purpose of this study, the researcher used both the SEARS-Parent and SEARS-Teacher in order to get a holistic picture of each child, by gaining different perspectives from different environments (Merrill, 2011). Before describing the SEARS-T and the SEARS-P, general information applying to both forms of the SEARS follows.

The SEARS uses a four-point rating scale: 0=Never, 1=Sometimes, 2=Often, and 3=Always. Higher scores indicate higher levels of perceived functioning (Merrell, 2011). Tables in the assessment manual allow the researcher to convert raw scores to T-scores and percentiles. The purpose of the SEARS is not to provide a diagnosis. Rather, score interpretation involves placement of scores into one of three Tiers. Tier 1 indicates “Average to High” (p. 34) functioning and includes children scoring from the 21st to the 99th percentile. Children in Tier 1 appear to be functioning within the “normal” range, and probably do not have need of intervention. Tier 2 indicates “At Risk” (p. 34) functioning. Tier 2 includes children
scoring from the 6th to the 20th percentile, which is approximately one standard deviation below the mean. Children scoring in this range may have “emerging social-emotional deficits” (p. 35) and may benefit from intervention. Tier 3 indicates “High Risk” (p. 35) functioning. About 5% of children score in the Tier 3 range, indicating a high risk for serious impairment and a probable need for intervention (Merrill, 2011).

Validity measures indicate the SEARS is effective and useful. Researchers provided theory and evidence to support score interpretation. The research process included several research studies, the purpose of which was to gather evidence supporting the validity of the instrument. In order to ensure face validity, researchers used a nine-step procedure to develop test questions. This procedure included using a panel to validate content and provide a readability analysis (Merrell, 2011). Researchers used factor analysis to support content validity. Intercorrelations among factors was moderate, ranging from .50 -.55. Researchers analyzed the instrument using fit indices, chi-square, the comparative index, the root mean square error of approximation, and the standardized root mean square residual. These analyses indicated good model fit. Additionally, researchers did analysis between SEARS scores and other strength-based assessments of social and emotional competence to ensure the SEARS accurately measures the intended constructs (Merrell, 2011).

Social Emotional Assets and Resilience Scale-Parent (SEARS-P)

The SEARS-P is a self-administered instrument designed to gain parents’ perspectives of their child at home and in the community. The SEARS-P consists of 39 items and contains three subscales plus a total score. The Self-Regulation/Responsibility (SR/R) subscales contain 22 items and attempt to measure the parent’s perception of the child’s level of “self-awareness, metacognition, intrapersonal insight, self-management, and direction” (Merrell, 2011, p. 4), and
ability to behave responsibly, to think before acting, and to accept responsibility for her/his actions. The Social-Competence (SC) subscale consists of 10 items measuring the parent’s perception of the child’s ability to make friends, communicate with other children effectively, and comfortably interact in groups. The Empathy (E) subscale consists of seven items measuring the parent’s perception of the child’s ability to empathize with others’ feelings and circumstances. Total raw scores range from 0-117. Raw scores below 58 indicate children are “at risk.” Raw scores below 44 indicate children are at “high risk.” Subscale scoring varies per subscale (Merrell, 2011).

The SEARS-P has strong reliability estimates and high internal consistency estimates, indicating high consistency across scale items. Cronbach’s alpha coefficients range from .87 -.98 for the three scales and total score. Test-retest reliability coefficients are strong--ranging from .88-.93-- and indicate the scores tend to be stable over time (Merrell, 2011). Reliability estimates are summarized in Table B.2. For the current study, Cronbach’s alpha for the total scale was .96 for the SEARS-P.

Table B.2

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s alpha</th>
<th>Test-retest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self - Regulation/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>
To confirm convergent validity, researchers compared the SEARS-P with two strength-based assessments that had strong psychometric properties, were standardized, and were widely used -- the SSRS-parent rating form (Gresham & Elliott, 1990) and the Home and Community Social Behavior Scales (HCSBS; Merrell & Caldarella, 2002). Strong correlations indicate the SEARS-P has strong convergent validity. The Pearson product-moment correlations between the SEARS-T and the SSRS social skills scale (parent version) were statistically significantly positive, with coefficients ranging from .22-.75 with a correlation between total scores of .74. The Pearson product-moment correlation between the SEARS-T and the HCSBS was also statistically significantly positive, with coefficients ranging from .38 to .87 with a correlation between total scores of .87 (Merrell, 2011).

Demographic questionnaire

In addition to the SEARS-P, parents completed a demographic questionnaire regarding their child. The questionnaire requested information about the age, race, and ethnicity of the child, as well as whether or not the child was receiving counseling services at the time of the study. I requested parents refrain from seeking counseling for their child during the course of the study and inform me if their child began the use of psychotropic medication during the course of the study.

Social Emotional Assets and Resilience Scale-Teacher (SEARS-T)

The SEARS-T is self-administered by teachers. The SEARS-T consists of 41 items and provides five scores - four subscales plus a total score. The measurement is intended to gain the teacher’s perspective of the child at school. Self-Regulation (SR) contains 13 items measuring the teacher’s perception of the child’s level of “self-awareness, metacognition, intrapersonal insight, self-management, and direction” (Merrell, 2011, p. 4). The Social-Competence (SC)
subscale consists of 12 items measuring the teacher’s perception of the child’s ability to make friends, communicate effectively with other children, and to interact comfortably in groups. The Empathy (E) subscale consists of six items measuring the teacher’s perception of the child’s ability to empathize with other’s feelings and circumstances. The Responsibility (R) subscale consists of 10 items measuring the teacher’s perception of the child’s ability to behave responsibly, to accept responsibility for his/her actions, and to think before acting. Total raw scores range from 0-123. Raw scores below 48 indicate children who are “at risk.” Raw scores below 28 indicate children who are at “high risk.” Subscale scoring varies per subscale (Merrell, 2011).

The SEARS-T has strong reliability and internal consistency estimates. Cronbach’s alpha coefficients are high and range from .91-.98 for the four scales and total score. Test-retest reliability coefficients are strong (ranging from .84-.94), indicating scores tend to be stable over time (Merrell, 2011). For the current study Cronbach’s alpha was .94 for the SEARS-T. Reliability estimates are summarized in Table B.3.

Table B.3

Reliability Estimates for SEARS-T

<table>
<thead>
<tr>
<th>Scale</th>
<th>Cronbach’s alpha</th>
<th>Test-retest</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Regulation</td>
<td>.95</td>
<td>.90</td>
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<tr>
<td>Social Competence</td>
<td>.94</td>
<td>.92</td>
</tr>
<tr>
<td>Empathy</td>
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<td>.84</td>
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<tr>
<td>Responsibility</td>
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<td>.92</td>
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<tr>
<td>Total score</td>
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<td>.94</td>
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</table>
To confirm convergent validity, researchers compared the SEARS-T with two strength-based assessments that are standardized, widely used, and have strong psychometric properties - the Social Skills Rating System (SSRS; Gresham & Elliott, 1990) and the School Social Behavior Scales (SSBA-2; Merrell, 2002). The Pearson product-moment correlations between the SEARS-T and the SSRS (teacher version) were statistically significantly positive, with coefficients ranging from .39-.82, a median of .70, and a correlation between total scores of .82. The Pearson product-moment correlation between the SEARS-T and the SSBS-2 Peer Relations scale was positive as well, with coefficients ranging from .76-.90, with a median of .80 (Merrell, 2011).

