

Exploring the Impact of Child-Centered Play Therapy for Children Exhibiting Behavioral Problems: A Meta-Analysis

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The authors conducted a meta-analysis exploring the effectiveness of child-centered play therapy (CCPT) approaches with children referred for disruptive behaviors across 23 between group studies ($N = 908$). Separate meta-analytic procedures were conducted for studies that implemented wait-list/no treatment and alternative treatment comparisons to estimate the aggregated treatment effect of CCPT approaches. Results revealed medium Hedges's g effect sizes for externalizing and overall problem behaviors compared to alternative treatment and waitlist controls, and small Hedges's g effect sizes for aggressive behaviors. The authors explore the impact of CCPT on behavioral disruptions, implications for therapists, and ways in which therapists can utilize play therapy to meet the increasing rates of childhood behavioral disorders.

Keywords: play therapy, disruptive behaviors, meta-analysis, child centered play therapy, externalizing behaviors

In the United States, rates of childhood behavioral problems continue to increase (Centers for Disease Control and Prevention, [CDC], 2019). According to the National Institute for Health and Clinical Excellence [NICE] (2013), behavioral disorders are the most common mental health disorders in children. Behavioral problems can range in severity from difficulty following directions to hitting and yelling. These behaviors are often identified as externalizing behaviors, as they include behaviors toward another person (CDC, 2019). Externalizing behaviors include distractibility, difficulty complying with rules and norms, hyperactivity, yelling, and invading another's space without permission (Achenbach & Rescorla, 2001; Hart et al., 2019; Liu, 2004). These behaviors can cause significant impairment in peer relationships (Pollack et al., 2016) and

academic performance (Redden et al., 2003); and subsequently often lead to poor outcomes in adulthood (Owens, 2016; Scott et al., 2001).

Children with behavioral problems struggle with emotional regulation, frequently misinterpret social cues, view neutral events as hostile, and use aggression and anger as problem-solving strategies (McCart & Sheidow, 2016). These behaviors can potentially impact their acquisition of social skills including communication, conflict resolution, and emotional regulation (Fantuzzo et al., 2004; Pollack et al., 2016). As a result, these often experience strained relationships with family, peers, and teachers (Brinkmeyer & Eyberg, 2003; Neece et al., 2012).

As behavioral problems are inherently disruptive, students often interrupt class and may experience academic problems (Brinkmeyer & Eyberg, 2003; Hamre et al., 2007; Myers & Pianta, 2008; Ray, 2007). Children who exhibit behavioral difficulties are more likely to be enrolled in special education services (Redden et al., 2003) and to have problems with truancy (Timmermans et al., 2008). Within adolescence, children identified as displaying behavioral problems are more likely to drop out of school (Owens, 2016), engage in substance use (Fergusson et al., 2005), risky sexual

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behaviors (Bennett & Bauman, 2000; Fergusson & Woodward, 2000), and be involved with the juvenile justice system (Fergusson et al., 1994). These problem behaviors can continue into adulthood, especially if the behavioral problems continue to increase in severity (Scott et al., 2001).

Williams et al. (2016) noted that even children who display mild behavioral problems are at risk for developing severe behavioral problems if they are not identified and effectively treated. As result, there is a significant need for mental health services that address childhood behavior problems (Brauner & Stephens, 2006). Additionally, as children of color (Alegria et al., 2010), males (McLeod & Kaiser, 2004), and those living in poverty (Robinson et al., 2017) are disproportionately represented when exploring childhood behavioral diagnoses, it is necessary to explore effective interventions that meet the needs of diverse clientele.

Child-Centered Play Therapy

Child Centered Play Therapy (CCPT), the most popular approach to childhood mental health counseling (Ray, 2011), is a non-directive intervention using toys and play to meet the developmental needs of children (Landreth, 2012). CCPT therapists focus on the whole child, providing a supportive and accepting relationship for the child to explore themselves while identifying emotional experiences and practicing ways of bringing self under control (Landreth, 2012). Within CCPT, the therapeutic relationship provides the avenue for children to integrate their emotions and experience and move toward self-actualization (Ray, 2011). Since children with behavioral problems struggle with relationships (Pollack et al., 2016), this intervention may assist children by modeling a safe and caring relationship wherein they can gain an internal locus of control and can develop healthier social skills (Landreth, 2012).

Additionally, early interventions for disruptive behaviors are paramount (Williams et al., 2016) and CCPT can be utilized with young children, thus meeting a significant need for treatment of disruptive behaviors in young children (Landreth, 2012; Ray, 2011).

