

SECTION I

OVERVIEW OF PLAY
THERAPY RESEARCH

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CHAPTER 1

What the Research Shows About Play Therapy: Twenty-First Century Update

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INTRODUCTION TO PLAY THERAPY RESEARCH

The field of mental health currently requires substantial evidence to support the use of interventions providing direct services to clients. Emphasis on evidentiary support of mental health interventions is not new. Many professional organizations, including the American Counseling Association (ACA), the American Psychological Association (APA), and the National Association of Social Workers (NASW), recognize the need for empirical support for practice (ACA, 2005; APA, 2002; NASW, 2008). Managed-care corporations often review interventions through panel evaluation of research and literature to help them make decisions regarding practitioner reimbursement. Over the last two decades, the field has observed the rise of the evidence-based movement of empirically supported treatments in which interventions are critiqued according to rigor of experimental research studies. Fortunately, play therapy research dates back more than 45 years, providing empirical support for even the harshest of critics. There are few interventions that can claim such a lengthy research history as well as a thriving body of current research.

We published our first review of play therapy research literature in 2000 in a simple article titled, "What the Research Shows About Play Therapy." We reviewed 82 play therapy research studies in the article,

4 OVERVIEW OF PLAY THERAPY RESEARCH

from 1942 to 1999. Bratton and Ray (2000) was our initial attempt to summarize and critique decades of play therapy research, including all studies that included the term *play therapy* and at least one aspect of experimental design, such as single-group pre- and post-assessment or stringent comparison of play therapy intervention to a control or comparison group. The purpose of Bratton and Ray (2000) was to explore the issues researched by historical and current play therapy literature and begin a review of methodological features of such studies. We later published findings applying precise methodology of meta-analysis review to 93 criteria-based controlled play therapy studies (Bratton, Ray, Rhine, & Jones, 2005). This chapter summarizes our earlier findings on play therapy research for the last century and reviews recent research from the first decade of the new millennium.

OVERVIEW OF OUTCOME RESEARCH FROM THE TWENTIETH CENTURY

To progress to the current century, we quickly review here the findings of Bratton and Ray (2000). Reviewing six decades of play therapy research, we found that play therapy research peaked in the decade of 1970, with a record 23 studies. Research leveled off in the 1980s and 1990s, resting at 16 to 17 studies in each decade. Most of the studies compared a play therapy intervention group with a control or comparison group, although we also included one group pre- and post-assessment designs. Play therapy interventions ranged from 2 to 100 sessions with a median number of sessions at 12. Participants ranged in age from 3 to 17 years. Although most interventions were designated as nondirective, many studies did not clearly identify the type or scope of play therapy orientation or treatment protocol. We focused on studies that were labeled *play therapy* and did not include studies involving parents or other treatment providers beyond therapists. The majority of studies included measurements of social maladjustment, with secondary priority in areas of intelligence, maladaptive school behavior, self-concept, and anxiety. Early play therapy research focused on intelligence and school achievement, while later years (1970s and 1980s) focused on social adjustment and self-concept.

Our review of twentieth-century research revealed positive effects of play therapy in the following areas: social maladjustment, withdrawn behavior, conduct disorder or aggression, maladaptive school behavior, emotional maladjustment, anxiety and fear, autism and schizophrenia, multiculturalism, self-concept, intelligence, reading, physical or learning disability, speech or language problems, sexual abuse and

domestic violence, depression, post-traumatic stress, ADHD and locus of control, divorce, and alcohol or drug abuse. Not all studies noted significant changes on all dependent variables; and, because of the extensive amount of data collected, we reported only the statistics that were significant. While the majority of studies were limited by small sample size, findings were favorable in support of the effectiveness of play therapy with a wide range of mental health issues.

META-ANALYTIC RESEARCH ON PLAY THERAPY

Meta-analytic reviews of research have made it possible to overcome individual study limitations resulting from small sample size by combining study findings to compute an overall treatment effect. Two meta-analyses on play therapy outcomes have been published in the 2000–2009 decade and have contributed to the recognition of play therapy in the broader field of child psychotherapy (Bratton et al., 2005; LeBlanc & Ritchie, 2001). A few other meta-analyses and systemic reviews of child psychotherapy have reported favorable outcomes for play therapy; they included only a handful of play therapy studies, however, and made only minimal note of its effects (Allin, Walthen, & MacMillan, 2005; Beelmann & Schneider, 2003; Casey & Berman, 1985; Eyeberg, Nelson, & Bogs, 2008; Hetzel-Riggin, Brausch, & Montgomery, 2007; Wethington et al., 2008). LeBlanc and Ritchie (2001) conducted the first meta-analysis to focus exclusively on play therapy studies and reported a moderate treatment effect size (ES) of .66 standard deviations for the 42 controlled studies they included in their analysis. Their findings were consistent with effect sizes found in earlier child psychotherapy meta-analyses (Casey & Berman, 1985, ES = .71; Weisz, Weiss, Han, Granger, & Morton, 1995, ES = .71).