Procedures

An application to the Institutional Review Board, seeking approval to conduct research with human subjects, was submitted and approved. Additionally, an application to the local ISD, to conduct research at four elementary schools was submitted and approved for all four schools. No participants were recruited or data collected until such approval was granted.

This section includes an explanation of the procedures I used for recruiting participants, gaining parental and teacher permission, and collecting data. It also includes procedures the researcher used for grouping participants, conducting treatment, ensuring treatment fidelity, and analyzing data.

Recruitment and data collection

In order to recruit participants, I spoke to administrators, teachers, and school counselors, asking them to refer children in grades K-4 who exhibited problematic or disruptive behaviors, including difficulty with empathy, self-regulation, and peer relationships. I sent a recruitment letter to all teachers in the four selected schools, informing them of the study and
asking them to refer children with disruptive or problematic behaviors to the school counselor. I also visited selected schools to talk to teachers in person. Additionally, I spoke to parents personally during a parent night at one school.

Once school personnel referred potential participants, I contacted parents/guardians of referred children by giving the children information letters about the study. The informed consent letter included a full explanation of the study’s purpose, procedures, and foreseeable risks, as well as information about the participation requirement that they complete a SEARS-P pre- and post-test. In the informed consent letter, I notified parents of the possibility of their child’s services being conducted the following spring semester, as opposed to being conducted immediately in the current fall semester. Additionally, I informed parents their participation was voluntary and they could withdraw at any time. The packet also contained the SEARS-P and the demographic questionnaire. Parents who agreed for their child to participate read, signed, and returned the informed consent form, as well as completed the SEARS-P and the demographic form, before their child was placed in the study. Parents returned forms in a sealed envelope to the school counselor. After I obtained the informed consent from parents, I sought teacher written consent to complete the SEARS-T pre- and post-tests, and asked them to complete the SEARS-T pre-test. I informed teachers of the possibility of their student’s services being delayed. Additionally, I informed them their participation was voluntary and they could withdraw at any time. After parents and teachers returned completed assessments in a sealed envelope to the school counselor, I scored assessments. I also obtained verbal and written assent from children prior to treatment.

In accordance with procedures for randomized controlled trial research, I stratified children by school and then randomly assigned each child into one of three equal groups: (a)
CCIPT treatment group; (b) CCGPT treatment group; and (c) waitlist control group. I used a random number generator to randomize children into groups. I placed children participating in CCGPT in a two person CCPT group, based on age with children being no more than 12 months apart, in accordance with best practices (Sweeney et al., 2014). Children in both the CCIPT and CCGPT groups participated in bi-weekly 30-minute sessions of CCPT for eight weeks, for a total of 16 sessions. Participants in the waitlist control group did not participate in treatment until after data collection was completed. After completion of the eight-week intervention period, parents completed the SEARS-P, and teachers completed the SEARS-T.

To ensure confidentiality, the school counselor kept all information in a sealed envelope until I could retrieve it. I did not include the names of children, teachers, or parents in any report or documentation. I used a code number to record data collected from pre- and post-tests, and was the only person having access to the master list of numbers. In accordance with human subjects approval, I will retain clinical files in a confidential manner.

*Intervention*

Children assigned to either the CCIPT or CCGPT treatment groups participated in two 30-minutes sessions per week of CCPT for a period of eight weeks, for a total of 16 sessions. Ideally, all children should have received 16 sessions. However due to four children moving before the treatment was complete, children received between 12 and 16 sessions, with a mean of 15.69 sessions. Therapists provided treatment in accordance with the protocol outlined in the CCPT treatment manual (Ray, 2011) with modifications enacted as necessary and appropriate for CCGPT. CCPT utilizes the language of play, the developmentally appropriate and natural language of children. In accordance with client-centered principles, therapists sought to be genuine, non-judgmental, and empathetic. Therapists created a safe, warm, and permissive
therapeutic environment. Therapists used responses such as tracking, reflection of content, reflection of feeling, reflection of meaning, limit-setting, returning responsibility, and facilitation of emotional expression (Landreth, 2012; Ray, 2011). Children participated in CCPT in a playroom on the campus of their own elementary school. I equipped playrooms with developmentally appropriate toys and materials selected to encourage maximum emotional expression and communication in accordance with recommendations by Ray (2011) and Landreth (2012). Categories of toys and materials were intended to facilitate expression of nurturance, aggression, mastery, control, imagination, and creativity.

Children assigned to the wait-list control group did not participate in treatment during the course of the study. After data collection was complete, children on the wait-list group participated in the same treatment as the children in the CCPT treatment groups, to ensure ethical treatment of human subjects. Waitlist participants received either CCIPT or CCGPT based on therapists’ clinical judgment.

**Intervention Team**

To ensure uniformity and integrity of treatment, all therapists were doctoral-level counseling students with a master’s degree in counseling and at least one year of experience in providing play therapy. All therapists had completed at least two 3-hour master’s level university courses in play therapy, including a course dedicated to CCGPT. Most therapists (six of 10) facilitated both group and individual play sessions with study participants. To further ensure integrity and uniformity of treatment, all therapists participated in a two-hour training on the protocols for conducting CCIPT and CCGPT in schools.

Additionally, faculty supervisors supervised and monitored all therapists for fidelity of treatment in accordance with Ray’s (2011) treatment manual. Therapists recorded all counseling
sessions, and stored recordings in a manner to ensure confidentiality, in accordance with IRB regulations. All therapists participated in weekly supervision by a faculty member with advanced experience in play therapy. Additionally, I, a play therapy specialist, assessed protocol adherence by randomly reviewing one session per child using the Play Therapy Skills Checklist (PTSC; Ray, 2011) for children receiving CCIPT and using the revised Group Play Therapy Skills Checklist (GPTSC; Ray, 2011) as seen in Appendix E for children receiving CCGPT. Sessions adhered to play therapy protocol with an average of 97.53% adherence to protocol per session.

Data Analysis

Before conducting data analysis, I scored all assessments according to Merrell (2011). Before running statistical analyses, I checked descriptive data for irregularities. In the case of missing data, I first attempted to contact reporters. In the event this was not possible, Merrill (2011) outlined an approach for inputting missing data up to one missing question per subtest.

I entered all data into SPSS (Statistical Package for the Social Sciences, IBM, 2015). I used mixed between-within analysis of variance (ANOVA). ANOVA is an appropriate method of statistical analysis in research studies, such as this one, that use a pre- and post-testing and random assignment of participants to factor levels, in this case CCIPT, CCGPT, and control groups (Pallant, 2013). I used mixed between-within ANOVA in order to determine whether the main effect for time or the interaction effect between treatment groups were significant. In order to control for Type I error, I set alpha at $p < .05$.