There is a strong empirical base for Child Centered Play therapy (Landreth, 2012; Ray et al., 2015; Lin & Bratton, 2015; Pester et al., 2019). Recently, several researchers used meta-

analyses to explore CCPT across diagnoses and within different settings. Lin and Bratton (2015) found moderate effect sizes for CCPT interventions across diagnosis while Ray et al. (2015) found small to moderate effect sizes for CCPT when used within the school systems. When exploring studies of single-case designs of CCPT, Pester et al. (2019) found moderate effect sizes for externalizing and internalizing behaviors and children's social skills. Jensen et al. (2017) meta-analysis found moderate effect sizes for play therapy, while noting the need for more rigorous research studies in play therapy, specifically the use of randomized controlled designs.

Despite the strong research support of CCPT, it is often excluded from evidence-based treatment indexes due to lack of randomized design, small sample sizes, and lack of diagnostic criteria for inclusion (Evans et al., 2018; Jensen et al., 2017). Currently, the interventions that garner the most research support include cognitive behavioral therapy (CBT) interventions (Battagliese et al., 2015; Kaminski & Claussen, 2017). As noted by Williams et al. (2016), early interventions for disruptive behaviors are paramount and because CCPT can be utilized with young children, it could meet a significant need for treatment of disruptive behaviors in young children (Landreth, 2012; Ray, 2011). Because many play studies include small sample sizes (Jensen et al., 2017), a meta-analysis may offer a more robust understanding of the potential effect of CCPT and deliver more accurate representation of the data through provision of overall mean effect sizes across multiple studies (Lipsey & Wilson, 2001).

As the rates of behavioral issues in children continue to increase it is important to explore if CCPT is effective in addressing this growing mental health concern. While several researchers' meta-analyses findings identified small to moderate treatment effects for CCPT modalities across broad presenting concerns and outcome measures (Jensen et al., 2017; Lin & Bratton, 2015; Ray et al., 2015; Pester et al., 2019) there is a need for CCPT research specifically on the treatment of problem behaviors. (Jensen et al., 2017). By providing an overall mean effect size for several studies, meta-analyses may offer a more robust understanding of the potential effect of interventions and deliver a more accurate representation of the data (Lipsey & Wilson, 2001). This study aims to address Jensen et al. (2017) call to explore the

effect of CCPT specifically on children referred to treatment for specific presenting concerns.

Purpose of the Study and Research Questions

The purpose of this study is to evaluate the effectiveness of play therapy on mitigating behavioral problems among children referred for treatment due to disruptive behaviors. The research questions in this study include: (a) What is the status of study quality among investigations of CCPT for disruptive behaviors? (b) To what degree does CCPT reduce externalizing behaviors in children? (c) To what degree does CCPT reduce overall problem behaviors in children? (d) To what degree does child-centered play therapy reduce aggressive behaviors in children?

Method

To conduct a meta-analysis exploring the impact of CCPT on children's disruptive behaviors, the authors collected, coded, and collated the studies using standards described by [Lipsey and Wilson \(2001\)](#). The information was then synthesized to rate the studies on quality. Statistical procedures were utilized to account for sample size to evaluate the effectiveness of all types of CCPT.

Inclusion and Exclusion Criteria

Inclusion of studies within this meta-analysis was determined by the following criteria: (a) appeared in print or electronically between 1999 and 2018; (b) at least one experimental group utilized a clearly defined CCPT or non-directive play therapy intervention; (c) the study participants were children ages two to 12 referred to treatment for disruptive behaviors, or scoring in clinical cutoffs on established behavior problem measures; (d) the experimental study compared CCPT with no treatment, treatment as usual (TAU), or an alternative treatment; and (e) used quantitative psychometric assessment. Upon review of the set of studies, all measures of disruptive behaviors had been previously used in a published study, and none raised concerns about validity. Studies were excluded from analysis if they utilized single-case research designs, quasi-experimental designs, did not identify participants as displaying behavioral problems, the intervention was not clearly described as CCPT, or included data for

comparison groups gained from alternative studies. Studies were limited to the time frame of 1999–2018 to increase the robustness of the sample, as many studies on CCPT prior to 2000 lacked empirical rigor ([Ray & Barton, 2010](#)).

Search Strategies

Search terms included “disruptive behavior,” “externalizing behaviors,” “aggressive behaviors,” “problem behaviors,” “non-directive therapy,” “child centered,” “filial,” “humanistic,” “play therapy” and “child centered play therapy.” Search electronic databases included PsycINFO, Pubmed, ERIC, ProQuest Dissertations and Theses, EBSCO, and the Play Therapy Outcome Research Database. Additionally, authors examined references from previous play therapy meta-analyses. Both published and unpublished studies were identified for inclusion and authors attempted to contact authors of unpublished works. The authors then aggregated selected articles in a shared electronic document and removed duplicate studies. The first author, who has experience in CCPT, determined whether each research article met all selection criteria by reviewing the title, abstract, and full text, and these selected articles were submitted for analysis.