In our 2005 meta-analysis of six decades of play therapy outcome research (Bratton et al., 2005), our intent was to conduct a comprehensive review of controlled play therapy studies from the early pioneering work of Virginia Axline through the end of the century. We carefully reviewed 180 documents that appeared to measure the effectiveness of play therapy dated 1942 to 2000, resulting in 93 studies included in the final calculation of effect size. Studies that met the following criteria were included: use of a controlled research design, sufficient data for computing effect size, and the identification by the author of a labeled *play therapy* intervention. A play therapy intervention was further defined to include studies that examined the use of paraprofessionals (primarily parents) as well as professionals as the

6 OVERVIEW OF PLAY THERAPY RESEARCH

direct provider of the intervention. The majority of studies that fell into the paraprofessional category used filial therapy methodology. Consistent with earlier meta-analyses in child psychotherapy, we used Cohen's *d* (1988) guidelines (.20 = small; .50 = medium; .80 = large) to interpret treatment effect size. Overall ES for the 93 studies was calculated at .80 standard deviations, interpreted as a large treatment effect. This finding means that children receiving play therapy interventions performed .80 standard deviations above children who did not receive play therapy.

The average age of study participants was 7.0, reduced to 6.7 years when play therapy was conducted by paraprofessionals under the direct supervision of a professional trained in play therapy. This result contrasted meta-analytic findings conducted on a broad range of child psychotherapies that reported mean ages of 10.2 years (Kazdin, Bass, Ayers, & Rodgers, 1990) and 10.5 years (Weisz, Weiss, Han, Granger, & Morton, 1995). Brestan and Eyeberg (1998) reviewed studies focused on conduct-disordered children and also reported higher mean age (9.8 years) than the mean for play therapy studies. We believe the lower mean age of play therapy participants compared to other psychotherapeutic interventions for children is particularly meaningful in view of the national priority to identify effective early interventions that allow children to receive help when problems first arise (New Freedom Commission on Mental Health, 2003; Subcommittee on Children and Family, 2003; U.S. Public Health Service, 2000). The finding regarding age supports our belief that the developmental properties of play are responsive to children's maturational needs, allowing them to meaningfully participate in therapy at a young age. Because play therapy can be used successfully with younger children, it conceivably has the potential to prevent the development of more severe and costly mental health problems that can develop over time.

In the 2005 analysis, we were also interested in examining specific study characteristics to investigate their impact on play therapy outcome. Of the 93 studies coded for analysis, the largest number of studies ($n = 36$) were conducted in a school setting, followed by outpatient clinic ($n = 34$). The treatment effect for clinic-based investigations was consistent with the overall effect size for play therapy ($ES = .81$), while school-based studies demonstrated a treatment effect of .69 standard deviations. Studies conducted in residential or crisis settings produced significantly greater treatment effects ($ES = 1.05$) than those carried out in schools or clinics, indicating that the location in which play therapy is conducted affects treatment outcome. It is important to

note, however, that the average number of sessions for play therapy in school settings was 8.4, approximately one-third the length of treatment in clinical settings (22.4 sessions). It is plausible that the lower number of sessions in schools might have accounted for the lower treatment effect. Because of inadequate staffing, school counselors and other school mental health professionals must often limit sessions per child so they can reach more students (Bratton, 2010). Hence, treatment length in school settings may be less likely to depend on the severity of the presenting issue and problem resolution than in other settings.

Additional findings indicated that play therapy had a moderate to large beneficial effect for internalizing (ES = .81), externalizing (ES = .79), and combined problem types (ES = .93). Treatment effects on outcomes for measures of self-concept, social adjustment, personality, anxiety, adaptive functioning, and family functioning, including quality of the parent-child relationship, were also reported in the moderate to large range. When play therapy was delivered by a parent or other caregiver (ES = 1.15), the effect size was larger than when delivered directly to the child by a mental health professional (ES = .72). This result was consistent with LeBlanc and Ritchie's (2001) findings and highlights the importance of including parents in treatment to increase the likelihood of a successful outcome. Both humanistic play therapy interventions (ES = .92) and nonhumanistic or behavioral play therapy approaches (ES = .71) were considered to be effective regardless of theoretical approach. The effect size reported for humanistic approaches, however, primarily defined as child-centered and non-directive play therapy, was in the large effect category, while the ES for the nonhumanistic group of interventions fell in the moderate category. This difference in effect may be attributed to a larger number of calculated humanistic studies ($n = 73$) compared to nonhumanistic studies ($n = 12$). Regardless, the findings for humanistic interventions is encouraging in light of the most recent survey of Association for Play Therapy members that indicated the majority of its members subscribed to the child-centered play therapy (CCPT) approach (Lambert et al., 2005).

The impact of treatment duration on outcomes was also of interest to us. Similar to LeBlanc and Ritchie's (2001) findings, optimal treatment effects were obtained in 35 to 40 sessions. It is important to note, however, that many studies with fewer than 14 sessions produced moderate to large treatment effects. Finally, age and gender were not found to be significant factors in predicting play therapy outcomes. Play therapy appeared to be equally effective across age and gender.

8 OVERVIEW OF PLAY THERAPY RESEARCH

We were unable to compute an effect size for ethnicity because of the lack of specificity in the reporting of ethnicity in individual studies.

In summary, meta-analytic findings on play therapy (Bratton et al., 2005; LeBlanc & Ritchie, 2002) established play therapy's utility as a mental health intervention and further confirmed that its effect on children's outcomes was similar to other child interventions reported by contemporary meta-analytic researchers in the field of child psychotherapy (Casey & Berman, 1985; Kazdin, Bass, Ayers, & Rodgers, 1990; Weisz, Weiss, Han, Granger, & Morton, 1995). Showing that play therapy was comparable in treatment effect to other established and frequently used interventions was an important first step for the field in refuting critics that were skeptical of play therapy having any place within the broader field of child psychotherapy.