I tested the assumptions necessary to conduct mixed between-within ANOVA:

- Independence of observations: Teachers and parents completed assessments independently of each other, meeting this assumption (Pallant, 2013).
• Normal distribution. According to the Kolmogorov-Smirnov test of normality, the SEARS-T post data was normally distributed, but the SEARS-P post data was not. Luckily, ANOVA is robust to this violation of normality when sample sizes are sufficiently large (above 30). The sample in the current study is sufficiently large at 56. Additionally, the Normal Q-Q Plot for the SEARS-P post data was essentially a straight line, suggesting near normality. The Mean and Trimmed Mean for both sets of scores are so similar as to indicate outliers are not causing a problem (Pallant, 2013).

• Homogeneity of variance. Levene’s test was not significant for either SEARS-T or SEARS-P Total Scores, indicating this assumption was met. Additionally, randomization and a priori power analysis should control for problems with homogeneity of variance (Pallant, 2013).

• Homogeneity of intercorrelations. The Box’s M statistic was less than alpha = .001, indicating neither the SEARS-T nor the SEARS-P data violated this assumption.

I decided to conduct post hoc pairwise comparisons through t-test analyses if ANOVA found statistically significant differences between groups, to determine what subtests of the SEARS were contributing to the difference. In addition to reporting statistical significance related to null hypothesis testing, I reported effect size according to eta-squared and interpreted effect sizes according to Cohen’s (1988) guidelines of .01 as a small effect, .06 as a moderate effect, and .14 as a large effect. According to Henson (2006), testing the null hypothesis for statistical significance only detects whether or not an effect is present. Effect size is of more practical use because it determines the size and importance of the effect. The American
Psychological Association (APA) Publication Manual (2010) also emphasized the importance of reporting effect sizes to provide information on the magnitude of an effect.
APPENDIX C

UNABRIDGED RESULTS
The following results are intended to answer the following research questions: (a) Do children who participate in CCIPT and CCGPT improve in overall social-emotional assets (i.e., Self-Regulation/Responsibility, Social Competence, and Empathy) over children who do not participate in CCPT as measured by parents? (b) Do children who participate in CCIPT and CCGPT improve in overall social-emotional assets (i.e., Self-Regulation, Responsibility, Social Competence, and Empathy) over children who do not participate in CCPT as measured by teachers? The following results are presented according to research questions, assumptions, and data analyses.

Parent Results

Research Question 1: Do children who participate in CCIPT and CCGPT improve in overall social-emotional assets (i.e., Self-Regulation/Responsibility, Social Competence, and Empathy) over children who do not participate in CCPT as measured by parents?

A mixed between-within subjects analysis of variance (ANOVA) was conducted to assess the impact of three different groups (CCIPT, CCGPT, and waitlist control group) on parent scores for children’s overall social-emotional assets across two time periods (pre-intervention and post-intervention). Alpha was set at \( p \leq .05 \) and practical significance was interpreted through \( \eta^2 \) as interpreted by Cohen (1988; i.e. .01 = small effect size, .06 = moderate effect, and .14 = large effect). The assumptions of independence of observations, homogeneity of variance, and homogeneity of intercorrelations were tested and reasonably met. Although the assumption of normality for SEARS-P post data was not met, ANOVA is robust to this violation when sample sizes are sufficiently large (above 30). Additionally, the Normal Q-Q Plot for the SEARS-P post data was essentially a straight line, suggesting near normality. The Mean and Trimmed Mean for the post-test Total SEARS-P scores were similar, indicating outliers were not
causing a problem (Pallant, 2013). Table C.1 presents pre- and post-test SEARS-P Total score means and standard deviations for the individual, group, and control conditions. Table C.1 also presents the difference in means between pre-and post-test for the individual, group, and control conditions.

Table C.1

SEARS-P Total Scores: Pre- and Post-Test Scores by Group

<table>
<thead>
<tr>
<th></th>
<th>Individual CCPT (n = 17)</th>
<th>Group CCPT (n = 21)</th>
<th>Control (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Post-Test</td>
<td>Mean Difference</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Score</td>
<td>39.41</td>
<td>43.88</td>
<td><strong>4.47</strong></td>
</tr>
<tr>
<td></td>
<td>35.76</td>
<td>39.57</td>
<td><strong>3.81</strong></td>
</tr>
<tr>
<td></td>
<td>39.33</td>
<td>39.50</td>
<td><strong>0.17</strong></td>
</tr>
<tr>
<td></td>
<td>SD 7.13</td>
<td>7.94</td>
<td>6.36</td>
</tr>
<tr>
<td></td>
<td>8.47</td>
<td>10.43</td>
<td>4.97</td>
</tr>
<tr>
<td></td>
<td>12.91</td>
<td>10.29</td>
<td>5.36</td>
</tr>
</tbody>
</table>

Note: An increase in score indicates an improvement in social-emotional assets

Results of the mixed between-within ANOVA on the Total score of the SEARS-P indicated a statistically significant interaction effect between treatment group and time, Wilks’ Lambda = .89, $F(2,53) = 3.15, p = .05, \eta^2 = .11$ (a moderate to large effect). Results indicated parents of children in CCIPT and CCGPT reported statistically significant improvement following the intervention when compared to parents of children in the waitlist control group. As indicated by Table C.1, parents’ scores improved more for the CCIPT and CCGPT conditions (an average of 4.47 and 3.81 points, respectively) as compared to the waitlist control group (an average of 0.17 points), and this difference was large enough to be statistically significant. There was also a statistically significant main effect for time, Wilk’s Lambda = .79, $F(1,53) = 14.34, p < .05, \eta^2 = .21$ (a large effect), suggesting an increase in social-emotional assets across the two time periods when all groups are considered. The main effect for group was not statistically significant, $F(2.53) = .87, p = .43, \eta^2 = .03$ (a small effect size).
Figure C.1 provides a visual depiction of the improvement in scores from pre-test to post-test for all three groups. Visually, the line representing the means for the waitlist control condition is almost horizontal while the lines representing the means for the CCIPT and CCGPT conditions slope upward, indicating an increase in scores, signifying an improvement in social-emotional assets.

Figure C.1

*Figure C.1:* Means between the Individual, Group, and Waitlist Control conditions over time on the SEARS-P Total Scores. Graph obtained from SPSS software output.

*Note:* An increase in score indicates an improvement in social-emotional assets.
Because SEARS-P Total scores yielded a statistically significant interaction effect, further analysis was conducted on SEARS-P scores to specifically examine the differences in the subscales comprising the Total score. In order to explore differences between groups, post hoc pairwise comparisons using paired sample t-tests were conducted, analyzing the mean differences between pre and post test scores for the Self-Regulation/Responsibility, Social Competence, and Empathy subscales based on group assignment. The following results should be interpreted with caution due to number of analyses. Pre- and post-test total and subscale means and standard deviations for each experimental group can be found in Table C.2. Results of the paired sample t-tests for each subscale and for all three experimental groups can be found in Table C.3.
### Table C.2