Coding Procedures

Coding and effect size calculations were conducted in accordance with [Lipsey and Wilson \(2001\)](#) and [Lin and Bratton's \(2015\)](#) procedures (see [Table 1](#)), to support the presence of quality reports within the study sample, while also decreasing the influence of publication bias when estimating the aggregated treatment effect. A coding guide was developed a priori by the second author in consultation with the first author to ensure target variables would be included within the sample, and utilized throughout the data coding and verification processes. The a priori standards included randomized experimental design, use of treatment manuals, power analysis, intent to treat analysis, blinded treatment allocation and assessment, and fidelity checks.

Statistical Analyses

Authors utilized Comprehensive Meta-Analysis (Version 3.0) to aggregate effect sizes and calculated Hedges's g with 95% confidence

intervals and weighted mean effect sizes for externalizing behaviors, overall problem behaviors, and aggressive behaviors (Lipsey & Wilson, 2001). Studies were included in the externalizing behaviors analysis if they reported results using formalized assessments of externalizing behaviors. Similarly, studies were included in the analysis of overall problem behaviors if they included a measure of all problem behaviors (e.g., externalizing, internalizing, aggressive). Studies were included in the analysis of aggressive behaviors if they reported results of a formalized assessment of this outcome variable. The authors used a random effects model, and for any studies that included more than one measure of the same variable, the mean effect size from that study was used in final calculations. The authors evaluated effect sizes based on Lipsey and Wilson (1993): small ≤ 0.30 , medium = 0.50, and large ≥ 0.67 . Analyses for studies that compared CCPT to an alternative treatment for externalizing behaviors were conducted separately

from those that compared CCPT to no treatment, however there were no enough studies to conduct analysis for studies that compared CCPT to an alternative treatment for aggressive and overall problem behaviors. Each of these analyses is represented in separate forest plots (see Figures 1–4).

Publication Bias

The authors assessed for publication bias (the phenomenon where studies with large effect sizes are more likely to be published in the literature) via analysis of funnel plots, fail safe N, and trim-and-fill statistics (Borenstein et al., 2009). In funnel plots, authors analyzed for an even distribution around the mean effect sizes. The fail-safe N statistic evaluates the number of studies with small or no effect size that would need to be published that would negate the findings of our study. Finally, the authors evaluated the trim-and-fill statistic, which

Table 1
Methodological Quality of Studies Aspects of Study

Study	A	B	C	D	E	F	G	H	I	J	K	Total
Baggerly and Landreth (2001)	-	-	-	+	+	-	-	+	+	-	-	4
Bratton et al. (2013)	+	-	+	+	+	+	+	+	+	-	-	8
Carnes-Holt and Bratton (2014)	+	+	+	+	+	+	-	+	+	-	-	9
Cochran and Cochran (2017)	-	-	-	+	+	-	-	+	+	-	-	4
Doubrava (2005)	+	+	-	-	-	+	-	+	+	-	-	5
Fall et al. (2002)	+	-	-	-	-	-	-	-	-	-	-	1
Flahive and Ray (2007)	+	+	+	-	+	+	+	+	+	-	-	8
Garza and Bratton (2005)	+	+	+	-	+	+	+	+	+	-	-	8
Gonzales (2012)	+	+	+	+	+	+	-	+	+	-	+	9
Helker and Ray (2009)	+	+	+	+	+	+	-	-	-	-	-	6
Jones and Landreth (2002)	+	-	-	-	-	+	-	+	+	-	-	4
Jones et al. (2002)	+	-	+	-	+	-	-	-	-	-	-	3
Morrison and Bratton (2010)	+	+	-	+	+	-	-	+	+	-	+	8
Ojiambo and Bratton (2014)	+	+	+	+	+	+	+	-	-	-	+	8
Packman and Bratton (2003)	+	-	-	-	-	-	-	+	+	-	-	3
Post et al. (2004)	+	+	-	-	+	-	-	-	-	-	-	3
Ray et al. (2009)	-	-	+	+	+	+	-	+	+	-	-	6
Ray et al. (2013)	+	-	-	+	-	+	+	+	+	-	-	6
Rennie (2000)	+	+	-	-	-	+	-	+	+	-	+	6
Rhine (2000)	+	-	-	-	+	+	-	+	+	-	+	6
Ritzi et al. (2017)	+	+	+	+	+	+	-	+	+	-	+	9
Schumann (2004)	+	-	+	+	+	+	-	+	+	-	-	7
Smith and Landreth (2004)	+	+	-	-	+	+	-	-	-	-	-	4
Wilson (2016)	+	+	+	+	+	+	+	+	+	-	-	9

Note. A = treatment was randomized; B = randomization was described; C = treatment allocation was blinded; D = adhere to protocol; E = fidelity checks; F = groups similar at baseline; G = blind outcome assessments conducted; H = number of dropouts in each group was mentioned; I = Reasons for drop out provided; J = analysis was done on intent-to-treat sample; K = power calculation described; Total = total number of aspects present for that study. + indicates the aspect was present. - indicates the aspect was not present or reported.