TWENTY-FIRST CENTURY OUTCOME RESEARCH

Over the last decade, play therapy research continues to thrive when measured by a number of studies ($n = 25$ so far, omitting filial therapy studies), experimental features applied to research, focused research questions on today's most pressing mental health issues, and rich description of methodology. Current publication of research has surpassed the record of play therapy studies published in the 1970s. This update is an attempt to review issues recently researched in the field of play therapy from 2000 to 2009. Criteria for inclusion included:

- *Play therapy* label is clearly used within the publication.
- Study was published in peer-review form in journal or book venue.
- Play therapy is a child-focused intervention and not parent or family intervention.
- Study utilized aspects of experimental design.

In contrast to the 2000 publication, we attempt to discern between rigorous and less rigorous research designs. Through the experience of meta-analysis, we discovered the need to differentiate levels of experimental research. Using Rubin's (2008) conceptual framework, we applied his evidentiary hierarchy for evidence-based practice to the identification of individual research studies and specifically categorized the studies into three labels, including experimental, quasi-experimental, and evidentiary. The *experimental* label describes studies meeting the most stringent criteria for research design, including random assignment of subjects, comparison to a control group or

another treatment group, clear methodology and treatment descriptions, and attention to internal and external validity threats. The *quasi-experimental* label represents studies that use comparison or control groups with clear methodology and attention to internal and external validity threats but not random assignment. As evidenced by play therapy studies categorized as quasi-experimental, randomization is often difficult when designing an intervention-based research design for children. We used the *evidentiary* label as descriptive of studies that provide evidence of play therapy effectiveness through pre- and post-assessment and clear methodology but typically do not use a comparison or control group.

In summarizing the findings of the 25 studies reviewed for this chapter, we categorized 13 studies as experimental, 4 as quasi-experimental, and 8 as evidentiary. The most researched mental health issue related to recent literature is externalizing and disruptive behaviors, with 10 studies specifically demonstrating the positive effect of play therapy on children's disruptive behaviors. The second most researched dependent variable was parent-teacher relationship problems emphasizing the positive effect of play therapy in six studies. Evenly divided, internalizing problems, anxiety, and sexual abuse and trauma issues were explored in five studies. Other issues, such as multicultural populations, identified disability or medical condition, ADHD, language skills, moral reasoning, social behavior, homelessness, depression, and self-concept, were explored by one to three studies. Positive effect of play therapy can be seen in all research areas except sexual abuse, which provided mixed results in two studies.

The number of play therapy sessions ranged from 6 to 32 of those reported. The mean number of play therapy sessions was 13.57, and the median was 13, similar to our earlier report (Bratton & Ray, 2000). The mode was indeterminable because of equal representation of 10, 12, and 16 number of sessions reported among four studies each. Participants' ages ranged from 3 to 17 years old, with majority of studies starting at 4 years and capping the age below 12 years. Surprisingly, compared to earlier research, these studies reported participant number at a mean of $N = 45$ when two studies with more than 200 participants were eliminated as outliers. With a higher level of participants, results can be interpreted with more confidence in statistical analyses. As in our earlier report, we have organized studies by research topic in a chart format to allow play therapists to easily use information. Table 1.1 is presented to briefly describe research results

(continued on page 28)

Table 1-1
Play Therapy Research 2000–2009

Research Issue: Multiculturalism			
Authors	Research Classification	Participants	Findings
Garza & Bratton (2005)	Experimental	29 – Ages 5 to 11	Authors randomly assigned Hispanic children identified by teachers as demonstrating behavioral problems to an individual child-centered play therapy (CCPT) or guidance curriculum intervention. Each group received 30 minutes of the assigned intervention once per week for 15 weeks. Results demonstrated that children receiving play therapy showed statistically significant decreases in externalizing behavioral problems and moderate improvements in internalizing behavior problems as reported by parents.
Shen (2002)	Experimental	30 – Ages 8 to 12	Author randomly assigned child participants from a rural elementary school in Taiwan following an earthquake to a CCPT group or control group. All children were scored at high risk for maladjustment. The CCPT groups received ten 40-minute group play therapy sessions over four weeks. Results indicated the CCPT group demonstrated a significant decrease in anxiety, as well as a large treatment effect, and a significant decrease in suicide risk as compared to the control group.
Shen (2007)	Quasi-experimental	81 – 7th and 8th grades	Author assigned child participants from a public junior high school in Midwest Taiwan to one of three conditions: Gestalt-play group counseling, cognitive-verbal group counseling, or no intervention control group. The treatment groups received 10 sessions of 40-minute group counseling over five weeks. Both treatment groups demonstrated significant improvement in overall behavioral and

				emotional strengths, with the play therapy group demonstrating significant improvement on family involvement and cognitive verbal counseling significantly improving affective strength.
Research Issue: Externalizing Disruptive Behavior Problems				
Fall, Naveliski, & Welch (2002)	Experimental	66 – Ages 6 to 10		Authors randomly assigned children identified with a special education label to six sessions of weekly 30-minute individual CCPT or a no-intervention control condition. Results demonstrated no difference between the groups in self-efficacy, but teacher ratings showed decreased problematic behavior and fewer social problems for the experimental group as compared to the control group.
Garza & Bratton (2005)	Experimental	29 – Ages 5 to 11		Authors randomly assigned Hispanic children identified by teachers as demonstrating behavioral problems to an individual CCPT or guidance curriculum intervention. Each group received 30 minutes of the assigned intervention once per week for 15 weeks. Results demonstrated that children receiving play therapy showed statistically significant decreases in externalizing behavior problems and moderate improvements in internalizing behavior problems as reported by parents.
Karcher & Lewis (2002)	Evidentiary	20 – Ages 8 to 17		Authors conducted a pre-test–post-test single group design for children in a residential psychiatric treatment facility. Participants were assigned according to primary diagnosis to the behavioral disorder or mood disorder group and received 15 to 18 biweekly sessions of pair counseling play therapy. Results indicated that reductions in problem behaviors were greatest for the behavioral disordered group. Results also demonstrated a decrease in externalizing behaviors, mediated by an increase in interpersonal understanding.