**SEARS-P Total Scores: Pre- and Post-Test Scores by Group**

<table>
<thead>
<tr>
<th>Sub-Scale</th>
<th>CCIPT (n = 17)</th>
<th>CCGPT (n = 21)</th>
<th>Control (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Self-Regulation/Responsibility</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>M</em></td>
<td>37.29</td>
<td>42.12</td>
<td>-4.82</td>
</tr>
<tr>
<td><em>SD</em></td>
<td>6.50</td>
<td>8.61</td>
<td>8.28</td>
</tr>
<tr>
<td></td>
<td>8.28</td>
<td>10.50</td>
<td>12.45</td>
</tr>
<tr>
<td><strong>Social Competence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>M</em></td>
<td>45.00</td>
<td>48.00</td>
<td>3.00</td>
</tr>
<tr>
<td><em>SD</em></td>
<td>8.24</td>
<td>7.15</td>
<td>10.35</td>
</tr>
<tr>
<td></td>
<td>10.35</td>
<td>9.41</td>
<td>12.58</td>
</tr>
<tr>
<td><strong>Empathy</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><em>M</em></td>
<td>44.53</td>
<td>47.29</td>
<td>2.77</td>
</tr>
<tr>
<td><em>SD</em></td>
<td>10.45</td>
<td>7.56</td>
<td>9.23</td>
</tr>
<tr>
<td></td>
<td>6.56</td>
<td>7.56</td>
<td>11.07</td>
</tr>
<tr>
<td></td>
<td>12.60</td>
<td>9.91</td>
<td></td>
</tr>
</tbody>
</table>

*Note:* An increase in score indicates an improvement in social-emotional assets.
Table C.3

*Paired Samples t-Test Results for SEARS –P Subscales by Group*

<table>
<thead>
<tr>
<th></th>
<th>t</th>
<th>df</th>
<th>Sig. (2-tailed)</th>
<th>η²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Self-Regulation/Responsibility</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCIPT</td>
<td>-2.25</td>
<td>16</td>
<td>.04*</td>
<td>.24</td>
</tr>
<tr>
<td>CCGPT</td>
<td>-3.89</td>
<td>20</td>
<td>.001*</td>
<td>.43</td>
</tr>
<tr>
<td>Waitlist Control</td>
<td>-.97</td>
<td>17</td>
<td>.35</td>
<td>.05</td>
</tr>
<tr>
<td><strong>Social Competence</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCIPT</td>
<td>-2.20</td>
<td>16</td>
<td>.04*</td>
<td>.23</td>
</tr>
<tr>
<td>CCGPT</td>
<td>-2.18</td>
<td>20</td>
<td>.04*</td>
<td>.19</td>
</tr>
<tr>
<td>Waitlist Control</td>
<td>.55</td>
<td>17</td>
<td>.59</td>
<td>.02</td>
</tr>
<tr>
<td><strong>Empathy</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CCIPT</td>
<td>-1.54</td>
<td>16</td>
<td>.14</td>
<td>.13</td>
</tr>
<tr>
<td>CCGPT</td>
<td>.22</td>
<td>20</td>
<td>.83</td>
<td>&lt;.01</td>
</tr>
<tr>
<td>Waitlist Control</td>
<td>.36</td>
<td>17</td>
<td>.73</td>
<td>.01</td>
</tr>
</tbody>
</table>

*Note:* An increase in score indicates an improvement in social-emotional assets.  
*p ≤ .05
For Self-Regulation/Responsibility, t-test results indicated statistically significant improvement with large effects between pre- and post-testing for the CCIPT and CCGPT conditions. The largest effect for Self-Regulation/Responsibility appeared to be for the group play therapy condition. The waitlist control group demonstrated no statistically significant improvement, yet a small to medium effect size on Self-Regulation/Responsibility indicates some small to moderate amount of improvement. For Social Competence, results denoted statistically significant improvement with large effects between pre- and post-testing for both the CCIPT and CCGPT conditions. The CCIPT condition resulted in a slightly larger effect than the CCGPT condition. No statistically significant improvement was found for the waitlist control group for Social Competence and there was a small effect. For the Empathy subscale, results indicated no statistically significant improvements nor observable effects for the CCGPT and waitlist control conditions. Although the results for the CCIPT condition did not reach statistical significance, effect size indicates that participants in CCIPT demonstrated improvement with large effect.

Teacher Results

Research Question 2: Do children who participate in CCIPT and CCGPT improve in overall social-emotional assets (i.e., Self-Regulation/Responsibility, Social Competence, and Empathy) over children who do not participate in CCPT as measured by teachers?

A mixed between-within subjects analysis of variance was conducted to assess the impact of three different groups (CCIPT, CCGPT, and waitlist control group) on teacher scores for children’s overall social-emotional assets across two time periods (pre-intervention and post-intervention). Alpha was set at $p \leq .05$ and practical significance was interpreted through $\eta^2$ as interpreted by Cohen (1988; i.e. .01 = small effect size for eta squared, .06 = moderate effect,
and .14 = large effect). The assumptions of independence of observations, normality, homogeneity of variance, and homogeneity of intercorrelations were tested and reasonably met. Additionally, the Normal Q-Q Plot for the SEARS-P post data was essentially a straight line, affirming normality. The Means and Trimmed Mean for the post-test Total SEARS-T scores were similar, indicating outliers were not causing a problem (Pallant, 2013). One teacher did not complete the SEARS-T pre-test eliminating one participant’s scores from analysis. Table C.4 presents pre- and post-test SEARS-P Total score means and standard deviations for the individual, group, and control conditions. Table C.4 also presents the difference in means between pre- and post-test for the individual, group, and control conditions.

Table C.4

<table>
<thead>
<tr>
<th></th>
<th>CCIPT (n = 16)</th>
<th>CCGPT (n = 21)</th>
<th>Control (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Score</td>
<td>Pre-Test</td>
<td>Post-Test</td>
<td>Mean Difference</td>
</tr>
<tr>
<td>M</td>
<td>41.44</td>
<td>43.31</td>
<td>1.87</td>
</tr>
<tr>
<td>SD</td>
<td>8.99</td>
<td>8.72</td>
<td>6.22</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>36.14</td>
<td>39.57</td>
<td>3.43</td>
</tr>
<tr>
<td>SD</td>
<td>8.46</td>
<td>8.38</td>
<td>5.97</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Pre-Test</th>
<th>Post-Test</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>M</td>
<td>37.22</td>
<td>38.56</td>
<td>1.34</td>
</tr>
<tr>
<td>SD</td>
<td>6.32</td>
<td>7.04</td>
<td>4.16</td>
</tr>
</tbody>
</table>

Note: An increase in score indicates an improvement in social-emotional assets

Results of the mixed between-within ANOVA on the Total score of the SEARS-T indicated no statistically significant interaction between treatment group and time, Wilks’ Lambda = .97, $F(2,52) = .76, p = .47, \eta^2 = .03$ (a small effect). Results indicated that teachers did not rate children in the three experimental groups as statistically significantly different from each other at post-test, following intervention, when compared to pre-test scores. The small effect size indicated only a small practical difference attributed to group assignment. As indicated by Table C.4, teachers’ scores improved more for the CCGPT condition (an average of 3.43 points) as
compared to the CCIPT and waitlist control groups (an average of 1.87 and 1.34 points, respectively), but this difference was not large enough to be statistically significant. There was, however, a statistically significant main effect for time, Wilk’s Lambda = .86, $F(1,52) = 8.71, p = .005$, $\eta^2 = .14$ (a large effect), suggesting an increase in social-emotional assets across the two time periods for all three groups together. The main effect for group was not statistically significant, $F(2, 52) = 2.02, p = .14$, $\eta^2 = .07$ (a moderate effect size).