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analyzes the effect sizes and lets us know if the distribution of our effect sizes is even.

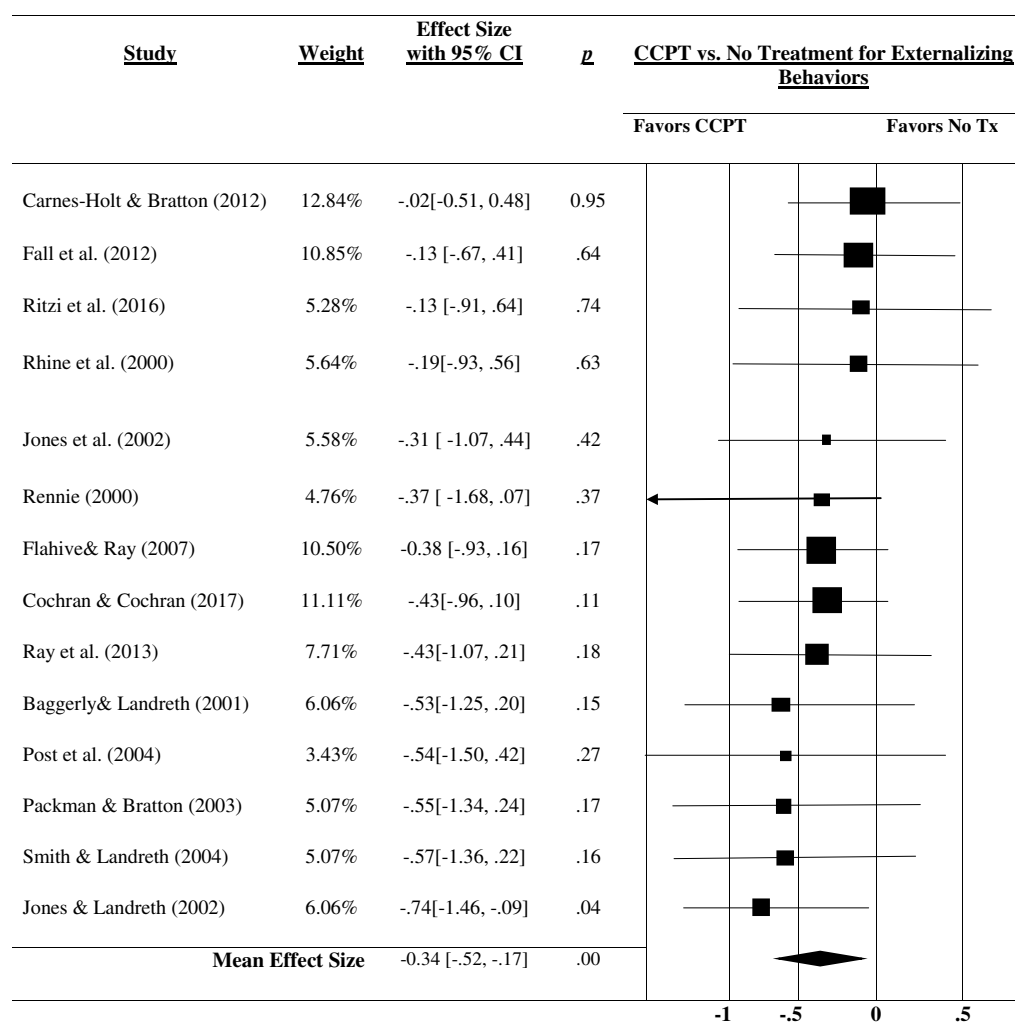
Heterogeneity of Effect Sizes

The authors assessed how similar the effect sizes were in the analyses via Cochran's Q statistic, and the inconsistency index (I^2). The Q

statistic evaluates the consistency between the effect sizes, and therefore the authors evaluated this statistic for a non-significant result, as this would indicate less heterogeneity. The I^2 measures the consistency among the variance in the error, and therefore sought for a result as .50 or less would indicate homogeneity of effect sizes (Borenstein et al., 2009).