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Research Issue: Multiculturalism				
Authors	Research Classification	Participants	Findings	
Muro, Ray, Schottelkorb, Smith, & Blanco (2006)	Evidentiary	23 – Ages 4 to 11	Authors conducted a repeated-measures single group design for children identified by teachers as exhibiting behavioral and emotional difficulties. Children participated in 32 sessions of individual CCPT across the duration of a school year. Ratings over three points of measure indicated statistically significant improvement on total behavioral problems, teacher-child relationship stress, and ADHD characteristics.	
Packman & Bratton (2003)	Experimental	30 – Ages 10 to 12	Authors randomly assigned children who attended a school for learning differences and were identified as exhibiting behavioral difficulties to a group play therapy condition or a no-intervention control condition. The treatment group participated in a humanistically based play therapy intervention for one hour per week for 12 weeks. Results indicated treatment group demonstrated statistically significant improvement on internalizing and total problems with large effect sizes. Externalizing problems scores yielded a moderate effect, yet not statistically significant.	
Ray (2008)	Evidentiary	202 – Ages 2 to 13	Author statistically analyzed archival data on children referred to a university counseling clinic and receiving weekly individual CCPT over a nine-year period. Children were assigned to data groups according to presenting problem and length of therapy as the independent variable and parent-child relationship stress as the dependent variable. CCPT	

				demonstrated statistically significant effects for externalizing problems, combined externalizing and internalizing problems, and nonclinical problems. Results also indicated that CCPT effects increased with the number of sessions, specifically reaching statistical significance at 11 to 18 sessions with large effect sizes.
Ray, Blanco, Sullivan, & Holliman (2009)	Quasi-experimental	41 – Ages 4 to 11		Authors assigned children identified by teachers as demonstrating aggressive behaviors to a CCPT condition or a wait-list control condition. Children in CCPT condition participated in 14 sessions of 30-minute individual play therapy conducted twice a week. Children in CCPT showed a moderate decrease in aggressive behaviors over children in the control group according to parent reports. Post hoc analysis revealed that children assigned to CCPT decreased aggressive behaviors statistically significantly and children assigned to control group demonstrated no statistically significant difference.
Schumann (2010)	Quasi-experimental	37 – Ages 5 to 12		Author assigned children identified by teachers as demonstrating aggressive behaviors to an individual CCPT condition or an evidence-based guidance curriculum condition. The CCPT condition received 12 to 15 weekly play therapy sessions, and the guidance condition received 8 to 15 group guidance sessions. Participation in either CCPT or evidence-based guidance curriculum resulted in significant decreases in aggressive behavior, internalizing problems, and externalizing problems.
Tyndall-Lind, Landreth, & Giordano (2001)	Quasi-experimental	32 – Ages 4 to 10		Authors compared a sibling group play therapy condition to an intensive individual play therapy condition and a control condition for children living in a domestic violence shelter. Sibling group CCPT consisted of 12 sessions of 45 minutes over 12 days. Results indicated

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Research Issue: Multiculturalism			
Authors	Research Classification	Participants	Findings
Wang Flahive & Ray (2007)	Experimental	56 – Ages 9 to 12	that sibling group play therapy was equally effective to intensive individual play therapy. Children in sibling group play therapy demonstrated a significant reduction in total behavior, externalizing and internalizing behavior problems, aggression, anxiety, and depression and significant improvement in self-esteem.
Research Issue: Attention Deficit Hyperactivity Disorder			
Ray, Schottelkorb, & Tsai (2007)	Experimental	60 – Ages 5 to 11	Authors randomly assigned children meeting criteria for ADHD to a play therapy treatment condition or a reading mentoring active control condition. Children in both conditions participated in 16 individual

			30-minute sessions over eight weeks. The play therapy condition received individual CCPT. Results indicated that both conditions demonstrated statistically significant improvement on ADHD, student characteristics, anxiety, and learning disability. Children in CCPT demonstrated statistically significant improvement over reading mentoring children on student characteristics, emotional lability, and anxiety/withdrawal.
Research Issue: Internalizing Behavior Problems			
Baggerly & Jenkins (2009)	Evidentiary	36 – Ages 5 to 12	Authors conducted a pre-test–post-test single group design with children who were homeless. Children received 45-minute individual CCPT sessions once per week ranging from 11 to 25 sessions with an average of 14 sessions over the academic year. Results indicated that children demonstrated statistically significant improvements on the developmental strand of internalization of controls and diagnostic profile of self-limiting features.
Garza & Bratton (2005)	Experimental	29 – Ages 5 to 11	Authors randomly assigned Hispanic children identified by teachers as demonstrating behavioral problems to an individual CCPT or guidance curriculum intervention. Each group received 30 minutes of the assigned intervention once per week for 15 weeks. Results demonstrated that children receiving play therapy showed statistically significant decreases in externalizing behavior problems and moderate improvements in internalizing behavior problems as reported by parents.