Figure C.2 provides a visual depiction of the improvement in scores from pre-test to post-test for all three groups. Visually, the line representing the change in the means for the CCGPT condition slopes more steeply upward, than the line representing the change in means for the CCIPT or waitlist control conditions over time. Additionally, the line representing the change in means for the CCIPT group slopes slightly more steeply than the line representing the change in means for the control group.
Figure C.2: Means between the Individual, Group, and Waitlist Control conditions over time on the SEARS-T Total Scores. Graph obtained from SPSS software output.

Note: An increase in score indicates an improvement in social-emotional assets.

Given that teachers of children in CCIPT and CCGPT reported no statistically significant improvement in Total scores with a small effect as compared teachers of children in the waitlist group, no further investigation was conducted.
Clinical Significance

Clinical significance is the practical importance a treatment offers in terms of benefit to daily functioning (Kazdin, 1999). To assess the clinical significance of the CCPT treatment, as well as the benefits specifically of CCIPT and CCGPT, the researcher examined the number of participants in the intervention group ($n = 35$) whose parent report scores improved from pre- to post-test, according to Merrell’s (2001) Three Tier Model (Average to High Functioning, At-Risk, and At High-Risk). According to Merrell (2010), Tier 1 indicates “Average to High” (p. 34) functioning and includes children scoring from the 21st to the 99th percentile. Children in Tier 1 appear to be functioning within the “normal” range, and probably do not have need of intervention. Tier 2 indicates “At Risk” (p. 34) functioning. Tier 2 includes children scoring from the 6th to the 20th percentile, which is approximately one standard deviation below the mean. Children scoring in this range may have “emerging social-emotional deficits” (p. 35) and may benefit from intervention. Tier 3 indicates “High Risk” (p. 35) functioning. About 5% of children score in the Tier 3 range, indicating a high risk for serious impairment and a probable need for intervention (Merrill, 2011). The SEARS-T data was not explored due to lack of statistical significance. Table C.5 presents the SEARS-P total score Tier levels for the intervention group and control group from pre-test to post-test, according to tier rank.
Table C.5

Tier Scores on the SEAR-P Total Scores for Intervention and Control Groups

<table>
<thead>
<tr>
<th>Tier</th>
<th>Intervention Group</th>
<th></th>
<th>Waitlist Control Group</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Post-Test</td>
<td>Pre-Test</td>
<td>Post-Test</td>
</tr>
<tr>
<td></td>
<td>(n = 38)</td>
<td>(n = 38)</td>
<td>(n = 18)</td>
<td>(n = 18)</td>
</tr>
<tr>
<td>Average-High</td>
<td>12</td>
<td>16</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>At-Risk</td>
<td>10</td>
<td>14</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>High-Risk</td>
<td>16</td>
<td>8</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

Note: SEARS software converted scores based upon participants’ raw score, T-score, and percentile.

A total of 38 participants were in the treatment intervention group (either CCIPT or CCGPT), as compared to 18 participants in the waitlist control group. After treatment, 50% of High Risk participants receiving CCPT moved from the High Risk group to more normative functioning, as compared to only 17% of High Risk participants on the waitlist control group. Of children participating in CCPT 37% moved to an improved category as compared to 22% in the waitlist group. Table C.6 presents the SEARS-P total score Tier levels divided by individual CCPT, group CCPT, and waitlist control from pre-test to post-test, according to tier rank.
### Table C.6

**Tier Scores on the SEAR-P Total Scores for Intervention and Control Groups**

<table>
<thead>
<tr>
<th>Tier</th>
<th>Pre-Test (n = 17)</th>
<th>Post-Test (n = 17)</th>
<th>Pre-Test (n = 21)</th>
<th>Post-Test (n = 21)</th>
<th>Pre-Test (n = 18)</th>
<th>Post-Test (n = 18)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average-High</td>
<td>7</td>
<td>9</td>
<td>5</td>
<td>7</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>At-Risk</td>
<td>6</td>
<td>7</td>
<td>4</td>
<td>7</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>High-Risk</td>
<td>4</td>
<td>1</td>
<td>12</td>
<td>7</td>
<td>6</td>
<td>5</td>
</tr>
</tbody>
</table>

*Note: SEARS software converted scores based upon participants’ raw score, T-score, and percentile.*

A total of 17 participants received CCIPT, 21 received CCGPT, and 18 participants were in the waitlist control group. After treatment, 75% of High Risk participants receiving CCIPT moved from the High Risk category to more normative functioning, and 42% of participants receiving CCGPT moved from the High Risk category to more normative functioning, as compared to only 17% of participants in the waitlist control group. Of children participating in CCIPT 35% moved to an improved category, and 38% of children participating in CCGPT moved to an improved category, as compared to 22% in the waitlist group. In terms of clinical significance, participants in the CCIPT and CCGPT conditions outperformed children in the waitlist control group.
APPENDIX D

EXTENDED DISCUSSION
I sought to investigate the effect of CCPT on the social-emotional assets of elementary school children, the effect of CCPT on social regulation, social competence, and empathy, and the comparative effect of CCIPT and CCGPT. Specifically, I investigated whether or not 16 school-based sessions of either CCIPT or CCGPT was correlated with improvement in social-emotional assets over eight weeks, as measured by the SEARS-P and the SEARS-T pre- and post-tests. When comparing results of all three treatment groups (CCIPT, CCGPT, and waitlist control), parent reports yielded statistically, practically, and clinically significant results, indicating parents of children in CCIPT and CCGPT reported significantly greater improvement in overall social-emotional competencies compared to parents of children in the waitlist group. Parents of children in CCIPT and CCGPT reported significantly greater improvement in self-regulation and responsibility when compared to parents of children in the waitlist group, with parents of children in CCGPT reporting the largest improvement. Parents of children in CCIPT and CCGPT reported significantly greater improvement in social competence when compared to parents in the waitlist group. Parents of children in the CCIPT group reported improvement in empathy, when compared to parents in the CCGPT and waitlist groups. Teachers of children in CCIPT and CCGPT did not report statistically significant improvement in overall social-emotional competencies compared to teachers of children in the waitlist group.

Parent Perceptions

*Overall Social-Emotional Assets*

Parents of children in CCIPT and CCGPT reported statistically, practically, and clinically significant improvement with medium to large effect in overall social and emotional competencies when compared to parents of children in the waitlist group, indicating the positive impact of school-based CCPT with elementary students who display emerging or serious
impairment in social-emotional development. The findings indicate that both CCIPT and CCGPT may be viable interventions for facilitating children’s social-emotional development. The medium to large effect size of these results is consistent with the meta-analytic findings in Lin and Bratton (2015) and Ray, Armstrong, Balkin, & Jayne (2014). The results are also consistent with Cheng (2015).

The findings indicate that both CCIPT and CCGPT may be viable interventions for facilitating children’s social-emotional development. Regarding CCGPT, these findings are consistent with Cheng (2015) who also found a statistically and practically significant outcome for CCGPT treatment with social-emotional assets. These results are also consistent with Stulmaker et al. (unpublished) who found a statistically significant result with CCIPT treatment with social-emotional assets. The current study, as well as Cheng (2015) and Stulmaker et al. (unpublished) all support the Ray et al.’s (2013) model which illustrates that, theoretically, CCPT appears to be a good choice of treatment for overall functional impairment because it encourages children’s development of empathy and self-regulation.