Figure 1

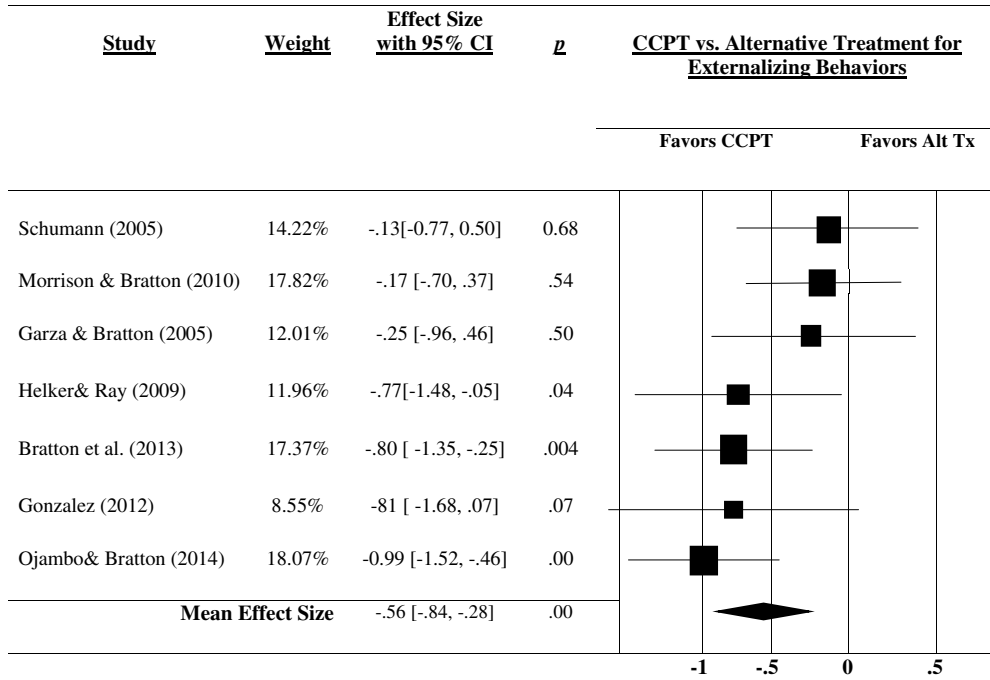
Effect Sizes, 95% Confidence Intervals, and p Values for Studies Evaluating Child Centered Play Therapy (CCPT) for Decreasing Externalizing Behaviors Versus No Treatment Comparison



Note. Tx = treatment. Each box represents the study sample size, with bigger boxes representing a large sample. The line on each box represents the confidence interval for the effect size. Negative effect sizes suggest CCPT was more influential in promoting the desired treatment effect.

Figure 2

Effect Sizes, 95% Confidence Intervals, and p Values for Studies Evaluating Child Centered Play Therapy (CCPT) for Decreasing Externalizing Behaviors Versus Alternative Treatment Comparison



Note. Tx = treatment. Each box represents the study sample size, with bigger boxes representing a large sample. The line on each box represents the confidence interval for the effect size. Negative effect sizes suggest CCPT was more influential in promoting the desired treatment effect.