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Research Issue: Internalizing Behavior Problems				
Authors	Research Classification	Participants	Findings	
Packman & Bratton (2003)	Experimental	30 – Ages 10 to 12	Authors randomly assigned children who attended a school for learning differences and were identified as exhibiting behavioral difficulties to a group play therapy condition or a no-intervention control condition. The treatment group participated in a humanistically based play therapy intervention for one hour per week for 12 weeks. Results indicated treatment group demonstrated statistically significant improvement on internalizing and total problems with large effect sizes. Externalizing problems scores yielded a moderate effect, yet it was not statistically significant.	
Tyndall-Lind, Landreth, & Giordano (2001)	Quasi-experimental	32 – Ages 4 to 10	Authors compared a sibling group play therapy condition to an intensive individual play therapy condition and a control condition for children living in a domestic violence shelter. Sibling group CCPT consisted of 12 sessions of 45 minutes over 12 days. Results indicated that sibling group play therapy was equally effective to intensive individual play therapy. Children in sibling group play therapy demonstrated a significant reduction in total behavior, externalizing and internalizing behavior problems, aggression, anxiety, and depression, and significant improvement in self-esteem.	
Wang Flahive & Ray (2007)	Experimental	56 – Ages 9 to 12	Authors randomly assigned children identified with behavioral problems by teachers to a group sand tray therapy condition or a wait-list control condition. Children participating in sand tray received	

				10 weekly 45-minute sessions of group sand tray therapy. Results revealed statistically significant differences in total externalizing and internalizing problem behaviors according to teachers for children who participated in sand tray therapy. Parent reports also revealed statistically significant differences on externalizing behaviors.
Research Issue: Anxiety				
Baggerly (2004)	Evidentiary	42 – Ages 5 to 11		Author conducted a pre-test–post-test single group design for children living in a homeless shelter. Children participated in 9 to 12 thirty-minute CCPT sessions once or twice a week. Results revealed significant improvement in self-concept, significance, competence, negative mood, and negative self-esteem related to depression and anxiety.
Ray, Schottelkorb, & Tsai (2007)	Experimental	60 – Ages 5 to 11		Authors randomly assigned children meeting criteria for ADHD to a play therapy treatment condition or a reading mentoring active control condition. Children in both conditions participated in 16 individual 30-minute sessions over eight weeks. The play therapy condition received individual CCPT. Results indicated that both conditions demonstrated statistically significant improvement on ADHD, student characteristics, anxiety, and learning disability. Children in CCPT demonstrated statistically significant improvement over reading mentoring children on student characteristics, emotional lability, and anxiety/withdrawal.
Reyes & Asbrand (2005)	Evidentiary	43 – Ages 7 to 16		Authors conducted a pre-test–post-test single group design with children who disclosed sexual abuse and were referred to a community-based agency. Children engaged in weekly 50-minute individual play therapy sessions over nine months and according to different theoretical orientations. Results indicated that trauma symptom severity, anxiety, depression, post-traumatic stress, and sexual distress in children decreased after six months of play therapy.

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Research Issue: Anxiety				
Authors	Research Classification	Participants	Findings	
Shen (2002)	Experimental	30 – Ages 8 to 12	Author randomly assigned child participants from a rural elementary school in Taiwan following an earthquake to a CCPT group or control group. All children were scored at high risk for maladjustment. The CCPT groups received ten 40-minute group play therapy sessions over four weeks. Results indicated the CCPT group demonstrated a significant decrease in anxiety, as well as a large treatment effect, and significant decrease in suicide risk as compared to the control group.	
Tyndall-Lind, Landreth, & Giordano (2001)	Quasi-experimental	32 – Ages 4 to 10	Authors compared a sibling group play therapy condition to an intensive individual play therapy condition and a control condition for children living in a domestic violence shelter. Sibling group CCPT consisted of 12 sessions of 45 minutes over 12 days. Results indicated that sibling group play therapy was equally effective to intensive individual play therapy. Children in sibling group play therapy demonstrated a significant reduction in total behavior externalizing and internalizing behavior problems, aggression, anxiety, and depression and significant improvement in self-esteem.	
Research Issue: Depression				
Baggerly (2004)	Evidentiary	42 – Ages 5 to 11	Author conducted a pre-test-post-test single group design for children living in a homeless shelter. Children participated in 9 to 12 thirty-minute CCPT group play therapy sessions once or twice a week.	