Self-Regulation/Responsibility

Results of this study found a statistically significant result for the improvement of Self-Regulation/Responsibility scores on the SEARS-P from pre- to post-test with a very large effect size for the CCGPT condition. The effect size for the subscale of Self-Regulation/Responsibility for CCGPT was by far the largest of any subscale for any treatment group. The CCIPT treatment condition also yielded a statistically significant improvement with a large effect size, although not as large an effect size as the group condition. The improvement in self-regulation/responsibility for the waitlist control groups was not statistically significant and had small effect. These results indicate both CCGPT and CCIPT are effective for the development of
self-regulation/responsibility, and that CCGPT may be preferable to CCIPT. This result is consistent with current theory that CCGPT is preferable to CCIPT for social-behavioral issues—specifically those issues related to self-regulation and responsibility. (Sweeney et al., 2014; Sweeney & Homeyer, 1999).

In terms of CCGPT, the results of the current study are consistent with Trostle (1988) and Ray, et al. (2015). Trostle (1988) found 10 sessions of CCGPT was related to an increase of self-control for 3-to-6-year old bilingual Puerto Rican children. Ray et al., 2015) also demonstrated a significant increase in self-regulation. The results of Ray et al., (2015), Trostle (1988), and the current study are inconsistent with Cheng (2015) who did not find statistically significant results on the SEARS-P for the subscale of Self-Regulation/Responsibility.

In terms of CCIPT, the results of the current study are consistent with those of other studies exploring the impact of CCIPT on self-regulation. Muro et al. (2006) and Ray et al. (2007) have conducted studies looking at the impact of CCIPT on self-regulation (Ray & Bratton, 2010). CCIPT was related to decreased ADHD characteristics (Muro, et al., 2006), and decreased emotional lability (Ray, et al., 2007). Additionally, according to Stulmaker et al. (unpublished) CCIPT appears to improve empathy and self-regulation deficits.

The results of the current study appear to confirm that both CCGPT and CCIPT may be effective treatments for the development of self-regulation and responsibility, as indicated in earlier studies with one exception. The current study also appears to confirm the theory that CCGPT is preferable to CCIPT in regards to self-regulation/responsibility.

**Social Competence**

Parents of children in CCIPT and CCGPT reported statistically significant improvement in Social Competence subscale scores with a large practical effect when compared to parents of
children on the waitlist. Results for the waitlist condition yielded a statistically insignificant result with a small effect size. These results indicate that either CCGPT or CCIPT is effective for treating social competence.

Regarding the individual condition, the current study appears to be consistent with Fall et al. (2002). Although researchers did not specifically use the words “social competence,” Fall, et al. (2002) reported CCIPT was related to reductions in social problems.

Regarding the group condition, this study appears to be consistent with several early studies on the relationship of group play therapy treatment with social competence. Research conducted on CCGPT was related to gains in social maturity (Pelham, 1972), social position (Thombs & Muro, 1973), acceptance of others (Trostle, 1988), social adjustment when interacting with emotional disturbance (Elliott & Pumfrey, 1972), and social functioning (Newcomer & Morrison, 1974).

The results of the current study appear to confirm that CCIPT and CCGPT are both effective for development of social competence. However, as both treatment conditions appeared almost equally effective, the results of the current study do not support the theory that CCGPT may be preferable to CCIPT for the development of social competence.

*Empathy*

Results from neither the CCIPT, CCGPT, nor waitlist conditions yielded a statistically significant result \( p \leq .05 \) for the SEARS-P subscale of Empathy. However, results from the CCIPT condition yielded a large effect size (eta squared = .13), indicating CCIPT demonstrated practical effectiveness in facilitating empathy growth. The results from the current study are consistent with the findings of Stulmaker et al. (unpublished) that CCIPT appears to improve empathy deficits.
The results of the SEARS-P for the subscale of Empathy for the CCGPT condition yielded a negligible effect size (eta squared = .002). According to these results, CCGPT appears to have little to no effect on empathy. This finding is consistent with a pilot outcome study of CCGPT (Ray et al., 2015) that demonstrated a significant increase in self-regulation but not empathy. However, this result is inconsistent with another study of CCGPT (Cheng, 2015) that demonstrated a statistically significant increase in empathy but not self-regulation. The related findings from the current study appear inconsistent with the theory that CCGPT is preferable to CCIPT for social issues. However, the conclusion one makes depends on one’s definition of empathy. According to Merrill (2011, p. 4), empathy is defined as “the child’s ability to understand and relate to others’ situations and feelings.” Thus, the definition of empathy according to the creator of the instrument used in this study defined empathy as more of an internal construct than a social one.

Several possible explanations exist for the lack of results for development of empathy in the group condition. The current study was one of three parts to a larger study. One of the concurrent research studies targeted children with aggressive behaviors. Data from this study (Wilson, 2016) indicated 71% of participants in both the CCIPT and CCGPT conditions were found to be “aggressive” as determined by a parent and/or teacher assessment of aggressive behavior (Children’s Aggression Scale-Parent or Children’s Aggression Scale-Teacher). Ray et al. (2013) theorized empathy developed in children as a result of the therapist’s empathetic responses to the child, including reflecting feelings, reflecting content, reflecting deeper meaning, and facilitating the relationship. Perhaps children in a group condition do not receive as much empathy as they would in an individual condition. In a group condition, the therapist has to divide attention between two participants, perhaps resulting in each participant receiving
less empathy than they would if they were participating in the individual condition. Perhaps in a
group condition (particularly in a group condition including one or two aggressive participants),
the children do not receive much empathy from each other. Additionally, in a group condition
(particularly in a group condition including one or two aggressive participants), the therapist
would likely respond with more limit setting responses, explaining the high level of impact
CCGPT had on self-regulation/responsibility.

Also, empathy may be more difficult to impact with therapy than other constructs, which
is consistent with my observations as a school counselor. Empathy improvement may require
more than 16 sessions, as indicated by Cheng (2015).

The two previous explanations fit with my personal experience during the course of the
study. In four of six groups in which this researcher delivered therapy, such was the case –
children did not receive much empathy from each other (at least initially), and the therapist had
the opportunity to set more than the typical number of limits (at least initially). As therapy
neared the later stages, children showed more empathy (particularly the girls), and the therapist
had to set fewer limits.

Just as internalizing behaviors are harder to observe or measure than externalizing
behaviors, empathy may be harder to observe or measure than either self-regulation/responsibility or social competence. Additionally, the Empathy subscale may be less
sensitive than the Self-Regulation/Responsibility subscale as the Empathy subscale consists of
one-third the number of items. In the present study, it appears that CCIPT is shows promise for
development of empathy, but results continue to be contradictory regarding CCGPT (Cheng,
2015; Ray et al., 2015).
More research appears to be needed with regard to empathy. As mentioned earlier, results from Ray et al., (2015) and Cheng (2016) were in direct conflict. Although researchers from both studies reported improvement in social competence scores, Ray et al. (2015) reported improvement in self-regulation and responsibility scores, but not empathy, and Cheng (2016) reported improvement in empathy scores, but not self-regulation/responsibility. Results of the current study are similar to the results of Ray et al. (2015). Currently, it appears that CCIPT is effective for development of empathy, but results continue to be contradictory with CCGPT.