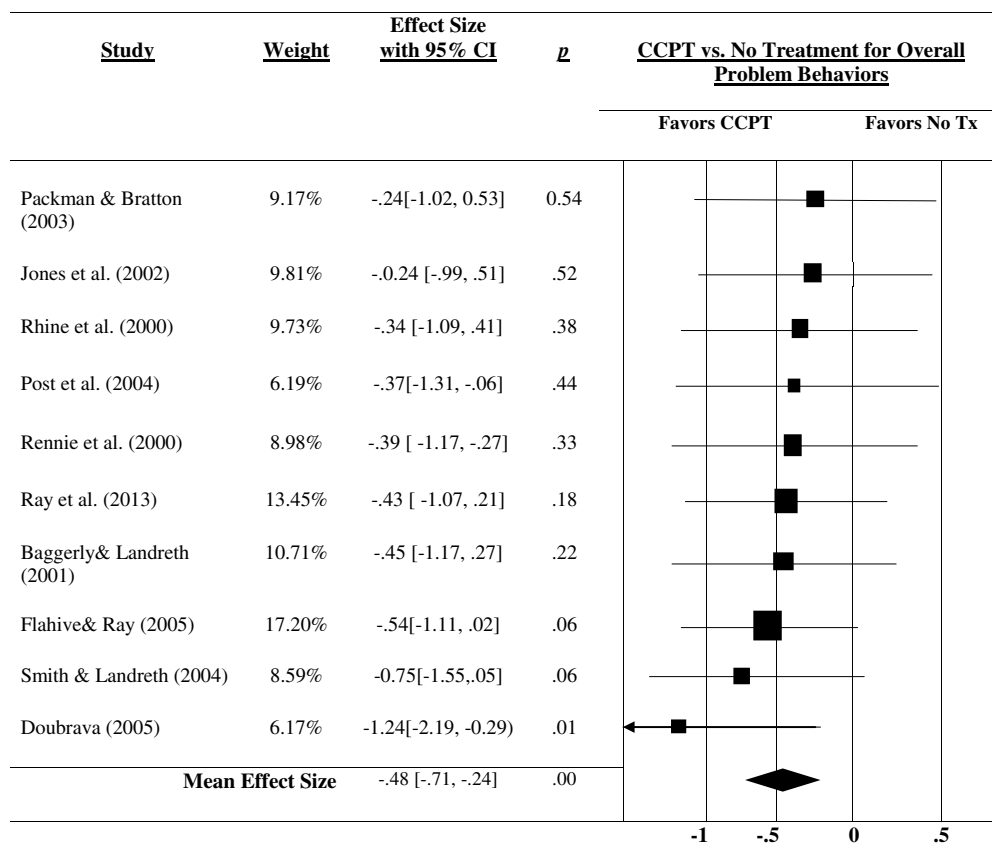
Results

The search identified 61 candidate articles and 13 dissertations that warranted further analysis. After applying inclusion and exclusion criteria, the authors selected 27 studies (21 peer reviewed, six dissertations) to include in analysis. Two studies had extremely high effect sizes that affected the homogeneity of effect sizes in analyses. The authors ran analyses with and without these studies and did not find substantial differences in the overall mean effect size for the analysis. Therefore, the authors removed those outlier studies from the analyses to eliminate the influence on effect size homogeneity. Further, two studies were excluded because the outcome variables explored did not align with the focus of this meta-analysis (e.g., academic problems and empathy in parent-child relationship).

The final sample resulted in 23 studies (17 peer reviewed, six dissertations) included in further analysis. Seven of the selected studies compared CCPT to an alternative treatment, and 16 studies that compared CCPT to no treatment or a wait-list condition. There was total of 904 participants across studies, with 483 having received individual CCPT, 103 received group CCPT, 116 received Child Parent Relationship Training (CPRT), 146 received Child Teacher Relationship Training (CTRT), and 56 received Child Centered Activity Therapy (CCAT). Among the studies that reported gender, 28% ($n = 249$) were girls, and 55% ($n = 491$) were boys. Ninety-one percent of participants ($n = 820$) lived in the U.S., ($n = 84$) 9% lived internationally. Among the studies that reported demographic information, 402 participants were Caucasian, 239 were Hispanic, 168 were African American, and 36 were classified as "other." The median age of participants in this

Figure 3

Effect Sizes, 95% Confidence Intervals, and p Values for Studies Evaluating Child Centered Play Therapy (CCPT) for Decreasing Overall Problem Behaviors Versus No Treatment



Note. Tx = treatment. Each box represents the study sample size, with bigger boxes representing a large sample. The line on each box represents the confidence interval for the effect size. Negative effect sizes suggest CCPT was more influential in promoting the desired treatment effect.

study was 6 years old, with a range from three to 11 years of age.

What Is the Status of Study Quality Among Investigations of CCPT for Disruptive Behaviors?

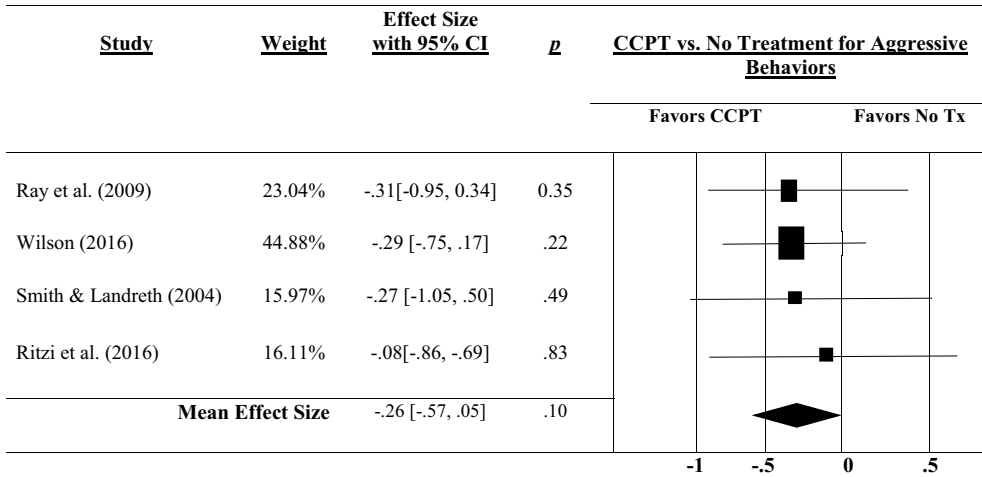
To rate the study quality, the authors utilized criteria adapted from Piet and Hougaard (2011) and Lin and Bratton (2015; see Table 1). For each criterion present, the study received one point. The lowest possible score was a 0, indicating a low-quality study and the highest score possible was a 11, indicating high study quality. Ten of the studies analyzed fell in the higher range of empirical rigor with rankings between seven and nine.