				Results revealed significant improvement in self-concept, significance, competence, negative mood, and negative self-esteem related to depression and anxiety.
Reyes & Asbrand (2005)	Evidentiary	43 – Ages 7 to 16		Authors conducted a pre-test–post-test single group design with children who disclosed sexual abuse and were referred to a community-based agency. Children engaged in weekly 50-minute individual play therapy sessions over nine months and according to different theoretical orientations. Results indicated that trauma symptom severity, anxiety, depression, post-traumatic stress, and sexual distress in children decreased after six months of play therapy.
Tyndall-Lind, Landreth, & Giordano (2001)	Quasi-experimental	32 – Ages 4 to 10		Authors compared a sibling group play therapy condition to an intensive individual play therapy condition and a control condition for children living in a domestic violence shelter. Sibling group CCPT consisted of 12 sessions of 45 minutes over 12 days. Results indicated that sibling group play therapy was equally effective to intensive individual play therapy. Children in sibling group play therapy demonstrated a significant reduction in total behavior, externalizing and internalizing behavior problems, aggression, anxiety, and depression and significant improvement in self-esteem.
Research Issues: Self-Concept and Self-Esteem				
Tyndall-Lind, Landreth, & Giordano (2001)	Quasi-experimental	32 – Ages 4 to 10		Authors compared a sibling group play therapy condition to an intensive individual play therapy condition and a control condition for children living in a domestic violence shelter. Sibling group CCPT consisted of 12 sessions of 45 minutes over 12 days. Results indicated that sibling group play therapy was equally effective to intensive

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Research Issues: Self-Concept and Self-Esteem			
Authors	Research Classification	Participants	Findings
Baggerly (2004)	Evidentiary	42 – Ages 5 to 11	<p>individual play therapy. Children in sibling group play therapy demonstrated a significant reduction in total behavior, externalizing and internalizing behavior problems, aggression, anxiety, and depression and significant improvement in self-esteem.</p> <p>Author conducted a pre-test–post-test single group design for children living in a homeless shelter. Children participated in 9 to 12 thirty-minute CCPT group play therapy sessions once or twice a week. Results revealed significant improvement in self-concept, significance, competence, negative mood, and negative self-esteem related to depression and anxiety.</p>
Research Issue: Social Behavior			
Fall, Navelski, & Welch (2002)	Experimental	66 – Ages 6 to 10	<p>Authors randomly assigned children identified with a special education label to six sessions of weekly 30 minute individual CCPT or a no-intervention control condition. Results demonstrated no difference between the groups in self-efficacy, but teacher ratings showed decreased problematic behavior and fewer social problems for the experimental group as compared to the control group.</p>

Research Issue: Moral Reasoning			
Paone, Packman, Maddux, & Rothman (2008)	Experimental	61 – Ages 13 to 16	Authors randomly assigned at-risk students to a talk therapy or activity therapy condition. Children in the talk therapy condition participated in 10 sessions of group talk therapy for 50 minutes per week. Children in the activity therapy condition participated in 10 sessions of developmentally appropriate group activity therapy for 50 minutes per week. Results indicated statistically significant development with a large effect size in moral reasoning for the activity therapy condition over the talk therapy condition.
Research Issue: Parent-Teacher Relationship			
Dougherty & Ray (2007)	Evidentiary	24 – Ages 3 to 8	Authors statistically analyzed archival data on children referred to a university counseling clinic and receiving weekly individual CCPT over a three-year period. Children were assigned to two data groups according to age (preoperational or operational) as the independent variable and parent-child relationship stress as the dependent variable. For both total stress and child domain scores, CCPT demonstrated statistically significant decreases in parent-child relationship stress with strong practical effects. Children in the concrete operations group experienced more change as a result of intervention than did children in the preoperational group.
Muro, Ray, Schottelkorb, Smith, & Blanco (2006)	Evidentiary	23 – Ages 4 to 11	Authors conducted a repeated-measures single group design for children identified by teachers as exhibiting behavioral and emotional difficulties. Children participated in 32 sessions of individual CCPT across the duration of a school year. Ratings over three points of measure indicated statistically significant improvement on total behavioral problems, teacher-child relationship stress, and ADHD characteristics.

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Research Issue: Parent-Teacher Relationship			
Authors	Research Classification	Participants	Findings
Ray (2007)	Experimental	93 – Ages 4 to 11	Author randomly assigned students who were identified as experiencing emotional and behavioral difficulties in the classroom into one of three treatment groups: play therapy only, play therapy and consultation, or consultation only. Children in the play therapy condition received 16 sessions of 30-minute individual CCPT over eight weeks. Teachers in consultation groups received one 10-minute person-centered consultation per week for eight weeks. Results demonstrated significant decreases in teacher-child relationship stress with large effect sizes in total stress for all three treatment groups.
Ray (2008)	Evidentiary	202 – Ages 2 to 13	Author statistically analyzed archival data on children referred to a university counseling clinic and receiving weekly individual CCPT over a nine-year period. Children were assigned to data groups according to presenting problem and length of therapy as the independent variable and parent-child relationship stress as the dependent variable. CCPT demonstrated statistically significant effects for externalizing problems, combined externalizing and internalizing problems, and nonclinical problems. Results also indicated that CCPT effects increased with the number of sessions, specifically reaching statistical significance at 11 to 18 sessions with large effect sizes.