Teacher Perceptions

According to teachers, all three groups of children improved from pre- to post-test. Unlike parents, however, teachers of children in CCIPT and CCGPT did not report statistically significant improvement when compared to teachers of children in the waitlist group on overall social-emotional assets. Both the control and CCIPT groups improved an average of 1.3 points per participant, whereas participants in CCGPT improved 3.9 points on average—3 times the amount of improvement in either CCIPT or control groups, but not large enough to result in statistical significance.

Lack of statistically significant results for teacher reports differentiating between intervention and control groups was especially disconcerting due to comments from administrators and counselors at all schools, stating that the number of office referrals had gone down substantially and contributing this occurrence to students’ receiving play therapy. However, lack of statistically significant results based on teacher reports is consistent with previous research. Garza and Bratton (2005) investigated the impact of CCPT with 29 Hispanic children, using both teacher and parent reports of children’s internalizing and externalizing behaviors. Although parents reported statistically significant differences in children’s
externalizing behavior, teachers reported no statistically significant results. Garza and Bratton attributed this occurrence partially to their failure to provide a controlled environment for teachers to complete assessments. They observed that at post-test, they had difficulty getting teachers to complete assessments, and teachers completed assessments hurriedly. Cheng (2015) also noticed similar concerns with teacher post-assessments. Cheng used the SEARS-P and SEAR-T to gather information on 43 kindergarten participants, also finding statistically significant results with parent reports but not with teacher reports. She observed teachers filling out assessments reluctantly and hurriedly. This is consistent with my observation of teachers completing the post-test assessments for the current study. Not only did several teachers complain of being too busy to complete assessments, but also I observed some teachers hurriedly completing assessments. Garza and Bratton’s (2005) recommendation to provide a controlled environment for teacher evaluation may be indicated. Teachers are stretched thin and have limited time to spend on such tasks. Inundated with a myriad of tasks, teachers may be used to doing tasks quickly. Perhaps a more in depth explanation to teachers before the start of the study would help teachers understand the importance of the information to future treatment of school children.

As mentioned in Helker and Ray (2009), I also felt that by asking teachers to complete assessments early in the school year, teachers may not have had enough time to get to know students well enough to accurately assess them. One teacher said as much when I collected her pre-test. Cheng (2015), Garza and Bratton (2005), and Helker and Ray (2009) noted their studies may have been affected by beginning-of-the-year factors and end-of-the-year factors. I also felt that the timing of collecting teacher assessments just prior to holiday break may have been unhelpful, as teachers have more than the typical number of tasks during the holiday season,
including completing student report card grades, planning holiday celebrations at school, and handling additional behavior issues. As a former teacher and school counselor with a total of 16 years’ experience, I can attest to children’s behavior changes during the holiday season. Children tend to be less focused during the holidays, discipline problems tend to increase, and holiday activities disrupt the typical classroom environment, having a negative impact on some children’s behavior. The normal chaos of the holiday season may have influenced children’s behavior and teachers’ perceptions of behavior.

Additionally, it is possible teachers may, understandably, not notice some differences in student behavior, as teachers are attending to the behaviors of multiple children. Helker and Ray (2009) noted that it might be difficult for teachers to notice internalizing behavior problems because children express these problems internally. Additionally, some children’s improvement may be indicated by a more assertive expression of wants, needs, and emotions, which teachers may misunderstand and view as less desirable than the child’s previous behaviors (Helker and Ray, 2009).

As in the current study, Cheng’s (2015) study also found no statistically significant results per teacher report between groups using the SEAR-T. Perhaps the SEARS-T is not a sensitive enough instrument to measure changes in teachers’ perceptions.

Study Strengths and Limitations

I utilized several design elements to guard against threats to validity. Most importantly, random assignment and the presence of a control group controlled for the threats to internal validity of history, passage of time, statistical regression to the mean, and selectivity bias (Creswell, 2014; Rubin & Bellamy, 2012). Pre- and post-testing also helped control for selectivity bias. To increase the likelihood of validity of the statistical conclusion, I selected a
probability of $\alpha < .05$ and reported effect size as well as statistical significance. To protect against threats to treatment fidelity, doctoral level play therapists with at least one year of experience in play therapy provided treatment. All therapists had completed at least two 3-hour master’s level university courses in play therapy, including a course dedicated to CCGPT. Additionally, faculty supervisors supervised and monitored all therapists for fidelity of treatment in accordance with Ray’s (2011) treatment manual. To ensure practitioner equivalence across all groups, I assigned most practitioners (six of 10) to both individual and group modalities. As demonstrated in an earlier section, the assessments used had strong reliability and validity to control for threats to measurement validity (Bryman, 2008; Creswell, 2014; Rubin & Bellamy, 2012).

However, some limitations in this study existed. In terms of external validity, I selected participants from a convenience sample in local area schools with a relatively small sample size, limiting generalizability. Results may not necessarily be accurately applied to other populations, regions, times, settings, and demographics (Rubin & Bellamy, 2012).

One threat to internal validity was teacher and parent knowledge of whether or not a child was receiving treatment, possibly resulting in rater bias or placebo effect. Providing a placebo or alternate treatment would have enabled blind ratings. However, this was not a practical solution; such an undertaking would have required a large number of volunteer play therapists. Relatedly, children also knew whether they were in the treatment group, perhaps resulting in placebo effect in the experimental groups or resentful demoralization in the control group. Again, although this could have been controlled with a placebo or alternative treatment group, the number of therapists required was not available (Bryman, 2008; Rubin & Bellamy, 2012).
A threat to construct validity was the possibility of mono-method bias (Trochim, 2006). I used only two instruments (SEARS-T and SEARS-P) to measure empathy, self-regulation, and social competence. Although these instruments enabled me to gather data across two environments, the two assessments are related to each other. Using another unrelated instrument to measure empathy, self-regulation, and social competence would have increased the probability of accurately measuring the constructs. However, teachers and parents might not have been willing to complete more than one assessment each, or they might have completed instruments in a haphazard manner. Another way to increase confidence in the data would have been to gather data from the children themselves. However, researchers agree young children are not developmentally able to complete self-reports on constructs requiring inter-and intra-personal awareness (Merrill, 2011).

Additionally, this study included no African American children, due to the need of African American participants for another concurrent part of the larger study. Although researchers in the larger study felt it was very important to the field to conduct a study on the impact of CCPT on African American children, this decision had the unfortunate consequence that the participants in the current study were not ethnically representative of the larger population.

Recommendations for Future Research

Recommendations for future research, based on the limitations and findings of the current study and of other earlier studies, include:

1. The current study was limited by the absence of African American participants. Future researchers would certainly want to include this population.
2. The current study utilized a relatively small sample size. Larger sample sizes would result in more confidence in results as well as increased generalizability. The use of grant funds or collaboration with other research institutions could increase access to additional resources, facilitating a larger sample size.

3. Due to the inconsistent findings between parents and teachers, future research studies should include data from both parents and teachers, utilizing multiple assessment measures.