The majority of studies randomized treatment ($n = 23$), more than half utilized treatment protocols ($n = 13$). Nineteen studies included fidelity checks, however only six studies conducted a power analysis prior to participant recruitment.

To What Degree Does CCPT Reduce Externalizing Behaviors in Children and Adolescents?

For the 14 studies that compared CCPT to no treatment ($n = 504$) the analyses generated a mean effect size of $-.34$ (95% CI $[-.52, -.17]$) $p < .00$. This indicates a small effect size and suggests that the null hypothesis can be rejected (see Figure 1). The effect size distribution was

Figure 4
Effect Sizes, 95% Confidence Intervals, and p Values for Studies Evaluating Child Centered Play Therapy (CCPT) for Decreasing Aggressive Behaviors Versus No Treatment



Note. Tx = treatment. Each box represents the study sample size, with bigger boxes representing a large sample. The line on each box represents the confidence interval for the effect size. Negative effect sizes suggest CCPT was more influential in promoting the desired treatment effect.

homogenous, $Q(13) = 5.08, p = .973, I^2 = 0$. This suggests the variance between observed effect sizes was not due to random error. Our publication bias analysis found the fail-safe N of 42 (this indicates that 42 unpublished studies with an effect size of zero would be needed to refute these findings) and a trim-and-fill result of zero, which suggests there is an even distribution of effect sizes in our analysis.

The authors included seven studies that compared CCPT to an alternative treatment for reducing externalizing behaviors, ($n = 284$) and the analysis yielded a mean effect size of $-.56$ (95% CI $[-.84, -.28]$) $p < .00$, and this indicates a medium effect size and suggests the null hypothesis can be rejected (see Figure 2). The effect size distribution was homogenous, $Q(6) = 8.47, p = .21, I^2 = 29.17$. The publication bias analysis produced a fail-safe N of 32, and a trim-and-fill analysis result of zero.

To What Degree Does Child-Centered Play Therapy Reduce Overall Problem Behaviors in Children and Adolescents?

The authors included ten studies that compared CCPT to no treatment for overall problem behaviors, ($n = 303$) and the analysis yielded a mean

effect size of $-.48$ (95% CI $[-.71, -.24]$) $p < .00$, and this indicates a medium effect size and suggests the null hypothesis can be rejected (see Figure 3). The effect size distribution was homogenous, $Q(9) = 3.95, p = .92, I^2 = 0$. Our publication bias analysis produced a fail-safe N of 33, and a trim-and-fill analysis result of two, which indicates a possible uneven distribution of the effect sizes in our analysis.

To What Degree Does Child-Centered Play Therapy Reduce Aggressive Behaviors in Children and Adolescents?

The authors included four studies that compared CCPT to no treatment for aggressive behaviors, ($n = 156$) and the analysis yielded a mean effect size of $-.26$ (95% CI $[-.57, .05]$) $p > .1$, and this indicates a small effect size and suggests the null hypothesis cannot be rejected (see Figure 4). The effect size distribution was homogenous, $Q(3) = .24, p = .97, I^2 = 0$. Our publication bias analysis produced a fail-safe N of 4, and a trim-and-fill analysis result of zero.

Discussion

This study included a total of 908 participants and results suggest that CCPT interventions

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were moderately effective in reducing children's externalizing behaviors ($-.56$ alternative treatments, $-.34$ no treatment) and total behavior problems ($-.48$). Mean effect sizes among the 23 studies assessing the effectiveness of CCPT interventions for decreasing behavioral problems indicated that CCPT was significantly, yet only slightly more beneficial than no treatment, moderately superior to alternative treatments for externalizing behaviors, and moderately superior than no treatment for overall problem behaviors (Achenbach & Rescorla, 2000). Results indicate that in addition to an improvement in disruptive behaviors, children also experienced a reduction in total behaviors.

These results align with Lin and Bratton (2015) meta-analysis of CCPT, wherein CCPT interventions demonstrated a moderate effect size for externalizing and total behaviors, regardless of presenting concern. Additionally, these results are similar to Battagliese et al. (2015) meta-analysis of cognitive behavioral treatments for externalizing disorders that found a moderate benefit of CBT ($d = .52$) when pooling studies using active and waitlist control groups. While caution should be used when comparing studies, these results may indicate that CCPT is an effective option for the treatment disruptive behaviors in children. Interestingly, results examining externalizing behaviors compared to an active treatment resulted in the highest effect size obtained, demonstrating CCPT may be moderately more effective than the alternative treatment, though less effective when compared to no treatment or waitlist control. These results are interesting and require further investigation.