<p>Ray, Henson, Schottelkorb, Brown, & Muro (2008)</p>	<p>Experimental</p>	<p>58 – Ages Pre-K to 5th grade</p>	<p>Authors randomly assigned children identified by teachers as exhibiting emotional and behavioral difficulties into one of two treatment groups (short-term and long-term). Children in the short-term condition participated in 16 sessions of 30-minute individual CCPT over eight weeks. Children in the long-term condition participated in 16 sessions of 30-minute individual CCPT over 16 weeks. Results indicated that both intervention groups demonstrated significant improvement in teacher-student relationship stress. Post hoc analyses indicated that the short-term intensive intervention demonstrated statistical significance and larger effect sizes in overall total stress, teacher, and student characteristics.</p>
<p>Shen (2007)</p>	<p>Quasi-experimental</p>	<p>81 – 7th and 8th grades</p>	<p>Author assigned child participants from a public junior high school in midwest Taiwan to one of three conditions: Gestalt-play group counseling, cognitive-verbal group counseling, or no intervention control group. The treatment groups received 10 sessions of 40-minute group counseling over five weeks. Both treatment groups demonstrated significant improvement in overall behavioral and emotional strengths with the play therapy group demonstrating significant improvement on family involvement and cognitive verbal counseling significantly improving affective strength.</p>
<p>Research Issue: Sexual Abuse and Trauma</p>			
<p>Carpentier, Slovsky, & Chaffin (2006)</p>	<p>Experimental</p>	<p>291 – Ages 5 to 12</p>	<p>Authors randomly assigned children identified with sexual behavior problems into two treatment groups, including a cognitive behavioral condition (CBT) and a play therapy condition (PT). Both groups were compared to an archival data sample of children with disruptive behaviors but not sexual behavior problems. The CBT group</p>

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Research Issue: Sexual Abuse and Trauma			
Authors	Research Classification	Participants	Findings
Reyes & Asbrand (2005)	Evidentiary	43 – Ages 7 to 16	was structured using behavior modification and psychoeducational principles. The PT group was less structured, using a combination of client-centered, psychodynamic, and directive methods. Ten-year follow-up data reported significantly fewer future sex offenses for the CBT group than for the play therapy group.
Scott, Burlingame, Starling, Porter, & Lilly (2003)	Evidentiary	26 – Ages 3 to 9	Authors conducted a pre-test–post-test single group design with children who disclosed sexual abuse and were referred to a community-based agency. Children engaged in weekly 50-minute individual play therapy sessions over nine months and according to different theoretical orientations. Results indicated that trauma symptom severity, anxiety, depression, post-traumatic stress, and sexual distress in children decreased after six months of play therapy.
Shen (2002)	Experimental	30 – Ages 8 to 12	Authors conducted a pre-test–post-test single group design with children referred for possible sexual abuse. Children completed between 7 and 13 sessions of CCPT. Results indicated an increased sense of competency over the course of therapy. No improvement was reported in other group comparisons.
			Author randomly assigned child participants from a rural elementary school in Taiwan following an earthquake to a CCPT group or control group. All children were scored at high risk for maladjustment.

Tyndall-Lind, Landreth, & Giordano (2001)	Quasi-experimental	32 – Ages 4 to 10	<p>The CCPT groups received ten 40-minute group play therapy sessions over four weeks. Results indicated the CCPT group demonstrated a significant decrease in anxiety, as well as a large treatment effect, and a significant decrease in suicide risk as compared to the control group.</p> <p>Authors compared a sibling group play therapy condition to an intensive individual play therapy condition and a control condition for children living in a domestic violence shelter. Sibling group CCPT consisted of 12 sessions of 45 minutes over 12 days. Results indicated that sibling group play therapy was equally effective to intensive individual play therapy. Children in sibling group play therapy demonstrated a significant reduction in total behavior, externalizing and internalizing behavior problems, aggression, anxiety, and depression, and significant improvement in self-esteem.</p>
Research Issue: Homeless			
Baggerly (2004)	Evidentiary	42 – Ages 5 to 11	<p>Author conducted a pre-test–post-test single group design for children living in a homeless shelter. Children participated in 9 to 12 thirty-minute CCPT group play therapy sessions once or twice a week. Results revealed significant improvement in self-concept, significance, competence, negative mood, and negative self-esteem related to depression and anxiety.</p>
Baggerly & Jenkins (2009)	Evidentiary	36 – Ages 5 to 12	<p>Authors conducted a pre-test–post-test single group design with children who were homeless. Children received 45-minute individual CCPT sessions once per week ranging from 11 to 25 sessions with an average of 14 sessions over the academic year. Results indicated that children demonstrated statistically significant improvement on the developmental strand of internalization of controls and diagnostic profile of self-limiting features.</p>

(continued)

Table 1-1
(continued)

Research Issues: Identified Disability and Medical Condition			
Authors	Research Classification	Participants	Findings
Danger & Landreth (2005)	Experimental	21 – Ages 4 to 6	Authors randomly assigned children qualified for speech therapy to one of two conditions, including group play therapy condition and regularly scheduled speech therapy session condition. Children assigned to the play therapy condition received 25 sessions of group CCPT concurrently with speech therapy over seven months. Results revealed that children in play therapy demonstrated increased receptive language skills and expressive language skills with large practical significance.
Fall, Navelski, & Welch (2002)	Experimental	66 – Ages 6 to 10	Authors randomly assigned children identified with a special education label to six sessions of weekly 30-minute individual CCPT or a no-intervention control condition. Results demonstrated no difference between the groups in self-efficacy but teacher ratings showed decreased problematic behavior and fewer social problems for the experimental groups as compared to the control group.
Jones & Landreth (2002)	Experimental	30 – Ages 7 to 11	Authors randomly assigned children diagnosed with insulin-dependent diabetes mellitus to an experimental or no-intervention control group. The experimental group participated in 12 sessions of CCPT over a 3-week camp. Both groups improved anxiety scores; the experimental group showed a statistically significant increase in diabetes adaptation over the control group.