4. It might be helpful to provide a more thorough explanation of the rationale for pre- and post-assessment to parents and teachers, and to provide a more controlled environment for teacher assessment. Perhaps researchers could provide substitute personnel to relieve teachers from class, lunch and/or recess duty, giving teachers the opportunity to complete assessments in an unhurried manner.

5. I recommend the addition of an independent rater for future studies for a relatively unbiased observation of children.

6. Due to the limitation of mono-methods bias, future researchers might consider using more than one instrument to measure the same construct, particularly if measuring empathy. Researchers might use an empathy measure that assesses the social-behavioral rather than the internal definition of empathy, to further investigate the theory of the benefits of CCGPT.

7. Future researchers need to be aware of the difficulty of matching appropriate group members when participants are randomly assigned. The result of random assignment for this study was that children in the CCGPT condition
were of various ages and grades, making it necessary to continue to recruit participants in order to find appropriate matches. Future researchers might avoid the difficulty I had in matching appropriate group members for CCGPT by utilizing a narrower age range of participants or blocking by grade when randomizing.

8. The current study would have been stronger if the researchers had compared CCIPT and CCGPT treatment to an already evidence-based treatment, rather than to a control group. Although this would require greater access to resources, this could result in stronger evidence for CCPT becoming an evidence-based treatment. It also would avoid the threats to internal validity associated with reporters and participant knowledge of treatment group.

9. In order to provide evidence for CCPT to be an evidence-based treatment, this researcher recommends this study be replicated.

10. A future study would increase external validity by using school counselors as treatment providers.

11. One possible limitation of this study was time. Earlier researchers have found larger CCPT results with 32 CCPT sessions as compared to 16 (Muro et al., 2006). Future studies could conduct long-term treatment. Long-term therapy could impact the results of the comparison of CCGPT and CCIPT.

Implications for Practice

The results of the current study help to confirm the effectiveness of CCPT as an intervention. This result is important for many reasons, not the least of which is that CCPT is one of few models of therapy developmentally appropriate for young children. Results of the
current study appear to confirm CCPT as a treatment of choice for young children. Particularly, this study confirms earlier research that CCPT is effective for the development of children’s overall social-emotional competencies, including self-regulation/responsibility, social competence, and empathy.

Additionally, this study helps to confirm the viability of CCPT (both group and individual) as an appropriate and effective treatment for use in schools. Based on this and previous studies, it appears it could be very valuable for university programs to train school counselors in CCIPT and CCGPT. CCGPT requires different training than CCIPT. School counselors, in particular, need to become comfortable with CCGPT, as it appears effective, when appropriate, and is an efficient use of school counselors’ time.

This study indicates the current theory on the benefits of CCGPT may be valid, specifically with the constructs of self-regulation/responsibility and social competence. It appears the environment of CCGPT is particularly helpful for the development of self-regulation/responsibility.

Specifically, this study indicates CCIPT is effective for the development of overall social-emotional assets, including self-regulation/responsibility, social competence, and empathy. This study also indicates CCGPT is effective for the development of overall social-emotional assets, including self-regulation/responsibility and social competence.

Finally, CCGPT research could benefit from the development of a formal CCGPT manual. CCGPT requires different skills than does CCIPT. CCGPT requires different training, different playroom materials and requirements, and different types of responses from the therapist.
Conclusion

Social-emotional assets impact children’s overall functioning. Early prevention is important, especially in the context of schools. CCIPT and CCGPT appear to be developmentally appropriate and effective interventions for development of social-emotional assets in children.

Specifically, CCIPT appeared to be effective for children in this study in facilitating development self-regulation/responsibility, social competence, and empathy. CCGPT appeared effective for the development of self-regulation/responsibility and social competence, but not with empathy. CCGPT appeared to be more effective than CCIPT with these children’s development of self-regulation/responsibility.

CCPT can be a developmentally appropriate and effective treatment for children in schools. As such, CCPT training (both individual and group) can be an important part of school counselor’s education.

At this time, until more research is completed on the use of CCGPT with empathy, I recommend using CCIPT when treating children with obvious empathy deficits. However, it appears CCGPT would be treatment of choice for those children needing treatment in self-regulation. Although CCIPT and CCGPT appear to be equally effective for social competence, CCGPT might be the more efficient treatment alternative.

The current study was only the second randomized controlled study to compare CCIPT and CCGPT, the last one—which used the term “self-directive” play therapy--(Pelham, 1971) having been conducted 45 years ago. Clearly, more current research is needed comparing CCIPT and CCGPT. As the current study was the first research study to compare CCIPT and
CCGPT in the development of overall social-emotional competencies, it is important future researches replicate this study.
APPENDIX D

OTHER ADDITIONAL MATERIALS
University of North Texas Institutional Review Board

Parent Informed Consent

Before agreeing to your child’s participation in this research study, it is important that you read and understand the following explanation of the purpose and benefits of the study and how it will be conducted.

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.Ed., LPC-Intern, NCC, University of North Texas, Department of Counseling and Higher Education.

Brittany Wilson, M.Ed., 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 individual or group 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 individual or group 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 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. Individual play therapy is a counseling intervention involving the child receiving individual attention from the therapist. Group play therapy is a counseling intervention combining the advantages of play therapy and group process. Through the interactions with the other group members and/or therapist, we hope your child will become more aware of their 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 assessment (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 20-40 minutes of your time to complete assessments.

If your child is assigned to the individual play therapy group, 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 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, whenever 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.

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 group 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 problem 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
Title of Study:

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.Ed., LPC-Intern, NCC, University of North Texas, Department of Counseling and Higher Education.

Brittany Wilson, M.Ed., 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 group or individual 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 others’ feelings, thoughts, and needs, as well as learn to interact in a socially appropriate ways. This study aims to explore whether participating in group or individual play therapy helps children decrease social, emotional, and behavioral problems 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 2 - 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 assignment to either group or individual play therapy group, 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, end of 8-week period. It will take
approximately 10 minutes to complete each assessment, 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 being more 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 two-four 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.
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
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 group or individual play therapy is helpful to you. Group play therapy is a time when you will come to a playroom with one or two other children and a counselor who 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. Individual play therapy almost the same as group play therapy except that you will come to a playroom by yourself with a counselor.

You will be asked to come to either group play therapy or individual 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. No one gets to choose who goes to group or individual play therapy. It is decided by chance.

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
## Group Play Therapy Skills Checklist (GPTSC)

**Therapist:** ________________________  **Observer:** ________________________  **Date:** _____________

**Child A/Age/Gender:** ________________  **Child B/Age/Gender:** ________________  **Child C/Age/Gender:** ________________

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<td>Tolerance for Noise/Messiness/Intense activity</td>
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<th>Need More</th>
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Other Observations

Identified Group Themes

Identified Individual Themes

Child A:
Child B:
Child C:

Therapist’s Strengths

Areas for Growth

Note. Group play therapy skills checklist (GPTSC) was adapted from D.C. Ray’s (2011) *Advanced Play Therapy: Essential Conditions, Knowledge, and Skills for Child Practice* (pp. 310-311). Reproduced with permission from the author. This chart was originally designed for working in individual play therapy and was adapted for use with group play therapy.


Merrell, K. W. & Calarella (2002). *The Home and Community Social Behavior Scales (HCSBS)*


http://www.statisticbrain.com/school-shooting-statistics/