While the results of this study indicate moderate effect sizes for externalizing and overall problem behaviors, CCPT demonstrated small effects on children's aggressive behaviors. Within this analysis, only four studies explored the effect of CCPT on aggressive behaviors, so the insignificant results may be indicative of the small sample. While aggressive behaviors are included as a subscale on most behavioral assessments, only four studies examined that scale specifically within their research. Again, the results of this study align with the results of Battagliese et al. (2015) meta-analysis of CBT and aggressive behaviors, wherein the researchers found low effect sizes for CBT in reducing children's aggressive behaviors. The low effect sizes identified in this study may be indicative of the difficulty in treating aggression,

or the frequent comorbidity of aggression with additional diagnoses (Battagliese et al., 2015). Additional research exploring the effect of CCPT on aggressive behaviors is warranted.

Because males (McLeod & Kaiser, 2004), children of color, and children living in rural or low-income families (Robinson et al., 2017) have higher rates of behavioral diagnoses, it is important to explore treatments that are viable for diverse populations. The participants in this sample were diverse. Of the 908 participants within this meta-analysis, 55% ($n = 491$) identified as male, almost half ($n = 443$) of participants identified as a minority, or non-White, and one-third ($n = 298$) were identified as living in poverty or qualifying for public health benefits.

The high representation of males, children of color, and those that have lower incomes within this analysis indicates that CCPT may be a viable intervention for diverse children. These results align with Lin and Bratton (2015) findings, recognizing that CCPT appears effective in treating diverse children, potentially due to the cross-cultural medium of play. By using play therapy with children exhibiting disruptive behaviors, counselors may be able to intervene before minority children are identified as needing special education or involved within disciplinary services.

The results also identified the need for more rigorous methodology within play therapy research, in alignment with Jensen et al. (2017) analysis. Play therapy researchers often conduct studies within realistic settings, and as a result they may experience difficulty in research design (Ray & Bratton, 2010), though research rigor within play therapy research is increasing. Our results indicate nearly half of the studies scored an 8 or 9 out of 11, and almost all of the studies randomized treatment and utilized a treatment protocol. Previous researchers called on play therapists to increase the quality of research design in CCPT (Baggerly & Bratton, 2010; Ray & Bratton, 2010). Our results suggest play therapy researchers are attempting meet this call.

Implications for Counselors

Our results have several implications for counselors. By implementing CCPT, counselors can potentially help children reduce disruptive behaviors and mitigate some of the

relational and academic difficulties that align with behavioral problems. Qualified mental health professionals can use CCPT in a multitude of settings, increasing access for children who could benefit from treatment. As many behavioral problems are first identified with school settings, and most children do not receive treatment outside of schools (Ghandour et al., 2019), school counselors can provide play therapy as an early intervention for children displaying behavioral problems as well as educate teachers on disruptive behaviors. Providing CCPT in the schools may provide early intervention before disruptive behaviors evolve into more serious diagnoses.

CCPT is a flexible treatment, and can be provided with varying involvement from teachers and parents. Studies included within this analysis explored CCPT being provided by qualified play therapists, and also individuals who were trained and supervised by qualified play therapists. Within this study, researchers explored multiple stakeholders as the providers of CCPT interventions. The ability for CCPT to be adapted to include relevant stakeholders allows for easier access to treatment.

Limitations and Suggestions for Future Research

While the results of this study are promising, it is important to recognize the limitations. Only a few studies included aggressive behaviors, attention problems, or social behaviors as outcome variables, thus limiting our ability to explore CCPT's impact on multiple variables of disruptive behaviors. Future researchers should explore the impact of CCPT on those variables to further expand our understanding of the usefulness of CCPT on multiple disruptive behaviors. The underlying cause of children's externalizing behaviors was not examined, and therefore, it is unknown if CCPT is particularly helpful for specific diagnoses, or trauma, or externalizing behaviors in general. Additionally, not all studies within this meta-analysis used exceptionally rigorous research methods, and few used an active control group. While the meta-analysis can account for some variance in methodology, it is important to note the potential impact of lower quality methodological rigor on the outcomes of this study.

Conclusion

The results of this analysis provide preliminary support for CCPT as a beneficial treatment for children exhibiting behavioral problems, including externalizing and aggressive behaviors. Though the results of this study were promising, there were a limited amount of studies available for analysis, and further research on CCPT could provide a more solid evidence base. Further, by utilizing research protocols and identifying participants through diagnostic criteria, researchers can continue to increase rigor of CCPT studies.

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