Packman & Bratton (2003)	Experimental	30 – Ages 10 to 12	Authors randomly assigned children who attended a school for learning differences and were identified as exhibiting behavioral difficulties to a group play therapy condition or a no-intervention control condition. The treatment group participated in a humanistically based play therapy intervention for one hour per week for 12 weeks. Results indicated treatment group demonstrated statistically significant improvement on internalizing and total problems with large effect sizes. Externalizing problems scores yielded a moderate effect, yet not statistically significant.
Research Issue: Academic Achievement			
Blanco (2010)	Experimental	43 – 1st grade	Author randomly assigned first-graders labeled at risk by state academic standards to an experimental treatment group or wait-list control group. Children in experimental group participated in 16 sessions of 30-minute individual CCPT sessions over 8 weeks. Children in the CCPT treatment group demonstrated significant improvement on academic achievement composite score over children in the control group.
Research Issue: Language Skills			
Danger & Landreth (2005)	Experimental	21 – Ages 4 to 6	Authors randomly assigned children qualified for speech therapy to one of two conditions, including group play therapy condition and regularly scheduled speech therapy session condition. Children assigned to the play therapy condition received 25 sessions of group CCPT concurrently with speech therapy over 7 months. Results revealed that children in play therapy demonstrated increased receptive language skills and expressive language skills with large practical significance.

28 OVERVIEW OF PLAY THERAPY RESEARCH

related to play therapy categorized by research issue. Hence, some studies are listed in multiple categories because of outcomes related to more than one area.

DISCUSSION

As can be seen in Table 1.1, the play therapy field is providing recent and relevant research to support its use with children. Among 13 experimental studies, typically regarded as the gold standard of research, 12 studies resulted in the positive effects of play therapy. Among the overall 25 studies, all but one resulted in positive effects, although some results were stronger than others. Unlike the earlier 2000 report, almost all studies ($N = 23$) provided a clear definition of play therapy treatment and the training of play therapists. Of the 25 studies, 18 used a child-centered play therapy treatment, 3 were identified as activity or sand tray with a humanistic or person-centered philosophy, 1 Gestalt, 1 Pair Counseling, and 2 were mixed and unclear. Consistent with the 2000 report, most research is being conducted using a child-centered play therapy approach typically aligned with the philosophies of Axline (1969) and Landreth (2002).

The identification and description of treatment protocol represents progress in conducting research in play therapy. Research conducted under the play therapy label but with a lack of clear structure related to theoretical conceptualization, however, is still a possible barrier to outcome. One example of this challenge emerged in review of this decade's research evidenced by Carpentier, Silovsky, and Chaffin (2006). In their study of children exhibiting sexual behavior problems, they compared a cognitive behavioral intervention with a play therapy intervention. The play therapy intervention was described as client-centered and psychodynamic principled with different materials and activities and topics introduced each week to the child. For play therapists who are trained in psychodynamic or child-centered principles, there is recognition that these two approaches are vastly different. The label of *play therapy* following psychodynamic principles is vague and open to interpretation by the reader or researcher. Child-centered play therapy, a well-defined approach to play therapy (Landreth, 2002), would not typically introduce any topic or activity in play therapy, nor would it advocate the use of different materials for each session. The failure to clearly define procedures or mention the use of a treatment protocol were important limitations to consider in drawing the conclusion that findings were due to the superiority of one treatment over the

other. The use of a manualized protocol that showed how these distinct approaches were integrated would provide clarity. From a research perspective, the description of play therapy provided by Carpentier et al. is broad and ill-defined and could possibly mislead the reader into concluding that play therapy was ineffective, when in fact it may have been the lack of a well-defined treatment and omission of treatment integrity measures that produced the results. Such an example reminds researchers that adhering to stringent research methods, including manualization of valid play therapy approaches and the assurance of treatment integrity, is critical in conducting research of sufficient rigor to advance the field of play therapy.

Another observation of current and historical play therapy research is related to the choices of dependent variables by researchers and how those might be affected by cultural pressures. In the last decade, there has been a rise in research related to disruptive and externalizing behaviors. This trend coincides with the rise of behaviorism in the schools and the focus on external achievement-related status in American culture. Play therapy researchers have responded to this cultural phenomenon in an effort to stay relevant in the minds of parents and other authorities. Fortunately, outcomes related to externalized behavior are positive. However, considering that most play therapy research is conducted according to child-centered philosophy, which directly emphasizes the inner world of the child, one might question this focus on behavior. Also, it can be observed that research related to self-concept is in decline, so much so that only two studies reported positive effects. Surprisingly, only one study focused on social behavior as an individual dependent variable compared to its rank as the most studied variable in the 2000 report. And finally, research related to multicultural populations continues to be sparse, with only one study on Hispanic children in the United States and two on children in Taiwan. Most studies, however, reported on ethnicity (unlike the 2000 report) and revealed a diversity of ethnic identification among participants. Considering the diversity of urban settings, play therapy research would benefit from the exploration of specific populations.

Overall, play therapy research continues to show strong evidence to support its use among a variation of populations and presenting problems. The last decade revealed changes in research methodology that allow play therapy to compete among other child interventions as a viable treatment. Strikingly, current play therapy research appears to be conducted by play therapists who are well-trained in both methodology and play therapy, leading to designs that accurately explore

30 OVERVIEW OF PLAY THERAPY RESEARCH

effectiveness variables related to play therapy. Play therapy research will continue to be strengthened through the progress of treatment manualization and description, delivery by trained professionals, and focus on specific dependent variables relevant to mental health issues among child populations.

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